

## MEMORIU DE ACTIVITATE

### DATE PERSONALE:

Numele: PRECUP.  
Prenumele: RADU-EMIL.  
Data și locul nașterii:  
Domiciliul:

### ADRESA:

Universitatea Politehnica Timișoara  
Facultatea de Automatică și Calculatoare  
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### PREGĂTIREA PROFESIONALĂ (<http://www.aut.upt.ro/~rprecup/bio.html>):

- 1992-1996: Diplomă de doctor, Facultatea de Automatică și Calculatoare din cadrul Universității “Politehnica” din Timișoara, 1996, ramura Științe tehnice, specializarea Sisteme automate, conducător științific: prof.dr.ing. Ștefan Preitl, titlul tezei: “Contribuții privind conducerea proceselor cu fază neminimă cu aplicații la reglarea turăției hidrogenatoarelor”.
- 1988-1993: Diplomă de licență, Facultatea de Matematică din cadrul Universității din Timișoara, promoția 1993, specializarea Matematică, cu media 9.05 a celor patru ani de studii și media 10 la licență.
- 1982-1987: Diplomă de merit, Facultatea de Electrotehnică din cadrul Institutului Politehnic “Traian Vuia” din Timișoara, promoția 1987, specializarea Automatică și calculatoare, direcția de aprofundare Conducerea proceselor cu calculatorul, cu media 9.98 a celor cinci ani de studii și media 10 la diplomă.
- 1977-1981: Bacalaureat în Matematică-Fizică, Liceul Industrial nr. 1, Lugoj.

### EXPERIENȚA ÎN MUNCĂ (<http://www.aut.upt.ro/~rprecup/bio.html>):

- ❑ *Perioada 2016 – 2020:* Decan al Facultății de Automatică și Calculatoare, Universitatea Politehnica Timișoara (<http://www.ac.upt.ro/conducere.php#top>).
- ❑ *Perioada 2016 – 2022:* Adjunct Professor la School of Engineering, Edith Cowan University, Joondalup, WA, Australia (<http://www.ecu.edu.au/schools/engineering/staff/>).
- ❑ *Perioada 2016 – 2020:* Membru al Consiliului Școlii Doctorale Automatică și Calculatoare, Universitatea Politehnica din București (<http://doctorat.acs.pub.ro/component-si-organizare/sedinte-alegeri/>).
- ❑ *Perioada 2017 – 2020:* Membru al Consiliului Național al Cercetării Științifice (CNCS) (<http://www.research.gov.ro/uploads/sistemul-de-cercetare/organisme-consultative/om-nr213-19-04-2017-cnsc-mo287.pdf>, <http://www.research.gov.ro/uploads/sistemul-de-cercetare/organisme-consultative/om-nr213-19-04-2017-cnsc.pdf>).
- ❑ *Perioada ianuarie – aprilie 2017:* Membru al Comisiei de Științe Inginerești din cadrul CNCS.
- ❑ *Perioada ianuarie – aprilie 2017:* Membru al Comisiei 2: Tehnologia informației și a comunicațiilor, spațiu și securitate din cadrul Colegiului Consultativ pentru Cercetare, Dezvoltare și Inovare (CCCDI).
- ❑ *Perioada 2012 – 2016:* Prodecan al Facultății de Automatică și Calculatoare, Universitatea Politehnica Timișoara (cu vechea denumire, până în 2013, Universitatea “Politehnica” din Timișoara).
- ❑ *Perioada martie – iunie 2012:* Președinte al Comisiei de Cercetare Științifică a Senatului Universității “Politehnica” din Timișoara.
- ❑ *Perioada 2011 – 2012:* Vicepreședinte al Comisiei de calculatoare, tehnologia informației și ingineria sistemelor din cadrul Consiliului Național de Atestare a Titlurilor, Diplomelor și Certificatelor Universitare (CNATDCU) și membru al panelului P2. Științe inginerești

<http://www.cnatdco.ro/paneluri-cnatdco/panel-2-stiinte-ingineresti/comisia-de-inginerie-calculatoare-tehnologia-informatiei-si-ingineria-sistemelor/>).

- ❑ *Perioada 2012 – în prezent:* Membru al Comisiei de calculatoare, tehnologia informației și ingineria sistemelor din cadrul CNATDCU (<http://www.cnatdco.ro/paneluri-cnatdco/incepand-cu-data-de-7-septembrie-2012/stiinte-ingineresti/comisia-de-calculatoare-tehnologia-informatiei-si-ingineria-sistemelor/>).
- ❑ *Perioada 2011 – în prezent:* Director al Centrului de Cercetare în Ingineria Sistemelor Automate din cadrul Universității Politehnica Timișoara (<http://www.aut.upt.ro/centru-cercetare/>).
- ❑ *Perioada 2009 – în prezent:* Membru al Școlii Doctorale de Informatică Aplicată și Matematică Aplicată din cadrul Óbuda University (cu vechea denumire Budapest Tech Polytechnical Institution), Budapesta, Ungaria ([http://www.doktori.hu/index.php?menuid=192&sz\\_ID=8670&lang=EN](http://www.doktori.hu/index.php?menuid=192&sz_ID=8670&lang=EN)).
- ❑ *Perioada 2008 – 2012:* Șef al Oficiului de Informare și Consiliere a Studenților (OICS) al Facultății de Automatică și Calculatoare, Universitatea “Politehnica” din Timișoara.
- ❑ *Perioada 2004 – în prezent:* Conducător de doctorat în domeniul Ingineria sistemelor (fost Automatică) la Universitatea Politehnica Timișoara, cinci doctori cu teze susținute: Raul-Cristian Roman (martie 2018), titlul tezei: “Tehnici de tip model-free de acordare a parametrilor reguletoarelor automate”, calificativul Excelent, Radu-Codruț David (aprilie 2015), titlul tezei: “Contributions to modeling and optimization of fuzzy control systems”, calificativul Excelent, Mircea-Bogdan Rădac (septembrie 2011), titlul tezei: “Iterative Techniques for Controller Tuning”, Ovidiu Baniș (mai 2009), titlul tezei: “Contribuții la conducerea traficului rutier urban utilizând o rețea de senzori wireless ca detector de trafic”, Zsuzsa Preitl (aprilie 2008), titlul tezei: “Model Based Design Methods for Speed Control Applications” și 15 doctoranzi îndrumați la ora actuală (<http://www.aut.upt.ro/~rprecup/stud.html>).
- ❑ *Perioada 2018 – în prezent:* 2 cercetători postdoctorali mentorați: Alexandru Topîrceanu, Universitatea Politehnica Timișoara (UPT), cu tema „IMproving the PREdiction of opinion dynamics in temporal Social networks: Mathematical modeling and Simulation framework (IMPRESS)”, finanțare UEFISCDI prin proiectul PN-III-P1-1.1-PD-2016-0193, Alexandra-Iulia Szedlak-Stînean, UPT, cu tema „NONlinear OBServers-based control structures applied to MEChatronics Systems (NOBSMECS)”, finanțare UEFISCDI prin proiectul PN-III-P1-1.1-PD-2016-0331 (<http://www.aut.upt.ro/~rprecup/postdoc.html>).
- ❑ *Perioada 2001 – 2011:* Director adjunct al Centrului de Cercetare Științifică în Automatică și Calculatoare din cadrul Universității “Politehnica” din Timișoara, director al Diviziei de Automatică și Informatică Industrială.
- ❑ *Perioada 2000 – în prezent:* Profesor la Departamentul de Automatică și Informatică Aplicată, la Facultatea de Automatică și Calculatoare din cadrul Universității Politehnica Timișoara, la disciplinele de System Theory and Automatization (Calculatoare și tehnologia informației – engleză), Ingineria reglării automate (Ingineria sistemelor), Tehnici de optimizare (Ingineria sistemelor), Matematici asistate de calculator (Ingineria sistemelor), Structuri și algoritmi pentru conducerea automată a proceselor (Ingineria sistemelor), Sisteme de conducere fuzzy (Ingineria sistemelor), Sisteme de conducere inteligentă (Ingineria sistemelor automate), Dynamic Systems and Stability în Automotive Control (Automotive Embedded Software), Prelucrarea matematică a semnalelor (Sisteme informatice aplicate în producție și servicii), Sisteme dinamice și stabilitate (Modele matematice în inginerie), Strategii de conducere avansată (Automatică), Sisteme de reglare avansată (Automatică), Optimizarea sistemelor asistată de calculator (Automatică), Abordări moderne în conducerea proceselor I (Sisteme automate), Elemente de reglare automată (Energetică), Intelligent Control in Automotive Embedded Systems (Automotive Embedded Software), Sisteme multiagent (Sisteme automate), Multi-agent Systems (Automotive Embedded Software).
- ❑ *Perioada 1998 – 2000:* Conferențiar la Departamentul de Automatică și Informatică Industrială de la Facultatea de Automatică și Calculatoare din cadrul Universității “Politehnica” din Timișoara, la disciplinele de Ingineria reglării automate II (Automatică), Sisteme de reglare avansată (Automatică), Matematici asistate de calculator (Automatică și calculatoare), Tehnici de optimizare (Automatică), Tehnici moderne de conducere (Automatică), Conducerea inteligentă a proceselor (Automatică), Conducerea numerică a sistemelor hidropneumatice (Mașini Hidraulice și Pneumatice), Elemente de reglare automată (Energetică), Teoria sistemelor și automatizări (Mecanică), Sisteme de reglare automată a excitației generatoarelor sincrone și Sisteme de reglare automată a vitezei generatoarelor sincrone (Energetică).
- ❑ *Perioada 1994 – 1998:* Șef de lucrări la Departamentul de Automatică și Informatică Industrială de la Facultatea de Automatică și Calculatoare din cadrul Universității “Politehnica” din Timișoara, la disciplinele de: Ingineria reglării automate I și II (Automatică), Sisteme de reglare avansată

(Automatică), Tehnici de optimizare (Automatică), Tehnici moderne de conducere (Automatică), Elemente de reglare automată (Energetică), Teoria sistemelor și automatizări (Mecanică).

- ❑ *Perioada 1991 – 1994:* Asistent la Catedra de Automatică și Informatică Industrială de la Facultatea de Automatică și Calculatoare din cadrul Universității Tehnice din Timișoara, la disciplinele de: Ingineria reglării automate I și II (Automatică), Teoria sistemelor (Automatică și calculatoare), Elemente de reglare automată (Energetică).
- ❑ *Perioada 1987 – 1991:* Inginer automatist la punctul de lucru Timișoara din cadrul S.C. Infoservice S.A. (fost SIRECA), cu preocupări profesionale în domeniul automatizărilor:
  - coordonarea activității compartimentului de Automatizări;
  - puneri în funcțiune de sisteme automate;
  - depanări și revizii de sisteme automate analogice și numerice.

#### **ALTE ACTIVITĂȚI MANAGERIALE ȘI ADMINISTRATIVE**

(<http://www.aut.upt.ro/~rprecup/bio.html>):

- ❑ *Perioada 2019 – în prezent:* Reviewer al National Council of Science and Technology (CONACYT), Ciudad de Mexico, Mexic.
- ❑ *Perioada 2019 – în prezent:* Reviewer al Mobility and Reintegration Programme (MoRePro) of the Slovak Academy of Sciences, Bratislava, Slovacia.
- ❑ *Perioada 2019 – în prezent:* Reviewer al Science Fund of the Republic of Serbia, Belgrad, Serbia.
- ❑ *Perioada 2017 – în prezent:* Reviewer al Slovenian Research Agency (ARRS), Ljubljana, Slovenia.
- ❑ *Perioada 2014 – în prezent:* Membru al Informatics and Electrical Engineering review panel of the Hungarian National Research, Development and Innovation Office (NKFIH), cu denumirea anterioară Hungarian Scientific Research Fund (OTKA), Budapesta, Ungaria.
- ❑ *Perioada 2012 – în prezent:* Reviewer al Research Foundation - Flanders (Fonds Wetenschappelijk Onderzoek - Vlaanderen, FWO), Bruxelles, Belgia.
- ❑ *Perioada 2011 – în prezent:* Reviewer al Hungarian National Research, Development and Innovation Office (NKFIH), cu denumirea anterioară Hungarian Scientific Research Fund (OTKA), Budapesta, Ungaria.
- ❑ *Perioada 2011 – în prezent:* Reviewer al Czech Science Foundation (GACR), Praga, Cehia.
- ❑ *Perioada martie – iunie 2012:* Membru al Senatului Universității “Politehnica” din Timișoara.
- ❑ *Perioada 2000 – în prezent:* Membru al Consiliului Facultății de Automatică și Calculatoare, Universitatea Politehnica Timișoara.
- ❑ *Perioada 2008 – 2012 și perioada 2000-2004:* Membru al Consiliului Departamentului de Automatică și Informatică Aplicată de la Facultatea de Automatică și Calculatoare din cadrul Universității “Politehnica” din Timișoara.
- ❑ *Perioada 2000 – în prezent:* Expert și evaluator al Consiliului Național al Cercetării Științifice (CNCS, cu vechea denumire Consiliul Național al Cercetării Științifice din Învățământul Superior, CNCSIS), București, în domeniile Automatică, Robotică și Ingineria Sistemelor.
- ❑ *Perioada 2008 – 2009:* Coordonarea activității de acreditare a programului de Master în Automotive Embedded Software în cadrul Facultății de Automatică și Calculatoare, Universitatea “Politehnica” din Timișoara.
- ❑ *Perioada 2008 – 2009:* Coordonarea părții de cercetare din cadrul activității de acreditare a programului de Bachelor în Ingineria Sistemelor și a programelor de Master în Ingineria Sistemelor și în Sisteme Informatice Aplicate în Producție și Servicii în cadrul Facultății de Automatică și Calculatoare, Universitatea “Politehnica” din Timișoara.
- ❑ *Perioada 2007 – în prezent:* Expert și evaluator al Agenției Române de Asigurare a Calității în Învățământul Superior (ARACIS), București, în domeniul Ingineria Sistemelor.

#### **DOMENII DE INTERES ȘTIINȚIFIC** (<http://www.aut.upt.ro/~rprecup/research.html>):

- ❑ Dezvoltarea unor noi strategii, structuri și algoritmi de conducere și reglare automată: conducere convențională, conducere fuzzy (domeniul tezei de doctorat), conducere adaptivă hibridă neuro-fuzzy, data-driven control, model-free control, sliding mode control ș.a.
- ❑ Teorie și aplicații în soft computing.
- ❑ Prelucrarea semnalelor.
- ❑ Modelarea, identificarea și optimizarea sistemelor utilizând inclusiv algoritmi de inspirație biologică.
- ❑ Proiectarea asistată de calculator a sistemelor de conducere automată.
- ❑ Dezvoltarea unor aplicații de conducere a sistemelor mecatronice și sistemelor încorporate (inclusiv sisteme specifice autovehiculelor și roboți mobili), grupurilor energetice, servosistemelor, sistemelor de acționări electrice ș.a.

**Activitatea didactică** (<http://www.aut.upt.ro/~rprecup/teach.html>,  
<http://www.aut.upt.ro/~rprecup/bio.html>):

- Am desfășurat cursuri, seminarii, laboratoare și proiecte la disciplinele menționate anterior.
- Am elaborat (în colaborare) patru cursuri, două culegeri de probleme și patru îndrumătoare de lucrări de laborator.
- Un program Socrates+ (cordonator) în 2014-2021, cu Universitatea din Ljubljana (Slovenia).
- Un program Socrates-Erasmus (cordonator) în 2009-2013, cu Universitatea din Ljubljana (Slovenia).
- Un program Socrates-Erasmus (cordonator) în 2010-2013, cu Kecekemét College (Ungaria).
- Un program Socrates-Erasmus (cordonator) în 1999-2000, cu Universitatea Tehnică din Viena (Austria).

**Adresa profilului meu pe researcherid.com:**

- <http://www.researcherid.com/rid/A-6993-2009>.

**Adresa mea de Open Researcher & Contributor ID (ORCID):**

- <https://orcid.org/0000-0002-2060-7403>.

**Activitatea științifică:**

Am desfășurat-o în domeniile de interes științific menționate anterior (<http://www.aut.upt.ro/~rprecup/research.html>), în care am elaborat (singur sau în colaborare, <http://www.aut.upt.ro/~rprecup/public.html>):

- O carte publicată în 2009 în **Butterworth-Heinemann, Elsevier** (Oxford, UK) (<https://www.elsevier.com/books/nature-inspired-optimization-algorithms-for-fuzzy-controlled-servo-systems/precup/978-0-12-816358-0>, <https://www.sciencedirect.com/book/9780128163580/nature-inspired-optimization-algorithms-for-fuzzy-controlled-servo-systems>), o carte publicată în 1997 la Editura Tehnică (București), zece cărți publicate în 1999-2009 la Editura Orizonturi Universitare (Timișoara) și trei cărți publicate în 2001-2012 la Editura Politehnica (Timișoara) (<http://www.aut.upt.ro/~rprecup/books.html>).
- Trei cărți *editate* publicate în 2012 și 2019 în **Springer** (<https://www.springer.com/gp/book/9783642283048>,  
<https://www.springer.com/gp/book/9789811359941>,  
<https://www.springer.com/gp/book/9789811361500>).
- 25 capitole de carte în Springer-Verlag, Kluwer Academic Publishers, IET Digital Library, World Scientific și Atlantis Press (<http://www.aut.upt.ro/~rprecup/bookch.html>).
- 90 lucrări științifice publicate în reviste cu factor de impact Clarivate Analytics Web of Science (cu denumirea anterioară ISI Web of Knowledge) (<http://www.aut.upt.ro/~rprecup/isijournals.html>): Automatica, IEEE Transactions on Cybernetics, IEEE Transactions on Neural Networks, IEEE Transactions on Neural Networks and Learning Systems, IEEE Transactions on Industrial Electronics, IEEE/ASME Transactions on Mechatronics, Information Sciences, IEEE Transactions on Industrial Informatics, IEEE Transactions on Instrumentation and Measurement, Expert Systems with Applications, Fuzzy Sets and Systems, ISA Transactions, Computers in Industry, Engineering Applications of Artificial Intelligence, Applied Soft Computing, Journal of The Franklin Institute, Robotics and Autonomous Systems, European Journal of Control, Asian Journal of Control, Mathematics and Computers in Simulation, Knowledge-Based Systems, IEEE Transactions on Education, IEEE Systems Journal, International Journal of Systems Science, International Journal of General Systems, Acta Astronautica, IET Control Theory & Applications, Neurocomputing, Electrical Engineering, Journal of Aerospace Information Systems, etc., în Elsevier, Springer, John Wiley and Sons, Taylor & Francis, The American Institute of Aeronautics and Astronautics etc.
- **Patru lucrări de tip Highly Cited Paper conform Clarivate Analytics Web of Science** în septembrie/octombrie 2019, mai/iunie 2018 și noiembrie/decembrie 2015 ([http://www.aut.upt.ro/~rprecup/CiI\\_2011\\_Highly\\_Cited\\_Paper.png](http://www.aut.upt.ro/~rprecup/CiI_2011_Highly_Cited_Paper.png),  
[http://www.aut.upt.ro/~rprecup/TIE\\_2017\\_Highly\\_Cited\\_Paper.png](http://www.aut.upt.ro/~rprecup/TIE_2017_Highly_Cited_Paper.png),  
[http://www.aut.upt.ro/~rprecup/InfSci\\_2017\\_Highly\\_Cited\\_Paper.jpg](http://www.aut.upt.ro/~rprecup/InfSci_2017_Highly_Cited_Paper.jpg),  
[http://www.aut.upt.ro/~rprecup/KBS\\_2013\\_Highly\\_Cited\\_Paper.jpg](http://www.aut.upt.ro/~rprecup/KBS_2013_Highly_Cited_Paper.jpg)).
- **O lucrare de tip Hot Paper conform Clarivate Analytics Web of Science** în noiembrie/decembrie 2015 ([http://www.aut.upt.ro/~rprecup/CiI\\_2015\\_Hot\\_Paper.jpg](http://www.aut.upt.ro/~rprecup/CiI_2015_Hot_Paper.jpg)).
- 46 lucrări științifice publicate în reviste de specialitate din străinătate sau în publicații asimilabile revistelor sub egida unor organizații profesionale internaționale (<http://www.aut.upt.ro/~rprecup/journals.html>).

- **Factor de impact (impact factor, IF) Clarivate Analytics Web of Science (cu denumirea anterioară ISI Web of Knowledge) cumulat = 163.667, IF cumulat calculat conform 2019 Journal Citation Reports (JCR) publicat de Clarivate Analytics în 2020 = 304.337** (<http://www.aut.upt.ro/~rprecup/isi-journals.html>, IF al celor mai bine cotate reviste din domeniul meu este aproximativ 3).
- Peste 50 lucrări științifice publicate în reviste de specialitate din țară.
- Peste 150 lucrări științifice prezentate și publicate în volumele unor manifestări științifice din străinătate (<http://www.aut.upt.ro/~rprecup/confe.html>) în Africa de Sud, Austria, Anglia, Brazilia, Bulgaria, Canada, Cehia, China, Cipru, Croația, Elveția, Franța, Germania, Grecia, Egipt, Italia, Malta, Moldova, Polonia, Portugalia, Rusia, Serbia, Slovacia, Slovenia, Spania, SUA, Tunisia, Turcia, Ungaria, Zambia.
- Peste 100 lucrări științifice publicate în volumele unor manifestări științifice organizate în România, în cadrul cărora 50 lucrări științifice publicate în volumele unor manifestări științifice internaționale organizate în România (cu referenți științifici) și redactate integral într-o limbă de circulație internațională.
- *Editor* al Proceedings of the 7<sup>th</sup> and 8<sup>th</sup> International Conferences on Technical Informatics CONTI'2006 and CONTI'2008, Timișoara, România, Editura Politehnica, Timișoara, 2006 și 2008.
- **Numărul meu Erdős este 3.**

#### **CITĂRI** (<http://www.aut.upt.ro/~rprecup/cita.html>):

- **6897 citări, indice Hirsch (h-index) = 49 și indice Egghe (g-index) = 69** conform Harzing, A.W. (2007) Publish or Perish, disponibil la link-ul <http://www.harzing.com/pop.htm>, **6720 citări, h-index = 49 și i10-index = 127** conform Scholar Google, disponibil la link-ul <http://scholar.google.com/citations?user=a43tQMQA AAAAJ&hl=en>, la 31 august 2020.
- **4858 citări în lucrări Scopus** ale celor 359 lucrări proprii indexate în Scopus, **h-index = 41** conform Scopus, disponibil la link-ul <http://www.scopus.com/authid/detail.url?authorId=56234853500>, la 31 august 2020.
- **3549 citări în lucrări Clarivate Analytics Web of Science (cu denumirea anterioară ISI Web of Knowledge)** ale celor 276 lucrări proprii indexate în Clarivate Analytics Web of Science, apreciate cu **h-index = 38** conform Clarivate Analytics Web of Science, disponibil la link-ul <http://www.researcherid.com/rid/A-6993-2009> transferat la <https://publons.com/researcher/1193864/radu-emil-precup/publications/>, la 31 august 2020.
- **h-index = 37** (sunt excluse autocitările tuturor coautorilor), **h-index = 35** (sunt excluse autocitările tuturor coautorilor) conform Scopus (a se vedea rezultatele prezentate sintetic la link-ul <http://www.scopus.com/authid/detail.url?authorId=56234853500>), **h-index = 29** (sunt excluse autocitările tuturor coautorilor) conform Clarivate Analytics Web of Science.
- **Factor de impact (impact factor, IF) Clarivate Analytics Web of Science (cu denumirea anterioară ISI Web of Knowledge) cumulat al citărilor independente: 574.685, IF cumulat al citărilor independente calculat conform 2013 Journal Citation Reports (JCR) publicat de Clarivate Analytics în 2014: 623.687** (IF al celor mai bine cotate reviste din domeniul meu este aproximativ 3).
- **Peste 4000 citări independente.**

#### **Lucrări și prelegeri invitate** (<http://www.aut.upt.ro/~rprecup/invite.html>):

- R.-E. Precup, Evolving Fuzzy Models of Mechatronics Applications, 17<sup>th</sup> IEEE International Symposium on Intelligent Systems and Informatics SISY 2019, Subotica, Serbia, pp. 1-2, 2019.
- R.-E. Precup, T.-A. Teban and A. Albu, Evolving Fuzzy and Neural Network Models of Finger Dynamics for Prosthetic Hand Myoelectric-based Control, Proceedings of 11<sup>th</sup> International Conference on Electronics, Computers and Artificial Intelligence ECAI 2019, Pitesti, Romania, pp. 1-8, 2019.
- A. Albu, R.-E. Precup and T.-A. Teban, Medical Applications of Artificial Neural Networks, Proceedings of XIV International SAUM Conference on Systems, Automatic Control and Measurements SAUM 2018, Niš, Serbia, pp. 1-11, 2018.
- R.-E. Precup, St. Preitl, C.-A. Bojan-Dragoș, M.-B. Rădac, A.-I. Szedlak-Sținean, E.-L. Hedrea and R.-C. Roman, Technical and Non-Technical Applications of Evolving Takagi-Sugeno-Kang Fuzzy Models, Proceedings of 4<sup>th</sup> International Conference on Electrical, Electronic and Computing Engineering IcETRAN 2017, Kladovo, Serbia, pp. 1-8, 2017.

- R.-E. Precup, St. Preitl, C.-A. Bojan-Dragoș, M.-B. Rădac, A.-I. Szedlak-Stînean, E.-L. Hedrea and R.-C. Roman, Evolving Takagi-Sugeno Fuzzy Modeling Applications of Incremental Online Identification Algorithms, Proceedings of XIII International SAUM Conference on Systems, Automatic Control and Measurements SAUM 2016, Niș, Serbia, pp. 3-10, 2016.
- R.-E. Precup, Nature-inspired optimization algorithms applied to fuzzy control, fuzzy modeling, mobile robots and optical character recognition, Proceedings of IEEE 9<sup>th</sup> International Symposium on Applied Computational Intelligence and Informatics SACI 2014, Timișoara, pp. 11, 2014.
- St. Preitl and R.-E. Precup, Linear and Fuzzy Control Extensions of the Symmetrical Optimum Method, Proceedings of Special International Conference on Complex Systems: Synergy of Control, Communications and Computing COSY 2011, Ohrid, Republic of Macedonia, pp. 59-68, 2011.
- St. Preitl, R.-E. Precup and Zs. Preitl, Aspects Concerning the Tuning of 2-DOF Fuzzy Controllers, Proceedings of X<sup>th</sup> Triennial International SAUM Conference on Systems, Automatic Control and Measurements SAUM 2010, Eds. Nikolić, V., Antić, D. and Mitić, D., Niș, Serbia, pp. 210-219, 2010.
- C.-A. Dragoș, R.-E. Precup, St. Preitl and M.-B. Rădac, Low-cost Fuzzy Control Solutions for Electromechanical Applications, Proceedings of 2<sup>nd</sup> International Scientific and Expert Conference TEAM 2010, Kecskemét, Hungary, vol. 1, pp. 10-23, 2010.
- St. Preitl, R.-E. Precup and Zs. Preitl, Development of 1-DOF and 2-DOF fuzzy controllers. Applications on servo-systems, Tutorial invitat la 2004 IEEE-TTC International Conference on Automation, Quality and Testing, Robotics AQTR 2004 (THETA 14), Cluj-Napoca, 2004.
- St. Preitl, Zs. Preitl and R.-E. Precup, Tuning Methodologies for PI and PID Controllers for Second and Third Order Systems, Proceedings of 7<sup>th</sup> Conference on Systems, Automatic Control and Measurements SAUM'01, Ed. Nedić, N.N., Vrnjačka Banja, Serbia, pp. 24-29, 2001.
- St. Preitl and R.-E. Precup, Tuning of PI and PID Controllers by a Generalized Form of the Symmetrical Optimum Method, Proceedings of 6<sup>th</sup> Conference on Systems, Automatic Control and Measurements SAUM'98, Ed. Bucevac, Z., Niș, Serbia, pp. 34-48, 1998.

**Granturi și contracte de cercetare (<http://www.aut.upt.ro/~rprecup/contracts.html>):**

- 45 granturi și contracte de cercetare-dezvoltare cu Ministerul Învățământului, CNCSU, CNCSIS, CNCS, UEFISCDI, Academia Română și directe cu terți, dintre care 33 câștigate prin competiție, la șapte granturi și contracte fiind director de proiect, la patru fiind responsabil de proiect al partenerului Universitatea Politehnica Timișoara.
- *Un grant de cercetare internațională (director) în 2008-2009 cu Universitatea din Ljubljana (Slovenia).*
- *Trei granturi de cercetare internațională (colaborator) în perioada 2003-2009: unul cu Universitatea Tehnică și Economică din Budapesta (Ungaria) și două cu Budapest Tech Polytechnical Institution.*

**Recunoașterea activității științifice (<http://www.aut.upt.ro/~rprecup/honours.html>):**

- *Membru corespondent al Academiei Române (din 2018).*
- *Membru corespondent al Academiei de Științe Tehnice din România (din 2018).*
- *Premiat cu Elsevier Scopus Award for Excellence in Global Contribution (2017).*
- *Premiul Grigore Moisil al Academiei Române, 2014, acordat în 2016, pentru Contribuții la optimizarea sistemelor fuzzy.*
- *Premiul Grigore Moisil al Academiei Române, 2003, acordat în 2005, pentru Contribuții la dezvoltarea conducerii FUZZY a proceselor.*
- *Premiul Spiru Haret al Marii Loji Naționale din România, acordat în 2016 în parteneriat cu Academia Română, pentru Educație, mediu, IT.*
- *Inclus în lista Top 10 researchers in Artificial Intelligence and Automation (conform listei publicate de IIoT World în iulie 2017).*
- *Inclus în Guide2Research Ranking for Top Scientists in Computer Science and Electronics în poziția 2974 a clasamentului mondial și a doua poziție în România (conform <http://www.guide2research.com/u/radu-emil-precup> la 17 iulie 2020).*
- *Marele Premiu la Gala Premiilor Lugojene, ediția a VIII-a, 2018.*
- *Premiat cu Certificate of Outstanding Reviewer from IEEE Transactions on Cybernetics în recognition of an outstanding contribution to the journal (2017).*
- *Profesor onorific al Óbuda University (cu denumirea veche Budapest Tech Polytechnical Institution), Budapesta, Ungaria (din 2007).*

- *Profesor Bologna* (2017) din partea Alianței Naționale a Organizațiilor Studentești din România (ANOSR).
- *Senior Member, IEEE* (din 2007).
- *Premiat cu Certificate of Appreciation* from the IEEE Romania Section in grateful recognition of 10 years of service as an IEEE member (2015).
- *Premiul Excelenței în Cercetare pe anul 2015* din partea Universității Politehnica Timișoara (UPT) pentru activitatea de cercetare avansată în domeniul Controllers, Control, Tuning, plasat conform măsurătorilor Scopus pe locul I în lume și pentru contribuția de excepție adusă astfel vizibilității UPT pe plan internațional.
- *Premiul Traian Vuia pentru Științe Inginerești la Gala Excelenței Bănățene, Ediția-II 2015*.
- *Premiat cu Best Paper Award* la 7<sup>th</sup> International Conference on Information Technology and Quantitative Management ITQM 2019 (Granada, Spania).
- *Nominalizare la Best Paper Award* la 12<sup>th</sup> International Conference on Informatics in Control, Automation and Robotics ICINCO 2015 (Colmar, Franța).
- *Premiat cu Certificate of Appreciation for the Best Paper in the Session TT07 I Control Theory* la 39<sup>th</sup> Annual Conference of the IEEE Industrial Electronics Society IECON 2013 (Viena, Austria).
- *Premiat cu Best Paper Award* la 16<sup>th</sup> Online World Conference on Soft Computing in Industrial Applications WSC16 (Loughborough University, Anglia, 2011).
- *Premiat cu Certificate of Achievement* from the IEEE Romania Section for notable services and contributions towards the advancement of the engineering professions (2011).
- *Premiat cu Best Paper Award in the Area of Intelligent Control* (două lucrări) la 2008 Conference on Human System Interaction HSI 2008, Krakow (Polonia).
- *Premiat cu Diplomă* din partea Facultății de Automatică și Calculatoare, acordată la Timișoara în 2006, pentru merite deosebite în cercetarea științifică valorificată prin publicații.
- *Premiat cu Diplomă de Excelență* din partea Facultății de Automatică și Calculatoare, acordată la Timișoara în 2005, pentru performanțe deosebite obținute în activitatea desfășurată în cadrul Facultății de Automatică și Calculatoare.
- *Premiat cu Excellency Diploma* la International Conference on Automation, Quality & Testing, Robotics AQTR 2004 (THETA 14, Cluj-Napoca).

**Apartenență la societăți științifice și tehnice (<http://www.aut.upt.ro/~rprecup/soc.html>):**

- Din anul 2002 sunt membru al Comitetului Tehnic al International Federation of Automatic Control (IFAC) “Computational Intelligence in Control” (cu denumirea veche “Cognition and Control”).
- Din anul 2003 sunt membru al Control Systems Society din cadrul Institute of Electrical and Electronics Engineers (IEEE), din anul 2003 sunt membru al Intelligent Transportation Systems Society, din anul 2010 sunt membru al Computational Intelligence Society, din anul 2011 sunt membru al Industrial Electronics Society iar din anul 2007 sunt **Senior Member, IEEE**.
- Din anul 2007 sunt membru al Subcommittee on Computational Intelligence of the Technical Committee on Control, Robotics and Mechatronics of the IEEE Industrial Electronics Society.
- Din anul 2013 sunt membru al Task Force on Autonomous Learning Systems within the Neural Networks Technical Committee of the IEEE Computational Intelligence Society.
- Din anul 2014 sunt membru al Technical Committee on Computational Cybernetics of the IEEE Systems, Man, and Cybernetics Society.
- Din anul 2016 sunt membru al Technical Committee on Cyber-Medical Systems of the IEEE Systems, Man, and Cybernetics Society.
- Din anul 2020 sunt membru al Task Force on Adaptive and Evolving Fuzzy Systems within the Fuzzy Systems Technical Committee of the IEEE Computational Intelligence Society.
- Din anul 2017 sunt membru al Machine Intelligence Research Labs (MIR Labs).
- Din anul 2011 sunt membru al The Working Group WG 12.9 on Computational Intelligence of the Technical Committee TC12 on Artificial Intelligence of the International Federation for Information Processing (IFIP).
- Din anul 2010 sunt membru al European Society for Fuzzy Logic and Technology (EUSFLAT).
- Din anul 2005 sunt membru onorific al Hungarian Fuzzy Association.
- Din anul 1993 sunt membru al Societății Române de Automatică și Informatică Tehnică (SRAIT).
- Din anul 1998 sunt membru al Societății de Robotică din România (SRR).
- Din anul 1996 sunt membru al Societății de Instalații Electrice și Automatizări din România (SIEAR).
- În perioada 2008-2019 am fost membru al Technical Committee on Virtual Systems in Measurements of the IEEE Instrumentation & Measurement Society.

- În perioada 2008-2019 am fost membru al Task Force on Educational Aspects of Standards of Computational Intelligence of the Technical Committee on Standards of the IEEE Computational Intelligence Society.

**Membru în colegii de redacție ale revistelor (<http://www.aut.upt.ro/~rprecup/edboards.html>):**

- *Guest Editor*, împreună cu Dr. Bo Xiao (Imperial College London, Anglia), Dr. Hak-Keung Lam (King's College London, Anglia) și Dr. R. Sakthivel (Bharathiar University, Coimbatore, India), al *Special Issue* on Interval Type-2 Fuzzy-Model-Based Control Design and Membership-Functions-Dependent Analysis, care va fi publicat în 2021 în revista *International Journal of Systems Science* (Taylor and Francis), factor de impact conform 2019 Journal Citation Reports (JCR) publicat de Clarivate Analytics în 2020 = 2.149.
- Associate editor al revistei *IEEE Transactions on Fuzzy Systems* (din 2018), indexată în Clarivate Analytics Web of Science (cu denumirea anterioară ISI Web of Knowledge), factor de impact conform 2019 Journal Citation Reports (JCR) publicat de Clarivate Analytics în 2020 = 9.518.
- Associate editor al revistei *IEEE Transactions on Cybernetics* (din 2018), indexată în Clarivate Analytics Web of Science (cu denumirea anterioară ISI Web of Knowledge), factor de impact conform 2019 Journal Citation Reports (JCR) publicat de Clarivate Analytics în 2020 = 11.079.
- Associate editor al revistei *Information Sciences*, Elsevier (din 2020), indexată în Clarivate Analytics Web of Science (cu denumirea anterioară ISI Web of Knowledge), factor de impact conform 2019 Journal Citation Reports (JCR) publicat de Clarivate Analytics în 2020 = 5.910.
- Membru al Editorial Board al revistei *Applied Soft Computing*, Elsevier (din 2014), indexată în Clarivate Analytics Web of Science (cu denumirea anterioară ISI Web of Knowledge), factor de impact conform 2019 Journal Citation Reports (JCR) publicat de Clarivate Analytics în 2020 = 5.472.
- Membru al Editorial Board al revistei *Evolving Systems*, Springer (din 2014), indexată în Clarivate Analytics Web of Science (cu denumirea anterioară ISI Web of Knowledge), top rated Springer Nature conform <https://www.springernature.com/>.
- Editor al revistei *Cogent Engineering*, Taylor & Francis, Anglia (din 2017), indexată în Clarivate Analytics Web of Science (cu denumirea anterioară ISI Web of Knowledge).
- *Guest Editor*, împreună cu Dr. Hak-Keung Lam (King's College London, Anglia), Dr. Bo Xiao (Imperial College London, Anglia) și Prof. Kazuo Tanaka (University of Electro-Communications, Tokyo, Japonia), al *Special Issue* on Membership-Function-Dependent Analysis and Design for Fuzzy-Model-Based Control Systems and their Applications, care va fi publicat în 2020 în revista *IET Control Theory & Applications*, factor de impact conform 2019 Journal Citation Reports (JCR) publicat de Clarivate Analytics în 2020 = 3.343.
- *Guest Editor*, împreună cu profesorii Hans Hellendoorn (Delft University of Technology, Olanda) și Plamen Angelov (Lancaster University, Anglia), al *Special Issue* on Synergy of computers, cognition, communication and control with industrial applications, publicat în revista *Computers in Industry* (Elsevier), vol. 74, dec. 2015, factor de impact conform 2019 Journal Citation Reports (JCR) publicat de Clarivate Analytics în 2020 = 3.954.
- Membru al Editorial Board al revistei Proceedings of the Romanian Academy, Series A: Mathematics, Physics, Technical Sciences, Information Science, Academia Română (din 2018), indexată în Clarivate Analytics Web of Science (cu denumirea anterioară ISI Web of Knowledge), factor de impact conform 2019 Journal Citation Reports (JCR) publicat de Clarivate Analytics în 2020 = 1.294.
- Membru al Editorial Board al revistei Romanian Journal of Information Science and Technology, Academia Română (din 2018), indexată în Clarivate Analytics Web of Science (cu denumirea anterioară ISI Web of Knowledge), factor de impact conform 2019 Journal Citation Reports (JCR) publicat de Clarivate Analytics în 2020 = 0.485.
- Membru al Senior Editorial Board al revistei Studies in Informatics and Control, ICI București (din 2020), indexată în Clarivate Analytics Web of Science (cu denumirea anterioară ISI Web of Knowledge), factor de impact conform 2019 Journal Citation Reports (JCR) publicat de Clarivate Analytics în 2020 = 2.102.
- Associate Editor al revistei Control Engineering and Applied Informatics, Societatea Română de Automatică și Informatică Tehnică (din 2016), indexată în Clarivate Analytics Web of Science (cu denumirea anterioară ISI Web of Knowledge), factor de impact conform 2019 Journal Citation Reports (JCR) publicat de Clarivate Analytics în 2020 = 0.775.
- Track Chair al revistei Acta Polytechnica Hungarica, Óbuda University, Ungaria (din 2014), Associate Editor (2012-2014), indexată în Clarivate Analytics Web of Science (cu denumirea



anterioară ISI Web of Knowledge), factor de impact conform 2019 Journal Citation Reports (JCR) publicat de Clarivate Analytics în 2020 = 1.219.

- Membru al Editorial Board al revistei International Journal of Computers Communications & Control (din 2017), indexată în Clarivate Analytics Web of Science (cu denumirea anterioară ISI Web of Knowledge), factor de impact conform 2019 Journal Citation Reports (JCR) publicat de Clarivate Analytics în 2020 = 2.093.
- Membru al Editorial Board al revistei Advances in Electrical and Computer Engineering, Universitatea "Ștefan cel Mare" din Suceava (din 2007), indexată în Clarivate Analytics Web of Science (cu denumirea anterioară ISI Web of Knowledge), factor de impact conform 2019 Journal Citation Reports (JCR) publicat de Clarivate Analytics în 2020 = 1.102.
- Associate Editor al revistei CAAI Transactions on Intelligence Technology, Chinese Association for Artificial Intelligence (CAAI) and The Institution of Engineering and Technology (IET) (din 2019).
- *Editor-in-Chief* al revistei International Journal of Artificial Intelligence, CESER Publications, India (din 2008), indexată în SCOPUS.
- *Editor-in-Chief* al revistei International Journal of Imaging and Robotics, CESER Publications, India (din 2011), indexată până în 2017 în SCOPUS.
- Editor al revistei Paladyn, Journal of Behavioral Robotics, Versita, Polonia, publicată pentru început împreună cu Springer-Verlag, apoi cu De Gruyter (din 2010), indexată în SCOPUS, DBLP.
- Editor al revistei International Journal of Tomography & Simulation, CESER Publications, India (din 2006), indexată până în 2017 în SCOPUS.
- Membru al Editorial Board al revistei International Journal of Advanced Intelligence Paradigms, Inderscience Publishers, Anglia (din 2009), indexată în SCOPUS, INSPEC.
- Membru al Editorial Advisory Board al revistei Mediterranean Journal of Measurement and Control, SoftMotor Ltd, Anglia (din 2009), indexată până în 2016 în SCOPUS, INSPEC.
- Editor al revistei International Journal of Soft Computing, Medwell Online, Pakistan (din 2007), indexată până în 2016 în SCOPUS.
- Membru al Editorial Board al revistei Journal of Electrical Engineering, Editura Politehnica, Timișoara (din 2012), indexată până în 2017 în SCOPUS, INSPEC.
- Membru al Editorial Board al revistei Facta Universitatis, Series Automatic Control and Robotics, University of Niš, Serbia (din 2008).
- Associate Editor al revistei Gradus, John von Neumann University, Ungaria (din 2014).
- Associate Editor al revistei Journal of Smart Environments and Green Computing, OAE Publishing Inc., SUA (din 2020).
- Associate Editor al revistei International Journal of Computational Intelligence and Pattern Recognition, Columbia International Publishing, SUA (2014-2016).
- Membru al Editorial Board al revistei Journal of Applied Mathematics, Hindawi Publishing Corporation, SUA (2014-2019), indexată în SCOPUS.
- Membru al Editorial Board of The Open Cybernetics & Systemics Journal, Bentham Open, Emiratele Arabe Unite (2016-2018), indexată până în 2018 în SCOPUS, Zentralblatt MATH, MathSciNet.
- Membru al Editorial Board al revistei Annals of The University of Craiova, Series: Automation, Computers, Electronics and Mechatronics (2015-2018), indexată până în 2018 în INSPEC.
- *Associate editor-in-chief* al Buletinului Științific al Universității Politehnica Timișoara, Seria Automatică și Calculatoare (2005-2016) și membru al colegiului de redacție în perioada 1994-2004.

**Membru în comitete internaționale de program (<http://www.aut.upt.ro/~rprecup/progcom.html>):**

- *FUZZ-IEEE Technical Chair*, împreună cu Prof. Plamen Angelov (Anglia) și Prof. Fernando Gomide (Brazilia), al 2022 IEEE World Congress on Computational Intelligence IEEE WCCI 2022 (Padua, Italia).
- *Co-Chair* al *Control Systems and Applications Track*, împreună cu Prof. Kanghyun Jo (Coreea) și Prof. Makoto Iwasaki (Japonia), în cadrul *44<sup>th</sup> Annual Conference of the IEEE Industrial Electronics Society IECON'18* (Washington DC, SUA).
- *Special Session Chair* al *IEEE Joint Conference on Neural Networks IJCNN 2013* (Dallas, TX, SUA).
- *Special Session Chair* al 2017 IEEE Conference on Evolving and Adaptive Intelligent Systems EAIS 2017 (Ljubljana, Slovenia).
- *Special Session Chair* al 2016 IEEE Conference on Evolving and Adaptive Intelligent Systems EAIS 2016 (Natal, Brazilia).

- *Publication Chair* al 7<sup>th</sup> International Conference on Swarm Intelligence ICSI'2016 (Bali, Indonezia), 6<sup>th</sup> International Conference on Swarm Intelligence and 2<sup>nd</sup> BRICS Congress on Computational Intelligence ICSI-CCI'2015 (Beijing, China), 5<sup>th</sup> International Conference on Swarm Intelligence ICSI'2014 (Hefei and Huangshan, China), 4<sup>th</sup> International Conference on Swarm Intelligence ICSI'2013 (Harbin, China), 3<sup>rd</sup> International Conference on Swarm Intelligence ICSI'2012 (Shenzhen, China) și 2<sup>nd</sup> International Conference on Swarm Intelligence ICSI'2011 (Chongqing, China), cu lucrările indexate în *Clarivate Analytics Conference Proceedings Citation Index (cu denumirea anterioară ISI Conference Proceedings Citation Index)*.
- *Publication Co-chair* al 11<sup>th</sup> International Conference on Swarm Intelligence ICSI'2020 (Belgrad, Serbia), 10<sup>th</sup> International Conference on Swarm Intelligence ICSI'2019 (Chiang Mai, Thailanda) și 9<sup>th</sup> International Conference on Swarm Intelligence ICSI'2018 (Shanghai, China).
- *Președinte al comitetului internațional de program* la 23<sup>rd</sup> International Conference on System Theory, Control and Computing ICSTCC 2019 (Sinaia).
- *Vicepreședinte al comitetelor internaționale de program* la 24<sup>th</sup>, 22<sup>nd</sup> și 21<sup>st</sup> International Conferences on System Theory, Control and Computing ICSTCC 2020, ICSTCC 2018 și ICSTCC 2017 (Sinaia), cu lucrările indexate în *Clarivate Analytics Conference Proceedings Citation Index (cu denumirea anterioară ISI Conference Proceedings Citation Index)*.
- *Copreședinte general și copreședinte al comitetelor internaționale de program* la IEEE 14<sup>th</sup>, 13<sup>th</sup> și 12<sup>th</sup> International Symposia on Applied Computational Intelligence and Informatics SACI 2020, SACI 2019 și SACI 2018 (Timișoara), cu lucrările indexate în *Clarivate Analytics Conference Proceedings Citation Index (cu denumirea anterioară ISI Conference Proceedings Citation Index)*.
- *Copreședinte general* la 15<sup>th</sup> International Conference on Development and Application Systems DAS 2020 (Suceava), cosponsorizată tehnic de IEEE Industry Applications Society.
- *Membru în comitetul internațional de program* la: 2021 IEEE Second International Conference on Control, Measurement and Instrumentation CMI 2021 (Kolkata, India), IEEE Symposium on Evolving and Autonomous Learning Systems (IEEE EALS) within 2020 IEEE Symposium Series on Computational Intelligence (IEEE SSCI 2020, Canberra, Australia), IEEE 15<sup>th</sup> International Conference on System of Systems Engineering SoSE 2020 (Budapesta, Ungaria), 17<sup>th</sup> International Conference on Informatics in Control, Automation and Robotics ICINCO 2020 (Liesaint - Paris, Franța), 7<sup>th</sup> International Conference on Control, Decision and Information Technologies CoDIT 2020 (Praga, Cehia), 12<sup>th</sup> International Conference on Fuzzy Computation Theory and Applications FCTA 2020 (Budapesta, Ungaria), IEEE 24<sup>th</sup> International Conference on Intelligent Engineering Systems INES 2020 (Reykjavik, Islanda), IEEE 18<sup>th</sup> International Symposium on Intelligent Systems and Informatics SISY 2020 (Subotica, Serbia), 2020 6<sup>th</sup> International Conference on Control, Automation and Robotics ICCAR 2020 (Singapore), 12<sup>th</sup> International KES Conference on Intelligent Decision Technologies KES IDT 20 (Split, Croația), 14<sup>th</sup> International KES Conference on Agents and Multi-Agent Systems: Technologies and Applications KES AMSTA 20 (Split, Croația), 13<sup>th</sup> International KES Conference on Human Centred Intelligent Systems KES HCIS 20 (Split, Croația), 12<sup>th</sup> Asian Conference on Intelligent Information and Database Systems ACIIDS 2020 (Phuket, Thailanda), 2020 IEEE International Conference on Automation, Quality and Testing, Robotics AQTR 2020 (Cluj-Napoca), 5<sup>th</sup> IFAC Conference on Intelligent Control and Automation Sciences ICONS 2019 (Belfast, Marea Britanie), IEEE Symposium on Computational Intelligence in Control and Automation (IEEE CICA) within 2019 IEEE Symposium Series on Computational Intelligence (IEEE SSCI 2019, Xiamen, China), 18<sup>th</sup> IEEE International Conference on Machine Learning and Applications ICMLA 2019 (Boca Raton, FL, SUA), 11<sup>th</sup> International Conference on Computational Collective Intelligence ICCCI 2019 (Hendaye, Franța), 16<sup>th</sup> International Conference on Informatics in Control, Automation and Robotics ICINCO 2019 (Praga, Cehia), 11<sup>th</sup> International Conference on Fuzzy Computation Theory and Applications FCTA 2019 (Viena, Austria), 6<sup>th</sup> International Conference on Control, Decision and Information Technologies CoDIT'19 (Paris, Franța), 7<sup>th</sup> IFAC Symposium on Systems Structure and Control SSSC 2019 (Sinaia), 16<sup>th</sup> International Conference on Distributed Computing and Artificial Intelligence DCAI'19 (Avila, Spania), 23<sup>rd</sup> IEEE International Conference on Intelligent Engineering Systems INES 2019 (Gödöllő, Ungaria), 13<sup>th</sup> International Symposium on Intelligent Distributed Computing IDC 2019 (Saint-Petersburg, Rusia), 19<sup>th</sup> International Conference on Intelligent Systems Design and Applications ISDA 2019 (Pretoria, Africa de Sud), International Symposium on Information Systems and Engineering ISE 2019 within 17<sup>th</sup> International Conference on High Performance Computing & Simulation HPCS 2019 (Dublin, Irlanda), 19<sup>th</sup> International Conference on Hybrid Intelligent Systems HIS 2019 (VIT Bhopal University, India), 11<sup>th</sup> Asian Conference on Intelligent Information and Database Systems ACIIDS

2019 (Yogyakarta, Indonesia), Second International Conference on Artificial Intelligence for Industries ai4i 2019 (Laguna Hills, CA, SUA), 11<sup>th</sup> International KES Conference on Intelligent Decision Technologies KES-IDT-19 (St. Julians, Malta), 13<sup>th</sup> International KES Conference on Agents and Multi-Agent Systems: Technologies and Applications KES-AMSTA-19 (St. Julians, Malta), 12<sup>th</sup> International KES Conference on Intelligent Interactive Multimedia: Systems and Services KES-IIMSS-19 (St. Julians, Malta), 10<sup>th</sup> IEEE International Conference on Cognitive Infocommunications CogInfoCom 2019 (Napoli, Italia), IEEE Joint 19<sup>th</sup> International Symposium on Computational Intelligence and Informatics and 7<sup>th</sup> International Conference on Recent Achievements in Mechatronics, Automation, Computer Sciences and Robotics CINTI-MACRo 2019 (Szeged, Ungaria), 17<sup>th</sup> IEEE International Symposium on Intelligent Systems and Informatics SISY 2019 (Subotica, Serbia), 20<sup>th</sup> International Carpathian Control Conference ICC 2019 (Krakow-Wieliczka, Polonia), Second International Conference on Advanced Computational and Communication Paradigms ICACCP 2019 (Sikkim, India), 6<sup>th</sup> International Conference on Electrical, Electronic and Computing Engineering IcETRAN 2019 (Srebrno Jezero, Serbia), 7<sup>th</sup> International Conference on Transportation & Logistics TIL 2019 (Niš, Serbia), 37<sup>th</sup> Conference of the North American Fuzzy Information Processing Society NAFIPS 2018 (Fortaleza, Brazilia), 3<sup>rd</sup> International Conference on Computing and Network Communications CoCoNet'19 (Trivandrum, Kerala, India), 11<sup>th</sup> International Conference on Electronics, Computers and Artificial Intelligence ECAI 2019 (Pitești), 7<sup>th</sup> International Workshop on Systems Safety & Security IWSSS 2019 (Pitești), 17<sup>th</sup> IEEE International Conference on Machine Learning and Applications ICMLA 2018 (Orlando, FL, SUA), 3<sup>rd</sup> IFAC Conference on Embedded Systems, Computational Intelligence and Telematics in Control CESCIT 2018 (Faro, Portugalia), 5<sup>th</sup> International Conference on Control, Decision and Information Technologies CoDIT'18 (Thessaloniki, Grecia), 9<sup>th</sup> International Conference on Cognitive Infocommunications CogInfoCom 2018 (Budapesta, Ungaria), 10<sup>th</sup> International Joint Conference on Computational Intelligence IJCCI 2018 (Sevilla, Spania), 6<sup>th</sup> World Conference on Information Systems and Technologies WorldCist'18 (Napoli, Italia), 10<sup>th</sup> International Conference on Computational Collective Intelligence ICCCI 2018 (Bristol, Marea Britanie), 22<sup>nd</sup> IEEE International Conference on Intelligent Engineering Systems INES 2018 (Las Palmas de Gran Canaria, Spania), 2018 IEEE Conference on Evolving and Adaptive Intelligent Systems EAIS 2018 (Rhodes, Grecia), 2018 IEEE International Symposium on INnovations in Intelligent SysTems and Applications INISTA 2018 (Thessaloniki, Grecia), IEEE 18<sup>th</sup> International Symposium on Computational Intelligence and Informatics CINTI 2018 (Budapesta, Ungaria), 16<sup>th</sup> International Symposium on Intelligent Systems and Informatics SISY 2018 (Subotica, Serbia), 10<sup>th</sup> International KES Conference on Intelligent Decision Technologies KES-IDT-18 (Gold Coast, Australia), 12<sup>th</sup> International KES Conference on Agents and Multi-Agent Systems: Technologies and Applications KES-AMSTA-18 (Gold Coast, Australia), 11<sup>th</sup> International KES Conference on Intelligent Interactive Multimedia: Systems and Services KES-IIMSS-18 (Gold Coast, Australia), 10<sup>th</sup> International Conference on Soft Computing and Pattern Recognition SoCPaR 2018 (Porto, Portugalia), 18<sup>th</sup> International Conference on Hybrid Intelligent Systems HIS 2018 (Porto, Portugalia), 19<sup>th</sup> International Carpathian Control Conference ICC 2018 (Szilvasvarad, Ungaria), 2<sup>nd</sup> International Symposium on Small-scale Intelligent Manufacturing Systems SIMS 2018 (Cavan, Ireland), International Conference Cybernetics & Informatics 2018 (Lazy pod Makytou, Slovacia), Fourth International Symposium on Signal Processing and Intelligent Recognition Systems SIRS'18 (Bangalore, India), 7<sup>th</sup> International Conference on Advances in Computing, Communications and Informatics ICACCI'18 (Bangalore, India), XIV International Conference on Systems, Automatic Control and Measurements SAUM 2018 (Nis, Serbia), International Conference Automatics and Informatics'2018 (Sofia, Bulgaria), 2018 IEEE International Conference on Automation, Quality and Testing, Robotics AQTR 2018 (Cluj-Napoca), 6<sup>th</sup> International Workshop on Systems Safety & Security IWSSS 2018 (Iasi), International Conference on Modern Intelligent Systems Concepts MISC 2018 (Rabat, Maroc), 26<sup>th</sup> International Joint Conference on Artificial Intelligence IJCAI 2017 (Melbourne, Australia), 16<sup>th</sup> IEEE International Conference on Machine Learning and Applications ICMLA 2017 (Cancun, Mexic), 14<sup>th</sup> International Conference on Informatics in Control, Automation and Robotics ICINCO 2017 (Madrid, Spania), 9<sup>th</sup> International Joint Conference on Computational Intelligence IJCCI 2017 (Funchal, Madeira, Portugalia), IEEE 21<sup>st</sup> International Conference on Intelligent Engineering Systems INES 2017 (Larnaca, Cipru), 2017 IEEE Conference on Evolving and Adaptive Intelligent Systems EAIS 2017 (Ljubljana, Slovenia), 9<sup>th</sup> International KES Conference on Intelligent Decision Technologies KES-IDT-17 (Vilamoura, Algarve, Portugalia), 11<sup>th</sup> International KES Conference on Agents and Multi-Agent Systems: Technologies and Applications KES-AMSTA-17 (Vilamoura, Algarve, Portugalia), 10<sup>th</sup> International KES Conference on Intelligent Interactive Multimedia:

Systems and Services KES-IIMSS-17 (Vilamoura, Algarve, Portugal), 3<sup>rd</sup> Global Conference on Artificial Intelligence GCAI 2017 (Miami, FL, SUA), 5<sup>th</sup> World Conference on Information Systems and Technologies WorldCist'17 (Porto Santo Island, Madeira, Portugal), 11<sup>th</sup> International Symposium on Intelligent Distributed Computing IDC 2017 (Belgrad, Serbia), 9<sup>th</sup> International Conference on Computational Collective Intelligence ICCCI 2017 (Nicosia, Cipru), 8<sup>th</sup> International Conference on Cognitive Infocommunications CogInfoCom 2017 (Debrecen, Ungaria), IEEE 15<sup>th</sup> International Symposium on Intelligent Systems and Informatics SISY 2017 (Subotica, Serbia), 8<sup>th</sup> EAI International Conference on Big Data Technologies and Applications BDTA 2017 (Gwangju, Coreea de Sud), Spring Conference of IEEE Region 10 TENSYP 2017 (Cochin, Kerala, India), Second International Conference on Advanced Wireless Information, Data, and Communication Technologies AWICT 2017 (Paris, Franța), 3<sup>rd</sup> International Integrated (Web & Offline) Conference & Concert on Convergence with Academic & Job Fair ICCC 2017 (Hangzhou, China), 5<sup>th</sup> International Workshop on Systems Safety & Security IWSSS 2017 (Târgoviște), 25<sup>th</sup> International Joint Conference on Artificial Intelligence IJCAI-16 (New York City, SUA), 2016 Annual Conference of the North American Fuzzy Information processing Society NAFIPS'2016 (El Paso, TX, SUA), 4<sup>th</sup> IFAC International Conference on Intelligent Control and Automation Sciences ICONS 2016 (Reims, Franța), 2016 IEEE Symposium on Evolving and Autonomous Learning Systems EALS 2016 as part of 2016 IEEE Symposium Series on Computational Intelligence SSCI 2016 (Atena, Grecia), 13<sup>th</sup> International Conference on Informatics in Control, Automation and Robotics ICINCO 2016 (Lisabona, Portugal), 20<sup>th</sup> Jubilee IEEE International Conference on Intelligent Engineering Systems INES 2016 (Budapesta, Ungaria), 11<sup>th</sup> International Workshop on Enterprise Integration, Interoperability and Networking EI2N 2016 (Rhodes, Grecia), 8<sup>th</sup> IEEE International Conference on Intelligent Systems IS'16 (Sofia, Bulgaria), 13<sup>th</sup> International Conference on Distributed Computing and Artificial Intelligence DCAI'16 (Sevilla, Spania), 8<sup>th</sup> International Conference on Fuzzy Computation Theory and Applications FCTA 2016 (Porto, Portugal), 17<sup>th</sup> International Carpathian Control Conference ICC'2016 (High Tatras, Slovacia), 8<sup>th</sup> International Conference on Computational Collective Intelligence ICCCI 2016 (Halkidiki, Grecia), 10<sup>th</sup> International Symposium on Intelligent Distributed Computing IDC'2016 (Paris, Franța), 7<sup>th</sup> Conference on Cognitive Infocommunications CogInfoCom 2016 (Wroclaw, Polonia), IEEE 14<sup>th</sup> International Symposium on Intelligent Systems and Informatics SISY 2016 (Subotica, Serbia), XIII International Conference on Systems, Automatic Control and Measurements SAUM 2016 (Nis, Serbia), Seventh International Conference on Sciences of Electronics, Technologies of Information and Telecommunications SETIT 2016 (Hammamet, Tunisia), Third International Afro-European Conference for Industrial Advancement AECIA 2016 (Marrakesh, Maroc), 8<sup>th</sup> International KES Conference on Intelligent Decision Technologies KES-IDT-16 (Puerto de la Cruz, Tenerife, Spania), 10<sup>th</sup> International KES Conference on Agents and Multi-Agent Systems: Technologies and Applications KES-AMSTA-16 (Puerto de la Cruz, Tenerife, Spania), 9<sup>th</sup> International KES Conference on Intelligent Interactive Multimedia: Systems and Services KES-IIMSS-16 (Puerto de la Cruz, Tenerife, Spania), 3<sup>rd</sup> International Symposium on Big Data and Cloud Computing Challenges ISBCC 2016 (Chennai, India), 4<sup>th</sup> World Conference on Information Systems and Technologies WorldCist'16 (Recife, PE, Brazilia), 7<sup>th</sup> EAI International Conference on Big Data Technologies and Applications BDTA 2016 (Seoul, Coreea de Sud), 1<sup>st</sup> International Symposium on Small-scale Intelligent Manufacturing Systems SIMS 2016 (Narvik, Norvegia), 4<sup>th</sup> International Conference on Applied Mechanics, Mechatronics and Intelligent System AMMIS 2016 (Beijing, China), 2<sup>nd</sup> International Conference on Mechanics and Control Engineering MCE 2016 (Guangzhou, China), International Conference on Computers, Data Management and Technology Applications ICCDMTA'2016 (Istanbul, Turcia), International Conference on Advanced Computing and Intelligent Engineering ICACIE 2016 (Bhubaneswar, Odisha, India), 2016 IEEE First International Conference on Control, Measurement and Instrumentation CMI 2016 (Kolkata, India), 5<sup>th</sup> International Conference on Advances in Computing, Communications and Informatics ICACCI'16 (Jaipur, India), International Conference on Intelligent Cloud Computing ICC 2016 (Wuhan, China), 20<sup>th</sup> International Conference on System Theory, Control and Computing Joint Conference SINTES 20, SACCS 16, SIMSIS 20 - ICSTCC 2016 (Sinaia), 2016 IEEE International Conference on Automation, Quality and Testing, Robotics AQTR 2016 (Cluj-Napoca), Artificial Intelligence Track of 18<sup>th</sup> International Symposium on Symbolic and Numeric Algorithms for Scientific Computing SYNASC 2016 (Timișoara), 2016 IEEE International Symposium on INnovations in Intelligent SysTems and Applications INISTA 2016 (Sinaia), 6<sup>th</sup> International Conference on Computers Communications and Control IEEE - ICCCC2016 (Oradea), 4<sup>th</sup> International Workshop on Systems Safety & Security IWSSS 2016 (Ploiești), 2015 IEEE International Conference on Systems, Man, and Cybernetics SMC 2015 (Hong

Kong), IEEE International Symposium on Intelligent Control ISIC 2015 as part of 2015 IEEE Multi-Conference on Systems and Control MSC 2015 (Sydney, Australia), 2<sup>nd</sup> IFAC Conference on Embedded Systems, Computational Intelligence and Telematics in Control CESCIT 2015 (Maribor, Slovenia), 2015 Annual Conference of the North American Fuzzy Information processing Society NAFIPS'2015 (Redmond, WA, SUA), 27<sup>th</sup> IEEE International Conference on Tools with Artificial Intelligence ICTAI 2015 (Vietri sul Mare, Italia), 2015 IEEE International Symposium on INnovations in Intelligent SysTems and Applications INISTA 2015 (Madrid, Spania), 12<sup>th</sup> International Conference on Informatics in Control, Automation and Robotics ICINCO 2015 (Colmar, Franța), 2015 IEEE Symposium on Evolving and Autonomous Learning Systems EALS'15 as part of 2015 IEEE Symposium Series on Computational Intelligence SSCI 2015 (Cape Town, Africa de Sud), IEEE 19<sup>th</sup> International Conference on Intelligent Engineering Systems INES 2015 (Bratislava, Slovacia), 9<sup>th</sup> International Symposium on Intelligent Distributed Computing IDC'2015 (Guimaraes, Portugalia), 8<sup>th</sup> International Conference on Evolutionary Multi-Criterion Optimization EMO 2015 (Guimaraes, Portugalia), 6<sup>th</sup> Conference on Cognitive Infocommunications CogInfoCom 2015 (Győr, Ungaria), 24<sup>th</sup> International Conference on Systems Engineering ICSE 2015 (Coventry, Anglia), Second International Afro-European Conference for Industrial Advancement AECIA 2015 (Villejuif, Franța), 7<sup>th</sup> International KES Conference on Intelligent Decision Technologies KES-IDT-15 (Sorrento, Italia), 9<sup>th</sup> International KES Conference on Agents and Multi-Agent Systems: Technologies and Applications KES-AMSTA-15 (Sorrento, Italia), 8<sup>th</sup> International KES Conference on Intelligent Interactive Multimedia: Systems and Services KES-IIMSS-15 (Sorrento, Italia), Second International Symposium on Signal Processing and Intelligent Recognition Systems SIRS'15 (Trivandrum, India), International Conference on Green and Human Information Technology ICGHIT 2015 (Da Nang, Vietnam), XII International Scientific Conference MMA 2015 (Novi Sad, Serbia), International Conference on Soft Computing in Applied Engineering & Sciences ICSCASE-2015 (Kumaracoil, Tamilnadu, India), First International Conference on Biological Engineering and Gene Technology BEGT 2015 (Shanghai, China), 19<sup>th</sup> International Conference on System Theory, Control and Computing ICSTCC 2015 (Cheile Gradistei-Fundata Resort), Artificial Intelligence Track of 17<sup>th</sup> International Symposium on Symbolic and Numeric Algorithms for Scientific Computing SYNASC 2015 (Timișoara), 3<sup>rd</sup> International Workshop on Systems Safety & Security IWSSS 2015 (București), 2014 IEEE International Instrumentation and Measurement Technology Conference I<sup>2</sup>MTC 2014 (Montevideo, Uruguay), 2014 IEEE International Conference on Fuzzy Systems FUZZ-IEEE 2014 (Beijing, China), 2014 IEEE Congress on Evolutionary Computation IEEE CEC 2014 (Beijing, China), IEEE International Symposium on Intelligent Control ISIC 2014 as part of 2014 IEEE Multi-Conference on Systems and Control MSC 2014 (Antibes/Nice, Franța), 11<sup>th</sup> International Conference on Informatics in Control, Automation and Robotics ICINCO 2014 (Vienna, Austria), 18<sup>th</sup> Online World Conference on Soft Computing in Industrial Applications WSC 18, IEEE 18<sup>th</sup> International Conference on Intelligent Engineering Systems INES 2014 (Tihany, Ungaria), 7<sup>th</sup> IEEE International Conference on Intelligent Systems IS'14 (Warsaw, Polonia), 15<sup>th</sup> IEEE International Symposium on Computational Intelligence and Informatics CINTI 2014 (Budapest, Ungaria), 5<sup>th</sup> Conference on Cognitive Infocommunications CogInfoCom 2014 (Vietri sul Mare, Italia), 2014 IEEE International Conference on Tools with Artificial Intelligence ICTAI 2014 (Limassol, Cipru), 6<sup>th</sup> International Conference on Computational Collective Intelligence Technologies and Applications ICCCI 2014 (Seoul, Korea), 8<sup>th</sup> International KES Conference on Agents and Multi-agent Systems KES AMSTA 2014 (Chania, Grecia), 6<sup>th</sup> International Conference on Intelligent Decision Technologies KES IDT 2014 (Chania, Grecia), 7<sup>th</sup> International KES Conference on Intelligent Interactive Multimedia Systems and Services KES IIMSS 2014 (Chania, Grecia), 3<sup>rd</sup> International Conference on Advances in Computing, Communications and Informatics ICACCI 2014 (New Delhi, India), 8<sup>th</sup> International Symposium on Intelligent Distributed Computing IDC'2014 (Madrid, Spania), 2014 UKACC 10<sup>th</sup> International Conference on Control CONTROL 2014 (Loughborough, Anglia), XII International SAUM Conference on Systems, Automatic Control and Measurements SAUM 2014 (Nis, Serbia), First International Afro-European Conference for Industrial Advancement AECIA 2014 (Addis Ababa, Etiopia), 18<sup>th</sup> International Conference on System Theory, Control and Computing ICSTCC 2014 (Sinaia), 2013 IEEE International Conference on Systems, Man, and Cybernetics SMC 2013 (Manchester, Anglia), IEEE International Conference on Tools with Artificial Intelligence ICTAI 2013 (Washington, DC, SUA), 2013 IEEE International Conference on Computational Intelligence and Virtual Environments for Measurement Systems and Applications CIVEMSA 2013 (Milan, Italia), IEEE 17<sup>th</sup> International Conference on Intelligent Engineering Systems INES 2013 (Costa Rica), 5<sup>th</sup> IEEE International Symposium on Logistics and Industrial Informatics LINDI 2013 (Wildau, Germania), 7<sup>th</sup> International Symposium on Intelligent

Distributed Computing IDC'2013 (Praga, Republica Cehă), 5<sup>th</sup> International Conference on Intelligent Decision Technologies KES IDT 2013 (Sesimbra, Portugalia), 6<sup>th</sup> International Conference on Intelligent Interactive Multimedia Systems and Services KES IIMSS 2013 (Sesimbra, Portugalia), 5<sup>th</sup> International Conference on Computational Collective Intelligence Technologies and Applications ICCCI 2013 (Craiova), International Conference "Automatics and Informatics'2013" (Sofia, Bulgaria), 17<sup>th</sup> International Conference on System Theory, Control and Computing ICSTCC 2013 (Sinaia), 2012 IEEE International Instrumentation and Measurement Technology Conference I<sup>2</sup>MTC 2012 (Graz, Austria), 4<sup>th</sup> IEEE International Symposium on Logistics and Industrial Informatics LINDI 2012 (Smolenice, Slovakia), 1<sup>st</sup> IFAC Conference on Embedded Systems, Computational Intelligence and Telematics in Control CESCIT 2012 (Würzburg, Germania), 17<sup>th</sup> Online World Conference on Soft Computing in Industrial Applications WSC17, 2012 IEEE International Conference on Computational Intelligence for Measurement Systems and Applications CIMSA 2012 (Tianjin, China), 2012 IEEE International Conference on Virtual Environments, Human-Computer Interfaces and Measurement Systems VECIMS 2012 (Tianjin, China), 16<sup>th</sup> IEEE International Conference on Intelligent Engineering Systems INES 2012 (Lisabona, Portugalia), 4<sup>th</sup> IEEE International Conference on Nonlinear Science and Complexity NSC 2012 (Budapesta, Ungaria), 2012 UKACC International Conference on Control (Cardiff, Țara Galilor), 22<sup>nd</sup> International Conference on Systems Engineering ICSE 2012 (Coventry, Anglia), 5<sup>th</sup> International Conference on Intelligent Interactive Multimedia Systems and Services KES IIMSS 2012 (Gifu, Japonia), 6<sup>th</sup> International KES Conference on Agents and Multi-agent Systems - Technologies and Applications KES AMSTA 2012 (Dubrovnik, Croația), 6<sup>th</sup> International Symposium on Intelligent Distributed Computing IDC 2012 (Calabria, Italia), XI International SAUM Conference on Systems, Automatic Control and Measurements SAUM 2012 (Nis, Serbia), 2011 IEEE International Conference on Systems, Man, and Cybernetics SMC 2011 (Anchorage, AK, SUA), 2011 IEEE International Instrumentation and Measurement Technology Conference I<sup>2</sup>MTC 2011 (Binjiang, Hangzhou, China), 2011 IEEE International Conference on Computational Intelligence for Measurement Systems and Applications CIMSA 2011 (Ottawa, ON, Canada), 2011 IEEE Conference on Virtual Environments, Human-Computer Interfaces and Measurement Systems VECIMS 2011 (Ottawa, ON, Canada), 16<sup>th</sup> IEEE International Conference on Emerging Technologies and Factory Automation ETFA 2011 (Toulouse, Franța), 3<sup>rd</sup> International Conference on Intelligent Decision Technologies KES-IDT-2011 (Piraeus, Grecia), 15<sup>th</sup> IEEE International Conference on Intelligent Engineering Systems INES 2011 (Poprad, Slovacia), 5<sup>th</sup> International Symposium on Computational Intelligence and Intelligent Informatics ISCII 2011 (Floriana, Malta), 3<sup>rd</sup> IEEE International Symposium on Logistics and Industrial Informatics LINDI 2011 (Budapesta, Ungaria), 5<sup>th</sup> International Symposium on Intelligent Distributed Computing IDC 2011 (Delft, Olanda), 16<sup>th</sup> Online World Conference on Soft Computing in Industrial Applications WSC16, 2010 IEEE International Conference on Systems, Man, and Cybernetics SMC 2010 (Istanbul, Turcia), 2010 IEEE International Instrumentation & Measurement Technology Conference I<sup>2</sup>MTC 2010 (Austin, TX, SUA), 2010 IEEE International Conference on Computational Intelligence for Measurement Systems and Applications CIMSA 2010 (Taranto, Italia), 2010 IEEE Conference on Virtual Environments, Human-Computer Interfaces and Measurement Systems VECIMS 2010 (Taranto, Italia), IEEE International Workshop on Robotic and Sensors Environments ROSE 2010 (Phoenix, AZ, SUA), 14<sup>th</sup> IEEE International Conference on Intelligent Engineering Systems INES 2010 (Las Palmas de Gran Canaria, Spania), 10<sup>th</sup> International Conference on Hybrid Intelligent Systems HIS 2010 (Atlanta, GA, SUA), IFAC Workshop on Intelligent Control Systems WICS2010 (Sinaia, România), UKACC International Conference on Control CONTROL 2010 (Coventry, Anglia), 4<sup>th</sup> International Symposium on Intelligent Distributed Computing IDC'2010 (Tangier, Maroc), World Congress on Nature and Biologically Inspired Computing NaBIC 2010 (Kitakyushu, Japan), X Triennial International SAUM Conference on Systems, Automatic Control and Measurements SAUM 2010 (Nis, Serbia), 15<sup>th</sup> Online World Conference on Soft Computing in Industrial Applications WSC15, 5<sup>th</sup> IEEE International Conference on Mechatronics ICM 2009 (Málaga, Spania), 2<sup>nd</sup> IFAC International Conference on Intelligent Control Systems and Signal Processing ICONS'09 (Istanbul, Turcia), 2009 IEEE Workshop on Computational Intelligence in Virtual Environments IEEE CIVE 2009 (Nashville, TN, SUA), 2009 IEEE International Conference on Computational Intelligence for Measurement Systems and Applications CIMSA 2009 (Hong Kong, China), 2009 IEEE Conference on Virtual Environments, Human-Computer Interfaces and Measurement Systems VECIMS 2009 (Hong Kong, China), 7<sup>th</sup> IEEE International Conference on Computational Cybernetics ICC 2009 (Palma de Mallorca, Spania), 5<sup>th</sup> IEEE International Vehicle Power and Propulsion Conference VPPC'09 (Dearborn, MI, SUA), World Congress on Nature & Biologically Inspired Computing NaBIC2009 (Bhubaneswar,

India), 2<sup>nd</sup> International Symposium on Intelligent Interactive Multimedia Systems and Services KES-IIMSS-09 (Mogliano Veneto, Italia), 4<sup>th</sup> International Symposium on Computational Intelligence and Intelligent Informatics ISCIII 2009 (Egipt), 20<sup>th</sup> International Conference on Systems Engineering ICSE2009 (Coventry, Anglia), IEEE International Workshop on Robotic and Sensors Environments ROSE 2009 (Lecco, Italia), 2009 Online World Conference on Soft Computing in Industrial Applications WSC14, 3<sup>rd</sup> International Workshop on Soft Computing Applications SOFA 2009 (Szeged, Ungaria, Arad, România), Workshop on Multi-Sensor Systems for Surveillance Applications MUSES'09 (Ottawa, ON, Canada), 9<sup>th</sup> Polish-British Workshop on Computer Systems Engineering Theory and Applications (Stronie Slaskie, Polonia, 2009), 2008 IEEE International Instrumentation & Measurement Technology Conference I<sup>2</sup>MTC 2008 (Victoria, BC, Canada), 8<sup>th</sup> International Conference on Hybrid Intelligent Systems HIS 2008 (Barcelona, Spania), 2008 IEEE International Conference on Computational Intelligence for Measurement Systems and Applications CIMSA 2008 (Istanbul, Turcia), 2008 IEEE Conference on Virtual Environments, Human-Computer Interfaces and Measurement Systems VECIMS 2008 (Istanbul, Turcia), 2008 Online World Conference on Soft Computing in Industrial Applications WSC-2008, 8<sup>th</sup> Polish-British Workshop on Computer Systems Engineering Theory and Applications (Sokolowska, Polonia, 2008), 3<sup>rd</sup> IFAC Workshop on Advanced Fuzzy and Neural Control AFNC 07 (Valenciennes, Franța), 7<sup>th</sup> International Conference on Hybrid Intelligent Systems HIS'07 (Kaiserslautern, Germania), 2007 IEEE International Conference on Virtual Environments, Human-Computer Interfaces, and Measurement Systems VECIMS 2007 (Ostuni, Italia), The IEEE Region 8 International Conference "Computer as a Tool" EUROCON 2007 (Warsaw, Polonia), 3<sup>rd</sup> IEEE International Conference on Mechatronics ICM 2006 (Budapesta, Ungaria), International Conference on Hybrid Intelligent Systems HIS'06 (Auckland, Noua Zeelandă), 4<sup>th</sup> Conference on Neuro-Computing and Evolving Intelligence NCEI'06 (Auckland, Noua Zeelandă), Fifth IEEE International Conference on Control and Automation ICCA'05 (Budapesta, Ungaria), 5<sup>th</sup> International Symposium on Intelligent Automation and Control ISAC 2004 as part of the World Automation Congress WAC 2004 (Sevilla, Spania), Second Workshop on Fuzzy Based Expert Systems FUBEST'96 (Sofia, Bulgaria), 16<sup>th</sup> International Conference on System Theory, Control and Computing ICSTCC 2012 (Sinaia), 2014 IEEE International Conference on Automation, Quality and Testing, Robotics AQTR 2014 (Cluj-Napoca), 2012 IEEE International Conference on Automation, Quality and Testing, Robotics AQTR 2012 (Cluj-Napoca), 15<sup>th</sup> International Conference on System Theory, Control and Computing ICSTCC 2011 (Sinaia), 2010 IEEE International Conference on Automation, Quality and Testing, Robotics AQTR 2010 (Cluj-Napoca), 14<sup>th</sup> International Conference on System Theory and Control (Sinaia, 2010), 2008 IEEE-TTTC International Conference on Automation, Quality & Testing, Robotics AQTR 2008 (THETA 16, Cluj-Napoca), 13<sup>th</sup> Symposium on Modeling, Simulation and Systems' Identification SIMSIS 13 (Galați, 2007), 13<sup>th</sup> International Symposium on System Theory, Automation, Robotics, Computers, Informatics, Electronics and Instrumentation SINTES 13 (Craiova, 2007), 2006 IEEE-TTTC International Conference on Automation, Quality & Testing, Robotics AQTR 2006 (THETA 15, Cluj-Napoca), 8<sup>th</sup> International Conference on Development & Application Systems DAS 2006 (Suceava), 7<sup>th</sup> International Conference on Development & Application Systems DAS 2004 (Suceava), International Conference on Automation, Quality & Testing, Robotics AQTR 2004 (THETA 14, Cluj-Napoca), 12<sup>th</sup> Symposium on Modeling, Simulation and Systems' Identification SIMSIS 12 (Galați, 2004), International Conference on Automation, Quality and Testing, Robotics A&QT-R 2002 (THETA 13, Cluj-Napoca), 11<sup>th</sup> Symposium on Modeling, Simulation and Systems' Identification SIMSIS 11 (Galați, 2001).

- *Președinte al comitetului internațional de program* la IEEE International Joint Conferences on Computational Cybernetics and Technical Informatics ICC-CONTI 2010 (Timișoara), cu lucrările indexate în *Clarivate Analytics Conference Proceedings Citation Index*.
- *Copreședinte al comitetului internațional de program* la 4<sup>th</sup> International Symposium on Applied Computational Intelligence and Informatics SACI 2007 (Timișoara), cu lucrările indexate în *Clarivate Analytics Conference Proceedings Citation Index*, 5<sup>th</sup> International Symposium on Applied Computational Intelligence and Informatics SACI 2009 (Timișoara), cu lucrările indexate în *Clarivate Analytics Conference Proceedings Citation Index*, 6<sup>th</sup> IEEE International Symposium on Applied Computational Intelligence and Informatics SACI 2011 (Timișoara), cu lucrările indexate în *IEEE Xplore* și *INSPEC*, 7<sup>th</sup> IEEE International Symposium on Applied Computational Intelligence and Informatics SACI 2012 (Timișoara), cu lucrările indexate în *IEEE Xplore* și *INSPEC*, 8<sup>th</sup> IEEE International Symposium on Applied Computational Intelligence and Informatics SACI 2013 (Timișoara), cu lucrările indexate în *Clarivate Analytics Conference Proceedings Citation Index*, 9<sup>th</sup> IEEE International Symposium on Applied Computational Intelligence and Informatics SACI 2014

(Timișoara), cu lucrările indexate în *Clarivate Analytics Conference Proceedings Citation Index*, 10<sup>th</sup> Jubilee IEEE International Symposium on Applied Computational Intelligence and Informatics SACI 2015 (Timișoara), și 11<sup>th</sup> IEEE International Symposium on Applied Computational Intelligence and Informatics SACI 2016 (Timișoara), cu lucrările indexate în *Clarivate Analytics Conference Proceedings Citation Index*.

- *Membru al Steering Committee* la 8<sup>th</sup> IEEE International Symposium on Applied Computational Intelligence and Informatics SACI 2013 (Timișoara), cu lucrările indexate în *Clarivate Analytics Conference Proceedings Citation Index*, 9<sup>th</sup> IEEE International Symposium on Applied Computational Intelligence and Informatics SACI 2014 (Timișoara), cu lucrările indexate în *Clarivate Analytics Conference Proceedings Citation Index*, 10<sup>th</sup> Jubilee IEEE International Symposium on Applied Computational Intelligence and Informatics SACI 2015 (Timișoara) și 11<sup>th</sup> IEEE International Symposium on Applied Computational Intelligence and Informatics SACI 2016 (Timișoara), cu lucrările indexate în *Clarivate Analytics Conference Proceedings Citation Index*.
- *Președinte al Track TT05: Mechatronics, Industrial Automation and Control*, împreună cu Prof. Seta Bogosyan (University of Alaska-Fairbanks, Fairbanks, AK, USA), în cadrul 13<sup>th</sup> International Conference on Optimization of Electrical and Electronic Equipment OPTIM 2012 (Brașov), cu lucrările indexate în *IEEE Xplore* și *INSPEC*.
- *Președinte al Track VII: Cognition*, împreună cu Prof. Claudiu Pozna (Szechenyi Istvan University, Győr, Hungary + Universitatea Transilvania din Brașov), în cadrul 3<sup>rd</sup> IEEE International Conference on Cognitive Infocommunications CogInfoCom 2012 (Kosice, Slovacia), cu lucrările indexate în *IEEE Xplore* și *INSPEC*.
- *Copreședinte al comitetului de program* la 1<sup>st</sup> Romanian-Hungarian Joint Symposium on Applied Computational Intelligence SACI 2004 (Timișoara).
- *Membru în comitetul de program* la 2<sup>nd</sup> Romanian-Hungarian Joint Symposium on Applied Computational Intelligence SACI 2005 (Timișoara) și 3<sup>rd</sup> Romanian-Hungarian Joint Symposium on Applied Computational Intelligence SACI 2006 (Timișoara).

**Activitatea de recenzie** (<http://www.aut.upt.ro/~rprecup/review.html>):

- *Referent* la următoarele reviste: *Automatica* (Elsevier Science), *IEEE Transactions on Cybernetics*, *Fuzzy Sets and Systems* (Elsevier Science), *IEEE Transactions on Fuzzy Systems*, *IEEE Transactions on Systems, Man, and Cybernetics*, *IEEE Transactions on Industrial Electronics*, *IEEE Computational Intelligence Magazine*, *IEEE Transactions on Industrial Informatics*, *IEEE/ASME Transactions on Mechatronics*, *IEEE Transactions on Automation Science and Engineering*, *International Journal of Robust and Nonlinear Control* (Wiley), *Computers in Industry* (Elsevier Science), *IEEE Transactions on Instrumentation and Measurement*, *Information Sciences* (Elsevier Science), *Engineering Applications of Artificial Intelligence* (Elsevier Science), *Applied Soft Computing* (Elsevier Science), *Mechatronics* (Elsevier Science), *Knowledge-Based Systems* (Elsevier Science), *Expert Systems with Applications* (Elsevier Science), *International Journal of Systems Science* (Taylor & Francis), *Journal of Guidance, Control, and Dynamics* (The American Institute of Aeronautics and Astronautics, AIAA), *Transportation Research Part C* (Elsevier Science), *Industrial & Engineering Chemistry Research* (American Chemical Society), *Information Fusion* (Elsevier Science), *Robotics and Computer-Integrated Manufacturing* (Elsevier Science), *Digital Signal Processing* (Elsevier Science), *Computer Methods and Programs in Biomedicine* (Elsevier Science), *Environmental Modelling & Software* (Elsevier Science), *Robotics and Autonomous Systems* (Elsevier Science), *IEEE Transactions on Education*, *Engineering Optimization* (Taylor & Francis), *Journal of Industrial and Engineering Chemistry* (Elsevier Science), *Chemical Engineering Science* (Elsevier Science), *Environmental Science and Pollution Research* (Springer-Verlag), *Journal of Environmental Science and Health, Part A* (Taylor & Francis), *Journal of Chemometrics* (John Wiley and Sons), *ISA Transactions* (Elsevier Science), *Asian Journal of Control* (Wiley InterScience), *Chemical Engineering and Processing: Process Intensification* (Elsevier Science), *Bioprocess and Biosystems Engineering* (Springer-Verlag), *Advances in Engineering Software* (Elsevier Science), *Fuzzy Optimization and Decision Making* (Springer-Verlag), *Soft Computing* (Springer-Verlag), *International Journal of Electrical Power and Energy Systems* (Elsevier Science), *Simulation Modelling Practice and Theory* (Elsevier Science), *Computers and Mathematics with Applications* (Elsevier Science), *Theoretical Computer Science* (Elsevier Science), *Artificial Intelligence in Medicine* (Elsevier Science), *International Journal of Adaptive Control and Signal Processing* (John Wiley and Sons), *SIAM Journal on Matrix Analysis and Applications*, *Journal of Dynamic Systems, Measurement, and Control* (ASME), *Journal of Computational and Nonlinear Dynamics* (ASME), *IET Control Theory & Applications* (The Institution of Engineering and Technology, UK), *IET*



Generation, Transmission & Distribution (The Institution of Engineering and Technology, UK), Journal of Biotechnology (Elsevier Science), International Journal of Control, Automation, and Systems (Institute of Control, Robotics and Systems, Korean Institute of Electrical Engineers and Springer-Verlag), Neurocomputing (Elsevier Science), Ocean Engineering (Elsevier Science), International Journal of Electronics (Taylor & Francis), International Journal of Automation and Computing (Springer-Verlag), Fuzzy Information and Engineering (Springer-Verlag and Guangzhou University, China), Computer Applications in Engineering Education (John Wiley and Sons), International Journal of Chemical Reactor Engineering (De Gruyter), Reviews in Chemical Engineering (De Gruyter), Strojniški vestnik - Journal of Mechanical Engineering (Ljubljana, Slovenia), Journal of Power Technologies (Warsaw, Poland), Electronics and Electrical Engineering (Lithuania), Applied and Computational Mathematics (Azerbaijan National Academy of Sciences), Acta Polytechnica Hungarica (Budapest, Ungaria), Thermal Science (Society of Thermal Engineers of Serbia), Chemical Industry & Chemical Engineering Quarterly (Belgrad, Serbia), Computer Science and Information Systems (ComSIS Consortium), Tehnički vjesnik – Technical Gazette (Osijek, Croatia), Applications and Applied Mathematics (Prairie View, TX, SUA), International Journal of Computational Intelligence and Applications (World Scientific), Facta Universitatis (Niš, Serbia), Proceedings of the Romanian Academy Series A: Mathematics, Physics, Technical Sciences, Information Science (Academia Română, București), Control Engineering and Applied Informatics (SRAIT, București) și Buletinul Științific al Universității Politehnica Timișoara, Seria Automatică și Calculatoare.

- *Referent* la următoarele conferințe vizibile: 21<sup>st</sup> World Congress of International Federation of Automatic Control IFAC 2020, 2020 IEEE International Instrumentation and Measurement Technology Conference I<sup>2</sup>MTC 2020, 2020 IEEE Symposium Series on Computational Intelligence SSCI 2020, International Joint Conference on Neural Networks IJCNN 2020, IEEE World Congress on Computational Intelligence IEEE CEC 2020, IEEE International Conference on Fuzzy Systems FUZZ-IEEE 2020, 14<sup>th</sup> Annual IEEE International Systems Conference SysCon 2020, 28<sup>th</sup> Mediterranean Conference on Control & Automation MED'2020, 39<sup>th</sup> Chinese Control Conference CCC 2020, 2018 American Control Conference, European Control Conference ECC 2018, 56<sup>th</sup> IEEE Conference on Decision and Control CDC 2017, 20<sup>th</sup> World Congress of International Federation of Automatic Control IFAC 2017, 19<sup>th</sup> World Congress of International Federation of Automatic Control IFAC 2014, European Control Conference ECC 2014, 2014 IEEE International Instrumentation and Measurement Technology Conference I<sup>2</sup>MTC 2014, 17<sup>th</sup> International IEEE Conference on Intelligent Transportation Systems ITSC 2014, IEEE Symposium Series on Computational Intelligence SSCI 2014, 2014 IEEE/ASME International Conference on Advanced Intelligent Mechatronics AIM 2014, 22<sup>nd</sup> Mediterranean Conference on Control & Automation MED'2014, 2014 IEEE International Conference on Computational Intelligence and Virtual Environments for Measurement Systems and Applications CIVEMSA 2014, 2014 IEEE International Symposium on INnovations in Intelligent SysTems and Applications INISTA 2014, 2014 IEEE Conference on Evolving and Adaptive Intelligent Systems EAIS 2014, 2013 IEEE Multi-Conference on Systems and Control MSC 2013, 2013 International Joint Conference on Neural Networks IJCNN 2013, 39<sup>th</sup> Annual Conference of the IEEE Industrial Electronics Society IECON 2013, 2013 IEEE International Instrumentation and Measurement Technology Conference I<sup>2</sup>MTC 2013, 10<sup>th</sup> IFAC Symposium on Advances in Control Education ACE 2013, 2<sup>nd</sup> IFAC Workshop on Convergence of Information Technologies and Control Methods with Power Systems ICPS'13, 51<sup>st</sup> IEEE Conference on Decision and Control CDC 2012, 2012 International Joint Conference on Neural Networks IJCNN 2012, 18<sup>th</sup> World Congress of International Federation of Automatic Control IFAC 2011, 2011 IEEE International Instrumentation and Measurement Technology Conference I<sup>2</sup>MTC 2011, 9<sup>th</sup> IEEE International Conference on Control & Automation ICCA'11, 2011 International Conference on Communications, Computing and Control Applications CCCA'11, American Control Conference 2010, 2010 IEEE International Conference on Systems, Man, and Cybernetics SMC 2010, 2010 IEEE International Instrumentation & Measurement Technology Conference I<sup>2</sup>MTC 2010, IEEE International Symposium on Industrial Electronics ISIE 2010, 8<sup>th</sup> IEEE International Conference on Control & Automation ICCA2010, 9<sup>th</sup> IFAC Workshop on Time Delay Systems IFAC - TDS 2010, 22<sup>th</sup> International Conference on Tools with Artificial Intelligence ICTAI 2010, 2010 Conference on Control and Fault-Tolerant Systems SysTol'10, IFAC Workshop on Intelligent Control Systems WICS2010, 3<sup>rd</sup> IEEE International Symposium on Resilient Control Systems ISRCS 2010, 3<sup>rd</sup> International Conference on Human System Interaction HSI '10, European Control Conference 2009 ECC'09, 3<sup>rd</sup> IEEE Multi-conference on Systems and Control MSC 2009, 48<sup>th</sup> IEEE Conference on Decision and Control CDC/CCC 09, 2<sup>nd</sup> IEEE International Symposium on Resilient

Control Systems ISRCS 09, 2<sup>nd</sup> IFAC International Conference on Intelligent Control Systems and Signal Processing ICONS'09, American Control Conference 2008, 17<sup>th</sup> World Congress of International Federation of Automatic Control IFAC 2008, 2008 IEEE International Instrumentation & Measurement Technology Conference I<sup>2</sup>MTC 2008, 2<sup>nd</sup> IEEE Multi-conference on Systems and Control MSC 2008, American Control Conference 2007, 2007 IEEE Conference on Decision and Control CDC07, 4<sup>th</sup> IEEE International Conference on Mechatronics ICM 2007, IEEE International Conference on Control Applications 2006 CCA, 3<sup>rd</sup> IEEE International Conference on Mechatronics ICM 2006, IEEE International Conference on Control Applications 2005 CCA, 16<sup>th</sup> World Congress of International Federation of Automatic Control IFAC 2005, 2003 ACM Symposium on Applied Computing SAC'03, American Control Conference 2002.

**Organizarea de manifestări științifice (<http://www.aut.upt.ro/~rprecup/organiz.html>):**

- *Vicepreședinte al comitetului național de organizare* al Joint IFAC Conference 7<sup>th</sup> IFAC Symposium on Systems Structure and Control SSSC 2019 and 15<sup>th</sup> IFAC Workshop on Time Delay Systems TDS 2019 (Sinaia).
- *Membru în comitetul de organizare* al 1<sup>st</sup> IFAC Workshop on Convergence of Information Technologies and Control Methods with Power Plants and Power Systems ICPS'07 (Cluj-Napoca, România), IEEE International Workshop on Soft Computing Applications IEEE - SOFA 2005 (Szeged, Ungaria, Arad, România), South-eastern Europe, USA, Japan and European Community Workshop on Research and Education in Control and Signal Processing REDISCOVER 2004 (Cavtat, Croația).
- *Organizator și chair* al *Sesiunii Speciale 5: Fuzzy Control, Modeling and Optimization*, în cadrul 6<sup>th</sup> International Conference on Computers Communications and Control IEEE - ICCCC2016 (Oradea).
- *Organizator*, împreună cu doctorii Jérôme Mendes (Institute of Systems and Robotics (ISR-UC), Portugalia), João Paulo (Institute of Systems and Robotics (ISR-UC), Portugalia), Cristiano Premebida (Loughborough University, Anglia) și Rui Araújo (University of Coimbra, Portugalia) al *Sesiunii Speciale* "Computational Intelligence Systems: Iterative, Dynamic, and Evolving Design", în cadrul 45<sup>th</sup> Annual Conference of the IEEE Industrial Electronics Society IECON 2019 (Lisbon, Portugalia).
- *Organizator*, împreună cu profesorii Plamen Angelov (Lancaster University, Anglia), Bruno Costa (Federal Institute of Rio Grande do Norte (IFRN), Natal, Brazilia), Luiz Affonso Guedes (Federal University of Rio Grande do Norte (UFRN), Natal, Brazilia), Moamar Sayed-Mouchaweh (High National Engineering School of Mines, Douai, Franța) și Igor Škrjanc (University of Ljubljana, Slovenia), al *Sesiunii Speciale* "Autonomous Fault Detection and Identification Methods", în cadrul 2<sup>nd</sup> IEEE International Conference on Cybernetics CYBCONF 2015 (Gdynia, Polonia).
- *Co-chair*, împreună cu profesorii Igor Škrjanc (University of Ljubljana, Slovenia) și Plamen Angelov (Lancaster University, Anglia), al *Sesiunii Invitate* "Applications of Data-Driven Approaches to Modeling, Identification, Prediction and Optimization for Intelligent Control and Planning", în cadrul 2014 IEEE Multi-Conference on Systems and Control MSC 2014 (Antibes, Franța).
- *Co-chair*, împreună cu profesorii Keith J Burnham (Coventry University, Anglia), Leszek Koszalka (Wroclaw University of Technology, Polonia) și Henry Selvaraj (University of Nevada, Las Vegas, NV, SUA), al *Sesiunii Speciale* "Artificial Intelligence in Systems Modelling, Optimisation and Control for Enhanced Computer Networks, Manufacturing Logistics and Tele-Informatics", în cadrul 6<sup>th</sup> International Conference on Hybrid Artificial Intelligence Systems HAIS 2011 (Wroclaw, Polonia).
- *Co-chair*, împreună cu profesorii Emil Petre (Universitatea din Craiova), Sergiu Caraman (Universitatea "Dunărea de Jos" din Galați) și Dan Selișteanu (Universitatea din Craiova), al *Sesiunii Speciale* "Intelligent Techniques in Modelling, Identification and Control of Bioprocesses", în cadrul 3<sup>rd</sup> International Conference on Intelligent Decision Technologies KES-IDT-2011 (Piraeus, Grecia).
- *Membru în comitetul de organizare* al Conferințelor Internaționale CONTI'94, CONTI'96, CONTI'98, CONTI'2000, CONTI'2002, CONTI'2004, CONTI'2006 și CONTI'2008 (Timișoara).

**Președinte și copreședinte de sesiune la manifestări științifice de prestigiu: (<http://www.aut.upt.ro/~rprecup/chair.html>)**

- 12<sup>th</sup> International Conference on Electronics, Computers and Artificial Intelligence ECAI 2020 (București), **26<sup>th</sup> Mediterranean Conference on Control and Automation MED'18** (Zadar, Croația), 2017 IEEE Conference on Evolving and Adaptive Intelligent Systems EAIS 2017 (Ljubljana, Slovenia), XIII International SAUM Conference on Systems, Automatic Control and Measurements SAUM 2016 (Nis, Serbia), **2014 IEEE Multi-Conference on Systems and Control**

**MSC 2014** (Antibes, Franța), IEEE International Conference on Cybernetics CYBCONF 2013 (Lausanne, Elveția), 17<sup>th</sup> International Conference on System Theory, Control and Computing ICSTCC 2013 (Sinaia), 16<sup>th</sup> International Conference on System Theory, Control and Computing ICSTCC 2012 (Sinaia), **18<sup>th</sup> World Congress of International Federation of Automatic Control IFAC 2011** (Milano, Italia), 15<sup>th</sup> International Conference on System Theory, Control and Computing ICSTCC 2011 (Sinaia), 15<sup>th</sup> Online World Conference on Soft Computing in Industrial Applications WSC15, X<sup>th</sup> Triennial International SAUM Conference on Systems, Automatic Control and Measurements SAUM 2010 (Nis, Serbia), 11<sup>th</sup> International Conference on Intelligent Engineering Systems INES 2007 (Budapesta, Ungaria), Third IFAC Workshop on Advanced Fuzzy and Neural Control AFNC 07 (Valenciennes, Franța), 4<sup>th</sup> IFAC Conference on Management and Control of Production and Logistics IFAC MCPL 2007 (Sibiu), 16<sup>th</sup> World Congress of International Federation of Automatic Control IFAC 2005 (Praga, Republica Cehă), 6<sup>th</sup> International Conference “Control of Power Systems’04”, Strbske Pleso (High Tatras, Slovacia), 3<sup>rd</sup> International Conference on Global Research and Education in Intelligent Systems INTER-ACADEMIA 2004 (Budapesta, Ungaria), 14<sup>th</sup> World Congress of International Federation of Automatic Control IFAC’99 (Beijing, China), Second International Conference on Applications of Fuzzy Systems ICAFS’96 (Siegen, Germania), 15<sup>th</sup> International Conference on System Theory, Control and Computing ICSTCC 2011 (Sinaia), 14<sup>th</sup> International Conference on System Theory and Control ICTSC 2010 (Sinaia), 12<sup>th</sup> Symposium on Modeling, Simulation and Systems’ Identification SIMSIS 12 (Galați, 2004), 7<sup>th</sup> Symposium on Automatic Control and Computer Science SACCS’2001 (Iași), 4<sup>th</sup> IFAC Conference on System Structure and Control SSC’97 (București), Third International Conference on Development & Application Systems D & AS ’96 (Suceava), Conferințele Internaționale CONTI’94, CONTI’96, CONTI’98, CONTI’2000, CONTI’2002, CONTI’2004, CONTI’2006, CONTI’2008 și ICC-CONTI 2010 (Timișoara).

#### **Alte aprecieri ale activității științifice:**

- În februarie 2003 am fost *profesor invitat* în Franța, la Université de Savoie, École Supérieure d’Ingénieurs d’Annecy, LISTIC.
- Acceptat începând cu 2003 în baza de date conținând *experți pentru Programul Cadru 6 al Uniunii Europene*.
- Numit începând cu 2003 *expert evaluator* (peer review) în domeniul științific Automatică în cadrul C.N.C.S.I.S.
- Numit începând cu 2006 *expert evaluator* (peer review) în domeniul Ingineria Sistemelor în cadrul A.R.A.C.I.S.
- *Membri în 16 comisii de abilitare* (<http://www.aut.upt.ro/~rprecup/habcom.html>): președinte al comisiei de abilitare a candidatei dr. ing. Zsofia Lendek, cu teza de abilitare “Takagi-Sugeno model-based design for switching systems and local stabilization” în domeniul Ingineria Sistemelor, susținută la Universitatea Tehnică din Cluj-Napoca în 2019, președinte al comisiei de abilitare a candidatului dr. ing. Constantin-Florin Căruntu, cu teza de abilitare “Advanced control strategies for networked / distributed systems” în domeniul Ingineria Sistemelor, susținută la Universitatea Tehnică “Gheorghe Asachi” din Iași în 2019, membru al comisiei de abilitare a candidatului dr. ing. Florin Stoican, cu teza de abilitare “Set-theoretic methods in control. Applications to fault tolerant control and motion planning” în domeniul Ingineria Sistemelor, susținută la Universitatea Politehnică din București în 2018, președinte al comisiei de abilitare a candidatului dr. ing. Gheorghe Dorin Șendrescu, cu teza de abilitare “Identification and Control Techniques for Nonlinear Systems” în domeniul Ingineria Sistemelor, susținută la Universitatea din Craiova în 2018, președinte al comisiei de abilitare a candidatului dr. ing. Monica Roman, cu teza de abilitare “Contributions to modelling, simulation and control of chemical reactions based processes” în domeniul Ingineria Sistemelor, susținută la Universitatea din Craiova în 2018, președinte al comisiei de abilitare a candidatului dr. ing. Silviu-Corneliu Folea, cu teza de abilitare “Senzori wireless și sisteme înglobate în controlul proceselor” în domeniul Ingineria Sistemelor, susținută la Universitatea Tehnică din Cluj-Napoca în 2017, președinte al comisiei de abilitare a candidatului dr. ing. Vlad Mureșan, cu teza de abilitare “Realizări științifice în domeniul modelării, simulării și controlului proceselor industriale” în domeniul Ingineria Sistemelor, susținută la Universitatea Tehnică din Cluj-Napoca în 2017, președinte al comisiei de abilitare a candidatului dr. ing. Marius Cioca, cu teza de abilitare “Cercetări și rezultate în ingineria sistemelor” în domeniul Ingineria Sistemelor, susținută la Universitatea din Petroșani în 2017, președinte al comisiei de abilitare a candidatului dr. ing. Ion-Lucian Bușoniu, cu teza de abilitare “Optimistic planning for nonlinear optimal control and networked systems” în domeniul Ingineria Sistemelor, susținută la Universitatea Tehnică din Cluj-Napoca în 2015,

președinte al comisiei de abilitare a candidatului dr. Ion Necoară, cu teza de abilitare “Coordinate descent methods for sparse optimization: Engineering applications” în domeniul Ingineria Sistemelor, susținută la Universitatea Politehnică din București în 2014, membru în comisia de abilitare a candidatului dr. ing. Dan Selișteanu, cu teza de abilitare “Research and achievements in modelling and control of bioprocesses” în domeniul Ingineria Sistemelor, susținută la Universitatea din Craiova în 2016, membru în comisia de abilitare a candidatei dr.ing. Monica Drăgoicea, cu teza de abilitare “Advances in service systems engineering: a modelling and simulation approach” în domeniul Ingineria Sistemelor, susținută la Universitatea Politehnică din București în 2016, membru în comisia de abilitare a candidatului dr. ing. Ciprian Gabriel Lupu, cu teza de abilitare “Metode, structuri și strategii de proiectare și implementare hardware și software a sistemelor de conducere în timp real pentru procesele neliniare mono și multivariabile” în domeniul Ingineria Sistemelor, susținută la Universitatea Politehnică din București în 2016, membru în comisia de abilitare a candidatei dr. ing. Eva-Henrietta Dulf, cu teza de abilitare “Abordări evoluat destinate controlului proceselor neconvenționale” în domeniul Ingineria Sistemelor, susținută la Universitatea Tehnică din Cluj-Napoca în 2015, membru în comisia de abilitare a candidatului dr. ing. Constantin-Bălă Zamfirescu, cu teza de abilitare “Advances in engineering social-cyber-physical systems” în domeniul Calculatoare și Tehnologia Informației, susținută la Universitatea “Lucian Blaga” din Sibiu în 2015, membru în comisia de abilitare a candidatei dr. ing. Monica Leba, cu teza de abilitare “Computers for control: from industrial processes to innovative systems” în domeniul Ingineria Sistemelor, susținută la Universitatea din Craiova în 2015.

- *Referent la 61 de teze de doctorat în Australia, Belgia, Franța, Italia, Norvegia și România* (<http://www.aut.upt.ro/~rprecup/doctcom.html>): “Soluții informatice pentru cercetarea variantelor și tiparelor genomice aplicând metode din ingineria sistemelor”, susținută de Cristian-Grigore Zimbru la Universitatea Politehnică Timișoara în 2020, conducător științific: prof.dr.ing. Ioan Silea, “Development of advanced autonomous learning algorithms for modeling and controlling nonlinear dynamical systems”, susținută de Md Meftahul Ferdays la University of New South Wales (UNSW), Canberra, Australia, în 2019, conducători științifici: dr. Sreenatha G. Anavatti, UNSW, Canberra, Australia, dr. Matthew A. Garratt, UNSW, Canberra, Australia și dr. Mahardhika Prathama, Nanyang Technological University (NTU), Singapore, “Model predictive control based on sliding mode control”, susținută de Miodrag D. Spasić, Norwegian University of Science and Technology (NTNU), Trondheim, Norvegia, în 2019, conducători științifici: prof.dr. Morten Hovd și prof.dr. Dragan Antić, “Diagnosis of a Wind Turbine Using Wireless Sensor Networks”, susținută de Lavinius Ioan Gliga, Universite de Rouen Normandie, Franța, în 2019, conducători științifici: prof.dr. Hocine Chafouk și prof.dr.ing. Dumitru Popescu, “Contributions to modelling and control in urban intelligent transportation systems”, susținută de Vlad Ion Constantinescu la Universitatea Politehnică din București în 2019, conducător științific: prof.dr.ing. Cristian Oară, “Sistem de raportare și ghidare în caz de accident bazat pe terminale mobile”, susținută de Alexandra Maria Pop la Universitatea Tehnică din Cluj-Napoca în 2019, conducător științific: prof.dr.ing. Honoriu Vălean, “Sistem distribuit bazat pe terminale mobile pentru monitorizarea condițiilor de mediu”, susținută de Adela Pușcașiu la Universitatea Tehnică din Cluj-Napoca în 2019, conducător științific: prof.dr.ing. Honoriu Vălean, “Algoritmi performanți pentru prelucrarea imaginilor și a semnalelor”, susținută de Bogdan Popa la Universitatea din Craiova în 2019, conducător științific: prof.dr.ing. Dan Popescu, “Contribuții privind comunicațiile mobile în sistemele de conducere dedicate autovehiculelor”, susținută de Alexandra-Elisabeta Lörincz la Universitatea din Craiova în 2019, conducător științific: prof.dr.ing. Dan Selișteanu, “Modelling and advanced control techniques for multibody systems”, susținută de Marius-Simion Costandin la Universitatea Tehnică din Cluj-Napoca în 2019, conducător științific: prof.dr.ing. Petru Dobra, “Autonomous Navigation Strategies for UGVs/UAVs”, susținută de Mac Thi Thoa la Ghent University, Belgia, în 2018, conducători științifici: prof.dr.ing. Clara M. Ionescu și dr.ing. Cosmin Copoț, “Robust and optimal control theory for algebraic dynamical systems”, susținută de Sebastian Florin Tudor la Universitatea Politehnică din București în 2018, conducător științific: prof.dr.ing. ing. Cristian Oară, “Strategii de control avansat al proceselor de epurare biologică a apelor reziduale”, susținută de Laurențiu Luca la Universitatea “Dunărea de Jos” din Galați în 2018, conducător științific: prof.dr.ing. Sergiu Caraman, “Automatic synthesis of control components for cyber-physical systems”, susținută de Attila Ors Kilyen la Universitatea Tehnică din Cluj-Napoca în 2018, conducător științific: prof.dr.ing. Tiberiu Stefan Leția, “Strategii de control al sistemelor de combatere a grindinei”, susținută de Ioan Porumb la Universitatea Tehnică din Cluj-Napoca în 2018, conducător științific: prof.dr.ing. Clement Feștilă, “Port-Hamiltonian systems identification”, susținută de Silviu Octavian Medianu la Universite Grenoble Alpes, Franța, în 2017, conducători științifici: prof.dr. Laurent Lefevre și prof.dr.ing. Dumitru Popescu, “Factorisation

techniques for generalised control systems”, susținută de George Cristian Flutur la Universitatea Politehnica din București în 2017, conducător științific: prof.dr.ing. ing. Cristian Oară, “Cercetări privind securitatea sistemelor automate”, susținută de Emil Pricop la Universitatea Petrol-Gaze din București în 2017, conducător științific: prof.dr.ing. Nicolae Paraschiv, “Aplicații ale conducerii predictive”, susținută de Andreea-Valentina Șoimu la Universitatea din Craiova în 2016, conducător științific: prof.dr.ing. Vladimir Răsvan, “Control techniques for electrical drives in automotive applications”, susținută de Sabin-Constantin Carpiuc la Universitatea Tehnică “Gheorghe Asachi” din Iași în 2015, conducător științific: prof.dr.ing. Corneliu Lazăr, “Automatic control applications in medicine”, susținută de Ciprian Sandu la Universitatea Politehnica din București în 2015, conducător științific: prof.dr.ing. Dumitru Popescu, “Contribuții la dezvoltarea unor sisteme inteligente ierarhizate”, susținută de Tudor-Ion Buzdugan la Universitatea Tehnică din Cluj-Napoca în 2015, conducător științific: prof.dr.ing. Clement Feștilă, “Soluții pentru conducerea unor procese optomecatronice cu aplicații în domeniul biomedical”, susținută de Corina Anca Mnerie la Universitatea Politehnica Timișoara în 2015, conducător științific: prof.dr.ing. Stefan Preitl, “Multi-objective methodologies for vehicles ride quality enhancing”, susținută de Stefano Bottelli, Politecnico di Milano, Italia, în 2014 (conducător științific: prof.dr. Sergio M. Savaresi), “Analysis and design of advanced vehicle sharing systems: on-board technologies, control and optimization”, susținută de Andrea Giovanni Bianchessi, Politecnico di Milano, Italia, în 2014 (conducător științific: prof.dr. Sergio M. Savaresi), “Model predictive control of energy efficient buildings in smart microgrids”, susținută de Giancarlo Mantovani, Politecnico di Milano, Italia, în 2014 (conducător științific: prof.dr. Luca Ferrarini), “Analysis and design of energy-oriented driving assistance systems”, susținută de Carlo Ongini, Politecnico di Milano, Italia, în 2014 (conducător științific: prof.dr. Sergio M. Savaresi), “Comanda multimodel pentru controlul motoarelor Diesel cu turbină”, susținută de Silviu Cornel Cîrstoiu la Universitatea Politehnica din București în 2014, conducător științific: prof.dr.ing. Dumitru Popescu, “Simulator for the identification and control of dynamic systems”, susținută de Silviu Medianu la Universitatea Politehnica din București în 2014, conducători științifici: prof.dr.ing. Dumitru Popescu și prof.dr. Laurent Lefevre (Institut National Polytechnique de Grenoble, Franța), “Contribuții la dezvoltarea unor soluții de reglare dedicate sistemelor de acționare electrică cu parametri variabili și cu intrări variabile în timp”, susținută de Alexandra-Iulia Stînean la Universitatea Politehnica Timișoara în 2014, conducător științific: prof.dr.ing. Stefan Preitl, “Controlul avansat al microaparaturilor de zbor în aplicații civile”, susținută de Ioan-Radu Morar la Universitatea Tehnică din Cluj-Napoca în 2014, conducător științific: prof.dr.ing. Ioan Nașcu, “Deteția și diagnoza defectelor sistemelor dinamice”, susținută de Bogdan-Vasile Beta la Universitatea Tehnică din Cluj-Napoca în 2013, conducător științific: prof.dr.ing. Petru Dobra, “Controlul numeric al convertoarelor DC-DC”, susținută de Liviu-Bogdan Tomesc la Universitatea Tehnică din Cluj-Napoca în 2013, conducător științific: prof.dr.ing. Petru Dobra, “Stabilitate și oscilații în sisteme hibride”, susținută de Laviniu Bejenaru la Universitatea din Craiova în 2013, conducător științific: prof.dr.ing. Vladimir Răsvan, “Contribuții la modelarea, simularea și controlul proceselor electrotermice în incinte industriale închise”, susținută de Andreea-Maria Neacă la Universitatea din Craiova în 2013, conducător științific: prof.dr.ing. Dan Popescu, “Metode evaluate de conducere neliniară a proceselor dinamice din biotehnologie”, susținută de Elena Bunciu (Stanciu) la Universitatea din Craiova în 2013, conducător științific: prof.dr.ing. Emil Petre, “Contribuții la monitorizarea și controlul transmisiei de date în rețea”, susținută de Roxana Stănică (Trucă) la Universitatea din Craiova în 2013, conducător științific: prof.dr.ing. Emil Petre, “Contribuții la dezvoltarea algoritmilor de control pentru acționări electrice cu motoare de curent continuu fără perii, cu aplicații la sistemele cu roboți industriali”, susținută de Mirela Dobra la Universitatea Tehnică din Cluj-Napoca în 2013, conducător științific: prof.dr.ing. Gheorghe Lazea, “Contributions to nonlinear systems identification and control”, susținută de Mihai Cornoiu la Universitatea Politehnica din București în 2012, conducători științifici: prof.dr.ing. Dumitru Popescu și prof.dr. Pierre Borne (Ecole Centrale de Lille, Franța), “Contribuții privind controlul robust al proceselor de tratare biologică a apelor uzate”, susținută de Alina Chiroșcă la Universitatea “Dunărea de Jos” din Galați în 2012, conducător științific: prof.dr.ing. Sergiu Caraman, “Metode de fraudare prin internet și contracararea fraudelor informatice”, susținută de Mirela Enache la Universitatea Tehnică din Cluj-Napoca în 2012, conducător științific: prof.dr.ing. Tiberiu Stefan Leția, “Control of two biological processes of environmental interest (biological wastewater treatment and microalgae production in photobioreactor)”, susținută de George-Adrian Ifrim la Universitatea “Dunărea de Jos” din Galați în 2012, conducători științifici: prof.dr.ing. Sergiu Caraman și prof.dr. Lionel Boillereaux, Nantes University, Franța, “Contributions à la modélisation et la commande des réseaux de trafic routier”, susținută de Cătălin Dimon la Universitatea Politehnica din București în 2012, conducători științifici:

prof.dr.ing. Dumitru Popescu și prof.dr. Geneviève Dauphin-Tanguy (Ecole Centrale de Lille, Franța), “Strategii de conducere pentru sistemele hibride. Aplicații”, susținută de Florin Stîngă la Universitatea din Craiova în 2012, conducător științific: prof.dr.ing. Dan Popescu, “Contributions to path planning algorithms for autonomous vehicles”, susținută de István Szóke la Universitatea Tehnică din Cluj-Napoca în 2011, conducător științific: prof.dr.ing. Gheorghe Lazea, “Networked predictive control for fast processes”, susținută de Constantin-Florin Căruntu la Universitatea Tehnică “Gh. Asachi” din Iași în 2011, conducător științific: prof.dr.ing. Corneliu Lazăr, “Genetic programming techniques for nonlinear systems identification”, susținută de Alina Patelli la Universitatea Tehnică “Gh. Asachi” din Iași în 2011, conducător științific: prof.dr.ing. Octavian Păstrăvanu, “Optimal robust control of horizontal variable speed wind turbine”, susținută de Andreea Pinteala la Universitatea Politehnică din București în 2011, conducători științifici: prof.dr.ing. Dumitru Popescu și prof.dr. Pierre Borne (Ecole Centrale de Lille, Franța), “Sistem de identificare distribuită a persoanelor pe baza amprentelor digitale”, susținută de Radu Florin Miron la Universitatea Tehnică din Cluj-Napoca în 2011, conducător științific: prof.dr.ing. Tiberiu Stefan Leția, “Soluții moderne de reglare bazate pe model cu aplicații în sisteme mecatronice”, susținută de Claudia-Adina Dragoș la Universitatea “Politehnică” din Timișoara în 2011, conducător științific: prof.dr.ing. Stefan Preitl, “Sisteme de monitorizare și conducere a proceselor distribuite cu aplicații la managementul traficului rutier”, susținută de Theodor George Oprica la Universitatea din Craiova în 2011, conducător științific: prof.dr.ing. Matei Vinătoru, “Contributions to simultaneous localization and mapping of mobile robots”, susținută de András László Majdik la Universitatea Tehnică din Cluj-Napoca în 2011, conducători științifici: prof.dr.ing. Gheorghe Lazea și prof.dr. José A. Castellanos (University of Zaragoza, Spania), “Dezvoltarea unor algoritmi de control neuro-adaptiv”, susținută de I. Bogdan Mureșan la Universitatea Tehnică din Cluj-Napoca în 2011, conducător științific: prof.dr.ing. Ioan Nașcu, “Algoritmi avansați de control automat cu aplicații în automatizarea stațiilor de epurare a apelor uzate”, susținută de Ruben Dan Crișan la Universitatea Tehnică din Cluj-Napoca în 2011, conducător științific: prof.dr.ing. Ioan Nașcu, “Contribuții la diagnosticarea sistemelor biologice prin metode electrografice”, susținută de Vasiliță Voinea la Universitatea Politehnică din București în 2011, conducător științific: prof.dr.ing. Dumitru Popescu, “Sistem de conducere a unui baraj hidroenergetic echipat cu stavilă segment și clapetă”, susținută de Liliana Vasile la Universitatea din Craiova în 2010, conducător științific: prof.dr.ing. Vladimir Răsvan, “Utilizarea rețelelor neuronale în diagnoza defectelor pentru procese dinamice neliniare”, susținută de Eugen Arinton la Universitatea “Dunărea de Jos” din Galați în 2010, conducător științific: prof.dr.ing. Sergiu Caraman, “Algoritmi de conducere adaptivă a sistemelor dinamice cu frecare”, susținută de Radu-Constantin Zglimbea la Universitatea din Craiova în 2010, conducător științific: prof.dr.ing. Constantin Marin, “Controlul distribuit al traficului rutier”, susținută de Mihai Hulea la Universitatea Tehnică din Cluj-Napoca în 2010, conducător științific: prof.dr.ing. Tiberiu Coloși, “Contribuții la analiza și dezvoltarea sistemelor cu reglatoare fuzzy aplicate în conducerea proceselor neliniare”, susținută de Marius-Lucian Tomescu la Universitatea “Politehnică” din Timișoara în 2008, conducător științific: prof.dr.ing. Stefan Preitl, “Algoritmi evolutivi în automatică”, susținută de Lavinia Eugenia Ferariu la Universitatea Tehnică “Gh. Asachi” din Iași în 2004, conducător științific: prof. dr. ing. Mihail Voicu, membru corespondent al Academiei Române.

- *Membru al comisiilor de acordare a titlurilor de Doctor Honoris Causa* către: Prof. Imre J. Rudas (decernat de Universitatea “Politehnică” din Timișoara în 2005), Acad. József Bokor (decernat de Universitatea “Politehnică” din Timișoara în 2007), Prof. Robin De Keyser (decernat de Universitatea Tehnică “Gh. Asachi” din Iași în 2007), Prof. János Fodor (decernat de Universitatea “Politehnică” din Timișoara în 2010), Acad. Florin Gheorghe Filip (decernat de Universitatea “Aurel Vlaicu” din Arad în 2018), Prof. Hamido Fujita (președinte al comisiei, titlu decernat de Universitatea Politehnică Timișoara în 2018), Dr. Attila Michael Bilgic (președinte al comisiei, titlu decernat de Universitatea Politehnică Timișoara în 2018).

**Vizite academice de lungă durată (cercetare și didactice, <http://www.aut.upt.ro/~rprecup/visits.html>):**

- Februarie 2003: profesor invitat (Invited Professor) în Franța, Université de Savoie, École Supérieure d’Ingénieurs d’Annecy, LISTIC (cercetare).
- Noiembrie 2004-octombrie 2009: Ungaria, Budapest Tech Polytechnical Institution, John von Neumann Faculty of Informatics (cercetare și didactice).
- Aprilie 1999-decembrie 1999: Austria, Vienna University of Technology, Institute for Handling Devices and Robotics (didactice).
- Iulie 2003-septembrie 2005: Ungaria, Budapest University of Technology and Economics, Department of Automation and Applied Informatics (cercetare).

**Colaborări internaționale (<http://www.aut.upt.ro/~rprecup/coop.html>):**

- Université de Savoie, Franța, din 2002, cooperare cu Prof. Laurent Foulloy și echipa domniei sale în domeniul sistemelor de conducere fuzzy.
- University of Ottawa, Canada, din 2007, cooperare cu Prof. Emil M. Petriu și echipa domniei sale în domeniile soft computing și prelucrarea matematică a semnalelor.
- University of Ljubljana, Slovenia, din 2007, cooperare cu Prof. Igor Škrjanc, Prof. Sašo Blažič și echipele domniilor lor în domeniul sistemelor de conducere fuzzy.
- Budapest University of Technology and Economics (BME), Ungaria, din 2003, cooperare cu Acad. István Nagy, Prof. Péter Korondi și echipele domniilor lor în domeniul algoritmilor de reglare pentru roboți mobili funcționând în spațiu inteligent.
- Óbuda University (cu denumirea veche Budapest Tech Polytechnical Institution, BMF), Budapesta, Ungaria, din 2003, cooperare cu Prof. Imre J. Rudas, Prof. János Fodor și echipa domniilor lor în domeniul sistemelor fuzzy.
- Cooperare din 1992 cu firme multinaționale din România și SUA în modelarea, identificarea și optimizarea sistemelor și reglarea turației hidrogeneratoarelor.

Timișoara, la 15.09.2020

*RADU-EMIL PRECUP*

**LISTA DE LUCRĂRI ȘTIINȚIFICE SEMNIFICATIVE, GRANTURI ȘI CONTRACTE DE CERCETARE ȘTIINȚIFICĂ, DEZVOLTARE ȘI INOVARE**

<http://www.aut.upt.ro/~rprecup/public.html>, <http://www.aut.upt.ro/~rprecup/contracts.html>

**A) CĂRȚI (<http://www.aut.upt.ro/~rprecup/books.html>):**

- R.-E. Precup and R.-C. David, Nature-Inspired Optimization Algorithms for Fuzzy Controlled Servo Systems, **Butterworth-Heinemann, Elsevier**, Oxford, UK, 148 pp., 2019.
- R.-E. Precup, T. Kamal and S. Zulqadar Hassan, Eds., Advanced Control and Optimization Paradigms for Wind Energy Systems, Power Systems Series, **Springer** Singapore, Singapore, 257 pp., 2019.
- R.-E. Precup, T. Kamal and S. Zulqadar Hassan, Eds., Solar Photovoltaic Power Plants - Advanced Control and Optimization Techniques, Power Systems Series, **Springer** Singapore, Singapore, 250 pp., 2019.
- R.-E. Precup, Sz. Kovács, St. Preitl and E. M. Petriu, Eds., Applied Computational Intelligence in Engineering and Information Technology, the first book in the new Springer-Verlag series on Topics in Intelligent Engineering and Informatics (Editors-in-Chief: I. J. Rudas and J. Fodor), **Springer-Verlag**, Berlin, Heidelberg, New York, 356 pp., 2012.
- A. Kovács, R.-E. Precup, B. Paláncz and L. Kovács, Modern Numerical Methods in Engineering (in English), Editura Politehnica Publishers, Timisoara, 482 pp., 2012.
- St. Preitl, R.-E. Precup and Zs. Preitl, Process Control Structures and Algorithms, vol. 1 (in Romanian: Structuri si algoritmi pentru conducerea automata a proceselor, vol. 1), Editura Orizonturi Universitare Publishers, Timisoara, 214 pp., 2009.
- St. Preitl, R.-E. Precup and Zs. Preitl, Process Control Structures and Algorithms, vol. 2 (in Romanian: Structuri si algoritmi pentru conducerea automata a proceselor, vol. 2), Editura Orizonturi Universitare Publishers, Timisoara, 272 pp., 2009.
- St. Preitl and R.-E. Precup, Eds., Design Techniques for Automatic Control Structures. Applications (in Romanian: Tehnici de proiectare a structurilor de reglare automata. Aplicatii), Editura Orizonturi Universitare Publishers, 107 pp., 2008.
- R.-E. Precup, Computer Assisted Mathematics. Algorithms (in Romanian: Matematici asistate de calculator. Algoritmuri), Editura Orizonturi Universitare Publishers, 231 pp., 2007.
- St. Preitl and R.-E. Precup, Eds., Controllers for Servo Systems: Design Methods (in Romanian: Regulatele pentru servosisteme: metode de proiectare), Editura Orizonturi Universitare Publishers, Timisoara, 128 pp., 2007.
- St. Preitl and R.-E. Precup, Elements of Automatic Control. Applications to Voltage and Speed Control Systems of Synchronous Generators (in Romanian: Elemente de reglare automata. Aplicatii la sistemele de reglare automata a excitatiei si vitezei generatoarelor sincrone), Editura Orizonturi Universitare Publishers, Timisoara, 304 pp., 2005.
- R.-E. Precup, L. Dragomir and I. Bulavitchi, Computer Assisted Mathematics. Applications (in Romanian: Matematici asistate de calculator. Aplicatii), Editura Politehnica Publishers, Timisoara, 298 pp., 2002.
- St. Preitl and R.-E. Precup, Introduction to Control Engineering (in Romanian: Introducere in ingineria reglarilor automate), Editura Politehnica Publishers, Timisoara, 334 pp., 2001.
- St. Preitl and R.-E. Precup, Automatic Control (in Romanian: Automatizari), Editura Orizonturi Universitare Publishers, Timisoara, 206 pp., 2001.
- R.-E. Precup, Solutions for Fuzzy Control of Non-minimum Phase Systems. Applications to Hydrogenerators Control (in Romanian: Solutii de conducere fuzzy a sistemelor cu faza neminima. Aplicatii la conducerea hidrogenatoarelor), Editura Orizonturi Universitare Publishers, Timisoara, 124 pp., 2000.
- St. Preitl and R.-E. Precup, Elements of Methodics of Teaching Courses of Automation and Computer Science (in Romanian: Elemente de metodica predarii disciplinelor de automata si calculatoare), Editura Orizonturi Universitare Publishers, Timisoara, 144 pp., 1999.
- R.-E. Precup, and St. Preitl, Fuzzy Controllers (in English), Editura Orizonturi Universitare Publishers, Timisoara, 212 pp., 1999.
- St. Preitl and R.-E. Precup, Introduction to Fuzzy Control (in Romanian: Introducere in conducerea fuzzy a proceselor), Editura Tehnica Publishers, Bucharest, 151 pp., 1997.

**B) CAPITOLE DE CARTE (<http://www.aut.upt.ro/~rprecup/bookch.html>):**



- R.-C. David, R.-E. Precup, St. Preitl, A.-I. Szedlak-Stînean and L.-O. Fedorovici, Application of grey wolf optimization in fuzzy controller tuning for servo systems, Chapter 13 in *Swarm Intelligence - Volume 2: Innovation, new algorithms and methods*, Y. Tan, Ed. (IET Digital Library), pp. 363-387, 2018.
- R.-E. Precup and R.-C. David, Nature-Inspired Optimization of Fuzzy Controllers and Fuzzy Models, Chapter 20 in *Handbook on Computational Intelligence*, P. P. Angelov, Ed., World Scientific, Singapore, Volume 2: Evolutionary Computation, Hybrid Systems, and Applications, pp. 697-729, 2016.
- St. Preitl, R.-E. Precup, Zs. Preitl, A.-I. Stînean, C.-A. Dragoş and M.-B. Rădac, Pragmatic Design Methods Using Adaptive Controller Structures for Mechatronic Applications with Variable Parameters and Working Conditions, in: *Complex Systems*, G. M. Dimirovski, Ed., Studies in Systems, Decision and Control, vol. 55 (Springer International Publishing), pp. 619-647, 2016.
- R.-E. Precup, E.-I. Voişan, E. M. Petriu, M.-B. Rădac and L.-O. Fedorovici, Gravitational Search Algorithm-Based Evolving Fuzzy Models of a Nonlinear Process, in: *Informatics in Control, Automation and Robotics*, J. Filipe, K. Madani, O. Gusikhin and J. Sasiadek, Eds., Lecture Notes in Electrical Engineering, vol. 383 (Springer International Publishing), pp. 51-62, 2016.
- R.-C. Roman, M.-B. Rădac, R.-E. Precup and E. M. Petriu, Virtual Reference Feedback Tuning of MIMO Data-Driven Model-Free Adaptive Control Algorithms, in: *Technological Innovation for Cyber-Physical Systems*, L. M. Camarinha-Matos, A. J. Falcão, N. Vafaei and S. Najdi, Eds., IFIP Advances in Information and Communication Technology, vol. 470 (Springer International Publishing), pp. 253-260, 2016.
- R.-C. David, R.-E. Precup, E. M. Petriu, St. Preitl, M.-B. Rădac and L.-O. Fedorovici, Adaptive Evolutionary Optimization Algorithms for Simple Fuzzy Controller Tuning Dedicated to Servo Systems, in: *Fuzzy Modeling and Control: Theory and Applications*, F. Matía, G. N. Marichal and E. Jiménez, Eds., Atlantis Computational Intelligence Systems, vol. 9 (Atlantis Press and Springer-Verlag), pp. 159-173, 2014.
- St. Preitl, R.-E. Precup, Z. Preitl, A.-I. Stînean, M.-B. Rădac and C.-A. Dragoş, Control Algorithms for Plants Operating Under Variable Conditions, Applications, in: *Advances in Soft Computing, Intelligent Robotics and Control*, J. Fodor and R. Fuller, Eds., Topics in Intelligent Engineering and Informatics, vol. 8 (Springer-Verlag), pp. 3-39, 2014.
- R.-C. David, R.-B. Grad, R.-E. Precup, M.-B. Rădac, C.-A. Dragoş and E. M. Petriu, An Approach to Fuzzy Modeling of Anti-lock Braking Systems, in: *Soft Computing in Industrial Applications*, V. Snáşel, P. Krömer, M. Köppen and G. Schaefer, Eds., Advances in Intelligent Systems and Computing, vol. 223 (Springer-Verlag), pp. 83-93, 2014.
- A.-I. Stînean, St. Preitl, R.-E. Precup, C.-A. Dragoş and M.-B. Rădac, Classical and Fuzzy Approaches to 2-DOF Control Solutions for BLDC-m Drives, in: *Intelligent Systems: Models and Applications*, E. Pap, Ed., Topics in Intelligent Engineering and Informatics, vol. 3 (Springer-Verlag), pp. 175-193, 2013.
- R.-E. Precup, F.-C. Enache, M.-B. Rădac, E. M. Petriu, St. Preitl and C.-A. Dragoş, Lead-Lag Controller-Based Iterative Learning Control Algorithms for 3D Crane Systems, in: *Aspects of Computational Intelligence: Theory and Applications*, L. Madarász and J. Živčák, Eds., Topics in Intelligent Engineering and Informatics, vol. 2 (Springer-Verlag), pp. 25-38, 2013.
- St. Preitl, A.-I. Stînean, R.-E. Precup, C.-A. Dragoş and M.-B. Rădac, 2-DOF and Fuzzy Control Extensions of Symmetrical Optimum Design Method: Applications and Perspectives, in: *Applied Computational Intelligence in Engineering and Information Technology*, R.-E. Precup, Sz. Kovács, St. Preitl and E. M. Petriu, Eds., Topics in Intelligent Engineering and Informatics, vol. 1 (Springer-Verlag), pp. 19-37, 2012.
- R.-C. David, R.-E. Precup, St. Preitl, J. K. Tar and J. Fodor, Three Evolutionary Optimization Algorithms in PI Controller Tuning, in: *Applied Computational Intelligence in Engineering and Information Technology*, R.-E. Precup, Sz. Kovács, St. Preitl and E. M. Petriu, Eds., Topics in Intelligent Engineering and Informatics, vol. 1 (Springer-Verlag), pp. 95-106, 2012.
- Cl. Pozna and R.-E. Precup, Ideas on a Pattern of Human Knowledge, in: *Applied Computational Intelligence in Engineering and Information Technology*, R.-E. Precup, Sz. Kovács, St. Preitl and E. M. Petriu, Eds., Topics in Intelligent Engineering and Informatics, vol. 1 (Springer-Verlag), pp. 273-286, 2012.
- C.-A. Dragoş, St. Preitl, R.-E. Precup and E. M. Petriu, Points of View on Magnetic Levitation System Laboratory-Based Control Education, in: *Human-Computer Systems Interaction: Backgrounds and Applications 2, Part 2*, Z. S. Hippe, J. L. Kulikowski and T. Mroczek, Eds., Advances in Intelligent and Soft Computing, vol. 99 (Springer-Verlag), pp. 261-275, 2012.

- R.-E. Precup, S. V. Spătaru, M.-B. Rădac, E. M. Petriu, St. Preitl, C.-A. Dragoș and R.-C. David, Experimental Results of Model-Based Fuzzy Control Solutions for a Laboratory Antilock Braking System, in: Human-Computer Systems Interaction: Backgrounds and Applications 2, Part 2, Z. S. Hippe, J. L. Kulikowski and T. Mroczek, Eds., Advances in Intelligent and Soft Computing, vol. 99 (Springer-Verlag), pp. 223-234, 2012.
- L.-O. Fedorovici, R.-E. Precup, R.-C. David and F. Drăgan, GSA-Based Training of Convolutional Neural Networks for OCR Applications, in: Computational Intelligence Systems in Industrial Engineering, C. Kahraman, Ed., Atlantis Computational Intelligence Systems, vol. 6 (Atlantis Press and Springer-Verlag), pp. 481-504, 2012.
- R.-E. Precup, R.-C. David, St. Preitl, E. M. Petriu and J. K. Tar, Optimal Control Systems with Reduced Parametric Sensitivity Based on Particle Swarm Optimization and Simulated Annealing, in: Intelligent Computational Optimization in Engineering Techniques and Applications, M. Köppen, G. Schaefer and A. Abraham, Eds., Studies in Computational Intelligence, vol. 366 (Springer-Verlag), pp. 177-207, 2011.
- R.-E. Precup, R.-C. David, E. M. Petriu, St. Preitl and A. S. Paul, Gravitational Search Algorithm-Based Tuning of Fuzzy Control Systems with a Reduced Parametric Sensitivity, in: Soft Computing in Industrial Applications, A. Gaspar-Cunha, R. Takahashi, G. Schaefer and L. Costa, Eds., Advances in Intelligent and Soft Computing, vol. 96 (Springer-Verlag), pp. 141-150, 2011.
- M.-B. Rădac, R.-E. Precup, E. M. Petriu, St. Preitl and C.-A. Dragoș, Convergent Iterative Feedback Tuning of State Feedback-Controlled Servo Systems, in: Informatics in Control Automation and Robotics, J. Andrade Cetto, J. Filipe and J.-L. Ferrier, Eds., Lecture Notes in Electrical Engineering, vol. 85 (Springer-Verlag), pp. 99-111, 2011.
- C.-A. Dragoș, St. Preitl, R.-E. Precup, M. Crețiu and J. Fodor, Modern Control Solutions with Applications in Mechatronic Systems, in: Computational Intelligence in Engineering, I. J. Rudas, J. Fodor and J. Kacprzyk, Eds., Studies in Computational Intelligence, vol. 313 (Springer-Verlag), pp. 87-102, 2010.
- St. Preitl, R.-E. Precup, M. L. Tomescu, M.-B. Rădac, E. M. Petriu and C.-A. Dragoș, Model-Based Design Issues in Fuzzy Logic Control, in: Towards Intelligent Engineering and Information Technology, I. J. Rudas, J. Fodor and J. Kacprzyk, Eds., Studies in Computational Intelligence, vol. 243 (Springer-Verlag), pp. 137-152, 2009.
- R.-E. Precup, M.-B. Rădac, St. Preitl, E. M. Petriu and C.-A. Dragoș, Iterative Feedback Tuning in Linear and Fuzzy Control Systems, in: Towards Intelligent Engineering and Information Technology, I. J. Rudas, J. Fodor and J. Kacprzyk, Eds., Studies in Computational Intelligence, vol. 243 (Springer-Verlag), pp. 179-192, 2009.
- Cl. Pozna, R.-E. Precup, St. Preitl, F. Troester and J. K. Tar, Points of View on Building an Intelligent Robot, in: Towards Intelligent Engineering and Information Technology, I. J. Rudas, J. Fodor and J. Kacprzyk, Eds., Studies in Computational Intelligence, vol. 243 (Springer-Verlag), pp. 263-277, 2009.
- R.-E. Precup and St. Preitl, On the Stability and Sensitivity Analysis of Fuzzy Control Systems for Servo-Systems, in: Fuzzy Systems Engineering, Theory and Practice, N. Nedjah and L. de Macedo Mourelle, Eds., Studies in Fuzziness and Soft Computing, vol. 181 (Springer-Verlag), pp. 131-161, 2005.
- St. Preitl and R.-E. Precup, Fuzzy Controllers with Dynamics, a Systematic Design Approach, in: Advances in Automatic Control, M. Voicu, Ed., The Springer International Series in Engineering and Computer Science, vol. 754 (Kluwer Academic Publishers and Springer-Verlag), pp. 283-296, 2003.

**C) LUCRĂRI PUBLICATE ÎN REVISTE INDEXATE ÎN CLARIVATE ANALYTICS WEB OF SCIENCE (ISI) (<http://www.aut.upt.ro/~rprecup/isijournals.html>):**

- R.-E. Precup and H. Hellendoorn, A survey on industrial applications of fuzzy control, **Computers in Industry** (Elsevier Science), vol. 62, no. 3, pp. 213-226, 2011, impact factor (IF) = 1.529, IF according to 2019 Journal Citation Reports (JCR) released by Clarivate Analytics in 2020 = 3.954, **Highly Cited Paper according to Clarivate Analytics Web of Science** as of September/October 2019 ([http://www.aut.upt.ro/~rprecup/Cil\\_2011\\_Highly\\_Cited\\_Paper.png](http://www.aut.upt.ro/~rprecup/Cil_2011_Highly_Cited_Paper.png)).
- R.-E. Precup, R.-C. David and E. M. Petriu, Grey Wolf Optimizer Algorithm-Based Tuning of Fuzzy Control Systems with Reduced Parametric Sensitivity, **IEEE Transactions on Industrial Electronics**, vol. 64, no. 1, pp. 527-534, 2017, impact factor (IF) = 7.050, IF according to 2019 Journal Citation Reports (JCR) released by Clarivate Analytics in 2020 = 7.515, **Highly Cited Paper according to Clarivate Analytics Web of Science** as of September/October 2019 ([http://www.aut.upt.ro/~rprecup/TIE\\_2017\\_Highly\\_Cited\\_Paper.png](http://www.aut.upt.ro/~rprecup/TIE_2017_Highly_Cited_Paper.png)).

- R.-E. Precup, M.-B. Rădac, R.-C. Roman and E. M. Petriu, Model-Free Sliding Mode Control of Nonlinear Systems: Algorithms and Experiments, **Information Sciences** (Elsevier Science), vol. 381, pp. 176-192, 2017, impact factor (IF) = 4.305, IF according to 2019 Journal Citation Reports (JCR) released by Clarivate Analytics in 2020 = 5.910, **Highly Cited Paper according to Clarivate Analytics Web of Science** as of May/June 2018 ([http://www.aut.upt.ro/~rprecup/InfSci\\_2017\\_Highly\\_Cited\\_Paper.jpg](http://www.aut.upt.ro/~rprecup/InfSci_2017_Highly_Cited_Paper.jpg)).
- R.-E. Precup, R.-C. David, E. M. Petriu, M.-B. Rădac, St. Preitl and J. Fodor, Evolutionary optimization-based tuning of low-cost fuzzy controllers for servo systems, **Knowledge-Based Systems** (Elsevier Science), vol. 38, pp. 74-84, 2013, impact factor (IF) = 3.058, IF according to 2019 Journal Citation Reports (JCR) released by Clarivate Analytics in 2020 = 5.921, **Highly Cited Paper according to Clarivate Analytics Web of Science** as of November/December 2015 ([http://www.aut.upt.ro/~rprecup/KBS\\_2013\\_Highly\\_Cited\\_Paper.jpg](http://www.aut.upt.ro/~rprecup/KBS_2013_Highly_Cited_Paper.jpg)).
- R.-E. Precup, P. Angelov, B. S. J. Costa and M. Sayed-Mouchaweh, An overview on fault diagnosis and nature-inspired optimal control of industrial process applications, **Computers in Industry** (Elsevier Science), vol. 74, pp. 75-94, 2015, impact factor (IF) = 1.685, IF according to 2019 Journal Citation Reports (JCR) released by Clarivate Analytics in 2020 = 3.954, **Hot Paper according to Clarivate Analytics Web of Science** as of November/December 2015 ([http://www.aut.upt.ro/~rprecup/Cii\\_2015\\_Hot\\_Paper.jpg](http://www.aut.upt.ro/~rprecup/Cii_2015_Hot_Paper.jpg)).
- R.-E. Precup, T.-A. Teban, A. Albu, A.-B. Borlea, I. A. Zamfirache and E. M. Petriu, Evolving fuzzy models for prosthetic hand myoelectric-based control, **IEEE Transactions on Instrumentation and Measurement**, vol. 69, no. 7, pp. 4625-4636, 2020, impact factor (IF) = 3.658, IF according to 2019 Journal Citation Reports (JCR) released by Clarivate Analytics in 2020 = 3.658.
- R.-E. Precup, E.-L. Hedrea, R.-C. Roman, E. M. Petriu, A.-I. Szedlak-Stînean and C.-A. Bojan-Dragoş, Experiment-Based Approach to Teach Optimization Techniques, **IEEE Transactions on Education**, DOI: 10.1109/TE.2020.3008878, pp. 1-7, 2020, impact factor (IF) = 1.855, IF according to 2019 Journal Citation Reports (JCR) released by Clarivate Analytics in 2020 = 1.855.
- R.-C. Roman, R.-E. Precup (corresponding author) and E. M. Petriu, Hybrid Data-Driven Fuzzy Active Disturbance Rejection Control for Tower Crane Systems, **European Journal of Control** (Elsevier), DOI: 10.1016/j.ejcon.2020.08.001, pp. 1-15, 2020, impact factor (IF) = 1.540, IF according to 2019 Journal Citation Reports (JCR) released by Clarivate Analytics in 2020 = 1.540.
- R.-E. Precup, E.-I. Voişan, E. M. Petriu, M. L. Tomescu, R.-C. David, A.-I. Szedlak-Stînean and R.-C. Roman, Grey Wolf Optimizer-Based Approaches to Path Planning and Fuzzy Logic-based Tracking Control for Mobile Robots, *International Journal of Computers Communications & Control* (Agora University Editing House - CCC Publications), vol. 15, no. 3, 3844, pp. 1-17, 2020, impact factor (IF) = 2.093, IF according to 2019 Journal Citation Reports (JCR) released by Clarivate Analytics in 2020 = 2.093.
- A. Topîrceanu and R.-E. Precup, A framework for improving electoral forecasting based on time-aware polling, *Social Network Analysis and Mining* (Springer), vol. 10, no. 1, 39, pp. 1-14, 2020, impact factor (IF) = 0.000, IF according to 2019 Journal Citation Reports (JCR) released by Clarivate Analytics in 2020 = 0.000.
- R.-E. Precup, S. Preitl, E. M. Petriu, R.-C. Roman, C.-A. Bojan-Dragoş, E.-L. Hedrea and A.-I. Szedlak-Stînean, A center manifold theory-based approach to the stability analysis of state feedback Takagi-Sugeno-Kang fuzzy control systems, *Facta Universitatis, Series: Mechanical Engineering* (University of Niš), vol. 18, no. 2, pp. 189-204, 2020, impact factor (IF) = 0.000, IF according to 2019 Journal Citation Reports (JCR) released by Clarivate Analytics in 2020 = 0.000.
- R.-C. Roman, R.-E. Precup (corresponding author), E. M. Petriu and F. Drăgan, Combination of Data-Driven Active Disturbance Rejection and Takagi-Sugeno Fuzzy Control with Experimental Validation on Tower Crane Systems, *Energies* (MDPI), vol. 12, no. 8, paper 1548, pp. 1-19, 2019, impact factor (IF) = 2.702, IF according to 2019 Journal Citation Reports (JCR) released by Clarivate Analytics in 2020 = 2.702.
- M.-B. Rădac and R.-E. Precup, Data-Driven Model-Free Tracking Reinforcement Learning Control with VRFT-based Adaptive Actor-Critic, *Applied Sciences* (MDPI), vol. 9, no. 9, paper 1807, pp. 1-23, 2019, impact factor (IF) = 2.474, IF according to 2019 Journal Citation Reports (JCR) released by Clarivate Analytics in 2020 = 2.474.
- E.-L. Hedrea, R.-E. Precup and C.-A. Bojan-Dragoş, Results on Tensor Product-based Model Transformation of Magnetic Levitation Systems, *Acta Polytechnica Hungarica*, vol. 16, no. 9, pp. 93-111, 2019, impact factor (IF) = 1.219, IF according to 2019 Journal Citation Reports (JCR) released by Clarivate Analytics in 2020 = 1.219.

- A. Albu, R.-E. Precup and T.-A. Teban, Results and Challenges of Artificial Neural Networks Used for Decision-Making in Medical Applications, *Facta Universitatis, Series: Mechanical Engineering* (University of Niš), vol. 17, no. 4, pp. 285-308, 2019, impact factor (IF) = 0.000, IF according to 2019 Journal Citation Reports (JCR) released by Clarivate Analytics in 2020 = 0.000.
- M.-B. Rădac and R.-E. Precup (corresponding author), Data-driven MIMO model-free reference tracking control with nonlinear state-feedback and fractional order controllers, **Applied Soft Computing** (Elsevier Science), vol. 73, pp. 992-1003, 2018, impact factor (IF) = 4.873, IF according to 2019 Journal Citation Reports (JCR) released by Clarivate Analytics in 2020 = 5.472.
- M.-B. Rădac and R.-E. Precup (corresponding author), Data-Driven Model-Free Slip Control of Anti-lock Braking Systems Using Reinforcement Q-Learning, **Neurocomputing** (Elsevier Science), vol. 275, pp. 317-329, 2018, impact factor (IF) = 4.072, IF according to 2019 Journal Citation Reports (JCR) released by Clarivate Analytics in 2020 = 4.438.
- M.-B. Rădac, R.-E. Precup (corresponding author) and R.-C. Roman, Data-driven model reference control of MIMO vertical tank systems with model-free VRFT and Q-learning, **ISA Transactions** (Elsevier Science), vol. 73, pp. 227-238, 2018, impact factor (IF) = 4.343, IF according to 2019 Journal Citation Reports (JCR) released by Clarivate Analytics in 2020 = 4.305.
- Cl. Pozna and R.-E. Precup (corresponding author), An Approach to the Design of Nonlinear State-Space Control Systems, *Studies in Informatics and Control* (ICI Bucharest), vol. 27, no. 1, pp. 5-14, 2018, impact factor (IF) = 1.347, IF according to 2019 Journal Citation Reports (JCR) released by Clarivate Analytics in 2020 = 2.102.
- R.-E. Precup, T.-A. Teban, A. Albu, A.-I. Szedlak-Stînean and C.-A. Bojan-Dragoş, Experiments in Incremental Online Identification of Fuzzy Models of Finger Dynamics, *Romanian Journal of Information Science and Technology* (Romanian Academy, Section for Information Science and Technology), vol. 21, no. 4, pp. 358-376, 2018, impact factor (IF) = 0.661, IF according to 2019 Journal Citation Reports (JCR) released by Clarivate Analytics in 2020 = 0.485.
- Cl. Pozna and R.-E. Precup (corresponding author), On a translated frame-based approach to geometric modeling of robots, **Robotics and Autonomous Systems** (Elsevier Science), vol. 91, pp. 49-58, 2017, impact factor (IF) = 2.638, IF according to 2019 Journal Citation Reports (JCR) released by Clarivate Analytics in 2020 = 2.825.
- E. Horvath, Cl. Pozna and R.-E. Precup, Robot Coverage Path Planning Based on Iterative Structured Orientation, *Acta Polytechnica Hungarica* (Óbuda University), vol. 15, no. 2, pp. 231-249, 2018, impact factor (IF) = 1.286, IF according to 2019 Journal Citation Reports (JCR) released by Clarivate Analytics in 2020 = 1.219.
- C.-A. Bojan-Dragoş, M.-B. Rădac, R.-E. Precup, E.-L. Hedrea and O.-M. Tănăsioiu, Gain-Scheduling Control Solutions for Magnetic Levitation Systems, *Acta Polytechnica Hungarica*, vol. 15, no. 5, pp. 89-108, 2018, impact factor (IF) = 1.286, IF according to 2019 Journal Citation Reports (JCR) released by Clarivate Analytics in 2020 = 1.219.
- M.-B. Rădac, R.-E. Precup (corresponding author) and R.-C. Roman, Model-free control performance improvement using virtual reference feedback tuning and reinforcement Q-learning, **International Journal of Systems Science** (Taylor & Francis), vol. 48, no. 5, pp. 1071-1083, 2017, impact factor (IF) = 2.185, IF according to 2019 Journal Citation Reports (JCR) released by Clarivate Analytics in 2020 = 2.149.
- C.-A. Bojan-Dragoş, R.-E. Precup, M. L. Tomescu, S. Preitl, O.-M. Tănăsioiu and S. Hergane, Proportional-Integral-Derivative Gain-Scheduling Control of a Magnetic Levitation System, *International Journal of Computers Communications & Control* (Agora University Editing House - CCC Publications), vol. 12, no. 5, pp. 599-611, 2017, impact factor (IF) = 1.290, IF according to 2019 Journal Citation Reports (JCR) released by Clarivate Analytics in 2020 = 2.093.
- A. Tenescu, R.-E. Precup and N. Minculete, Evolving Fuzzy Models for Automated Translation, *Acta Polytechnica Hungarica* (Óbuda University), vol. 14, no. 2, pp. 27-46, 2017, IF according to 2019 Journal Citation Reports (JCR) released by Clarivate Analytics in 2020 = 1.219.
- I.-D. Borlea, R.-E. Precup, F. Drăgan and A.-B. Borlea, Centroid Update Approach to K-Means Clustering, *Advances in Electrical and Computer Engineering* (Ştefan cel Mare University of Suceava), vol. 17, no. 4, pp. 3-10, 2017, impact factor (IF) = 0.699, impact factor according to 2019 Journal Citation Reports (JCR) released by Clarivate Analytics in 2020 = 1.102.
- R.-C. Roman, M.-B. Rădac, R.-E. Precup and E. M. Petriu, Virtual Reference Feedback Tuning of Model-Free Control Algorithms for Servo Systems, *Machines* (MDPI), vol. 5, no. 4, paper 25, pp. 1-15, 2017, impact factor (IF) = 0.000, IF according to 2019 Journal Citation Reports (JCR) released by Clarivate Analytics in 2020 = 0.000.

- R.-E. Precup, R.-C. David, A.-I. Szedlak-Stînean, E. M. Petriu and F. Drăgan, An Easily Understandable Grey Wolf Optimizer and Its Application to Fuzzy Controller Tuning, *Algorithms (MDPI)*, vol. 10, no. 2, paper 68, pp. 1-15, 2017, impact factor (IF) = 0.000, IF according to 2019 Journal Citation Reports (JCR) released by Clarivate Analytics in 2020 = 0.000.
- R.-E. Precup, St. Preitl, C.-A. Bojan-Dragoş, M.-B. Rădac, A.-I. Szedlak-Stînean, E.-L. Hedrea and R.-C. Roman, Automotive Applications of Evolving Takagi-Sugeno-Kang Fuzzy Models, *Facta Universitatis, Series: Mechanical Engineering (University of Niš)*, vol. 15, no 2, pp. 231-244, 2017, impact factor (IF) = 0.000, IF according to 2019 Journal Citation Reports (JCR) released by Clarivate Analytics in 2020 = 0.000.
- M.-B. Rădac and R.-E. Precup (corresponding author), Three-level hierarchical model-free learning approach to trajectory tracking control, **Engineering Applications of Artificial Intelligence** (Elsevier Science), vol. 55, pp. 103-118, 2016, impact factor (IF) = 2.894, IF according to 2019 Journal Citation Reports (JCR) released by Clarivate Analytics in 2020 = 4.201.
- R.-C. Roman, M.-B. Rădac and R.-E. Precup (corresponding author), Multi-input-multi-output system experimental validation of model-free control and virtual reference feedback tuning techniques, **IET Control Theory & Applications**, vol. 10, no. 12, pp. 1395-1403, 2016, impact factor (IF) = 2.536, IF according to 2019 Journal Citation Reports (JCR) released by Clarivate Analytics in 2020 = 3.343.
- M.-B. Rădac and R.-E. Precup (corresponding author), Model-free constrained data-driven iterative reference input tuning algorithm with experimental validation, **International Journal of General Systems** (Taylor & Francis), vol. 45, no. 4, pp. 455-476, 2016, impact factor (IF) = 2.490, IF according to 2019 Journal Citation Reports (JCR) released by Clarivate Analytics in 2020 = 1.671.
- R.-C. Roman, M.-B. Rădac, R.-E. Precup and E. M. Petriu, Data-driven Model-Free Adaptive Control Tuned by Virtual Reference Feedback Tuning, *Acta Polytechnica Hungarica*, vol. 13, no. 1, pp. 83-96, 2016, impact factor (IF) = 0.745, IF according to 2019 Journal Citation Reports (JCR) released by Clarivate Analytics in 2020 = 1.219.
- M.-B. Rădac, R.-E. Precup (corresponding author) and E. M. Petriu, Model-Free Primitive-Based Iterative Learning Control Approach to Trajectory Tracking of MIMO Systems With Experimental Validation, **IEEE Transactions on Neural Networks and Learning Systems**, vol. 26, no. 11, pp. 2925-2938, 2015, impact factor (IF) = 4.854, IF according to 2019 Journal Citation Reports (JCR) released by Clarivate Analytics in 2020 = 8.793.
- R.-E. Precup, M.-C. Sabău and E. M. Petriu, Nature-Inspired Optimal Tuning of Input Membership Functions of Takagi-Sugeno-Kang Fuzzy Models for Anti-lock Braking Systems, **Applied Soft Computing** (Elsevier Science), vol. 27, pp. 575-589, 2015, impact factor (IF) = 2.857, IF according to 2019 Journal Citation Reports (JCR) released by Clarivate Analytics in 2020 = 5.472.
- M.-B. Rădac and R.-E. Precup (corresponding author), Data-based two-degree-of-freedom iterative control approach to constrained non-linear systems, **IET Control Theory & Applications**, vol. 9, no. 7, pp. 1000-1010, 2015, impact factor (IF) = 1.957, IF according to 2019 Journal Citation Reports (JCR) released by Clarivate Analytics in 2020 = 3.343.
- R.-E. Precup and M. L. Tomescu, Stable fuzzy logic control of a general class of chaotic systems, **Neural Computing and Applications** (Springer), vol. 26, no. 3, pp. 541-550, 2015, impact factor (IF) = 1.492, IF according to 2019 Journal Citation Reports (JCR) released by Clarivate Analytics in 2020 = 4.774.
- R.-E. Precup, H. Hellendoorn and P. Angelov, Editorial: Synergy of computers, cognition, communication and control with industrial applications, **Computers in Industry** (Elsevier Science), vol. 74, pp. 71-74, 2015, impact factor (IF) = 1.685, IF according to 2019 Journal Citation Reports (JCR) released by Clarivate Analytics in 2020 = 3.954.
- M.-B. Rădac and R.-E. Precup (corresponding author), Optimal behaviour prediction using a primitive-based data-driven model-free iterative learning control approach, **Computers in Industry** (Elsevier Science), vol. 74, pp. 95-109, 2015, impact factor (IF) = 1.685, IF according to 2019 Journal Citation Reports (JCR) released by Clarivate Analytics in 2020 = 3.954.
- Cl. Pozna, R.-E. Precup (corresponding author) and P. Földesi, A novel pose estimation algorithm for robotic navigation, **Robotics and Autonomous Systems** (Elsevier Science), vol 63, pp. 10-21, 2015, impact factor (IF) = 1.618, IF according to 2019 Journal Citation Reports (JCR) released by Clarivate Analytics in 2020 = 2.825.
- R.-E. Precup, E. M. Petriu, M.-B. Rădac, St. Preitl, L.-O. Fedorovici and C.-A. Dragoş, Cascade control system-based cost effective combination of tensor product model transformation and fuzzy control, **Asian Journal of Control** (John Wiley and Sons), vol. 17, no. 2, pp. 381-391, 2015, impact factor

- (IF) = 1.407, IF according to 2019 Journal Citation Reports (JCR) released by Clarivate Analytics in 2020 = 2.779.
- R.-E. Precup, M. L. Tomescu and E. M. Petriu, A Unified Anti-Windup Technique for Fuzzy and Sliding Mode Controllers, *International Journal of Computers Communications & Control* (Agora University Editing House - CCC Publications), vol. 10, no. 6, pp. 843-855, 2015, impact factor (IF) = 0.627, IF according to 2019 Journal Citation Reports (JCR) released by Clarivate Analytics in 2020 = 2.093.
- M.-B. Rădac, R.-E. Precup and E. M. Petriu, Constrained Data-Driven Model-Free ILC-based Reference Input Tuning Algorithm, *Acta Polytechnica Hungarica*, vol. 12, no. 1, pp. 137-160, 2015, impact factor (IF) = 0.544, IF according to 2019 Journal Citation Reports (JCR) released by Clarivate Analytics in 2020 = 1.219.
- Á. Takács, L. Kovács, I. J. Rudas, R.-E. Precup and T. Haidegger, Models for Force Control in Telesurgical Robot Systems, *Acta Polytechnica Hungarica*, vol. 12, no. 8, pp. 95-114, 2015, impact factor (IF) = 0.544, IF according to 2019 Journal Citation Reports (JCR) released by Clarivate Analytics in 2020 = 1.219.
- M.-B. Rădac, R.-E. Precup (corresponding author), E. M. Petriu and St. Preitl, Iterative Data-Driven Tuning of Controllers for Nonlinear Systems with Constraints, **IEEE Transactions on Industrial Electronics**, vol. 61, no. 11, pp. 6360-6368, 2014, impact factor (IF) = 6.498, IF according to 2019 Journal Citation Reports (JCR) released by Clarivate Analytics in 2020 = 7.515.
- R.-E. Precup, R.-C. David, E. M. Petriu, M.-B. Rădac and St. Preitl, Adaptive GSA-Based Optimal Tuning of PI Controlled Servo Systems With Reduced Process Parametric Sensitivity, Robust Stability and Controller Robustness, **IEEE Transactions on Cybernetics**, vol. 44, no. 11, pp. 1997-2009, 2014, impact factor (IF) = 3.469, IF according to 2019 Journal Citation Reports (JCR) released by Clarivate Analytics in 2020 = 11.079.
- R.-E. Precup, H.-I. Filip, M.-B. Rădac, E. M. Petriu, St. Preitl and C.-A. Dragoş, Online Identification of Evolving Takagi-Sugeno-Kang Fuzzy Models for Crane Systems, **Applied Soft Computing** (Elsevier Science), vol. 24, pp. 1155-1163, 2014, impact factor (IF) = 2.810, IF according to 2019 Journal Citation Reports (JCR) released by Clarivate Analytics in 2020 = 5.472.
- R.-E. Precup, R.-C. David, E. M. Petriu, St. Preitl and M.-B. Rădac, Novel Adaptive Charged System Search Algorithm for Optimal Tuning of Fuzzy Controllers, **Expert Systems with Applications** (Elsevier Science), vol. 41, no. 4, part 1, pp. 1168-1175, 2014, impact factor (IF) = 2.240, IF according to 2019 Journal Citation Reports (JCR) released by Clarivate Analytics in 2020 = 5.452.
- R.-E. Precup, M.-L. Tomescu and C.-A. Dragoş, Stabilization of Rössler chaotic dynamical system using fuzzy logic control algorithm, **International Journal of General Systems** (Taylor & Francis), vol. 43, no. 5, pp. 413-433, 2014, impact factor (IF) = 1.637, IF according to 2019 Journal Citation Reports (JCR) released by Clarivate Analytics in 2020 = 1.671.
- Cl. Pozna and R.-E. Precup, Applications of Signatures to Expert Systems Modelling, *Acta Polytechnica Hungarica* (Óbuda University), vol. 11, no. 2, pp. 21-39, 2014, impact factor (IF) = 0.649, IF according to 2019 Journal Citation Reports (JCR) released by Clarivate Analytics in 2020 = 1.219.
- R. S. Fantana, N. Minculete and R.-E. Precup, Extension of Liskov Substitution Principle and Application to Curriculum Management, *Acta Polytechnica Hungarica*, vol. 11, no. 7, pp. 25-42, 2014, impact factor (IF) = 0.649, IF according to 2019 Journal Citation Reports (JCR) released by Clarivate Analytics in 2020 = 1.219.
- M.-B. Rădac, R.-E. Precup (corresponding author), E. M. Petriu and St. Preitl, Iterative Data-Driven Controller Tuning with Actuator Constraints and Reduced Sensitivity, **Journal of Aerospace Information Systems** (The American Institute of Aeronautics and Astronautics), vol. 11, no. 9, pp. 551-564, 2014, impact factor (IF) = 0.213, IF according to 2019 Journal Citation Reports (JCR) released by Clarivate Analytics in 2020 = 1.076.
- R.-C. David, R.-E. Precup (corresponding author), E. M. Petriu, M.-B. Rădac and St. Preitl, Gravitational Search Algorithm-Based Design of Fuzzy Control Systems with a Reduced Parametric Sensitivity, **Information Sciences** (Elsevier Science), vol. 247, pp. 154-173, 2013, impact factor (IF) = 3.893, IF according to 2019 Journal Citation Reports (JCR) released by Clarivate Analytics in 2020 = 5.910.
- M.-B. Rădac, R.-E. Precup (corresponding author), E. M. Petriu, St. Preitl and C.-A. Dragoş, Data-driven reference trajectory tracking algorithm and experimental validation, **IEEE Transactions on Industrial Informatics**, vol. 9, no. 4, pp. 2327-2336, 2013, impact factor (IF) = 8.785, IF according to 2019 Journal Citation Reports (JCR) released by Clarivate Analytics in 2020 = 9.112.
- R.-E. Precup, M.-B. Rădac, M. L. Tomescu, E. M. Petriu and St. Preitl, Stable and convergent iterative feedback tuning of fuzzy controllers for discrete-time SISO systems, **Expert Systems with**

- Applications** (Elsevier Science), vol. 40, no. 1, pp. 188-199, 2013, impact factor (IF) = 1.965, IF according to 2019 Journal Citation Reports (JCR) released by Clarivate Analytics in 2020 = 5.452.
- R.-E. Precup, R.-C. David, E. M. Petriu, St. Preitl and M.-B. Rădac, Fuzzy logic-based adaptive gravitational search algorithm for optimal tuning of fuzzy controlled servo systems, **IET Control Theory & Applications**, vol. 7, no. 1, pp. 99-107, 2013, impact factor (IF) = 1.844, IF according to 2019 Journal Citation Reports (JCR) released by Clarivate Analytics in 2020 = 3.343.
- R.-E. Precup, M.-L. Tomescu, St. Preitl, E. M. Petriu, J. Fodor and Cl. Pozna, Stability analysis and design of a class of MIMO fuzzy control systems, **Journal of Intelligent & Fuzzy Systems** (IOS Press), vol. 25, no. 1, pp. 145-155, 2013, impact factor (IF) = 0.936, IF according to 2019 Journal Citation Reports (JCR) released by Clarivate Analytics in 2020 = 1.851.
- M.-B. Rădac, R.-E. Precup (corresponding author), E. M. Petriu and St. Preitl, Experiment-based Performance Improvement of State Feedback Control Systems for Single Input Processes, *Acta Polytechnica Hungarica* (Óbuda University), vol. 10, no. 1, pp. 5-24, 2013, impact factor (IF) = 0.471, IF according to 2019 Journal Citation Reports (JCR) released by Clarivate Analytics in 2020 = 1.219.
- R.-E. Precup, R.-C. David, E. M. Petriu, St. Preitl and M.-B. Rădac, Experiments in fuzzy controller tuning based on an adaptive gravitational search algorithm, *Proceedings of the Romanian Academy, Series A: Mathematics, Physics, Technical Sciences, Information Science* (Editura Academiei Romane, Bucharest), vol. 14, no. 4, pp. 360-367, 2013, impact factor (IF) = 1.115, IF according to 2019 Journal Citation Reports (JCR) released by Clarivate Analytics in 2020 = 1.294.
- C.-A. Dragoş, R.-E. Precup, M. L. Tomescu, St. Preitl, E. M. Petriu and M.-B. Rădac, An Approach to Fuzzy Modeling of Electromagnetic Actuated Clutch Systems, *International Journal of Computers Communications & Control* (Agora University Editing House - CCC Publications), vol. 8, no. 3, pp. 395-406, 2013, impact factor (IF) = 0.694, IF according to 2019 Journal Citation Reports (JCR) released by Clarivate Analytics in 2020 = 2.093.
- R.-E. Precup, R.-C. David, E. M. Petriu, St. Preitl and M.-B. Rădac, Fuzzy control systems with reduced parametric sensitivity based on simulated annealing, **IEEE Transactions on Industrial Electronics**, vol. 59, no. 8, pp. 3049-3061, 2012, impact factor (IF) = 5.165, IF according to 2019 Journal Citation Reports (JCR) released by Clarivate Analytics in 2020 = 7.515.
- R.-E. Precup, M. L. Tomescu, M.-B. Rădac, E. M. Petriu, St. Preitl and C.-A. Dragoş, Iterative performance improvement of fuzzy control systems for three tank systems, **Expert Systems with Applications** (Elsevier Science), vol. 39, no. 9, pp. 8288-8299, 2012, impact factor (IF) = 1.854, IF according to 2019 Journal Citation Reports (JCR) released by Clarivate Analytics in 2020 = 5.452.
- Cl. Pozna, N. Minculete, R.-E. Precup (corresponding author), L. T. Kóczy and Á. Ballagi, Signatures: Definitions, operators and applications to fuzzy modeling, **Fuzzy Sets and Systems** (Elsevier Science), vol. 201, pp. 86-104, 2012, impact factor (IF) = 1.749, IF according to 2019 Journal Citation Reports (JCR) released by Clarivate Analytics in 2020 = 3.305.
- R.-E. Precup, R.-C. David, E. M. Petriu, St. Preitl and M.-B. Rădac, Novel adaptive gravitational search algorithm for fuzzy controlled servo systems, **IEEE Transactions on Industrial Informatics**, vol. 8, no. 4, pp. 791-800, 2012, impact factor (IF) = 3.381, IF according to 2019 Journal Citation Reports (JCR) released by Clarivate Analytics in 2020 = 9.112.
- N. Minculete, Cl. Pozna and R.-E. Precup (corresponding author), A refinement of Sandor-Toth's inequality, **Journal of Inequalities and Applications** (SpringerOpen), 2012: 4, pp. 1-16, DOI: 10.1186/1029-242X-2012-4, 2012, impact factor (IF) = 0.820, IF according to 2019 Journal Citation Reports (JCR) released by Clarivate Analytics in 2020 = 1.470.
- R.-E. Precup, C.-A. Dragoş, St. Preitl, M.-B. Rădac and E. M. Petriu, Novel tensor product models for automatic transmission system control, **IEEE Systems Journal**, vol. 6, no. 3, pp. 488-498, 2012, impact factor (IF) = 1.270, IF according to 2019 Journal Citation Reports (JCR) released by Clarivate Analytics in 2020 = 3.987.
- T. Haidegger, L. Kovács, R.-E. Precup, B. Benyó, Z. Benyó and St. Preitl, Simulation and control for telerobots in space medicine, **Acta Astronautica** (Elsevier Science), vol. 181, no. 1, pp. 390-402, 2012, impact factor (IF) = 0.701, IF according to 2019 Journal Citation Reports (JCR) released by Clarivate Analytics in 2020 = 2.830.
- R.-E. Precup, T. Haidegger, St. Preitl, Z. Benyó, A. S. Paul and L. Kovács, Fuzzy control solution for telesurgical applications, *Applied and Computational Mathematics* (Ministry of Communications and Information Technology, Azerbaijan National Academy of Sciences and Institute of Applied Mathematics of Baku State University), vol. 11, no. 3, pp. 378-397, 2012, impact factor (IF) = 0.750, IF according to 2019 Journal Citation Reports (JCR) released by Clarivate Analytics in 2020 = 2.354.

- Cl. Pozna and R.-E. Precup, Aspects concerning the observation process modelling in the framework of cognition processes, *Acta Polytechnica Hungarica* (Óbuda University), vol. 9, no. 1, pp. 203-223, 2012, impact factor (IF) = 0.588, IF according to 2019 Journal Citation Reports (JCR) released by Clarivate Analytics in 2020 = 1.219.
- R.-E. Precup, M. L. Tomescu, E. M. Petriu, St. Preitl and C.-A. Dragoş, Stable design of a class of nonlinear discrete-time MIMO fuzzy control systems, *Acta Polytechnica Hungarica* (Óbuda University), vol. 9, no. 2, pp. 57-76, 2012, impact factor (IF) = 0.588, IF according to 2019 Journal Citation Reports (JCR) released by Clarivate Analytics in 2020 = 1.219.
- M.-B. Rădac, R.-E. Precup (corresponding author), E. M. Petriu and St. Preitl, Application of IFT and SPSA to servo system control, **IEEE Transactions on Neural Networks**, vol. 22, no. 12, part 2, pp. 2363-2375, 2011, impact factor (IF) = 2.952, IF according to 2019 Journal Citation Reports (JCR) released by Clarivate Analytics in 2020 = 8.793 (IEEE Transactions on Neural Networks and Learning Systems starting with 2012).
- R.-E. Precup, St. Preitl, M.-B. Rădac, E. M. Petriu, C.-A. Dragoş and J. K. Tar, Experiment-based teaching in advanced control engineering, **IEEE Transactions on Education**, vol. 54, no. 3, pp. 345-355, 2011, impact factor (IF) = 1.021, IF according to 2019 Journal Citation Reports (JCR) released by Clarivate Analytics in 2020 = 1.855.
- Cl. Pozna, R.-E. Precup (corresponding author), J. K. Tar, I. Škrjanc and St. Preitl, New results in modelling derived from Bayesian filtering, **Knowledge-Based Systems** (Elsevier Science), vol. 23, no. 2, pp. 182-194, 2010, impact factor (IF) = 1.574, IF according to 2019 Journal Citation Reports (JCR) released by Clarivate Analytics in 2020 = 5.921.
- Cl. Pozna, F. Troester, R.-E. Precup (corresponding author), J. K. Tar and St. Preitl, On the Design of an Obstacle Avoiding Trajectory: Method and Simulation, **Mathematics and Computers in Simulation** (Elsevier Science), vol. 79, no. 7, pp. 2211-2226, 2009, impact factor (IF) = 0.946, IF according to 2019 Journal Citation Reports (JCR) released by Clarivate Analytics in 2020 = 1.620.
- R.-E. Precup, St. Preitl, E. M. Petriu, J. K. Tar, M. L. Tomescu and Cl. Pozna, Generic two-degree-of-freedom linear and fuzzy controllers for integral processes, **Journal of The Franklin Institute** (Elsevier Science), vol. 346, no. 10, pp. 980-1003, 2009, impact factor (IF) = 1.130, IF according to 2019 Journal Citation Reports (JCR) released by Clarivate Analytics in 2020 = 4.036.
- R.-E. Precup, M. L. Tomescu and St. Preitl, Fuzzy Logic Control System Stability Analysis Based on Lyapunov's Direct Method, *International Journal of Computers Communications & Control* (Agora University Editing House - CCC Publications), vol. IV, no. 4, pp. 415-426, 2009, impact factor (IF) = 0.373, IF according to 2019 Journal Citation Reports (JCR) released by Clarivate Analytics in 2020 = 2.093.
- R.-E. Precup, St. Preitl, J. K. Tar, M. L. Tomescu, M. Takács, P. Korondi and P. Baranyi, Fuzzy Control System Performance Enhancement by Iterative Learning Control, **IEEE Transactions on Industrial Electronics**, vol. 55, no. 9, pp. 3461-3475, 2008, impact factor (IF) = 5.468, IF according to 2019 Journal Citation Reports (JCR) released by Clarivate Analytics in 2020 = 7.515.
- R.-E. Precup, St. Preitl, I. J. Rudas, M. L. Tomescu and J. K. Tar, Design and Experiments for a Class of Fuzzy Controlled Servo Systems, **IEEE/ASME Transactions on Mechatronics**, vol. 13, no. 1, pp. 22-35, 2008, impact factor (IF) = 1.614, IF according to 2019 Journal Citation Reports (JCR) released by Clarivate Analytics in 2020 = 5.673.
- R.-E. Precup, W. S. Lee, M. V. C. Rao and Zs. Preitl, Linear and fuzzy control solutions for tape drives, **Electrical Engineering** (Springer), vol. 90, no. 5, pp. 361-377, 2008, impact factor (IF) = 0.378, IF according to 2019 Journal Citation Reports (JCR) released by Clarivate Analytics in 2020 = 1.180.
- R.-E. Precup and St. Preitl, PI-Fuzzy Controllers for Integral Plants to Ensure Robust Stability, **Information Sciences** (Elsevier Science), vol. 177, no. 20, pp. 4410-4429, 2007, impact factor (IF) = 2.147, IF according to 2019 Journal Citation Reports (JCR) released by Clarivate Analytics in 2020 = 5.910.
- R.-E. Precup, St. Preitl and P. Korondi, Fuzzy Controllers with Maximum Sensitivity for Servosystems, **IEEE Transactions on Industrial Electronics**, vol. 54, no. 3, pp. 1298-1310, 2007, IF according to 2019 Journal Citation Reports (JCR) released by Clarivate Analytics in 2020 = 7.515.
- R.-E. Precup, M. L. Tomescu and St. Preitl, Lorenz System Stabilization Using Fuzzy Controllers, *International Journal of Computers Communications & Control* (Agora University, CCC Publishing, EBSCO Publishing), vol. II, no. 3, pp. 279-287, 2007, impact factor (IF) = 0.000, IF according to 2019 Journal Citation Reports (JCR) released by Clarivate Analytics in 2020 = 2.093.
- R.-E. Precup and St. Preitl, PI and PID controllers tuning for integral-type servo systems to ensure robust stability and controller robustness, **Electrical Engineering** (Springer), vol. 88, no. 2, pp. 149-156,



- 2006, impact factor (IF) = 0.068, IF according to 2019 Journal Citation Reports (JCR) released by Clarivate Analytics in 2020 = 1.180.
- R.-E. Precup and St. Preitl, Stability and Sensitivity Analysis of Fuzzy Control Systems. *Mechatronics Applications, Acta Polytechnica Hungarica* (Óbuda University), vol. 3, no. 1, pp. 61-76, 2006, impact factor (IF) = 0.000, IF according to 2019 Journal Citation Reports (JCR) released by Clarivate Analytics in 2020 = 1.219.
- R.-E. Precup and St. Preitl, Optimisation Criteria in Development of Fuzzy Controllers with Dynamics, **Engineering Applications of Artificial Intelligence** (Elsevier Science), vol. 17, no. 6, pp. 661-674, 2004, impact factor (IF) = 0.421, IF according to 2019 Journal Citation Reports (JCR) released by Clarivate Analytics in 2020 = 4.201.
- R.-E. Precup, St. Preitl and G. Faur, PI Predictive Fuzzy Controllers for Electrical Drive Speed Control: Methods and Software for Stable Development, **Computers in Industry** (Elsevier Science), vol. 52, no. 3, pp. 253-270, 2003, impact factor (IF) = 0.692, IF according to 2019 Journal Citation Reports (JCR) released by Clarivate Analytics in 2020 = 3.954.
- R.-E. Precup and St. Preitl, Development of Fuzzy Controllers with Non-homogeneous Dynamics for Integral-type Plants, **Electrical Engineering** (Springer), vol. 85, no. 3, pp. 155-168, 2003, impact factor (IF) = 0.099, IF according to 2019 Journal Citation Reports (JCR) released by Clarivate Analytics in 2020 = 1.180.
- R.-E. Precup, S. Doboli and St. Preitl, Stability Analysis and Development of a Class of Fuzzy Control Systems, **Engineering Applications of Artificial Intelligence** (Elsevier Science), vol. 13, no. 3, pp. 237-247, 2000, impact factor (IF) = 0.231, IF according to 2019 Journal Citation Reports (JCR) released by Clarivate Analytics in 2020 = 4.201.
- St. Preitl and R.-E. Precup, An Extension of Tuning Relations after Symmetrical Optimum Method for PI and PID Controllers, **Automatica** (Elsevier Science), vol. 35, no. 10, pp. 1731-1736, 1999, impact factor (IF) = 0.911, IF according to 2019 Journal Citation Reports (JCR) released by Clarivate Analytics in 2020 = 5.541.

**D) LUCRĂRI PUBLICATE ÎN REVISTE INDEXATE ÎN BAZE DE DATE INTERNAȚIONALE ȘI CONTRIBUȚII ÎN CĂRȚI PUBLICATE ÎN EDITURI DE PRESTIGIU (<http://www.aut.upt.ro/~rprecup/journals.html>):**

- R.-E. Precup, S. Preitl, E. M. Petriu, C.-A. Bojan-Dragoș, A.-I. Szedlak-Stînean, R.-C. Roman and E.-L. Hedrea, Model-Based Fuzzy Control Results for Networked Control Systems, *Reports in Mechanical Engineering (Regional Association for Security and Crisis Management, European Centre for Operational Research)*, vol. 1, no. 1, pp. 10-25, 2020.
- R.-C. Roman, R.-E. Precup, C.-A. Bojan-Dragoș and A.-I. Szedlak-Stînean, Combined Model-Free Adaptive Control with Fuzzy Component by Virtual Reference Feedback Tuning for Tower Crane Systems, *Procedia Computer Science* (Elsevier Science), vol. 162, pp. 267-274, 2019.
- C.-A. Bojan-Dragoș, R.-E. Precup and E.-L. Hedrea, TP-based model transformation and gain-scheduling control of electromagnetic actuated clutch systems, *Journal of Engineering Sciences and Innovation (Technical Sciences Academy of Romania)*, vol. 4, no. 3, pp. 301-312, 2019.
- R.-C. Roman, R.-E. Precup and R.-C. David, Second Order Intelligent Proportional-Integral Fuzzy Control of Twin Rotor Aerodynamic Systems, *Procedia Computer Science* (Elsevier Science), vol. 139, pp. 372-380, 2018.
- G. Rigatos, P. Siano, D. Selișteanu and R. E. Precup, Nonlinear Optimal Control of Oxygen and Carbon Dioxide Contents in Blood, *Intelligent Industrial Systems* (Springer-Verlag), vol. 3, no. 2, pp. 61-75, 2017.
- R.-E. Precup, C.-A. Bojan-Dragoș, E. M. Petriu, M.-B. Rădac and A.-I. Stînean, Results on Optimal Tuning of Fuzzy Models of Magnetic Levitation Systems, *International Journal of Artificial Intelligence (CESER Publications)*, vol. 13, no. 2, pp. 57-72, 2015.
- R.-E. Precup, T. Haidegger and L. Kovács, Stable Hybrid Fuzzy Controller-based Architecture for Robotic Telesurgery Systems, *International Journal of Computational Intelligence and Pattern Recognition (Columbia International Publishing)*, vol. 1, no. 1, pp. 61-76, 2014.
- R.-E. Precup, C.-A. Dragoș, S. Preitl, E. M. Petriu and M.-B. Rădac, A simple fuzzy control design for powertrain systems with three inertias, *Memoirs of the Scientific Sections of the Romanian Academy (Editura Academiei Romane, Bucharest)*, Tome XXXVI, pp. 97-110, 2013.
- C. Purcaru, R.-E. Precup, D. Iercan, L.-O. Fedorovici, R.-C. David and F. Drăgan, Optimal Robot Path Planning Using Gravitational Search Algorithm, *International Journal of Artificial Intelligence (CESER Publications)*, vol. 10, no. S13, pp. 1-20, 2013.

- R.-C. David, C.-A. Dragoş, R.-G. Bulzan, R.-E. Precup, E. M. Petriu and M.-B. Rădac, An approach to fuzzy modeling of magnetic levitation systems, *International Journal of Artificial Intelligence (CESER Publications)*, vol. 9, no. A12, pp. 1-18, 2012.
- C.-A. Dragoş, R.-E. Precup, St. Preitl, E. M. Petriu and A.-I. Stînean, Takagi-Sugeno fuzzy control solutions for mechatronic applications, *International Journal of Artificial Intelligence (CESER Publications)*, vol. 8, no. S12, pp. 45-65, 2012.
- Cl. Pozna, R.-E. Precup, L. T. Kóczy and Á. Ballagi, Potential field-based approach for obstacle avoidance trajectories, *The IPSI BgD Transactions on Internet Research (IPSI Bgd Internet Research Society)*, vol. 8, no. 2, pp. 40-45, 2012.
- T. Haidegger, L. Kovács, St. Preitl, R.-E. Precup, B. Benyó and Z. Benyó, Controller design solutions for long distance telesurgical applications, *International Journal of Artificial Intelligence (CESER Publications)*, vol. 6, no. S11, pp. 48-71, 2011.
- R.-E. Precup, M.-L. Tomescu, St. Preitl, E. M. Petriu, J. Fodor and A. S. Paul, Stable design of Takagi-Sugeno fuzzy controllers for a laboratory three-tank system, *International Journal of Nuclear Knowledge Management (Inderscience Publishers)*, vol. 5, no. 2, pp. 126-147, 2011.
- R.-E. Precup, M.-L. Tomescu, E. M. Petriu and L.-E. Dragomir, Stable fuzzy logic control of generalized van der Pol oscillator, *International Journal of Artificial Intelligence (CESER Publications)*, vol. 7, no. A11, pp. 36-46, 2011.
- Cl. Pozna, R.-E. Precup, N. Minculete and C. Alexandru, Modelling the Intelligence Phenomenon, *Acta Technica Jaurinensis (Széchenyi István University)*, vol. 4, no. 1, pp. 13-21, 2011.
- R.-E. Precup, M. L. Tomescu, St. Preitl and E. M. Petriu, Fuzzy logic-based stabilization of a magnetic ball suspension system, *International Journal of Artificial Intelligence (CESER Publications)*, vol. 5, no. A10, pp. 56-66, 2010.
- R.-E. Precup, M. L. Tomescu, St. Preitl and E. M. Petriu, Fuzzy Logic-based Stabilization of Nonlinear Time-varying Systems, *International Journal of Artificial Intelligence (CESER Publications)*, vol. 3, no. A09, pp. 24-36, 2009.
- R.-E. Precup, R.-C. David, St. Preitl and E. M. Petriu, Design aspects of optimal PI controllers with reduced sensitivity for a class of servo systems using PSO algorithms, *Facta Universitatis, Series Automatic Control and Robotics (University of Niš)*, vol. 8, no. 1, pp. 1-12, 2009.
- R.-E. Precup, M. L. Tomescu, St. Preitl and I. Škrjanc, Stable Fuzzy Logic Control Solution for Lorenz Chaotic System Stabilization, *International Journal of Artificial Intelligence (CESER Publications)*, vol. 1, no. A08, pp. 23-33, 2008.
- M.-L. Tomescu, St. Preitl, R.-E. Precup and J. K. Tar, Stability Analysis Method for Fuzzy Control Systems Dedicated Controlling Nonlinear Processes, *Acta Polytechnica Hungarica (Óbuda University)*, vol. 4, no. 3, pp. 127-141, 2007.
- Cl. Pozna and R.-E. Precup, Plausible Reasoning in Modular Robotics and Human Reasoning, *Acta Polytechnica Hungarica (Óbuda University)*, vol. 4, no. 4, pp. 133-147, 2007.
- R.-E. Precup and St. Preitl, On a Class of Control Systems with Takagi-Sugeno PI-Fuzzy Controllers, *Studies in Informatics and Control (National Institute for R&D in Informatics ICI Bucharest)*, vol. 15, no. 3, pp. 323-332, 2006.
- St. Preitl and R.-E. Precup, Sensitivity study of a class of fuzzy control systems, *Periodica Polytechnica, Electrical Engineering (Budapest University of Technology and Economics)*, vol. 50, no. 3-4, pp. 255-268, 2006.
- St. Preitl, R.-E. Precup, J. Fodor and B. Bede, Iterative Feedback Tuning in Fuzzy Control Systems. Theory and Applications, *Acta Polytechnica Hungarica (Óbuda University)*, vol. 4, no. 3, pp. 81-96, 2006.
- Zs. Preitl, R.-E. Precup, J. K. Tar and M. Takács, Use of Multi-parametric Quadratic Programming in Fuzzy Control Systems, *Acta Polytechnica Hungarica (Óbuda University)*, vol. 3, no. 3, pp. 29-43, 2006.
- R.-E. Precup, St. Preitl, Cs. Szabo, P. Korondi and P. Szemes, On Some Low-Cost Tracking Controllers for Mobile Robots, *Control and Intelligent Systems (Acta Press)*, vol. 33, no. 1, pp. 1-12, 2005.
- R.-E. Precup and St. Preitl, Control Solutions in Mechatronics Systems, *Facta Universitatis, Series Electronics and Energetics (University of Niš)*, vol. 18, no. 3, pp. 379-394, 2005.
- St. Preitl, R.-E. Precup and Zs. Preitl, Development of Conventional and Fuzzy Controllers and Takagi-Sugeno Fuzzy Models Dedicated for Control of Low Order Benchmarks with Time Variable Parameters, *Acta Polytechnica Hungarica (Óbuda University)*, vol. 2, no. 1, pp. 75-92, 2005.
- R.-E. Precup, St. Preitl and P. Korondi, Development of Fuzzy Controllers with Dynamics Regarding Stability Conditions and Sensitivity Analysis, *Journal of Advanced Computational Intelligence and Intelligent Informatics (Fuji Technology Press)*, vol. 8, no. 5, pp. 499-506, 2004.

- St. Preitl and R.-E. Precup, Points of View in Controller Design by Means of Extended Symmetrical Optimum Method, in: Control Systems Design 2003 (CSD '03), S. Kozak and M. Huba, Eds. (Elsevier), pp. 95-100, 2004.
- R.-E. Precup and St. Preitl, Popov-type Stability Analysis Method for Fuzzy Control Systems with PI Fuzzy Controllers, Revue Roumaine de Sciences Techniques, Serie Electrotechnique et Energetique (Editura Academiei Romane, Bucharest), vol. 48, no. 4, pp. 505-522, 2003.
- R.-E. Precup and St. Preitl, Multiobjective Optimisation Criteria in Development of Fuzzy Controllers with Dynamics, in: Control Applications of Optimisation 2003, R. Bars and E. Gyurkovics, Eds. (Elsevier Science), pp. 257-262, 2003.
- St. Preitl, Zs. Preitl and R.-E. Precup, Low Cost Fuzzy Controllers for Classes of Second-order Systems, in: Proceedings of the 15<sup>th</sup> IFAC World Congress, E. F. Camacho, Ed. (Elsevier), CD-ROM, paper index 416, 6 pp., 2003.
- R.-E. Precup and St. Preitl, Development Method for a Takagi-Sugeno PI-fuzzy Controller, in: Proceedings of the 15<sup>th</sup> IFAC World Congress, E. F. Camacho, Ed. (Elsevier), CD-ROM, paper index 390, 6 pp., 2003.
- R.-E. Precup and St. Preitl, On Some Low Cost Fuzzy Control Solutions for Third-Order Integral Actuators, in: Cost Oriented Automation (Low Cost Automation 2001), R. Bernhardt and H.-H. Erbe, Eds. (Elsevier Science), pp. 65-70, 2002.
- St. Preitl, R.-E. Precup, St. Solyom and L. Kovacs, Development of Conventional and Fuzzy Controllers for Output Coupled Drive Systems and Variable Inertia, in: Large Scale Systems: Theory and Applications 2001 (LSS'01), F. G. Filip, I. Dumitrache and S. Iliescu, Eds. (Elsevier Science), pp. 261-269, 2002.
- R.-E. Precup, St. Preitl and Zs. Preitl, Robustness Analysis of a Class of Fuzzy Systems, in: Large Scale Systems: Theory and Applications 2001 (LSS'01), F. G. Filip, I. Dumitrache and S. Iliescu, Eds. (Elsevier Science), pp. 249-254, 2002.
- St. Preitl, R.-E. Precup and St. Kilyeni, State Space Approach to the Stability Analysis of a Class of Fuzzy Control Systems Meant for Third-order Plants, in: Artificial Intelligence in Real Time Control (AIRTC-2000), I. J. Rudas, and J. K. Tar, Eds. (Elsevier Science), pp. 259-264, 2001.
- St. Preitl and R.-E. Precup, Cross-optimization Aspects Concerning the Extended Symmetrical Optimum Method, in: Digital Control 2000: Past, Present and Future of PID Control, J. Quevedo and T. Escobet, Eds. (Elsevier Science), pp. 223-228, 2000.
- R.-E. Precup, St. Preitl and St. Solyom, Center Manifold Theory Approach to the Stability Analysis of Fuzzy Control Systems, in: Computational Intelligence. Theory and Applications, B. Reusch, Ed., Lecture Notes in Computer Science (Springer-Verlag), vol. 1625, pp. 382-390, 1999.
- R.-E. Precup and St. Preitl, Development of a Quasi-PI Fuzzy Controller Based on the Principle of Minimum Guaranteed Phase Margin, in: Proceedings of the 14<sup>th</sup> World Congress of International Federation of Automatic Control, H.-F. Chen, D.-Z. Cheng and J.-F. Zhang, Eds. (Elsevier Science), vol. 12, pp. 183-188, 1999.
- S. Doboli and R.-E. Precup, Stability Analysis and Design of a Class of Fuzzy Control Systems, in: System Structure and Control 1997, Vl. Ionescu and D. Popescu, Eds. (Elsevier Science), pp. 333-338, 1998.
- R.-E. Precup and St. Preitl, On Some Predictive and Adaptive Fuzzy Controllers Based on Ensuring the Maximum Phase Reserve, in: System Structure and Control 1997, Vl. Ionescu and D. Popescu, Eds. (Elsevier Science), pp. 321-326, 1998.
- R.-E. Precup, St. Preitl and P. Vukovic, On a Combination of Sliding Mode Control and Fuzzy Control, Facta Universitatis, Series Mechanics, Automatic Control and Robotics (University of Niš), vol. 6, no. 2, pp. 133-142, 1996.
- R.-E. Precup and St. Preitl, Fuzzy Control Algorithms Implementation for a Synchronous Generator Connected to a Power System, in: Integrated Systems Engineering, G. Johannsen, Ed. (Elsevier Science), pp. 377-386, 1995.
- St. Preitl and R.-E. Precup, On the Opportunity of ARW Measures in Fuzzy Control, in: Real World Applications of Intelligent Technologies, H.-J. Zimmermann, M. Gh. Negoita and D. Dascalu, Eds. (Editura Academiei Romane, Bucharest), pp. 149-153, 1995.

**E) LUCRĂRI PUBLICATE ÎN VOLUMELE UNOR MANIFESTĂRI ȘTIINȚIFICE DIN STRĂINĂTATE INDEXATE ÎN BAZE DE DATE INTERNAȚIONALE ȘI/SAU ORGANIZATE DE INTERNATIONAL FEDERATION OF AUTOMATIC CONTROL (IFAC) (<http://www.aut.upt.ro/~rprecup/conf.html>):**

- R.-C. David, R.-E. Precup, S. Preitl, A.-I. Szedlak-Stînean, R.-C. Roman and E. M. Petriu, Design of Low-Cost Fuzzy Controllers with Reduced Parametric Sensitivity Based on Whale Optimization Algorithm, Proceedings of **2020 IEEE International Conference on Fuzzy Systems FUZZ-IEEE 2020**, Glasgow, UK, pp. 1-6, 2020.
- R.-E. Precup, A.-B. Borlea, E. M. Petriu and F. Drăgan, Iterative Feedback Tuning of Two-Degree-of-Freedom Controllers for Lighting Process Control, Proceedings of **14<sup>th</sup> Annual IEEE International Systems Conference SysCon 2020**, Montreal, QC, Canada, pp. 1-6, 2020.
- R.-C. David, R.-E. Precup, S. Preitl, E. M. Petriu, A.-I. Szedlak-Stînean and R.-C. Roman, Whale Optimization Algorithm-Based Tuning of Low-Cost Fuzzy Controllers with Reduced Parametric Sensitivity, Proceedings of **28<sup>th</sup> Mediterranean Conference on Control and Automation MED 2020**, Saint-Raphael, France, pp. 440-445, 2020.
- E.-L. Hedrea, R.-E. Precup, C.-A. Bojan-Dragoş, E. M. Petriu and R.-C. Roman, Tensor Product-Based Model Transformation and Sliding Mode Control of Electromagnetic Actuated Clutch System, Proceedings of **2019 IEEE International Conference on Systems, Man and Cybernetics SMC 2019**, Bari, Italy, pp. 1418-1423, 2019.
- R.-C. Roman, R.-E. Precup, E. M. Petriu, E.-L. Hedrea, C.-A. Bojan-Dragoş and M.-B. Rădac, Model-Free Adaptive Control With Fuzzy Component for Tower Crane Systems, Proceedings of **2019 IEEE International Conference on Systems, Man and Cybernetics SMC 2019**, Bari, Italy, pp. 1400-1405, 2019.
- R.-E. Precup, T.-A. Teban, A. Albu, A.-B. Borlea, I. A. Zamfirache and E. M. Petriu, Evolving Fuzzy Models for Prosthetic Hand Myoelectric-based Control Using Weighted Recursive Least Squares Algorithm for Identification, Proceedings of 2019 IEEE International Symposium on Robotic and Sensors Environments ROSE 2019, Ottawa, ON, Canada, pp. 164-169, 2019.
- A. Topîrceanu and R.-E. Precup, A Novel Methodology for Improving Election Poll Prediction Using Time-Aware Polling, Proceedings of 2019 IEEE/ACM International Conference on Advances in Social Networks Analysis and Mining ASONAM '19, Vancouver, BC, Canada, pp. 282-285, 2019.
- A.-I. Szedlak-Stînean, R.-E. Precup and R.-C. David, State Observers for Mechatronics Systems with Rigid and Flexible Drive Dynamics, Proceedings of 16<sup>th</sup> International Conference on Informatics in Control, Automation and Robotics ICINCO 2019, Prague, Czech Republic, vol. 2, pp. 387-394, 2019.
- C.-A. Bojan-Dragoş, E.-L. Hedrea, R.-E. Precup, A.-I. Szedlak-Stînean and R.-C. Roman, MIMO Fuzzy Control Solutions for the Level Control of Vertical Two Tank Systems, Proceedings of 16<sup>th</sup> International Conference on Informatics in Control, Automation and Robotics ICINCO 2019, Prague, Czech Republic, vol. 1, pp. 810-817, 2019.
- E.-L. Hedrea, R.-E. Precup, C.-A. Bojan-Dragoş and O. Tănăsioiu, Tensor Product-Based Model Transformation Technique Applied to Modeling Magnetic Levitation Systems, Proceedings of 23<sup>rd</sup> IEEE International Conference on Intelligent Engineering Systems INES 2019, Gödöllő, Hungary, pp. 179-184, 2019.
- A.-I. Szedlak-Stînean, C.-A. Bojan-Dragoş, R.-E. Precup and M.-B. Rădac, Gain-Scheduling Control Solutions for a Strip Winding System with Variable Moment of Inertia, Proceedings of **3<sup>rd</sup> IFAC Conference on Advances in Proportional-Integral-Derivative Control PID 2018**, Ghent, Belgium, 2018, IFAC-PapersOnLine, vol. 51, no. 4, pp. 370-375, 2018.
- R.-C. Roman, M.-B. Rădac, C. Tureac and R.-E. Precup, Data-Driven Active Disturbance Rejection Control of Pendulum Cart Systems, Proceedings of **2018 IEEE Conference on Control Technology and Applications CCTA 2018**, Copenhagen, Denmark, pp. 933-938, 2018.
- R.-E. Precup, T.-A. Teban, E. M. Petriu, A. Albu and I.-C. Mituleţu, Structure and Evolving Fuzzy Models for Prosthetic Hand Myoelectric-Based Control Systems, Proceedings of **26<sup>th</sup> Mediterranean Conference on Control and Automation MED'18**, Zadar, Croatia, pp. 625-630, 2018.
- M.-B. Rădac, R.-E. Precup, E.-L. Hedrea and I.-C. Mituleţu, Data-Driven Model-Free Model-Reference Nonlinear Virtual State-Feedback Control from Input-Output Data, Proceedings of **26<sup>th</sup> Mediterranean Conference on Control and Automation MED'18**, Zadar, Croatia, pp. 332-338, 2018.
- C.-A. Bojan-Dragoş, M.-B. Rădac, R.-E. Precup, E.-L. Hedrea, A.-I. Szedlak-Stînean and S. Preitl, Gain-Scheduling Position Control Approaches for Electromagnetic Actuated Clutch Systems, Proceedings of 15<sup>th</sup> International Conference on Informatics in Control, Automation and Robotics ICINCO 2018, Porto, Portugal, vol. 2, pp. 411-418, 2018.
- E.-L. Hedrea, C.-A. Bojan-Dragoş, R.-E. Precup and E. M. Petriu, Comparative Study of Control Structures for Maglev Systems, Proceedings of 2018 IEEE 18<sup>th</sup> International Conference on Power Electronics and Motion Control PEMC 2018, Budapest, Hungary, pp. 657-662, 2018.

- C.-A. Bojan-Dragoş, R.-E. Precup, E.-L. Hedrea, A. Simo and A. Daia, Discrete time Control Solutions for Inverted Pendulum Crane Mode Control, Proceedings of 18<sup>th</sup> IEEE International Symposium on Computational Intelligence and Informatics CINTI 2018, Budapest, Hungary, pp. 295-300, 2018.
- R.-C. Roman, R.-E. Precup, M.-B. Rădac and E. M. Petriu, Takagi-Sugeno Fuzzy Controller Structures for Twin Rotor Aerodynamic Systems, Proceedings of **2017 IEEE International Conference on Fuzzy Systems FUZZ-IEEE 2017**, Naples, Italy, pp. 1-6, 2017.
- R.-C. Roman, R.-E. Precup and M.-B. Rădac, Model-Free Fuzzy Control of Twin Rotor Aerodynamic Systems, Proceedings of **25<sup>th</sup> Mediterranean Conference on Control and Automation MED 2017**, Valletta, Malta, pp. 559-564, 2017.
- M.-B. Rădac, R.-E. Precup and R.-C. Roman, Anti-lock Braking Systems Data-Driven Control Using Q-Learning, Proceedings of **2017 IEEE International Symposium on Industrial Electronics ISIE 2017**, Edinburgh, UK, pp. 418-423, 2017.
- L.-E. Hedrea, C.-A. Bojan-Dragoş, R.-E. Precup, R.-C. Roman, E. M. Petriu and C. Hedrea, Tensor Product-Based Model Transformation for Position Control of Magnetic Levitation Systems, Proceedings of **2017 IEEE International Symposium on Industrial Electronics ISIE 2017**, Edinburgh, UK, pp. 1141-1146, 2017.
- M.-B. Rădac, R.-E. Precup and R.-C. Roman, Multi Input-Multi Output Tank System Data-Driven Model Reference Control, Proceedings of **13<sup>th</sup> IEEE International Conference on Control & Automation ICCA 2017**, Ohrid, Macedonia, pp. 1078-1083, 2017.
- R.-E. Precup, C.-A. Bojan-Dragoş, E.-L. Hedrea, I.-D. Borlea and E. M. Petriu, Evolving Fuzzy Models for Anti-lock Braking Systems, Proceedings of **2017 IEEE International Conference on Computational Intelligence and Virtual Environments for Measurement Systems and Applications CIVEMSA 2017**, Annecy, France, pp. 48-53, 2017.
- R.-E. Precup, C.-A. Bojan-Dragoş, E.-L. Hedrea, M.-D. Rarinca and E. M. Petriu, Evolving Fuzzy Models for the Position Control of Magnetic Levitation Systems, Proceedings of **2017 IEEE Conference on Evolving and Adaptive Intelligent Systems EAIS 2017**, Ljubljana, Slovenia, pp. 1-6, 2017.
- A.-I. Szedlak-Stínean, R.-E. Precup and E. M. Petriu, Fuzzy and 2-DOF Controllers for Processes with a Discontinuously Variable Parameter, Proceedings of 14<sup>th</sup> International Conference on Informatics in Control, Automation and Robotics ICINCO 2017, Madrid, Spain, vol. 2, pp. 431-438, 2017.
- E.-L. Hedrea, C.-A. Bojan-Dragoş, R.-E. Precup and T.-A. Teban, Tensor Product-Based Model Transformation for Level Control of Vertical Three Tank Systems, Proceedings of 21<sup>st</sup> International Conference on Intelligent Engineering Systems INES 2017, Larnaca, Cyprus, pp. 113-118, 2017.
- C.-A. Bojan-Dragoş, R.-E. Precup, S. Hergane, T.-A. Teban and E. M. Petriu, Fuzzy Logic-Based Adaptive Control Scheme for Magnetic Levitation Systems, Proceedings of 2017 IEEE International Symposium on Robotics and Intelligent Sensors IRIS 2017, Ottawa, Canada, pp. 160-165, 2017.
- D.-A. Dutescu, M.-B. Rădac and R.-E. Precup, Model Predictive Control of a Nonlinear Laboratory Twin Rotor Aero-dynamical System, Proceedings of IEEE 15<sup>th</sup> International Symposium on Applied Machine Intelligence and Informatics SAMI 2017, Herl'any, Slovakia, pp. 37-42, 2017.
- R.-E. Precup, T.-A. Teban, T. E. Alves de Oliveira and E. M. Petriu, Evolving Fuzzy Models for Myoelectric-based Control of a Prosthetic Hand, Proceedings of **2016 IEEE International Conference on Fuzzy Systems FUZZ-IEEE 2016**, Vancouver, Canada, pp. 72-77, 2016.
- R.-C. Roman, M.-B. Rădac and R.-E. Precup, Mixed MFC-VRFT Approach for a Multivariable Aerodynamic System Position Control, Proceedings of **2016 IEEE International Conference on Systems, Man, and Cybernetics SMC 2016**, Budapest, Hungary, pp. 2615-2620, 2016.
- M.-B. Rădac and R.-E. Precup, Hierarchical Data-Driven Model-Free Iterative Learning Control Using Primitives, Proceedings of **2016 IEEE International Conference on Systems, Man, and Cybernetics SMC 2016**, Budapest, Hungary, pp. 2785-2790, 2016.
- M.-B. Rădac, R.-E. Precup and R.-C. Roman, Data-Driven Virtual Reference Feedback Tuning and Reinforcement Q-learning for Model-Free Position Control of an Aerodynamic System, Proceedings of **24<sup>th</sup> Mediterranean Conference on Control and Automation MED'2016**, Athens, Greece, pp. 1126-1132, 2016.
- T.-A. Teban, R.-E. Precup, E.-I. Voişan, T. E. Alves de Oliveira and E. M. Petriu, Recurrent Dynamic Neural Network Model for Myoelectric-based Control of a Prosthetic Hand, Proceedings of **10<sup>th</sup> Annual IEEE International Systems Conference SysCon 2016**, Orlando, FL, USA, pp. 1-6, 2016.
- R.-E. Precup, R.-C. David, E. M. Petriu, A.-I. Szedlak-Stínean and C.-A. Bojan-Dragoş, Grey Wolf Optimizer-Based Approach to the Tuning of PI-Fuzzy Controllers with a Reduced Process Parametric Sensitivity, Proceedings of **4<sup>th</sup> IFAC International Conference on Intelligent Control and**

- Automation Sciences ICONS 2016**, Reims, France, 2016, IFAC-PapersOnLine, vol. 49, no. 5, pp. 55-60, 2016.
- R.-E. Precup, M.-B. Rădac, E. M. Petriu, R.-C. Roman, T.-A. Teban and A.-I. Szedlak-Stînean, Evolving Fuzzy Models for the Position Control of Twin Rotor Aerodynamic Systems, Proceedings of **2016 IEEE 14<sup>th</sup> International Conference on Industrial Informatics INDIN 2016**, Poitiers, France, pp. 237-242, 2016.
- A.-I. Szedlak-Stînean, R.-E. Precup, St. Preitl, E. M. Petriu and C.-A. Bojan-Dragoş, State Feedback Control Solutions for a Mechatronics System with Variable Moment of Inertia, Proceedings of **13<sup>th</sup> International Conference on Informatics in Control, Automation and Robotics ICINCO 2016**, Lisbon, Portugal, vol. 2, pp. 458-465, 2016.
- C.-A. Bojan-Dragoş, R.-E. Precup, St. Preitl, A.-I. Szedlak-Stînean and E. M. Petriu, Particle Swarm Optimization of Fuzzy Models for Electromagnetic Actuated Clutch Systems, Proceedings of **18<sup>th</sup> Mediterranean Electromechanical Conference MELECON 2016**, Limassol, Cyprus, pp. 1-6, 2016.
- R.-E. Precup, R.-C. David, E. M. Petriu, M.-B. Rădac and E.-I. Voişan, Experiment-Based Comparison of Nature-Inspired Algorithms for Optimal Tuning of PI-Fuzzy Controlled Nonlinear DC Servo Systems, Proceedings of **2016 International Symposium on Power Electronics, Electrical Drives, Automation and Motion SPEEDAM 2016**, Capri, Italy, pp. 1261-1266, 2016.
- G. Rigatos, P. Siano, D. Selişteanu and R.-E. Precup, An H-infinity approach to optimal control of oxygen and carbon dioxide contents in blood, Proceedings of **International Conference of Computational Methods in Sciences and Engineering ICCMSE 2016**, Athens, Greece, AIP Publishing, AIP Conference Proceedings, vol. 1790, pp. 060005-1-060005-8, 2016.
- C.-A. Bojan-Dragoş, St. Preitl, R.-E. Precup, St. Hergane, E. G. Hughiet and A.-I. Szedlak-Stînean, State Feedback and Proportional-Integral-Derivative Control of a Magnetic Levitation System, Proceedings of **IEEE 14<sup>th</sup> International Symposium on Intelligent Systems and Informatics SISY 2016**, Subotica, Serbia, pp. 111-116, 2016.
- R.-E. Precup, E. M. Petriu, M.-B. Rădac, E.-I. Voişan and F. Drăgan, Adaptive Charged System Search Approach to Path Planning for Multiple Mobile Robots, Proceedings of **2<sup>nd</sup> IFAC Conference on Embedded Systems, Computer Intelligence and Telematics CESCIT 2015**, Maribor, Slovenia, 2015, IFAC-PapersOnLine, vol. 48, no. 10, pp. 294-299, 2015.
- R.-C. Roman, M.-B. Rădac, R.-E. Precup and E. M. Petriu, Data-Driven Optimal Model-Free Control of Twin Rotor Aerodynamic Systems, Proceedings of **2015 IEEE International Conference on Industrial Technology ICIT 2015**, Seville, Spain, pp. 161-166, 2015.
- M.-B. Rădac, R.-E. Precup and E. M. Petriu, Optimal Motion Prediction Using a Primitive-based Model-Free Iterative Control Approach for Crane Systems, Proceedings of **2015 IEEE International Conference on Industrial Technology ICIT 2015**, Seville, Spain, pp. 366-372, 2015.
- R.-E. Precup, A.-D. Balint, M.-B. Rădac and E. M. Petriu, Backtracking Search Optimization Algorithm-based approach to PID controller tuning for torque motor systems, Proceedings of **2015 9<sup>th</sup> Annual IEEE International Systems Conference SysCon 2015**, Vancouver, BC, Canada, pp. 127-132, 2015.
- R.-E. Precup, E.-I. Voişan, E. M. Petriu, M.-B. Rădac and L.-O. Fedorovici, Implementation of Evolving Fuzzy Models of a Nonlinear Process (**Best Paper Nomination**), Proceedings of **12<sup>th</sup> International Conference on Informatics in Control, Automation and Robotics ICINCO 2015**, Colmar, Alsace, France, vol. 1, pp. 5-14, 2015.
- C.-A. Bojan-Dragoş, A.-I. Stînean, R.-E. Precup, St. Preitl and E. M. Petriu, Model Predictive Control Solution for Magnetic Levitation Systems, Proceedings of **20<sup>th</sup> International Conference on Methods and Models in Automation & Robotics MMAR 2015**, Miedzyzdroje, Poland, pp. 139-144, 2015.
- A.-I. Stînean, C.-A. Bojan-Dragoş, R.-E. Precup, St. Preitl and E. M. Petriu, Takagi-Sugeno PD+I Fuzzy Control of Processes with Variable Moment of Inertia, Proceedings of **2015 International Symposium on Innovations in Intelligent Systems and Applications INISTA 2015**, Madrid, Spain, 8 pp., 2015.
- M.-B. Rădac, R.-E. Precup and E. M. Petriu, Design and Testing of a Constrained Data-Driven Iterative Reference Input Tuning Algorithm, Proceedings of **2014 European Control Conference ECC 2014**, Strasbourg, France, pp. 2034-2039, 2014.
- R.-E. Precup, E. M. Petriu, L.-O. Fedorovici, M.-B. Rădac and F. Drăgan, Multi-Robot Charged System Search-Based Optimal Path Planning in Static Environments, Proceedings of **2014 IEEE International Symposium on Intelligent Control ISIC 2014 Part of 2014 IEEE Multi-conference on Systems and Control IEEE MSC 2014**, Antibes, France, pp. 1912-1917, 2014.
- M.-B. Rădac, R.-C. Roman, R.-E. Precup and E. M. Petriu, Data-Driven Model-Free Control of Twin Rotor Aerodynamic Systems: Algorithms and Experiments, Proceedings of **2014 IEEE International**

- Symposium on Intelligent Control ISIC 2014 Part of **2014 IEEE Multi-conference on Systems and Control IEEE MSC 2014**, Antibes, France, pp. 1889-1894, 2014.
- C. Pozna, P. Földesi, R.-E. Precup and L. T. Kóczy, On the development of signatures for artificial intelligence applications, Proceedings of **2014 IEEE International Conference on Fuzzy Systems FUZZ-IEEE 2014**, Beijing, China, pp. 1304-1310, 2014.
- R.-E. Precup, A.-L. Borza, M.-B. Rădac and E. M. Petriu, Bacterial Foraging Optimization Approach to the Controller Tuning for Automotive Torque Motors, Proceedings of **IEEE 23<sup>rd</sup> International Symposium on Industrial Electronics ISIE 2014**, Istanbul, Turkey, pp. 972-977, 2014.
- R.-E. Precup, M.-C. Sabău, C.-A. Dragoş, M.-B. Rădac, L.-O. Fedorovici and E. M. Petriu, Particle swarm optimization of fuzzy models for anti-lock braking systems, Proceedings of **IEEE Conference on Evolving and Adaptive Intelligent Systems EAIS 2014**, Linz, Austria, paper index 05, 6 pp., 2014.
- R.-E. Precup, M.-B. Rădac, C.-A. Dragoş, St. Preitl and E. M. Petriu, Model-Free Tuning Solution for Sliding Mode Control of Servo Systems, Proceedings of **8<sup>th</sup> Annual IEEE International Systems Conference SysCon 2014**, Ottawa, ON, Canada, pp. 30-35, 2014.
- R.-E. Precup, A.-L. Borza, M.-B. Rădac and E. M. Petriu, Performance Analysis of Torque Motor Systems with PID Controllers Tuned by Bacterial Foraging Optimization Algorithms, Proceedings of **2014 IEEE International Conference on Computational Intelligence and Virtual Environments for Measurement Systems and Applications CIVEMSA 2014**, Ottawa, ON, Canada, pp. 141-146, 2014.
- R.-E. Precup, R.-C. David, A.-I. Stînean, M.-B. Rădac and E. M. Petriu, Adaptive Hybrid Particle Swarm Optimization-Gravitational Search Algorithm for Fuzzy Controller Tuning, Proceedings of **2014 IEEE International Symposium on Innovations in Intelligent Systems and Applications INISTA 2014**, Alberobello, Italy, pp. 14-20, 2014.
- Á. Takács, S. Jordán, R.-E. Precup, L. Kovács, J. K. Tar, I. J. Rudas and T. Haidegger, Review of Tool-Tissue Interaction Models for Robotic Surgery Applications, Proceedings of **IEEE 12<sup>th</sup> International Symposium on Applied Machine Intelligence and Informatics SAMI 2014**, Herl'any, Slovakia, pp. 339-344, 2014.
- M.-B. Rădac, R.-E. Precup, E. M. Petriu, St. Preitl and C.-A. Dragoş, Constrained Data-Driven Controller Tuning for Nonlinear Systems (**Certificate of Appreciation for the Best Paper in the Session TT07 1 Control Theory**), Proceedings of **39<sup>th</sup> Annual Conference of the IEEE Industrial Electronics Society IECON 2013**, Vienna, Austria, pp. 3402-3407, 2013.
- R.-E. Precup, M.-B. Rădac, E. M. Petriu, C.-A. Dragoş and St. Preitl, Simulated Annealing Approach to Fuzzy Modeling of Servo Systems, Proceedings of **2013 IEEE International Conference on Cybernetics CYBCONF 2013**, Lausanne, Switzerland, pp. 267-272, 2013.
- A.-I. Stînean, St. Preitl, R.-E. Precup, C.-A. Dragoş, M.-B. Rădac and E. M. Petriu, Modeling and Control of An Electric Drive System with Continuously Variable Reference, Moment of Inertia and Load Disturbance, Proceedings of **9<sup>th</sup> Asian Control Conference ASCC 2013**, Istanbul, Turkey, 2013, paper 585, 6 pp., 2013.
- C.-A. Dragoş, R.-E. Precup, R.-C. David, S. Preitl, A.-I. Stînean and E. M. Petriu, Simulated annealing-based optimization of fuzzy models for magnetic levitation systems, Proceedings of **2013 Joint IFSA World Congress and NAFIPS Annual Meeting IFSA/NAFIPS 2013**, Edmonton, AB, Canada, pp. 286-291, 2013.
- A.-I. Stînean, St. Preitl, R.-E. Precup, C.-A. Dragoş, M.-B. Rădac and E. M. Petriu, Low-Cost Neuro-Fuzzy Control Solution for Servo Systems with Variable Parameters, Proceedings of **2013 IEEE International Conference on Computational Intelligence and Virtual Environments for Measurement Systems and Applications CIVEMSA 2013**, Milano, Italy, pp. 156-161, 2013.
- C. Purcaru, R.-E. Precup, D. Iercan, L.-O. Fedorovici, E. M. Petriu and E.-I. Voişan, Multi-Robot GSA- and PSO-Based Optimal Path Planning in Static Environments, Proceedings of **9<sup>th</sup> International Workshop on Robot Motion and Control RoMoCo '13**, Wasowo, Poland, pp. 197-202, 2013.
- R.-E. Precup, M.-B. Rădac, E. M. Petriu, C.-A. Dragoş, St. Preitl and A.-I. Stînean, Data-Driven Performance Improvement of Control Systems for Three-Tank Systems, Proceedings of **2013 6<sup>th</sup> International Conference on Human System Interactions (HSI 2013)**, Gdansk, Sopot, Poland, pp. 306-311, 2013.
- M.-B. Rădac, R.-C. Roman, R.-E. Precup, E. M. Petriu, C.-A. Dragoş and St. Preitl, Data-based Tuning of Linear Controllers for MIMO Twin Rotor Systems, Proceedings of **IEEE Region 8 EuroCon 2013 Conference**, Zagreb, Croatia, pp. 1915-1920, 2013.

- A.-I. Stînean, St. Preitl, R.-E. Precup, C.-A. Dragoş, E. M. Petriu and M.-B. Rădac, Solutions to Avoid the Worst Case Scenario in Driving Systems Working Under Continuously Variable Conditions, Proceedings of IEEE 9<sup>th</sup> International Conference on Computational Cybernetics ICC3 2013, Tihany, Hungary, pp. 339-344, 2013.
- A.-I. Stînean, St. Preitl, R.-E. Precup, C.-A. Dragoş, M.-B. Rădac and M. Crainic, Adaptable fuzzy control solutions for driving systems working under continuously variable conditions, Proceedings of 14<sup>th</sup> IEEE International Symposium on Computational Intelligence and Informatics CINTI 2013, Budapest, Hungary, pp. 231-237, 2013.
- M.-B. Rădac, R.-E. Precup, E. M. Petriu, B.-S. Cerveneak, C.-A. Dragoş and St. Preitl, Stable Iterative Correlation-Based Tuning Algorithm for Servo Systems, Proceedings of **38<sup>th</sup> Annual Conference of the IEEE Industrial Electronics Society IECON 2012**, Montreal, QC, Canada, pp. 2500-2505, 2012.
- R.-E. Precup, M.-B. Rădac, H.-I. Filip, St. Preitl, C.-A. Dragoş and E. M. Petriu, Signal Processing in Iterative Improvement of Inverted Pendulum Crane Mode Control System Performance, Proceedings of **2012 IEEE International Instrumentation and Measurement Technology Conference I2MTC 2012**, Graz, Austria, pp. 812-815, 2012.
- M.-B. Rădac, R.-E. Precup, E. M. Petriu, St. Preitl and C.-A. Dragoş, Experiment-Based Approach to Reference Trajectory Tracking, Proceedings of **2012 IEEE International Conference on Control Applications (CCA), Part of 2012 IEEE Multi-Conference on Systems and Control**, Dubrovnik, Croatia, pp. 470-475, 2012.
- C.-A. Dragoş, St. Preitl, R.-E. Precup, E. M. Petriu and A.-I. Stînean, Adaptive Control Solutions for the Position Control of Electromagnetic Actuated Clutch Systems, Proceedings of **2012 IEEE Intelligent Vehicles Symposium IEEE IV'12**, Alcalá de Henares, Spain, pp. 81-86, 2012.
- B.-S. Cerveneak, M.-B. Rădac, R.-E. Precup, A.-I. Stînean, E. M. Petriu, St. Preitl and C.-A. Dragoş, Novel Iterative Formulation of Correlation-Based Tuning, Proceedings of **2012 IEEE International Conference on Industrial Technology ICIT 2012**, Athens, Greece, pp. 898-903, 2012.
- St. Preitl, A.-I. Stînean, R.-E. Precup, Zs. Preitl, E. M. Petriu, C.-A. Dragoş and M.-B. Rădac, Controller Design Methods for Driving Systems Based on Extensions of Symmetrical Optimum Method with DC and BLDC Motor Applications, Proceedings of 2<sup>nd</sup> IFAC Conference on Advances in PID Control PID'12, Brescia, Italy, Advances in PID Control, vol. 2, R. Vilanova and A. Visioli, Eds. pp. 264-269, 2012.
- A.-I. Stînean, St. Preitl, R.-E. Precup, E. M. Petriu, C.-A. Dragoş and M.-B. Rădac, 2-DOF PI(D) Takagi-Sugeno and Sliding Mode Controllers for BLDC Drives, Proceedings of 15<sup>th</sup> International Power Electronics and Motion Control Conference EPE-PEMC 2012 ECCE Europe, Novi Sad, Serbia, pp. DS2a.7-1-DS2a.7-6, 2012.
- R.-C. David, R.-E. Precup, E. M. Petriu, M.-B. Rădac, C. Purcaru, C.-A. Dragoş and St. Preitl, Adaptive Gravitational Search Algorithm for PI-fuzzy Controller Tuning, Proceedings of 9<sup>th</sup> International Conference on Informatics in Control, Automation and Robotics ICINCO 2012, Rome, Italy, vol. 1, pp. 136-141, 2012.
- M.-B. Rădac, B.-A. Bigher, R.-E. Precup, E. M. Petriu, C.-A. Dragoş, St. Preitl and A.-I. Stînean, Data-based Tuning of PI Controllers for Vertical Three-Tank Systems, Proceedings of 9<sup>th</sup> International Conference on Informatics in Control, Automation and Robotics ICINCO 2012, Rome, Italy, vol. 1, pp. 31-39, 2012.
- R.-E. Precup, R.-C. David, E. M. Petriu, St. Preitl and M.-B. Rădac, Charged System Search Algorithms for Optimal Tuning of PI Controllers, Proceedings of 1<sup>st</sup> IFAC Conference on Embedded Systems, Computational Intelligence and Telematics in Control CESCIT 2012, Würzburg, Germany, K. Schilling and E. Leutert, Eds., pp. 115-120, 2012.
- A.-I. Stînean, St. Preitl, R.-E. Precup, E. M. Petriu, C.-A. Dragoş and M.-B. Rădac, Takagi-Sugeno Fuzzy Control Solutions for BLDC Drives, Proceedings of 2012 International Symposium on Power Electronics, Electrical Drives, Automation and Motion SPEEDAM 2012, Sorrento, Italy, pp. 724-729, 2012.
- A.-I. Stînean, St. Preitl, R.-E. Precup, C.-A. Dragoş and M.-B. Rădac, Hybrid Fuzzy Control Solutions for Brushless DC Drives with Variable Moment of Inertia, Proceedings of IEEE 10<sup>th</sup> Jubilee International Symposium on Intelligent Systems and Informatics SISY 2012, Subotica, Serbia, pp. 317-322, 2012.
- St. Preitl, R.-E. Precup, A.-I. Stînean, C.-A. Dragoş and M.-B. Rădac, Control structures for variable inertia output coupled drives, Proceedings of 4<sup>th</sup> IEEE International Symposium on Logistics and Industrial Informatics LINDI 2012, Smolenice, Slovakia, pp. 179-184, 2012.



- Cl. Pozna and R.-E. Precup, Novel design of cognitive system strategies, Proceedings of 4<sup>th</sup> IEEE International Symposium on Logistics and Industrial Informatics LINDI 2012, Smolenice, Slovakia, pp. 205-214, 2012.
- R.-E. Precup, H.-I. Filip, M.-B. Rădac, Cl. Pozna, C.-A. Dragoş and St. Preitl, Experimental results of evolving Takagi-Sugeno fuzzy models for a nonlinear benchmark, Proceedings of 2012 IEEE 3<sup>rd</sup> International Conference on Cognitive Infocommunications CogInfoCom 2012, Kosice, Slovakia, pp. 567-572, 2012.
- Cl. Pozna and R.-E. Precup, A general formulation of abduction algorithms, Proceedings of 2012 IEEE 3<sup>rd</sup> International Conference on Cognitive Infocommunications CogInfoCom 2012, Kosice, Slovakia, pp. 573-578, 2012.
- R.-E. Precup, M.-L. Tomescu, St. Preitl, E. M. Petriu and C.-A. Dragoş, Stability Analysis of Fuzzy Logic Control Systems for a Class of Nonlinear SISO Discrete-Time Systems, Proceedings of **18<sup>th</sup> IFAC World Congress**, Milano, Italy, pp. 13612-13617, 2011.
- R.-E. Precup, R.-C. David, E. M. Petriu, St. Preitl and M.-B. Rădac, Gravitational Search Algorithms in Fuzzy Control Systems Tuning, Proceedings of **18<sup>th</sup> IFAC World Congress**, Milano, Italy, pp. 13624-13629, 2011.
- T. Haidegger, L. Kovács, R.-E. Precup, St. Preitl, B. Benyó and Z. Benyó, Cascade Control for Telerobotic Systems Serving Space Medicine, Proceedings of **18<sup>th</sup> IFAC World Congress**, Milano, Italy, pp. 3759-3764, 2011.
- R.-E. Precup, P. A. Ianc, E. M. Petriu, C.-A. Dragoş, St. Preitl and M.-B. Rădac, Low-Cost Fuzzy Control Approaches to a Class of State Feedback-Controlled Servo Systems, Proceedings of **2011 IEEE/ASME International Conference on Advanced Intelligent Mechatronics AIM 2011**, Budapest, Hungary, pp. 1022-1027, 2011.
- C.-A. Dragoş, St. Preitl, R.-E. Precup, E. M. Petriu and A.-I. Stînean, A Comparative Case Study of Position Control Solutions for a Mechatronics Application, Proceedings of **2011 IEEE/ASME International Conference on Advanced Intelligent Mechatronics AIM 2011**, Budapest, Hungary, pp. 814-819, 2011.
- M.-B. Rădac, R.-B. Grad, R.-E. Precup, E. M. Petriu, St. Preitl and C.-A. Dragoş, Mixed Virtual Reference Feedback Tuning - Iterative Feedback Tuning: Method and Laboratory Assessment, Proceedings of **20<sup>th</sup> IEEE International Symposium on Industrial Electronics ISIE 2011**, Gdansk, Poland, pp. 649-654, 2011.
- M.-B. Rădac, R.-E. Precup, E. M. Petriu, St. Preitl and R.-C. David, Stable Iterative Feedback Tuning Method for Servo Systems, Proceedings of **20<sup>th</sup> IEEE International Symposium on Industrial Electronics ISIE 2011**, Gdansk, Poland, pp. 1943-1948, 2011.
- M.-B. Rădac, R.-E. Precup, E. M. Petriu, P. A. Ianc, St. Preitl and C.-A. Dragoş, Low-Cost Optimal State Feedback Fuzzy Control of Nonlinear Second-Order Servo Systems, Proceedings of **2011 IEEE International Conference on Computational Intelligence for Measurement Systems and Applications CIMSA 2011**, Ottawa, ON, Canada, pp. 103-106, 2011.
- C.-A. Dragoş, R.-E. Precup, E. M. Petriu, M. L. Tomescu, St. Preitl, R.-C. David and M.-B. Rădac, 2-DOF PI-Fuzzy Controllers for a Magnetic Levitation System, Proceedings of 8<sup>th</sup> International Conference on Informatics in Control, Automation and Robotics ICINCO 2011, Noordwijkerhout, The Netherlands, vol. 1, pp. 111-116, 2011.
- R.-E. Precup, F.-C. Enache, M.-B. Rădac, E. M. Petriu, C.-A. Dragoş and St. Preitl, Iterative Learning Control Application to a 3D Crane System, Proceedings of 8<sup>th</sup> International Conference on Informatics in Control, Automation and Robotics ICINCO 2011, Noordwijkerhout, The Netherlands, vol. 1, pp. 117-122, 2011.
- M.-B. Rădac, F.-C. Enache, R.-E. Precup, E. M. Petriu, St. Preitl and C.-A. Dragoş, Previous and Current Cycle Learning Approach to a 3D Crane System Laboratory Equipment, Proceedings of 15<sup>th</sup> International Conference on Intelligent Engineering Systems INES 2011, Poprad, Slovakia, pp. 197-202, 2011.
- Cl. Pozna and R.-E. Precup, New Results in Abduction Process Modeling, Proceedings of 15<sup>th</sup> International Conference on Intelligent Engineering Systems INES 2011, Poprad, Slovakia, pp. 203-208, 2011.
- T. A. Várkonyi, J. K. Tar, I. J. Rudas, St. Preitl, R.-E. Precup and A. R. Várkonyi-Kóczy, A Novel Approach to Robust Fixed Point Transformation, Proceedings of 5<sup>th</sup> International Symposium on Computational Intelligence and Intelligent Informatics ISCIII 2011, Floriana, Malta, pp. 13-18, 2011.
- M.-B. Rădac, R.-B. Grad, R.-E. Precup, St. Preitl, C.-A. Dragoş, E. M. Petriu and A. Kilyeni, Mixed Virtual Reference Feedback Tuning - Iterative Feedback Tuning Approach to the Position Control of a

- Laboratory Servo System, Proceedings of International Conference on Computer as a Tool EUROCON 2011, Lisbon, Portugal, paper index 453, 4 pp., 2011.
- Cl. Pozna, L. T. Kóczy, R.-E. Precup, N. Minculete and Á. Ballagi, A cooperation scenario for multiagent systems, Proceedings of IEEE Region 8 Conference AFRICON 2011, Livingstone, Zambia, paper index 205, 6 pp., 2011.
- A.-I. Stínean, St. Preitl, R.-E. Precup, C.-A. Dragoş and M.-B. Rădac, 2-DOF Control Solutions for BLDC-m Drives, Proceedings of IEEE 9<sup>th</sup> International Symposium on Intelligent Systems and Informatics SISY 2011, Subotica, Serbia, pp. 29-34, 2011.
- Cl. Pozna, R.-E. Precup, J. Kovacs and P. Foldesi, Cooperation in Multiagent Systems, Proceedings of IEEE 9<sup>th</sup> International Symposium on Intelligent Systems and Informatics SISY 2011, Subotica, Serbia, pp. 195-200, 2011.
- A.-I. Stínean, St. Preitl, R.-E. Precup, C.-A. Dragoş, M.-B. Rădac and E. M. Petriu, State feedback fuzzy control solution for BLDC drives, Proceedings of 12<sup>th</sup> IEEE International Symposium on Computational Intelligence and Informatics CINTI 2011, Budapest, Hungary, pp. 85-90, 2011.
- A.-I. Stínean, St. Preitl, R.-E. Precup, Cl. Pozna, C.-A. Dragoş and M.-B. Rădac, Speed and position control of BLDC servo systems with low inertia, Proceedings of 2<sup>nd</sup> International Conference on Cognitive Infocommunications CogInfoCom 2011, Budapest, Hungary, 10 pp., 2011.
- Cl. Pozna and R.-E. Precup, Results concerning a new pattern of human knowledge, Proceedings of 2<sup>nd</sup> International Conference on Cognitive Infocommunications CogInfoCom 2011, Budapest, Hungary, 18 pp., 2011.
- Cl. Pozna, L. T. Kóczy, R.-E. Precup, N. Minculete and Á. Ballagi, Cooperation of agents in fuzzy environments, Proceedings of World Conference on Soft Computing WConSC 2011, San Francisco, CA, USA, 6 pp., 2011.
- T. Haidegger, L. Kovács, R.-E. Precup, B. Benyó and Z. Benyó, Enabling Control Technologies for Telesurgery, Proceedings of 62<sup>th</sup> International Astronautical Congress IAC 2011, Cape Town, South Africa, paper index 9589, 8 pp., 2011.
- R.-E. Precup, M. L. Tomescu, E. M. Petriu, St. Preitl, J. Fodor and D. Bărbulescu, Stability Analysis of a Class of MIMO Fuzzy Control Systems, Proceedings of **2010 IEEE International Conference on Fuzzy Systems FUZZ-IEEE 2010**, Barcelona, Spain, pp. 2885-2890, 2010.
- R.-E. Precup, S. V. Spătaru, E. M. Petriu, St. Preitl, M.-B. Rădac and C.-A. Dragoş, Stable and Optimal Fuzzy Control of a Laboratory Antilock Braking System, Proceedings of **2010 IEEE/ASME International Conference on Advanced Intelligent Mechatronics AIM 2010**, Montreal, Canada, pp. 593-598, 2010.
- R.-E. Precup, L.-T. Dioanca, E. M. Petriu, M.-B. Rădac, St. Preitl and C.-A. Dragoş, Tensor Product-Based Real-time Control of the Liquid Levels in a Three Tank System, Proceedings of **2010 IEEE/ASME International Conference on Advanced Intelligent Mechatronics AIM 2010**, Montreal, Canada, pp. 768-773, 2010.
- R.-E. Precup, C. Borchescu, M.-B. Rădac, St. Preitl, C.-A. Dragoş, E. M. Petriu and J. K. Tar, Implementation and Signal Processing Aspects of Iterative Regression Tuning, Proceedings of **2010 IEEE International Symposium on Industrial Electronics ISIE 2010**, Bari, Italy, pp. 1657-1662, 2010.
- R.-E. Precup, S. V. Spătaru, M.-B. Rădac, E. M. Petriu, St. Preitl and C.-A. Dragoş, Model-based Fuzzy Control Solutions for a Laboratory Antilock Braking System, Proceedings of 3<sup>rd</sup> International Conference on Human System Interaction HSI 2010, Rzeszow, Poland, pp. 133-138, 2010.
- C.-A. Dragoş, St. Preitl, R.-E. Precup and E. M. Petriu, Magnetic Levitation System Laboratory-based Education in Control Engineering, Proceedings of 3<sup>rd</sup> International Conference on Human System Interaction HSI 2010, Rzeszow, Poland, pp. 496-501, 2010.
- Cl. Pozna, V. Prahovean and R.-E. Precup, A New Pattern of Knowledge Based on Experimenting the Causality Relation, Proceedings of 14<sup>th</sup> International Conference on Intelligent Engineering Systems INES 2010, Las Palmas of Gran Canaria, Spain, pp. 61-66, 2010.
- R.-E. Precup, I. Moşincat, M.-B. Rădac, St. Preitl, St. Kilyeni, E. M. Petriu and C.-A. Dragoş, Experiments in Iterative Feedback Tuning for Level Control of Three-Tank System, Proceedings of 15<sup>th</sup> IEEE Mediterranean Electromechanical Conference MELECON 2010, Valletta, Malta, pp. 564-569, 2010.
- C.-A. Dragoş, St. Preitl, R.-E. Precup, C.-A. Neş, D. Pîrlea and A. S. Paul, Control Solutions for Vehicles with Continuously Variable Transmission, Proceedings of 11<sup>th</sup> IEEE International Symposium on Computational Intelligence and Informatics CINTI 2010, Budapest, Hungary, pp. 157-162, 2010.

- St. Preitl, R.-E. Precup, C.-A. Dragoş and M.-B. Rădac, Tuning of 2-DOF Fuzzy PI(D) Controllers. Laboratory Applications, Proceedings of 11<sup>th</sup> IEEE International Symposium on Computational Intelligence and Informatics CINTI 2010, Budapest, Hungary, pp. 237-242, 2010.
- C.-A. Dragoş, R.-E. Precup, St. Preitl, E. M. Petriu and M.-B. Rădac, Simulation and Experimental Results for a Magnetic Levitation Laboratory System, Proceedings of 7<sup>th</sup> EUROSIM Congress on Modelling and Simulation EUROSIM 2010, Prague, Czech Republic, vol. 2: Full Papers (CD), paper index 155, 8 pp., 2010.
- Cl. Pozna, L.-T. Kóczy, R.-E. Precup and Á. Ballagi, A Kantian Pattern of Knowledge, the Observation Representation, Proceedings of 8<sup>th</sup> IEEE International Symposium on Intelligent Systems and Informatics SISY 2010, Subotica, Serbia, pp. 405-412, 2010.
- C.-A. Dragoş, St. Preitl, R.-E. Precup, R.-G. Bulzan, E. M. Petriu and J. K. Tar, Experiments in Fuzzy Control of a Magnetic Levitation System Laboratory Equipment, Proceedings of 8<sup>th</sup> IEEE International Symposium on Intelligent Systems and Informatics SISY 2010, Subotica, Serbia, pp. 601-606, 2010.
- Cl. Pozna, R.-E. Precup, N. Minculete, Cs. Antonya and C.-A. Dragoş, Properties of Classes, Subclasses and Objects in an Abstraction Model, Proceedings of 19<sup>th</sup> International Workshop on Robotics in Alpe-Adria-Danube Region RAAD 2010, Budapest, Hungary, pp. 291-296, 2010.
- C.-A. Dragoş, St. Preitl, R.-E. Precup, D. Pîrlea, C.-S. Neş, E. M. Petriu and Cl. Pozna, Modeling of a Vehicle with Continuously Variable Transmission, Proceedings of 19<sup>th</sup> International Workshop on Robotics in Alpe-Adria-Danube Region RAAD 2010, Budapest, Hungary, pp. 441-446, 2010.
- Cl. Pozna, R.-E. Precup, N. Minculete and Cs. Antonya, Cognition Aspects Concerning an Abstraction Model, Proceedings of 10<sup>th</sup> IASTED International Conference on Artificial Intelligence and Applications AIA 2010, Innsbruck, Austria, pp. 414-419, 2010.
- M.-B. Rădac, R.-E. Precup, St. Preitl, J. K. Tar and K. J. Burnham, Tire Slip Fuzzy Control of a Laboratory Anti-lock Braking System, Proceedings of the **European Control Conference 2009 ECC'09**, Budapest, Hungary, pp. 940-945, 2009.
- M.-B. Rădac, R.-E. Precup, E. M. Petriu, St. Preitl and C.-A. Dragoş, Iterative Feedback Tuning Approach to a Class of State Feedback-Controlled Servo Systems, Proceedings of 6<sup>th</sup> International Conference on Informatics in Control, Automation and Robotics ICINCO 2009, Milan, Italy, vol. 1 Intelligent Control Systems and Optimization, pp. 41-48, 2009.
- R.-E. Precup, M.-B. Rădac, St. Preitl, M.-L. Tomescu, E. M. Petriu and A. S. Paul, IFT-based PI-fuzzy Controllers: Signal Processing and Implementation, Proceedings of 6<sup>th</sup> International Conference on Informatics in Control, Automation and Robotics ICINCO 2009, Milan, Italy, vol. 1 Intelligent Control Systems and Optimization, pp. 207-212, 2009.
- R.-E. Precup, St. Preitl, E. M. Petriu, J. K. Tar, M.-B. Rădac and C.-A. Dragoş, Stable Design of Fuzzy Controllers for Robotic Telemanipulation Applications, Proceedings of **2009 IEEE Workshop on Computational Intelligence in Virtual Environments CIVE 2009**, Nashville, TN, USA, pp. 1-6, 2009.
- M.-B. Rădac, R.-E. Precup, St. Preitl, E. M. Petriu, C.-A. Dragoş, A. S. Paul and St. Kilyeni, Signal Processing Aspects in State Feedback Control Based on Iterative Feedback Tuning, Proceedings of **2<sup>nd</sup> International Conference on Human System Interaction HSI'09**, Catania, Italy, pp. 40-45, 2009.
- C.-A. Dragoş, St. Preitl and R.-E. Precup, Electromagnetic Actuator in Mechatronic System, Proceedings of 15<sup>th</sup> International Conference on Electrical Drives and Power Electronics EDPE 2009, Dubrovnik, Croatia, CD-ROM, paper index T03-003, 6 pp., 2009.
- R.-E. Precup, M.-B. Rădac, St. Preitl, E. M. Petriu and J. Fodor, On the Optimal Design of Low-Cost Fuzzy Controllers for Ship Course Control, Proceedings of 51<sup>st</sup> International Symposium ELMAR-2009, Zadar, Croatia, pp. 163-166, 2009.
- R.-E. Precup, C. Gavriluţă, M.-B. Rădac, St. Preitl, C.-A. Dragoş, J. K. Tar and E. M. Petriu, Iterative Learning Control Experimental Results for Inverted Pendulum Crane Mode Control, Proceedings of 7<sup>th</sup> International Symposium on Intelligent Systems and Informatics SISY 2009, Subotica, Serbia, pp. 323-328, 2009.
- C.-A. Dragoş, St. Preitl and R.-E. Precup, Model Predictive Control Solutions for an Electromagnetic Actuator, Proceedings of 7<sup>th</sup> International Symposium on Intelligent Systems and Informatics SISY 2009, Subotica, Serbia, pp. 59-64, 2009.
- R.-E. Precup, M. L. Tomescu, St. Preitl, E. M. Petriu, St. Kilyeni and C. Bărbulescu, Stability Analysis Approach to a Class of Fuzzy Controlled Nonlinear Time-varying Systems, Proceedings of IEEE Region 8 EUROCON 2009 Conference, Saint-Petersburg, Russia, pp. 970-975, 2009.

- C. Bărbulescu, St. Kilyeni, Gh. Vuc, B. Luștrea, R.-E. Precup and St. Preitl, Software Tool for Power Transfer Distribution Factors (PTDF) Computing within the Power Systems, Proceedings of IEEE Region 8 EUROCON 2009 Conference, Saint-Petersburg, Russia, pp. 532-539, 2009.
- Cl. Pozna and R.-E. Precup, Modeling Derived from Bayesian Filtering: Analysis of Estimation Process, Proceedings of **13<sup>th</sup> International Conference on Intelligent Engineering Systems INES 2009**, Barbados, pp. 73-78, 2009.
- Cl. Pozna, R.-E. Precup, N. Minculete and Cs. Antonya, Characteristics of a New Abstraction Model, Proceedings of 4<sup>th</sup> International Symposium on Computational Intelligence and Intelligent Informatics ISCIII 2009, Egypt, pp. 129-134, 2009.
- Cl. Pozna, R.-E. Precup, St. Preitl, E. M. Petriu and J. K. Tar, Structure for Behaviourist Representation of Knowledge, Proceedings of 10<sup>th</sup> International Symposium of Hungarian Researchers on Computational Intelligence and Informatics CINTI 2009, Budapest, Hungary, pp. 55-68, 2009.
- C.-A. Dragoș, St. Preitl, R.-E. Precup, M. Crețiu and J. Fodor, Modern Control Solutions for Mechatronic Servosystems. Comparative Case Studies, Proceedings of 10<sup>th</sup> International Symposium of Hungarian Researchers on Computational Intelligence and Informatics CINTI 2009, Budapest, Hungary, pp. 69-82, 2009.
- R.-E. Precup, St. Preitl, J. Fodor, I.-B. Ursache, P. A. Clep and St. Kilyeni, Experimental Validation of Iterative Feedback Tuning Solutions for Inverted Pendulum Crane Mode Control (**Best Paper Award in the Area of Intelligent Control**), Proceedings of 2008 Conference on Human System Interaction HSI 2008, Krakow, Poland, pp. 536-541, 2008.
- R.-E. Precup, St. Preitl, M. L. Tomescu, E. M. Petriu, J. K. Tar and C. Bărbulescu, Stable Iterative Feedback Tuning-based Design of Takagi-Sugeno PI-Fuzzy Controllers (**Best Paper Award in the Area of Intelligent Control**), Proceedings of 2008 Conference on Human System Interaction HSI 2008, Krakow, Poland, pp. 542-547, 2008.
- R.-E. Precup, St. Preitl, E. M. Petriu, J. K. Tar and J. Fodor, Iterative Learning-Based Fuzzy Control System, Proceedings of **IEEE International Workshop on Robotic and Sensors Environments ROSE 2008**, Ottawa, ON, Canada, pp. 25-28, 2008.
- M.-B. Rădac, R.-E. Precup, St. Preitl, J. K. Tar, J. Fodor and E. M. Petriu, Gain-Scheduling and Iterative Feedback Tuning of PI Controllers for Longitudinal Slip Control, Proceedings of **6<sup>th</sup> IEEE International Conference on Computational Cybernetics ICC 2008**, Stara Lesna, Slovakia, pp. 183-188, 2008.
- J. K. Tar, I. J. Rudas, J. F. Bitó, St. Preitl and R.-E. Precup, Dynamic Friction Compensation in the Slotine-Li and in an SVD-Based Adaptive Control, Proceedings of 17<sup>th</sup> International Workshop on Robotics in Alpe-Adria-Danube Region RAAD 2008, Ancona, Italy, Alexa Edizioni, CD-ROM, paper index 5, 8 pp., 2008.
- St. Preitl, R.-E. Precup, P. A. Clep, I.-B. Ursache, J. Fodor and I. Škrjanc, Pole Placement Approaches for Linear and Fuzzy Systems, Proceedings of 6<sup>th</sup> International Symposium on Intelligent Systems and Informatics SISY 2008, Subotica, Serbia, CD-ROM, paper index 77, 6 pp., 2008.
- M.-B. Rădac, R.-E. Precup, St. Preitl, J. K. Tar and E. M. Petriu, Linear and Fuzzy Control Solutions for a Laboratory Anti-lock Braking System, Proceedings of 6<sup>th</sup> International Symposium on Intelligent Systems and Informatics SISY 2008, Subotica, Serbia, CD-ROM, paper index 49, 6 pp., 2008.
- R.-E. Precup, St. Preitl, J. K. Tar, J. Fodor, I.-B. Ursache and P. A. Clep, Low-Cost Fuzzy Logic Approach to Ship Course Control, Proceedings of 50<sup>th</sup> International Symposium ELMAR-2008, Zadar, Croatia, vol. 2, pp. 423-426, 2008.
- St. Preitl, R.-E. Precup, Gy. Kártyás and J. Gáti, Model Based Concept for Higher Education on the Way Towards Highly Integrated Solutions in Computer Systems, Proceedings of **12<sup>th</sup> International Conference on Intelligent Engineering Systems INES 2008**, Miami, FL, USA, pp. 99-102, 2008.
- Cl. Pozna and R.-E. Precup, Using Plausible Reasoning in Modular Robots Kinematics, Proceedings of **12<sup>th</sup> International Conference on Intelligent Engineering Systems INES 2008**, Miami, FL, USA, pp. 243-248, 2008.
- R.-E. Precup, St. Preitl, P. A. Clep, I.-B. Ursache, J. K. Tar and J. Fodor, Stable Fuzzy Control Systems with Iterative Feedback Tuning, Proceedings of **12<sup>th</sup> International Conference on Intelligent Engineering Systems INES 2008**, Miami, FL, USA, pp. 287-292, 2008.
- St. Preitl, R.-E. Precup, M.-B. Rădac, C.-A. Dragoș, J. K. Tar and J. Fodor, On the Stable Design of Stable Fuzzy Control Systems with Iterative Learning Control, Proceedings of 9<sup>th</sup> International Symposium of Hungarian Researchers on Computational Intelligence and Informatics CINTI 2008, Budapest, Hungary, pp. 345-360, 2008.

- R.-E. Precup, Zs. Preitl and St. Preitl, Iterative Feedback Tuning Approach to Development of PI-Fuzzy Controllers, **Proceedings of 2007 IEEE International Conference on Fuzzy Systems FUZZ-IEEE 2007**, London, UK, pp. 199-204, 2007.
- R.-E. Precup, St. Preitl and E. M. Petriu, PI-fuzzy Controller Design Based on an Optimization Approach, Preprints of **Third IFAC Workshop on Advanced Fuzzy and Neural Control AFNC 07**, Valenciennes, France, CD-ROM, paper index TU 3-2, 6 pp., 2007.
- St. Preitl, R.-E. Precup, J. Fodor and M. Takács, Hints in Low Cost Solutions for Networked Control Systems, Proceedings of **5<sup>th</sup> IEEE International Conference on Computational Cybernetics ICC 2007**, Gammarth, Tunisia, pp. 275-280, 2007.
- Cl. Pozna and R.-E. Precup, Plausible Reasoning and Fuzzy Logic, Proceedings of **5<sup>th</sup> IEEE International Conference on Computational Cybernetics ICC 2007**, Gammarth, Tunisia, pp. 51-56, 2007.
- R.-E. Precup, Zs. Preitl and E. M. Petriu, Delta Domain Design of Low-Cost Fuzzy Controlled Servosystems, Proceedings of **2007 IEEE International Symposium on Intelligent Signal Processing WISP 2007**, Alcalá de Henares (Madrid), Spain, CD-ROM, paper index 884, 6 pp., 2007.
- R.-E. Precup, St. Preitl, St. Kilyeni, J. K. Tar and B. Luștrea, Iterative Learning Control Approach to Fuzzy Control Systems Development, Proceedings of IEEE Region 8 EUROCON 2007 Computer as a Tool Conference, Warsaw, Poland, pp. 692-697, 2007.
- R.-E. Precup, St. Preitl, St. Kilyeni, Zs. Preitl and C. Bărbulescu, Fuzzy Control Systems Dedicated to Electro-hydraulic Servo-systems. IFT Techniques and Sensitivity Analysis, Proceedings of IEEE Region 8 EUROCON 2007 Computer as a Tool Conference, Warsaw, Poland, pp. 1409-1416, 2007.
- J. K. Tar, I. J. Rudas, St. Preitl and R.-E. Precup, Experiments in Fuzzy Control of a Class of Servo Systems for Mobile Robots, Proceedings of 16<sup>th</sup> International Workshop on Robotics in Alpe-Adria-Danube Region RAAD 2007, Ljubljana, Slovenia, pp. 263-270, 2007.
- R.-E. Precup, St. Preitl, J. K. Tar and M. Takács, Optimization Aspects in a Class of Fuzzy Controlled Servosystems, Proceedings of **11<sup>th</sup> International Conference on Intelligent Engineering Systems INES 2007**, Budapest, Hungary, pp. 235-240, 2007.
- St. Preitl, R.-E. Precup and Zs. Preitl, Case Studies in Teaching Fuzzy and Advanced Control Strategies, Proceedings of 8<sup>th</sup> International Symposium of Hungarian Researchers on Computational Intelligence and Informatics CINTI 2007, Budapest, Hungary, pp. 457-473, 2007.
- R.-E. Precup and St. Preitl, Development Method for Low Cost Fuzzy Controlled Servosystems, Proceedings of **2006 IEEE International Symposium on Intelligent Control ISIC**, München, Germany, pp. 2707-2712, 2006.
- R.-E. Precup and St. Preitl, Low Cost Fuzzy Controlled Servo Systems in Mechatronic Systems, Preprints of **4<sup>th</sup> IFAC Symposium on Mechatronic Systems MECHATRONICS 2006**, Heidelberg, Germany, pp. 247-252, 2006.
- R.-E. Precup and St. Preitl, A Genetic Iterative Feedback Tuning (GIFT) Method for Fuzzy Control System Development, Proceedings of **2006 International Symposium on Evolving Fuzzy Systems**, Ambleside, Lake District, UK, pp. 144-149, 2006.
- R.-E. Precup, St. Preitl and Zs. Preitl, Fuzzy Control Solution for a Class of Tricycle Mobile Robots, Proceedings of **3<sup>rd</sup> IEEE International Conference on Mechatronics ICM 2006**, Budapest, Hungary, pp. 208-213, 2006.
- St. Preitl and R.-E. Precup, Experiments in Fuzzy Control of a Class of Servo Systems for Mobile Robots, Proceedings of 15<sup>th</sup> International Workshop on Robotics in Alpe-Adria-Danube Region RAAD 2006, Balatonfüred, Hungary, CD-ROM, paper index 51, 7 pp., 2006.
- J. K. Tar, J. F. Bito, St. Preitl and R.-E. Precup, The Effect of the Static Striebeck Friction in the Robust VS / Sliding Mode Control of a Ball-Beam System, Proceedings of 15<sup>th</sup> International Workshop on Robotics in Alpe-Adria-Danube Region RAAD 2006, Balatonfüred, Hungary, CD-ROM, paper index 5, 6 pp., 2006.
- R.-E. Precup, St. Preitl, I. J. Rudas and J. K. Tar, On the Use of Iterative Learning Control in Fuzzy Control System Structures, Proceedings of 7<sup>th</sup> International Symposium of Hungarian Researchers on Computational Intelligence, Budapest, Hungary, pp. 69-82, 2006.
- St. Preitl, R.-E. Precup and Zs. Preitl, Sensitivity Analysis of Low Cost Fuzzy Controlled Systems, Preprints of **16<sup>th</sup> IFAC World Congress**, P. Horacek, M. Simandl and P. Zitek, Eds. (International Federation of Automatic Control), Prague, Czech Republic, DVD, paper index 1794, 6 pp., 2005.
- R.-E. Precup and St. Preitl, Stability Analysis of Fuzzy Control Systems. Multivariable Point of View, Preprints of **16<sup>th</sup> IFAC World Congress**, P. Horacek, M. Simandl and P. Zitek, Eds. (International Federation of Automatic Control), Prague, Czech Republic, DVD, paper index 1793, 6 pp., 2005.

- R.-E. Precup, Zs. Preitl and St. Kilyeni, Fuzzy Control Solution for Hydro Turbine Generators, Proceedings of **2005 IEEE International Conference on Control and Automation ICCA2005**, Budapest, Hungary, vol. 1, pp. 83-88, 2005.
- R.-E. Precup and St. Preitl, Stability and Sensitivity Analysis of Fuzzy Control Systems. Mechatronics Applications, Proceedings of 6<sup>th</sup> International Symposium of Hungarian Researchers on Computational Intelligence, Budapest, Hungary, pp. 130-143, 2005.
- St. Preitl, R.-E. Precup and Zs. Preitl, Two Degree of Freedom Takagi-Sugeno Fuzzy Controllers in Trajectory Tracking, Proceedings of 6<sup>th</sup> International Carpathian Control Conference, Miskolc-Lillafüred, Hungary, vol. 2, pp. 273-278, 2005.
- R.-E. Precup, St. Preitl, M. Balas and V. Balas, Fuzzy Controllers for Tire Slip Control in Anti-lock Braking Systems, Proceedings of **IEEE International Conference on Fuzzy Systems FUZZ-IEEE 2004**, Budapest, Hungary, vol. 3, pp. 1317-1322, 2004.
- R.-E. Precup and St. Preitl, Sensitivity Analysis of a Class of Fuzzy Controlled Mobile Robots, Proceedings of **2<sup>nd</sup> IFAC Workshop on Advanced Fuzzy/Neural Control AFNC'04**, K. Leiviska, Ed., Oulu, Finland, pp. 115-120, 2004.
- R.-E. Precup, St. Preitl, Cs. Czabo, P. Korondi and P. Szemes, On the Development of Mamdani PI-Fuzzy Controllers for a Class of Mobile Robots, Proceedings of IEEE 4<sup>th</sup> International Conference on Intelligent Systems Design and Application ISDA 2004, Budapest, Hungary, vol. 1, pp. 277-282, 2004.
- St. Preitl, R.-E. Precup and St. Kilyeni, Fuzzy Controllers with Dynamics for Hydro-generators: Voltage and Speed Control, Proceedings of 6<sup>th</sup> International Conference "Control of Power Systems'04", V. Vesely, Ed., Strbske Pleso, High Tatras, Slovakia, CD-ROM, paper index A3-04, 10 pp., 2004.
- G. Kovacs, R.-E. Precup, St. Preitl and Z. Gyurko, Time Delay Compensation for Networked Control Systems, Proceedings of 3<sup>rd</sup> International Conference on Global Research and Education in Intelligent Systems INTER-ACADEMIA 2004, Budapest, Hungary, vol. 1, pp. 207-214, 2004.
- St. Preitl and R.-E. Precup, Sensitivity Study of a Class of Fuzzy Controlled Servo Systems, Proceedings of 3<sup>rd</sup> International Conference on Global Research and Education in Intelligent Systems INTER-ACADEMIA 2004, Budapest, Hungary, vol. 1, pp. 47-56, 2004.
- R.-E. Precup and St. Preitl, Fuzzy Controllers for Speed Control of Hydroelectric Power Turbines, Proceedings of 2<sup>nd</sup> Slovakian-Hungarian Joint Symposium on Applied Machine Intelligence SAMI 2004, Herl'any, Slovakia, pp. 77-87, 2004.
- St. Preitl and R.-E. Precup, Development of TS Fuzzy Controllers with Dynamics for Low Order Benchmarks with Time Variable Parameters, Proceedings of 5<sup>th</sup> International Symposium of Hungarian Researchers on Computational Intelligence, Budapest, Hungary, pp. 239-248, 2004.
- St. Preitl and R.-E. Precup, Low Cost Fuzzy Control Solutions for Embedded Systems, Proceedings of Budapest Tech International Jubilee Conference – Science in Engineering, Economics and Education, Budapest, Hungary, pp. 151-162, 2004.
- St. Preitl and R.-E. Precup, Points of View in Controller Design by Means of Extended Symmetrical Optimum Method, Preprints of **2<sup>nd</sup> IFAC Conference on Control Systems Design**, St. Kozak and M. Huba, Eds., Bratislava, Slovak Republic, CD-ROM, paper index 048-3-4, 6 pp., 2003.
- R.-E. Precup, St. Preitl, Cs. Szabo, Z. Gyurko and P. Szemes, Sliding Mode Navigation Control in Intelligent Space, Proceedings of **2003 IEEE International Symposium on Intelligent Signal Processing WISP 2003**, Budapest, Hungary, pp. 225-230, 2003.
- R.-E. Precup and St. Preitl, Aspects Concerning the Development of Fuzzy Controllers with Dynamics Subject to Conditions of Stability and Sensitivity Analysis, Proceedings of IEEE International Conference on Computational Cybernetics ICC3 2003, I. J. Rudas and A. Szakal, Eds., Siófok, Hungary, pp. 169-174, 2003.
- R.-E. Precup and St. Preitl, Multiobjective Optimisation Criteria in Development of Fuzzy Controllers with Dynamics, Preprints of IFAC Workshop on Control Applications of Optimisation CAO 2003, R. Bars and E. Gyurkovics, Eds., Visegrad, Hungary, pp. 261-266, 2003.
- St. Preitl, R.-E. Precup and Zs. Preitl, Two Degree of Freedom Fuzzy Controllers: Structure and Development, Proceedings of International Conference in Memoriam John von Neumann, Budapest, Hungary, pp. 49-60, 2003.
- St. Preitl, R.-E. Precup and P. Korondi, Aspects Concerning the Development of Fuzzy Controllers for Servo Systems, Proceedings of 4<sup>th</sup> International Symposium of Hungarian Researchers on Computational Intelligence, Budapest, Hungary, pp. 89-100, 2003.

- St. Preitl, R.-E. Precup, Zs. Preitl and L. Kovacs, Development Methods of Fuzzy Controllers for Low Order Benchmarks (Electrical Drives), Proceedings of **2002 First International IEEE Symposium "Intelligent Systems" IS'2002**, Varna, Bulgaria, vol. II Invited Sessions EUNITE, pp. 13-18, 2002.
- St. Preitl, Zs. Preitl and R.-E. Precup, Low Cost Fuzzy Controllers for Classes of Second-order Systems, Preprints of **15<sup>th</sup> IFAC World Congress b'02**, E. F. Camacho, L. Basanez and J. A. de la Puente, Eds. (Pergamon, Elsevier Science Ltd), Barcelona, Spain, CD-ROM, paper index 416, 6 pp., 2002.
- R.-E. Precup and St. Preitl, Development Method for a Takagi-Sugeno PI-fuzzy Controller. Preprints of **15<sup>th</sup> IFAC World Congress b'02**, E. F. Camacho, L. Basanez and J. A. de la Puente, Eds. (Pergamon, Elsevier Science Ltd), Barcelona, Spain, CD-ROM, paper index 390, 6 pp., 2002.
- St. Preitl and R.-E. Precup, Research Results in Fuzzy Controllers with Dynamics, Proceedings of Third International Symposium of Hungarian Researchers on Computational Intelligence, Budapest, Hungary, pp. 197-208, 2002.
- R.-E. Precup and St. Preitl, On Some Low Cost Fuzzy Control Solutions for Third-Order Integral Actuators, Preprints of **6<sup>th</sup> IFAC Symposium on Cost Oriented Automation – Low Cost Automation 2001**, R. Bernhardt and H.-H. Erbe, Eds., Berlin, Germany, pp. 68-73, 2001.
- St. Preitl, R.-E. Precup, St. Solyom and L. Kovacs, Development of Conventional and Fuzzy Controllers for Output Coupled Drive Systems and Variable Inertia, Preprints of **6<sup>th</sup> IFAC / IFORS / IMACS / IFIP Symposium on Large Scale Systems: Theory and Applications LSS2001**, F. G. Filip, I. Dumitrache and S. Iliescu, Eds. (Editura ICI Publishers), Bucharest, Romania, pp. 267-274, 2001.
- R.-E. Precup, St. Preitl and Zs. Preitl, Robustness Analysis of a Class of Fuzzy Systems, Preprints of **6<sup>th</sup> IFAC / IFORS / IMACS / IFIP Symposium on Large Scale Systems: Theory and Applications LSS2001**, F. G. Filip, I. Dumitrache and S. Iliescu, Eds. (Editura ICI Publishers), Bucharest, Romania, pp. 255-260, 2001.
- St. Preitl and R.-E. Precup, Extended Symmetrical Optimum (ESO) Method: A New Tuning Strategy for PI/PID Controllers, Preprints of **IFAC Workshop on Digital Control: Past, Present and Future of PID Control**, J. Quevedo and T. Escobet, Eds., Terrassa, Spain, pp. 421-426, 2000.
- St. Preitl and R.-E. Precup, Cross Optimization Aspects Concerning the Extended Symmetrical Optimum Method, Preprints of IFAC Workshop on Digital Control: Past, Present and Future of PID Control, J. Quevedo and T. Escobet, Eds., Terrassa, Spain, pp. 254-259, 2000.
- D. Todinca, A.-M. Badulescu and R.-E. Precup, VHDL Approach to Performance Analysis of Fuzzy Logic Controllers, Proceedings of **8<sup>th</sup> Conference on Information Processing and Management of Uncertainty in Knowledge-Based Systems IPMU 2000**, Madrid, Spain, vol. II, pp. 896-901, 2000.
- St. Preitl, R.-E. Precup and St. Kilyeni, State Space Approach to the Stability Analysis of a Class of Fuzzy Control Systems Meant for Third-order Plants, Preprints of IFAC Symposium on Artificial Intelligence in Real Time Control AIRTC-2000, I. J. Rudas and J. K. Tar, Eds., Budapest, Hungary, pp. 263-268, 2000.
- R.-E. Precup and St. Preitl, Development of Some Fuzzy Controllers with Non-Homogenous Dynamics with Respect to the Input Channels Meant for a Class of Systems, Proceedings of **European Control Conference ECC'99**, Karlsruhe, Germany, pp. 61-66, 1999.
- R.-E. Precup and St. Preitl, Development of a Quasi-PI Fuzzy Controller Based on the Principle of Minimum Guaranteed Phase Margin, Proceedings of **14<sup>th</sup> World Congress of International Federation of Automatic Control IFAC'99**, H. F. Chen, K. J. Hunt, Y. Hashimoto, I. Farkas and H. Murase, Eds. (Elsevier Science), Beijing, China, vol. K, pp. 183-188, 1999.
- St. Preitl, R.-E. Precup and St. Kilyeni, Variable Structure Fuzzy Controllers for Speed and Voltage Control of Synchronous Generators, Proceedings of **34<sup>th</sup> Conference on Universities Power Engineering UPEC'99**, Leicester, UK, vol. 1, pp. 185-188, 1999.
- R.-E. Precup and St. Preitl, On a Hybrid PI-Neuro-Fuzzy Controller Meant for a Class of Non-Minimum Phase Systems, Proceedings of Seventh European Congress on Intelligent Technologies and Soft Computing EUFIT'99, H.-J. Zimmermann, Ed. (Verlag Mainz), Aachen, Germany, CD-ROM, paper index BA8-12793-P, 6 pp., 1999.
- R.-E. Precup and St. Preitl, On a Design Method for PI Fuzzy Controllers Meant for Minimum Phase Systems, Proceedings of "CONTROLO'98" Conference, A. Dourado et al., Eds., Coimbra, Portugal, vol. 2, pp. 697-702, 1998.
- St. Preitl, R.-E. Precup and T.-L. Dragomir, Inter-Regional Co-operation in Higher Education as Stabilisation Element, Preprints of **IFAC Conference on Supplemental Ways for Improving International Stability SWIIS'98**, I. Dumitrache and P. Kopacek, Eds., Sinaia, Romania, pp. 135-140, 1998.

- R.-E. Precup, D. Todinca and St. Preitl, VHDL Implementation of PID Fuzzy Controller Applied to Control of Non-minimum Phase Systems, Proceedings of 6<sup>th</sup> Conference on Systems, Automatic Control and Measurements SAUM'98, Z. Bucevac, Ed., Nis, Serbia, pp. 369-374, 1998.
- S. Doboli and R.-E. Precup, The Application of a Stability Analysis Method to Fuzzy Control Systems, Proceedings of **Seventh World Congress of International Fuzzy Systems Association IFSA'97**, M. Mares, R. Mesiar, V. Novak, J. Ramik and A. Stupnanova, Eds. (Academia), Prague, Czech Republic, vol. 3, pp. 452-457, 1997.
- R.-E. Precup and St. Preitl, Two-level Fuzzy Control of a Hydrogenerator, Proceedings of **32<sup>nd</sup> Conference on Universities Power Engineering UPEC'97**, Manchester, UK, vol. 1, pp. 539-542, 1997.
- R.-E. Precup and St. Preitl, Overview on Some Predictive and Adaptive Fuzzy Controllers Applied to Nonminimum-phased Systems, Proceedings of 12<sup>th</sup> Conference on Systems Engineering ICSE'97, Coventry, UK, vol. 2, pp. 556-559, 1997.
- R.-E. Precup and St. Preitl, Popov-type Stability Analysis Method for Fuzzy Control Systems, Proceedings of Fifth European Congress on Intelligent Technologies and Soft Computing EUFIT'97, H.-J. Zimmermann, Ed. (Verlag Mainz), Aachen, Germany, vol. 2, pp. 1306-1310, 1997.
- S. Doboli and R.-E. Precup, Stability Analysis and Design of a Class of Fuzzy Control Systems, Preprints of **Fourth IFAC Conference on System Structure and Control SSC'97**, Vl. Ionescu and D. Popescu, Eds. (Editura Tehnica), Bucharest, Romania, pp. 361-366, 1997.
- R.-E. Precup and St. Preitl, On Some Predictive and Adaptive Fuzzy Controllers Based on Ensuring the Maximum Phase Reserve, Preprints of Fourth IFAC Conference on System Structure and Control SSC'97, Vl. Ionescu and D. Popescu, Eds. (Editura Tehnica), Bucharest, Romania, pp. 349-354, 1997.
- R.-E. Precup and St. Preitl, Intelligent Sliding Mode Controller with Fuzzy Logic Blocks, Proceedings of Second World Congress on Intelligent Manufacturing Processes & Systems IMP&S'97, L. Monostori, Ed. (Springer), Budapest, Hungary, pp. 402-407, 1997.
- R.-E. Precup and St. Preitl, Some Results in Fuzzy Control of Nonminimum-phased Systems, Proceedings of Second Workshop on Fuzzy Based Expert Systems FUBEST'96, D. V. Lakov, Ed., Sofia, Bulgaria, pp. 6-13, 1996.
- R.-E. Precup and St. Preitl, Stability Analysis of Minimum- and Nonminimum- Phased Fuzzy Control Systems, Proceedings of Fourth European Congress on Intelligent Technologies and Soft Computing EUFIT'96, H.-J. Zimmermann, Ed. (Verlag Mainz), Aachen, Germany, vol. 2, pp. 1065-1069, 1996.
- St. Preitl and R.-E. Precup, Stability Analysis of a Hydrogenerator Speed Control System Containing a Fuzzy Controller with Dynamics, Proceedings of Second Conference on Applications of Fuzzy Systems ICAFS'96, Siegen, Germany, pp. 400-405, 1996.
- R.-E. Precup, On a Stability Procedure Concerning Fuzzy Control Systems Containing Fuzzy Controllers with Dynamics, Proceedings of Second Conference on Applications of Fuzzy Systems ICAFS'96, Siegen, Germany, pp. 285-291, 1996.
- R.-E. Precup and St. Preitl, On the Predictive Component Treatment for PID Fuzzy Controllers, Proceedings of **Sixth World Congress of International Fuzzy Systems Association IFSA'95**, Sao Paulo, Brazil, vol. 1, pp. 573-576, 1995.
- R.-E. Precup, On the Parameter Adaptation of a Fuzzy Controller Meant for the Speed Control of Hydrogenerators, Proceedings of Third European Congress on Intelligent Technologies and Soft Computing EUFIT'95, H.-J. Zimmermann, Ed. (Verlag Mainz), Aachen, Germany, vol. 2, pp. 1105-1109, 1995.
- St. Preitl and R.-E. Precup, Approach to the Predictive Component Treatment for Fuzzy Controllers, Proceedings of Third European Congress on Intelligent Technologies and Soft Computing EUFIT'95, H.-J. Zimmermann, Ed. (Verlag Mainz), Aachen, Germany, vol. 2, pp. 1082-1086, 1995.
- R.-E. Precup and St. Preitl, On a Fuzzy Digital PID Predictor Controller, Proceedings of **Second IEEE Mediterranean Symposium on New Directions in Control and Automation**, Chania, Crete, Greece, pp. 569-573, 1994.
- R.-E. Precup, St. Preitl, St. Kilyeni and B. Lustrea, Fuzzy Speed and Voltage Control of a Hydrogenerator, Preprints of **Fifth Symposium on Application of Multivariable System Techniques AMST'94**, R. Whalley, Ed. (Mechanical Engineering Publications Limited), London, UK, pp. 151-158, 1994.
- St. Preitl and R.-E. Precup, Comparison of Three State Feedback Controllers. Why Fuzzy Control ?, Proceedings of Second European Congress on Intelligent Technologies and Soft Computing EUFIT'94, H.-J. Zimmermann, Ed. (Verlag der Augustinus Buchhandlung), Aachen, Germany, vol. 3, pp. 1383-1387, 1994.



- R.-E. Precup and St. Preitl, Fuzzy Controller Equivalent to the Digital PID Predictor Controller, Proceedings of Second European Congress on Intelligent Technologies and Soft Computing EUFIT'94, H.-J. Zimmermann, Ed. (Verlag der Augustinus Buchhandlung), Aachen, Germany, vol. 2, pp. 968-971, 1994.
- R.-E. Precup and St. Preitl, Fuzzy Control Algorithms Implementation for a Synchronous Generator Connected to a Power System, Preprints of IFAC Conference on Integrated Systems Engineering ISE'94, Baden-Baden, Germany (Pergamon), pp. 83-92, 1994.
- St. Preitl and R.-E. Precup, Fuzzy Control and Fuzzy Optimization Aspects for a Hydrogenerator Connected to a Power System, Proceedings of First Workshop on Fuzzy Based Expert Systems FUBEST'94, Sofia, Bulgaria, pp. 8-10, 1994.
- R.-E. Precup and St. Preitl, Fuzzy Control of an Electrohydraulic Servosystem under Nonlinearity Constraints, Proceedings of **First European Congress on Fuzzy and Intelligent Technologies EUFIT'93**, H.-J. Zimmermann, Ed. (Verlag der Augustinus Buchhandlung), Aachen, Germany, vol. 3, pp. 1524-1530, 1993.
- St. Preitl, R.-E. Precup and A. Fogarasi, Control Algorithms for the Electrohydraulic Servosystem of a Speed Governor, Proceedings of Hydrodynamic Machines in Power Engineering HYDROTURBO'93 Conference, Brno, Czech Republic, vol. 2, pp. 321-330, 1993.
- St. Preitl and R.-E. Precup, Aspects Concerning Tuning and Implementation of Some Controllers and Control Algorithms for Speed Control of Hydrogenerators in Hydroelectric Power Stations, Proceedings of "Automation'92" Conference, Budapest, Hungary, vol. 3, pp. 504-513, 1992.

**F) GRANTURI ȘI CONTRACTE DE CERCETARE (<http://www.aut.upt.ro/~rprecup/contracts.html>):**

- 2018-2019: principal investigator, IMproving the PREdiction of opinion dynamics in temporal Social networks: Mathematical modeling and Simulation framework (IMPRESS), 38245 EUR, national postdoctoral research project (PD, UEFISCDI), director: Lect. Dr. Alexandru Topirceanu, Politehnica University of Timisoara (UPT).
- 2018-2019: principal investigator, NONlinear OBServers-based control structures applied to MEChatronics Systems (NOBSMECS), 47207 EUR, national postdoctoral research project (PD, UEFISCDI), director: Lect. Dr. Alexandra-Iulia Szedlak-Stinean, UPT.
- 2014-2017: director of the UPT partner, Advanced control systems for bioprocesses in food industry (ADCOSBIO), 238637 EUR, national joint applied research project (PCCA, Executive Agency for Higher Education, Research, Development and Innovation Funding - UEFISCDI), director: Prof. Dan Selisteanu, University of Craiova.
- 2014-2017: director of the UPT partner, Advanced control system of a biorefinery plant (BIOCON), 284091 EUR, national joint applied research project (PCCA, UEFISCDI), director: Prof. Sergiu Caraman, "Lower Danube" University of Galati.
- 2015-2017: principal investigator, Learning techniques for improving control systems performance using model-free approaches (LTIPerforM), 83114 EUR, national research Young Teams grant (TE, UEFISCDI), director: Lect. Dr. Mircea-Bogdan Radac, UPT.
- 2014-2017: principal investigator, Experimental model for an automatic capacitive compensator designed for improving the power factor and for load balancing in low-voltage electricity distribution networks (CAEREDJT), 235102 EUR, national joint applied research project (PCCA, UEFISCDI), director: Assoc. Prof. Adrian Pana, UPT.
- 2012-2016: director of the UPT partner, Software products based on artificial intelligence algorithms applied to modelling and optimization of chemical systems (AISoftChim), 362903 EUR, national joint applied research project (PCCA, UEFISCDI), director, Prof. Silvia Curteanu, "Gheorghe Asachi" Technical University of Iasi.
- 2011-2016: director, New performance improvement techniques of control systems using experiment-based tuning, 339907 EUR, national exploratory research grant (PCE, UEFISCDI).
- 2008-2009: director of the Romanian partner, UPT, New results in development and applications of fuzzy control systems, 16000 EUR, international research contract (bilateral project Slovenia-Romania, CNMP), Prof. Igor Škrjanc, director of the Slovenian partner, University of Ljubljana.
- 2008-2009: principal investigator, Integration of Iterative Learning Control (ILC) and fuzzy methods in intelligent control systems, 16000 EUR, international research contract (bilateral project Hungary-Romania, CNMP), Prof. Stefan Preitl, director of the Romanian partner, UPT, Prof. János Fodor, director of the Hungarian partner, Budapest Tech Polytechnical Institution.
- 2006-2007: principal investigator, Analysis and development of intelligent systems, 16000 EUR, international research contract (bilateral project Hungary-Romania, Romanian Ministry of Research),

- Prof. Stefan Preitl, director of the Romanian partner, UPT, Prof. János Fodor, director of the Hungarian partner, Budapest Tech Polytechnical Institution.
- 2003-2005: principal investigator, Nonlinear systems and control in the field of power electronics, 16000 EUR, international research contract (bilateral project Hungary-Romania, Romanian Ministry of Research), Prof. Stefan Preitl, director of the Romanian partner, UPT, Acad. István Nagy, director of the Hungarian partner, Budapest University of Technology and Economics.
- 2008-2011: director of the UPT partner, Real-time informatics technologies for embedded-system-control of power-train in automotive design and applications (SICONA), 500000 EUR, national research contract (CNMP), director, Prof. Corneliu Lazar, “Gheorghe Asachi” Technical University of Iasi.
- 2009-2011: principal investigator, Research concerning new cognitive systems based on experimenting causal relations, 250000 EUR, national research contract (CNCSIS), director, Assoc. Prof. Claudiu Pozna, Transilvania University of Brasov.
- 2009-2011: principal investigator, Research concerning the design and implementation of modern solutions for information security in distributed systems, SCADA, DCS and remote control applied to gas distribution, 65000 EUR, national research contract (CNCSIS), director, Prof. Ioan Silea, UPT.
- 2007-2010: principal investigator, Integrated real-time networked control systems (SICOTIR), 500000 EUR, national research contract (CNMP), director, Prof. Cosmin Ionete, University of Craiova.
- 2007-2008: principal investigator, Analysis and development of intelligent control systems with fuzzy controllers dedicated to servo systems, 35000 EUR, national research contract (CNCSIS), director, Prof. Stefan Preitl, UPT.
- 2006-2007: director, Development of new fuzzy controller structures for embedded systems using Iterative Feedback Tuning algorithms, 18000 EUR, national research contract (CNCSIS).
- 2004-2005: director, Development of new fuzzy controller structures based on sensitivity theory, 15000 EUR, national research contract (CNCSIS).
- 2004-2005: principal investigator, Development of new control structures and controller development methods for positioning systems, 12000 EUR, national research contract (CNCSIS), director, Prof. Stefan Preitl, UPT.
- 2001: director, Research concerning the development of new stability analysis methods for a class of fuzzy control systems applied to the development of Takagi-Sugeno fuzzy controllers, 1400 USD, national research contract (CNCSIS).
- 2001: principal investigator, Research concerning the development of new robustness analysis methods for fuzzy control systems based on the parametric sensitivity analysis, 1500 USD, national research contract (CNCSIS), director, Prof. Stefan Preitl, UPT.
- 2000: principal investigator, Research concerning the development of new stability analysis methods for fuzzy control systems applied to power systems processes, 2000 USD, national research contract (CNCSIS), director, Prof. Stefan Preitl, UPT.
- 1998-1999: principal investigator, Research concerning the development of new control structures and controller development methods for variable inertia drives, 11000 USD, national research contract (CNCSU, CNCSIS), director, Prof. Stefan Preitl, UPT.
- 1998-2001: principal investigator, Intelligent process control systems, 170000 USD, national research contract (CNCSIS, World Bank), director, Prof. Ioan Dumitrache, corresponding member of Romanian Academy, Politehnica University of Bucharest.
- 1998-2001: principal investigator, Transient and voltage stability in power systems, 50000 USD, national research contract (CNCSIS, World Bank), director, Prof. Stefan Kilyeni, UPT.
- 1996-1997: principal investigator, Research concerning the development of control strategies for synchronous generators based on fuzzy set theory, 3500 USD, national research contract (CNCSU), director, Prof. Stefan Preitl, UPT.
- 1996: director, Research concerning the implementation of fuzzy control algorithms dedicated to electro-hydraulic and eletromechanical servo systems, 2000 USD, national research contract (CNCSU).
- 1996: principal investigator, Fuzzy control structures with dynamics and fuzzy-based parameter adaptation dedicated to control of nonminimum phase systems, 2700 USD, national research contract (Romanian Academy), director, Prof. Stefan Preitl, UPT.
- 1995: principal investigator, Development of control strategies and structures, and controllers applied to hydrogenerator control, 2000 USD, national research contract (CNCSU), director, Prof. Stefan Preitl, UPT.
- 1993: principal investigator, Development of control algorithms based on fuzzy set theory, 1000 USD, national research contract (Romanian Ministry of Education), director, Prof. Stefan Preitl, UPT.

1993: principal investigator, Control systems structures for small and medium power hydrogenerators, models and structures for applications, 1000 USD, national research contract (Romanian Ministry of Education), director, Prof. Toma-Leonida Dragomir, UPT.