NAME Ladislau MATEKOVITS

CURRENT CONTACT DETAILS

Address

Phone

E-mail ladislau.matekovits@polito.it

Gender

Date of birth

Nationality

QUALIFICATIONS

2021 (3-month) **Peter the Great St. Petersburg Polytechnic University- Associated Professor** - election by concurs
(Sept. 1, 2021 – Nov 30, 2021) - with collaboration assignment
Higher School of Applied Physics and Space Technologies, Institute of Electronics and Telecommunications, 195251 – St. Petersburg, Russia.

Type / sector of activity: Education and research

Principal subjects / occupational skills: Education, research, university management

2020-present **Italian National Research Council Associate** (3-year term)
(Aug. 3, 2020 – June 30, 2023) - with collaboration assignment
Renew till June 30, 2027 (document issued on June 27, 2022)
Istituto di Elettronica e di Ingegneria dell'Informazione e delle Telecomunicazioni, National Research Council of Italy, 10129 Turin, Italy

Type / sector of activity: Education and research

Principal subjects / occupational skills: Research, project management

2020-present **Honorary Professor** - Permanent
Polytechnic University of Timisoara (Universitatea Politehnica Timisoara), Piața Victoriei 2, Timișoara 300006, Romania (decision no. 179 of 09/07/2020 of the Senate of the University)

Type / sector of activity: Education and research

Principal subjects / occupational skills: Education, research, university management

2014-present **Associate Professor**
Politecnico di Torino, Torino, C.so Duca degli Abruzzi nr 24, 10129 Torino, Italy

Type / sector of activity: Education and research

Principal subjects / occupational skills: Education, research, university management

2014-2018 **Honorary Fellow** (4-year term)
Macquarie University, Sydney, 2109, NSW, Australia

Type / sector of activity: Education and research

Principal subjects / occupational skills: Education, research, university management

2009-2012 **Marie Curie Fellow**
Macquarie University, Sydney, Australia and Politecnico di Torino, Torino, Italy

Type / sector of activity: Research

Principal subjects / occupational skills: Research project management

Ladislau Matekovits

1996-2014	**Lecturer, researcher, laboratory technician** Politecnico di Torino, Torino, Italy.
Type / sector of activity	Education and research
Principal subjects/ occupational skills	Education, research, university management

EDUCATION AND TRAINING

		Date (from - to)
Title of qualification awarded	**PhD (Dottore di ricerca)** Politecnico di Torino, Torino, Italy Electromagnetism	1992-1995
Title of qualification awarded	**Electronic and Telecommunication Engineer – 5 years** Institutul Politehnic din Bucureşti (IPB), Romania General and specific competencies in radiocommunication	1986-1992
Title of qualification awarded	**Electronic Engineer** Politecnico di Torino, Torino, Italia	

PERSONAL SKILLS

Research, project management and education in Antennas, Electromagnetics and related fields

Mother language: Hungarian

Other languages	UNDERSTANDING		SPEAKING		WRITINIG
	Listening	Reading	Conversation	Oral speech	
Romanian	C2	C2	C2	C2	C2
Italian	C2	C2	C2	C2	C2
English	C1	C1	C1	C1	C1
France	A1	A1	A1	A1	A1

Legend: C: proficient user, B: independent user, A: Basic user, (2 better than 1)

Communication skills

Good communication skills acquired during the long term experience in delivering classes in various high education institutions and in different languages (Italian, Romanian, English) and by active participation in international research teams in different countries

Organization/managerial skills

- Member of different committees at Department and PhD school level.
- Leadership (I am tutoring various PhD and Master students)

Informatics skills

- Microsoft Office
- Matlab, Fortran
- Simulation Software for electromagnetic analysis (CST; HFSS; FEKO; etc.)

SUPLIMENTARY INFORMATION

Publications (total): 113 journal papers, 309 conf. papers, 3 books, 6 book chapters.
h-factor: 25 (Scopus), 29 (Google Scholar), 23 (WoS)

Patents (total)	3 granted patents
Projects (total)	International: responsible (Principal investigator) – 1 (European) // 2 others, participant (researcher) – 4; National: responsible – 4 (Italy): participant – 16 (Italy, Australia, Romania);
Awards (selection)	- URSI Young Scientist Award 1998; - Best AP2000 Oral Paper on Antennas, ESA-EUREL Millennium Conf. on Antennas & Propagations, 2000, Davos, Switzerland; - International collaboration award (Australian Research Council - 2013); - Micro Media Grant - Marie Curie Alumni Association (2014); - Associate Editor of the month - IEEE ACCESS Nov. 2015; - American Romanian Academy of Arts and Sciences (ARA) - 2019 ARA Medal of Excellence in Science "for outstanding contribution to electronics and telecommunications". - Motohisa Kanda Award 2019: for the most cited paper of the IEEE Transactions on EMC in the past five years. - Ad Astra Award 2020: Engineering Sciences. Category: Award for Excellence in Research for researchers with more than 7 years of experience and affiliation abroad. - Outstanding Associate Editor Award for the IEEE Antennas and Wireless Propagation Letters (for year 2020). "For exceptional performance from 1 January to 31 December 2020 as an Associate Editor of the IEEE Antennas and Wireless Propagation Letters"
Conference organizations (selection)	- Assistant Chairman of the TPC of the European Microwave Conference 2002 and of the European Microwave Week Local Committee, 23-27 Sept. 2002, Milan, Italy - General Chair 11th International Conference on Body Area Networks (BodyNets 2016), 15-16 Dec., 2016, Torino, Italy
Memberships	IEEE (Member -1994, Senior Member – 2011 - present) ARA (American Romanian Academy of Arts and Sciences) (Member, 2016-present) European Association on Antennas and Propagation (EurAAP) – Member-2022
Editor	Associate Editor - IEEE ACCESS (2014 - present); Associate Editor - IET Microwaves, Antennas and Propagation (2016 - present); Associate Editor - IEEE Antennas and Wireless Propagation Letters (AWPL) (2017 - present); Editorial Board member - Electronic Materials (https://www.mdpi.com/journal/electronicmat/editors)
Professional qualification	Member of the organizing Committee: International Conference on Electromagnetics in Advanced Applications: (2012-present) National qualification for Full Professor in Electromagnetic fields, Italy (Abilitazione Scientifica Nazionale, Prima Fascia) 20/7/2017. Member of the National Council for the Attestation of University Degrees, Diplomas and Certificates (CNATDCU), Romania, for the term 2020-2024
Outreach (selection)	“Top 100 Romanians from Everywhere”, (Top 100 Romani de Pretutindeni),

published by Newsweek Romania

ACADEMIC AWARDS: Professional honours, awards, prizes, fellowships etc. (full career):

1. TEMPUS JEP 2736-91/1 ***Scholarship*** - Electronics Department (Polito), student, 03/1992-07/1992.
2. ***Student Researcher Award 1997***-Raj Mittra Travel Grant-. This award partially founds travels and accommodation for participation to 1997 IEEE AP-S Int'l Symp. and URSI North American Science Meeting, July 13–18, 1997 Montreal, Canada.
3. ***URSI Young Scientist Award 1998***, URSI Electromagnetic Theory Symposium, May 1998, Thessaloniki, Greece.
4. ***Young Scientist Award*** (Barzilai Award), XII Riunione Nazionale di Elettromagnetismo, 28 Set.-1 Oct. 1998, Cetraro, (Cs), Italia.
5. ***Young Scientist Award***-10th MICROCOLL, 21-24 March 1999, Budapest, Hungary.
6. ***Best AP2000 Oral Paper*** on Antennas, ESA-EUREL Millenium Conference on Antennas & Propagation, 9-14 April 2000, Davos.
7. ***Marie Curie International Outgoing Fellowship (IOF)*** – 2007. Project title: ***A****nalysis of* ***L****ow-cost* ***O****riginal* ***H****olographic* ***A****ntenna: Theoretical* ***O****ve****R****v****I****ew,* ***NO****tes,* ***S****tud****Y****,* ***D****esig****N*** *and* ***E****as****Y*** *Implementation* ("ALOHA TORINO-SYDNEY")**.**
8. Australian Research Council-Communication Research Network (ACoRN) ***travel grant*** to attend the European Microwave week 2009 in Rome.
9. ***International collaboration award*** (ICA): Australian Research Council (ARC) Discovery grant (2013-2015). Project ID: DP130102009. *Dual-Band Antennas with Digitally Steerable Beams Made out of Multi-State Electromagnetic Elements*. Total budget: A$ 400.000. International Collaboration Award (ICA) value A$ 4.000.Visiting Academic at Macquarie University, Sydney 1/3/-31/7 2013.
10. ***Micro Media Grant*** - Marie Curie Alumni Association (2014), 250 Euro, for the publication of the paper: L. Matekovits, T. S. Bird "Width-modulated Microstrip-line based Mantle Cloaks for Thin Single- and Multiple Cylinders", *IEEE Trans. Antennas and Propagat.*, Vol. 62, No. 5, pp. 2606 - 2615, May 2014.
11. ***Certificate of Award*** - Marie Curie Fellowship, Brussels, 08/10/2015.
12. ***Associate Editor of the month*** – IEEE ACCESS – Nov. 2015.
13. ***Micro Travel Grant*** - Marie Curie Alumni Association (2017), 400 Euro, to participate at the 2017 IEEE International Symposium on Antennas and Propagation/USNC-URSI National Radio Science Meeting, July 9 - 14, 2017, San Diego, California, U.S.A..
14. ***Kanda Award 2018***: for the most cited paper of the IEEE Transactions on EMC in the past five years.
    "The paper I. Sohail, Y. Ranga, L. Matekovits, K. P. Esselle, S. G. Hay, ``A single-Layer Frequency Selective Surface for Ultra-Wideband Electromagnetic Shielding", *IEEE Trans. Electromagnetic Compatibility*, Vol. 56, No. 6, pp. 1404 - 1411, Dec. 2014 and another one has received the highest citations (51) among all the papers published in the last 5 years (2014-2018)." (e-mail of March 28, 2019 from the EiC of the *IEEE Trans. Electromagnetic Compatibility*)
15. 2019 ARA Medal of Excellence in Science "*for outstanding contribution to electronics and telecommunications*", at the 43rd congress of American Romanian Academy of Arts and Sciences, June 10-13, 2019, Thessaloniki, Greece;
16. Ad Astra Awards for Excellence in Research, 2020 Edition, Dec. 29, 2020. Engineering Sciences. Category: Award for Excellence in Research for researchers with more than 7 years of experience and affiliation abroad. (Premiile Ad Astra pentru excelență în cercetare, ediția 2020, 29 Decemberie 2020). https://ad-astra.ro/2020/12/30/editia-a-patra-a-premiilor-ad-astra-pentru-excelenta-in-cercetare-2/
17. Outstanding Associate Editor Award for the IEEE Antennas and Wireless Propagation Letters (for year 2020). "*For exceptional performance from 1 January to 31 December 2020 as an Associate Editor of the IEEE Antennas and Wireless Propagation Letters*"
18. 2nd Prize of the IEEE Communication Community Turkey Branch, at the 30th IEEE Conference on Signal Processing and Communications Applications (SIU) Congress for the paper: Lida Kouhalvandi, Ladislau Matekovits, "Improvement of the Electromagnetic Performances through Surrogate Modeling and Particle Swarm Optimization of a Frequency Selective Surface", 16 - 18 May 2022, Safranbolu, Turkey.

COMPETITIVE RESEARCH FUNDING: (SELECTION):

1. ***A****nalysis of* ***L****ow-cost* ***O****riginal* ***H****olographic* ***A****ntenna: Theoretical* ***O****ve****R****v****I****ew,* ***NO****tes,* ***S****tud****Y****,* ***D****esig****N*** *and* ***E****as****Y*** *Implementation* ("ALOHA TORINO-SYDNEY")**.** Marie Curie International Outgoing Fellowship (IOF). Role: ***principal investigator***. Period: 1/7/2009-30/6/2011 (outgoing phase 2 years at Macquarie

University, Sydney, Australia) and 1/7/2011-30/6/2012 (reintegration - Politecnico di Torino). Results: 1 patent, 12 journal papers, 46 conference papers (including 4 invited papers and 1 invited talk). Value: 327,000 Euro.

2. *Dual-Band Antennas with Digitally Steerable Beams Made out of Multi-State Electromagnetic Elements*. Australian Research Council (ARC) Discovery grant (2013-2015). Project ID: DP130102009. Proponents: Karu Esselle, Michael Heimlich, Trevor S. Bird, Ladislau Matekovits, Stuart G. Hay. Role: ***partner investigator***. Value: AU$ 400,000.
3. *Innovative planar antennas for THz systems*, Progetti di internazionalizzazione della ricerca-2013, funded by Compagnia di San Paolo and Politecnico di Torino. Investigators: P. Pirinoli, L. Matekovits, M. Orefice, from Polito and Prof. F. Yang, A/Prof. S. Xu, Tsinghua University, Beijing, China. Role: ***researcher***. Duration 12 months. Start: 10/13. Value: 40,000 Euro. Follow-on: 6 months. Value: 10,000 Euro
4. *Compact Composite Cavity Resonator Antennas with Wide Bandwidths*, Australian Research Council (ARC) Discovery grant (2015-2018). Project ID: DP150103242. Proponents: Karu Esselle, Trevor S. Bird, Ladislau Matekovits, Stuart G. Hay, Per-Simon Kildal. Role: ***partner investigator***. AU$ 485,100.
5. *Advanced Non-radiating Architectures Scattering Tenuously and Sustaining Invisible Anapoles* (ANASTASIA), Progetti di internazionalizzazione della ricerca-2017, funded by Compagnia di San Paolo and Politecnico di Torino. Investigators: L. Matekovits, L. Lussardi (Polito) and Alexey Basharin, National University of Science and Technology "MISiS", Moscow, Russia. Role: ***principal investigator***. Duration 12 months. Start: 20/9/17. Value: 50,000 Euro. Follow-on: 5 month. Value: 5,000 Euro.
6. Beam Steering of High-Gain Antennas using Metasurfaces, Australian Research Council (ARC) Discovery grant (2019-2022). Project ID: DP190103352. Investigators: Karu Esselle, J(Yiannis) Vardaxoglou, Stefano Maci, David Bulger, Ladislau Matekovits. Total budget: A$ 570.000. Role: ***partner investigator***. Duration 48 months. Start: 1/1/19.
7. Deployable ANtenna for CubEsats (DANCE): Multidisciplinary research project in the framework of the Alta Scuola Politecnica (www.asp-poli.it/presentation/), jointly funded by the Politecnico di Milano and Politecnico di Torino, the largest and oldest technical universities in Italy. Role: ***Principal academic tutor***. Investigators/partners: Prof. P. Bettini (PoliMi), Argotec, srl.. Value: 10.000 Euro. Duration 16 months: (June 2020 - Sept. 2021). Start: 1/6/20.
8. Surface Modified Alloy Resource of Titan Imbeds with Electromagnetic Structures - (SMARTIES), Exploratory Research Projects - PN-II-P4-ID-PCE-2020-2 (project ID: PCE-2020-0404). Founding agency: The Romanian Executive Agency for Higher Education, Research, Development and Innovation Funding (UEFISCDI). Investigators: Ildiko Peter (project director), Gabriela Strnad, Alexandru Pozdarca, Ladislau Matekovits, Trambitas Cristian, Olah Peter, Jakab-Farkas Làszlò. Role: ***Researcher***. Duration 36 months. Value: 250.000 Euro. Start: 04/01/2021.
9. Dezvoltarea de Metasuprafete Active cu Aplicatii in Domeniul Suprafetelor Selective in Frecventa (Development of Active Metasurfaces with Applications in the field of Frequency Selective Surfaces), Proponents: Andrei Marius Silaghi, Ladislau Matekovits. Role: ***Mentor***. Duration 24 months. Post Doctoral Research Projects - 2021 Call, Project call ID: PN-III-P1-1.1-PD-2021-0010. Project registration code: PN-III-P1-1.1-PD-2021-0010. Value: 250.000,00 RON, (52.083,33 Euro). Start: 1/4/2022.

PUBLICATIONS: A list of (full career) publications is attached as Supplementary material.

Book Chapters:

1. Y. Ranga, Karu P. Esselle, ***L. Matekovits***, "Making UWB Antennas Unidirectional: Phase Coherence, with an Ultra-Wide Band Frequency Selective Surface Reflector," (Ch. 10 in) The World of Applied Electromagnetics: In Appreciation of Magdy Fahmy Iskander, Akhlesh Lakhtakia and Cynthia M. Furse (Editors), Springer, 2017.
2. I. Peter, ***L. Matekovits***, M. Rosso, "Up-to-date knowledge and outlooks for the use of metallic biomaterials" - review paper in Biomaterials in Regenerative Medicine, Editor Leszek A. Dobrzański, InTech, June 2017.
3. G. Labate, L.Matekovits, A. Alù, "Metamaterial and metasurface cloaking: principles and applications", Chap. 10 in Surface Electromagnetics, June 2019. Edited by Fan Yang (Tsinghua University, Beijing), Yahya Rahmat-Samii (University of California, Los Angeles).
4. I. Peter, ***L. Matekovits***, "Biometallic orthopedic implant with printed antenna"', SpringerBook: 48143, 13th EAI International Conference on Body Area Networks, Chapter 34 (5 pages). Sugimoto Chika, Farhadi Hamed, Matti

Hamalainen (Eds.), pp. Pages 393-397, Dec. 2019. ISBN 978-3-030-29896-8 (conference paper published as book chapter).
5. A. De Sabata, ***L. Matekovits***, A. M. Silaghi, "Printed Periodic Structures in Support to 5G Network Antennas", Pages 73-108. Printed Antennas for 5G Networks, Ed. L. Matekovits, B. K. Kanaujia, J. Kishor, S. K. Gupta, Springer Nature Switzerland AG, 2022 https://doi.org/10.1007/978-3-030-87605-0_4.
6. L. Kouhalvandi, ***L. Matekovits***, "Multi-objective Optimization Methods for Passive ad Active Devices in mm-Wave 5G Networks", Pages 337-371. Printed Antennas for 5G Networks, Ed. L. Matekovits, B. K. Kanaujia, J. Kishor, S. K. Gupta, Springer Nature Switzerland AG, 2022, https://doi.org/10.1007/978-3-030-87605-0_12.

Journal papers: 104 published articles in high-rank journals (*IEEE Tran. APS/MTT/EMC* - 15+, *Scientific Reports* - 4, Nature Communications, etc.). The number of **journal** articles published in the last 5 years is as follows: 2017: 11 articles / 2018: 3 articles / 2019: 8 articles, / 2020: 14 / 2021: 7 articles / 2022: 17 articles (till date)

Conference papers: Regularly present at IEEE International Symposium on Antennas and Propagation/USNC-URSI National Radio Science Meeting, European Conference on Antennas and Propagation (EuCAP), International Conference on Electromagnetics in Advanced Applications and other. The number of conference papers for the last 5 years is as follows: 2017: 10 articles / 2018: 15 articles / 2019: 17 articles/ 2020: 10 articles / 2021: 13 articles / 2022: 13 article (till date).

Extended information

COORDINATION OF RESEARCH AND TECHNOLOGY TRANSFER GROUPS AND PROJECTS.

From 2011, I am a Coordinator of a research group at Politecnico di Torino on Metamaterials, a topic introduced by myself, and from 2014, I am tutoring PhD students.

- 1 PhD student in Electronic engineering: start date: a.y. 2014-2015 – including a 2-month visit at Heriot-Watt University, Edinburgh (UK) and a second one of 7-months at the University of Texas at Austin, USA and two month in. The National University of Science and Technology "MISiS", Moscow, Russia. The quality of the research has also been recognized by various grants (travel / waive of conference participation fee, etc.) my PhD student received in the last two years of his doctoral study. He is winner for the "Call for PhD students awards" competition, open to PhD students from Politecnico di Torino. He has been granted with the title of "Dottore di ricerca" on July 28, 2018, with the maximum mark, and laude. Today he is full-time researcher at Wave up – Innovation in electromagnetics, via Roma 77, 53100, Siena, Italy a spin-off of the University of Siena. Thesis title: "A Tri-vial Contrast Theory for Electromagnetic Invisibility: Cloaking and Nonradiating Sources"

- a second PhD candidate, resulted winner in the enrolment process with a general mark of 92/100, has chosen to continue the thesis work on cloaking, under my guidance. In 2017, during the preparation of her Master thesis she spent 3 months in Adelaide University, Australia. The thesis, tutored by the applicant, and co-tutored by Prof. Ch. Fumeaux, has been defended by cum laude. She has already spent a three-week period at ITMO University in St. Petersburg (Russia) and starting Jan. 2020 she performed a 2-month visit at KTH Royal Institute of Technology, a public research university in Stockholm, Sweden. She is winner for the "Call for PhD students awards" competition, open to PhD students from Politecnico di Torino. She has defended her thesis in June 2021. Thesis title: "Analysis and Reduction of the Scattering by Cloaked Metallic Cylinders Beyond the Quasi-static Limit".

- A third PhD candidate, who has finished her study, and defended her PhD degree on Jan. 13, 2020, has performed her activity in cotutelle with Shiraz University, Shiraz, Iran. She joined the group in 2018 with a governmental fellowship, and considering the excellent work she carried out on the use of Graphene in THz regime, the possibility of the joint degree has been considered. She was funded for three months by my personal research funds. The collaboration is continuing after her graduation. Nowadays she is associate researcher in Roma Tre University. Thesis title: "Dynamically Tunable Scattering Manipulation of Dielectric and Conducting Cylinders Using Nanostructured Graphene Metasurfaces".

- A fourth PhD student was working on LoRa WAN based networks for monitoring operation of environmental pollution and meteorological parameters. This study has been carried out in strong collaboration with the Consorzio Interuniversitario Nazionale per la Fisica delle Atmosfere ed Idrosfere, Italy, who fully founded the three year period of the Doctoral studies. He has defended his degree in June 2021. Thesis title: "Monitoring of huge buildings and civil structures using self-powered LoRa wireless sensor networks".

- One PhD student accepted for start the PhD in autumn 2022. Topic: Tunable metasurfaces. Funding: High Education Commission (HEC) Pakistan.

- One PhD student accepted for start the PhD in autumn 2022. Topic: Tunable frequency selective surfaces. Funding: personal research funds.

In the last 10 years, I mentored students for the completion of their MS theses: 7 graduations in 2016, 4 in 2017 and 1 in 2018, 4 in 2019, 5 in 2020, 16 in 2021 and 4 in 2022 (till date). In this moment there are more than 10 students working toward their Master thesis under my guidance. Additionally to the above-mentioned

collaborations, two of these theses were developed in collaboration with Heriot-Watt University, Edinburgh (UK), where two of my students spent a 2-month period, each. Still in 2017 one more thesis has been developed in collaboration with Prof. Takamaro Kikkawa, from Hiroshima University, Japan. In the a.y. 208-19 two of my students have carried out their Master Thesis University of California, Irvine (reference person Prof. Capolino), one in Telecom Italia (Milano), one at Trinity College Dublin, Ireland, one at Technische Universiteit Delft, the Netherlands, and two in collaboration with a university consortium in Italy. Orange (France), University College of Dublin and University of Medicine, Pharmacy, Science and Technology „George Emil Palade" of Târgu Mureș (Romania) are other institutions where my student carried out their Master thesis.
My group also includes post-docs and research associates, positions sponsored on my research funds.

International student exchange has also been strongly encouraged. During the last years, I hosted three visiting PhD student (Iran, China) and one visiting post-doc (Iran): each mobility lasted 6 month and was fully funded by national agencies. I am receiving continuous requests for hosting other researchers. Recently two Visiting researchers have carried out their research activity in my group: one from Department of Electronics and Communication Engineering, Istanbul Technical University, Istanbul, Turkey (now Assistant professor at Dogus Uni., Turkey) and a the second one from Department of Electronics and Communication Engineering, Uttarakhand Technical University, Dehradun, India (now university professor with contract in India).

Some of my Master students have continued their career in research/academy: for example, F. Monticone finished his PhD studies at The University of Texas at Austin, and since January 1, 2017, he is Assistant Professor at the Cornell University (USA). When he was my student, he received a student fellowship to participate at the European Microwave Week.

In the timeframe July 1, 2014, June 30 2018, I was Honorary Fellow at Macquarie University, Sydney, Australia. Such a position also included mentoring Master and PhD students. The efficiency of such activity is clearly demonstrated by the numerous joint publications. Approximately once a year I am receiving one of the students from Macquarie University in my lab for a short research visit. Since 2011 I am also regularly visit (once a year) Macquarie Uni.

Starting 04/2022 I am a mentor in a two-year project funded by the Romanian Executive Agency for Higher Education, Research, Development and Innovation Funding (UEFISCDI). My role is to guide a young researcher on his career development.

Scientific responsibility (Principal Investigator/member) of competitive National and International research projects, awarded through a peer-review process (last10 years).

1. Analysis of Low-cost Original Holographic Antenna: Theoretical OveRvIew, NOtes, StudY, DesigN and EasY Implementation ("ALOHA TORINO-SYDNEY"). Marie Curie International Outgoing Fellowship (IOF). Role: Principal investigator. Period: 1/7/2009-30/6/2011 (outgoing phase 2 years at Macquarie University, Sydney, Australia) and 1/7/2011-30/6/2012 (reintegration - Politecnico di Torino). Results: 1 patent, 12 journal papers, 46 conference papers (including 4 invited papers and 1 invited talk). Value: 327,000 Euro.

(i) Co-investigator with Proff. M. Heimlich and K. P. Esselle on research contracts with US Air Force AOARD: (i) Electrically tunable EBG structure demonstrator for IC-, thick-, or thin-film processing. Project ID: 104040. Period: 2010; (ii) Follow-up 2011; (iii) Follow-up 2012. Total Value: AU$230,000.

2. Electronically Controllable Integrated Millimetre-Wave Devices Formed by Cascading Multi-State Electromagnetic Element. Macquarie University Safety Net Grants (1 year/project). Role: Partner investigator. year 2011- / year 2012.
3. Dual-Band Antennas with Digitally Steerable Beams Made out of Multi-State Electromagnetic Elements. Australian Research Council (ARC) Discovery grant (2013-2015). Project ID: DP130102009. Proponents: Karu Esselle, Michael Heimlich, Trevor S. Bird, Ladislau Matekovits, Stuart G. Hay. Role: Partner investigator. Value: AU$ 400,000.
4. WIreless SEcurity SOlution for Scuba-diving (WISE-SOS): Multidisciplinary research project in the framework of the Alta Scuola Politecnica (www.asp-poli.it/presentation/), Politecnico di Milano (Polimi) şi Politecnico di Torino. Role: Principal academic tutor. Duration 18 months. Value: 11.500 Euro.

5. Innovative planar antennas for THz systems, Progetti di internazionalizzazione della ricerca-2013, funded by Compagnia di San Paolo and Politecnico di Torino. Investigators: P. Pirinoli, L. Matekovits, M. Orefice, from Polito and Prof. F. Yang, A/Prof. S. Xu, Tsinghua University, Beijing, China. Role: Applicant, 2nd investigator. Duration 12 months. Start: 10/13. Value: 40,000 Euro.
    1. Follow-up: 6 months. Value: 10,000 Euro
6. Reti e Sensori integrati per il Controllo Unificato delle Emergenze, (RESCUE), "Sistema regionale innovativo di monitoraggio e gestione dell'emergenza interoperabile col sistema nazionale del Dipartimento di Protezione Civile" e per la formazione dal titolo “Progetto di formazione in Sistemi avanzati per la protezione civile” Role: Group Leader. Duration: 1/7/2015-31/12/2020. Value: 2.070.375 Euro (founded: 238.169,75 Euro Polito, 92.801,84 - research group of L. Matekovits).
7. Compact Composite Cavity Resonator Antennas with Wide Bandwidths, Australian Research Council (ARC) Discovery grant (2015-2018). Project ID: DP150103242. Proponents: Karu Esselle, Trevor S. Bird, Ladislau Matekovits, Stuart G. Hay, Per-Simon Kildal. Rol: Partner investigator. AU$ 485,100.
8. Mobility projects for experienced researchers from diaspora 2016. The Romanian Executive Agency for Higher Education, Research, Development and Innovation Funding (UEFISCDI). Contract-MCD-0019-Aldo De Sabata - PNCDI III, SP 1.1. Total budget: RON 5,000. Role: Experienced researcher from diaspora. Duration 24/10-2/11 2016.
9. Advanced Non-radiating Architectures Scattering Tenuously And Sustaining Invisible Anapoles (ANASTASIA), Progetti di internazionalizzazione della ricerca-2017, funded by Compagnia di San Paolo and Politecnico di Torino. Investigators: L. Matekovits, L. Lussardi from Polito and Prof. Alexey Basharin, National University of Science and Technology “MISiS”, Moscow, Russia. Role: Principal investigator. Duration 12 months. Start: 10/17. Value: 50,000 Euro.
    2. Follow-up: 4 months. Value: 5,000 Euro
10. Mobility projects for experienced researchers from diaspora 2017. The Romanian Executive Agency for Higher Education, Research, Development and Innovation Funding (UEFISCDI). Ladislau Matekovits. Contract-PN-III-P1-1.1-MCD-2017-0051. Total budget: RON 5.000. Role: Experienced researcher from diaspora. Duration 4-14/12/2017.
11. Mobility projects for experienced researchers from diaspora 2018. The Romanian Executive Agency for Higher Education, Research, Development and Innovation Funding (UEFISCDI). Ladislau Matekovits. Contract-PN-III-P1-1.1-MCD-2018-0093. Total budget: RON 5.000. Role: Experienced researcher from diaspora. Duration 3-9/11/2018.
12. Beam Steering of High-Gain Antennas using Metasurfaces, Australian Research Council (ARC) Discovery grant - 2019-2022. Project ID: DP190103352. Investigators: Karu Esselle, J(Yiannis) Vardaxoglou, Stefano Maci, David Bulger, Ladislau Matekovits. Total budget: A$ 570.000. Role: Partner Investigator. Duration 48 months. Start: 1/1/19.
13. Deployable ANtenna for CubEsats (DANCE): Multidisciplinary research project in the framework of the Alta Scuola Politecnica (www.asp-poli.it/presentation/), jointly funded by the Politecnico di Milano and Politecnico di Torino, the largest and oldest technical universities in Italy. Role: Principal academic tutor. Investigators/partners: Prof. P. Bettini (PoliMi), Argotec, srl.. Value: 10.000 Euro. Duration 16 months: (June 2020 - Sept. 2021), Start: 1/6/20.
14. Surface Modified Alloy Resource of Titan Imbeds with Electromagnetic Structures - (SMARTIES), Funding Application for Exploratory Research Projects - PN-II-P4-ID-PCE-2020-2 (project ID: PCE-2020-0404). Founding agency: The Romanian Executive Agency for Higher Education, Research, Development and Innovation Funding (UEFISCDI). Investigators: Ildiko Peter (project director), Gabriela Strnad, Alexandru Pozdarca, Ladislau Matekovits, Trambitas Cristian, Olah Peter, Jakab-Farkas Làszlò. Role: Researcher. Value: 250.000 Euro. Duration 36 months. Start: 04/01/2021.
15. Dezvoltarea de Metasuprafete Active cu Aplicatii in Domeniul Suprafetelor Selective in Frecventa (Development of Active Metasurfaces with Applications in the field of Frequency Selective Surfaces), Proponents: Andrei Marius Silaghi, Ladislau Matekovits. Role: Mentor. Value: 50.000 Euro. Duration 24 months. Post Doctoral Research Projects - 2021 Call, Project call ID: PN-III-P1-1.1-PD-2021-0010. Project registration code: PN-III-P1-1.1-PD-2021-0010. Start: 1/4/2022.

Scientific Responsibility of National and International Research Projects, ruled through Partnership Agreements with Companies and/or Public Private Bodies, which are Leaders in their Own Sector

1. Analisi e misurazioni per la caratterizzazione 3D dei parametri di antenne integrate a satellite, Research contract with ArgoTec S.p.A., 2017. Role: Scientific Responsible;
2. Sviluppo di antenne per test di compatibilitá a radiofrequenza per microsatelliti, e alle attivitá connesse, Consultancy contract with ArgoTec S.p.A., 2019. Role: Scientific Responsible.
3. Ricerca e Sviluppo di tecniche e di sensori innovativi per la caratterizzazione ed il monitoraggio del territorio - STESEM, (2021-2022) Role: Director (Responsabile Scientifico). Duration 12 months. Participation in expenses for research activity by Consorzio Interuniversitario per la Fisica Spaziale.
4. Sviluppo di sensoristica per telerilevamento e monitoraggio ambientale, (2021-2022) - Role: Director (Responsabile Scientifico). Duration 12 months. Participation in expenses for research activity by Consorzio Interuniversitario per la Fisica Spaziale.

Outcomes obtained in the field of technology transfer, in terms of participation in start-ups and spin-offs, development, use and commercialization of patents/licenses.

1. ***L. Matekovits***, G. Vietti Colomé, P. Pirinoli, M. Orefice, Dispositivo con constante dielettrica modulata per la propagazione di onde elettromagnetiche, Nr: RA2006A000064. Data: 3/11/2006.
   1.a) Extension Europe: Device for the propagation of electromagnetic waves with modulated dielectric constant. **Granted:** 02/05/2012, EP1919024 B1.
2. ***L. Matekovits***, M. Orefice, K.P. Esselle, M. C. Heimlich, Metodo di Realizzazione di Una Struttura Accordabile Elettronicamente, e Struttura Accordabile Elettronicamente. Nr: TO2010A000536. Data 22/06/2010. **Granted:** 02/07/2013.
3. G. Dassano, ***L. Matekovits***, M. Orefice, G. Vietti Colomé, An antenna system for transmission and reception of multifrequency wideband signal from and into a tyre Nr: MI2010A000606. Data: 9/04/2010.
   3.a) Extension Europa: ”Tyre sensor device”, Nr: EP20110718306, **Granted:** 22 /01/2014, EP2555930 B1;
   3.b) Extension USA: ”Tyre sensor device”, Nr. 13/639.591, **Granted:** 27/10/2015, US9168795 B2.
4. Sumer Singh Singhwal, Binod Kumar Kanaujia, ***L. Matekovits***, A novel glueless technique to hold a MIMO Dielectric Resonator Antenna onto substrate with additional performance improvement. Ordinary Application, Indian Patent (Filed on 13-07-2021 vide Application no. 202111031330), Pages-6, Claims: 5, Drawings: 5, Abstract:-1, Claims Pages:-1.

NATIONAL AND INTERNATIONAL REPUTATION AND PROFESSIONAL ACTIVITY FOR THE SCIENTIFIC COMMUNITY

Editorship of Journals with international reputation (in the role of Editor in Chief – EIC), editorship of book series, encyclopedias and essays of recognized prestige.

Edited books:

1. L. Matekovits, B. K. Kanaujia, J. Kishor, S. K. Gupta, Printed Antennas for 5G Networks, Springer Nature Switzerland AG (contract signed). doi: 10.1007/978-3-030-87605-0.
   https://www.springer.com/gp/book/9783030876043

2. Antenna Designs for 5G/IoT and Space Applications, Eds. F.Tubbal, L. Matekovits, R. Raad, Pages: 268, Published: October 2022 (This book is a reprint of the Special Issue Antenna Designs for 5G/IoT and Space Applications that was published in Electronics)
   https://www.mdpi.com/books/book/6208-antenna-designs-for-5g-iot-and-space-applications

Editorial activity:

1. IEEE ACCESS: Leading Associate Editor (2014) of a special session entitled “Bio-Compatible Devices and Bio-Electromagnetics for Bio-Medical Applications”, with guest editors from 3 continents.
   For this activity in Nov. 2015, I was awarded with the title of “**Associate Editor of the month**”.

2. IEEE ACCESS: Leading Associate Editor (2017) of a special session entitled “Body Area Networks”, (http://ieeeaccess.ieee.org/special-sections-closed/body-area-networks/), with 5 guest editors (12 papers).

3. MDPI Electronics: Guest Editor of "MDPI Electronics Special Section Editorial: Antenna Designs for 5G/IoT and Space Applications," with F. Tubbal, R. Raad (Wollongong University, Australia) (14 published papers).

4. Two edited conference Proceedings: 10th and 11th EAI International Conference on Body Area Networks.

Participation in the Editorial Board of Journals with international reputation (in the role of Associate Editor or equivalent), participation in the Editorial Board of book series, encyclopedias and essays of recognized prestige.

1. Associate Editor - IEEE ACCESS (2014 – present. second term started in 2017; third term from 2020);
2. Associate Editor - IET Microwaves, Antennas and Propagation (2016 - present);
3. Associate Editor - IEEE Antennas and Wireless Propagation Letters (AWPL) (since 2017);
4. Editorial Board member - Electronic Materials (https://www.mdpi.com/journal/electronicmat/editors)
5. Editor:
   a. Proc. of the 10th EAI International Conference on Body Area Networks (BODYNETS) – 2015 (https://eudl.eu/proceedings/BODYNETS/2015);
   b. Proc. of the 11th EAI International Conference on Body Area Networks (BODYNETS) – 2016 (https://eudl.eu/proceedings/BODYNETS/2016);
6. Meta-reviewer: European Conference on Antennas and Propagation (EuCAP) – since 2017 (role similar to an Associate Editor).

Official research and/or teaching and/or fellowship roles, positions as Scholar/ Visiting Professor in international highly qualified universities and research centres. (Selection)

1. Lecturer in different 2nd level courses at Politecnico di Torino: 2000-present. Electromagnetic Fields I and II, Advanced Antenna Engineering, Guiding electromagnetic systems, etc.;

2. Erasmus teaching mobility (different universities in Romania) - Universitatea Politehnica Timisoara - Romania (from a.y. 2004 to present, interruption for the Marie Curie IOF period), Universitatea Tehnică di Cluj-Napoca - Romania (a.y. 2013-2014, 2017-19), Universitatea Tehnică Gheorghe Asachi din Iaşi - Romania (a.y. 2007-2008), University of California Irvine (a.y. 2018-19) – U.S.A., Peter the Great St. Petersburg Polytechnic University – Russia (a.y. 2018-19); University of Medicine, Pharmacy, Science and Technology of Târgu Mureș (Universitatea de Medicină, Farmacie, Știință și Tehnologie din Târgu Mureș) (a.y. 2019-20);

3. Professor with contract: Aurel Vlaicu University of Arad (Romania): course Electromagnetic Fields and Electromagnetic compatibility: March-April 2005;

4. Lecturer-in-charge for different courses at Politecnico di Torino (from a.y. 2005 to present):
   a. Complementi di Campi Elettromagnetici, (Bachelor)
   b. Radiating Electromagnetic systems, (Master)
   c. Radio Planning, (Master)
   d. Metamaterials: Theory and multiphysics applications (formally: Metamaterials: theory and applications in electromagnetics), 3rd level course

5. Visiting Scientist - Research Institute for High Frequency Physics and Radar Techniques (FGAN-FHR) - now Fraunhofer Institute: 10/2005-12/2005;

6. Marie Curie International Outgoing Fellow (IOF): Macquarie University, Sydney, Australia, July 1, 2009 – June 30, 2011, Politecnico di Torino, from July 1, 2011 to June 30, 2012;

7. Visiting Associate - Macquarie University, Sydney, Australia: from March 3, 2014 to June 16, 2014;

8. Honorary Fellow- Macquarie University, Sydney, Australia: from July 1, 2014 (4-year appointment);

9. Visiting Scientist - Tsinghua University, Beijing, China: from May 12 to July 16 and from Aug. 15 to Sept 1, 2014. Other two weeks in 2015;

10. Visiting scientist - The National University of Science and Technology "MISiS": for a total of 6 month in the 2017-2019 period;

11. Honorary Professor – Permanent, Polytechnic University of Timisoara (Universitatea Politehnica Timisoara), Piața Victoriei 2, Timișoara 300006, Romania (decision no. 179 of 09/07/2020 of the Senate of the University).

Seminars: (selection):

1. The National University of Science and Technology "MISiS", Russia, Nov. 8, 2017: Width modulated microstrip line as innovative structure for enhanced radar cross section reduction;
2. Seminar concerning spectral problems in wave-guides, Politecnico di Torino, Oct. 19, 2015: "Design of 2D, periodic, width-modulated microstrip line configuration for electromagnetic applications";
3. Fudan University, China, Mai 10, 2016: Design and advanced applications of planar and conformal, periodic width-modulated microstrip line configurations;
4. University of Adelaide, Australia, October 1, 2015: Design and advanced applications of planar and conformal, periodic width modulated microstrip line configurations, IEEE seminars (MTT-S, AP-S);
5. AFRL/Lincoln, Laboratory Massachusetts Institute of Technology (Boston), USA, July 9, 2010. Periodic structures in the field of antennas: a challenging subject.

Offices in the Governing bodies of national and international scientific societies.

1. Institute of Electrical and Electronics Engineers (IEEE): Member -1994, Senior Member – 2011-present.
2. European Association on Antennas and Propagation (EurAAP): Member, 2021-present
3. The Applied Computational Electromagnetics Society: ACES: member -2022

Participation in Academies with international reputation in the research field of the candidate.

1. American Romanian Academy of Arts and Sciences (ARA): Member, 2016-present.

Prizes and awards awarded to the candidate for his/her scientific activity and project activity in the Academic Fields, where this is appropriate (full career)

1. TEMPUS JEP 2736-91/1 Scholarship - Electronics Department (Polito), student, 03/1992-07/1992;
2. Student Researcher Award 1997-Raj Mittra Travel Grant. This award partially founds travels and accommodation for participation to 1997 IEEE AP-S Int'l Symp. and URSI North American Science Meeting, July 13–18, 1997 Montreal, Canada;
3. URSI Young Scientist Award 1998, URSI Electromagnetic Theory Symposium, May 1998, Thessaloniki, Greece;
4. Young Scientist Award (Barzilai Award), XII Riunione Nazionale di Elettromagnetismo, 28 Set.-1 Oct. 1998, Cetraro, (Cs), Italia;
5. Young Scientist Award -10th MICROCOLL, 21-24 March 1999, Budapest, Hungary;
6. Best AP2000 Oral Paper on Antennas, ESA-EUREL Millenium Conference on Antennas & Propagation, 9-14 April 2000, Davos;
7. Marie Curie International Outgoing Fellowship (IOF) – 2007. Project title: Analysis of Low-cost Original Holographic Antenna: Theoretical OveRvIew, NOtes, StudY, DesigN and EasY Implementation ("ALOHA TORINO-SYDNEY");
8. Australian Research Council-Communication Research Network (ACoRN) travel grant to attend the European Microwave week 2009 in Rome;
9. IEEE Certificate of Appreciation, November 19, 2010;

10. International collaboration award (ICA): Australian Research Council (ARC) Discovery grant (2013-2015). Project ID: DP130102009. Dual-Band Antennas with Digitally Steerable Beams Made out of Multi-State Electromagnetic Elements. Total budget: A$ 400.000. International Collaboration Award (ICA) value A$ 4.000.Visiting Academic at Macquarie University, Sydney 1/3/-31/7 2013;
11. Micro Media Grant - Marie Curie Alumni Association (2014), 250 Euro, for the publication of the paper: L. Matekovits, T. S. Bird "Width-modulated Microstrip-line based Mantle Cloaks for Thin Single- and Multiple Cylinders", IEEE Trans. Antennas and Propagat., Vol. 62, No. 5, pp. 2606 - 2615, May 2014;
12. Certificate of Award - Marie Curie Fellowship, Brussels, 08/10/2015;
13. Associate Editor of the month – IEEE ACCESS – Nov. 2015;
14. Micro Travel Grant - Marie Curie Alumni Association (2017), 400 Euro, for the participation to the 2017 IEEE International Symposium on Antennas and Propagation/USNC-URSI National Radio Science Meeting, July 9 - 14, 2017, San Diego, California, U.S.A.;
15. ANASTASIA - one of the best research project in NUST MISiS in 2018 – "Architects of ultramodern metamaterials develop theory of invisibility and transparent materials" (see above: Advanced Non-radiating Architectures Scattering Tenuously And Sustaining Invisible Anapoles (ANASTASIA))
16. American Romanian Academy of Arts and Sciences (ARA) – 2019 ARA medal of Excellence in Science – "for outstanding contribution to electronics and telecommunications", at the 43rd ARA congress, June, 10-13, 2019, Thessaloniki, Greece;
17. Motohisa Kanda Award 2019: for the most cited paper of the IEEE Transactions on EMC in the past five years.

    From the mail of the EiC of the IEEE Trans. Electromagnetic Compatibility, of March 28, 2019:

    "The paper I. Sohail, Y. Ranga, L. Matekovits, K. P. Esselle, S. G. Hay, "A single-Layer Frequency Selective Surface for Ultra-Wideband Electromagnetic Shielding", IEEE Trans. Electromagnetic Compatibility, Vol. 56, No. 6, pp. 1404-1411, Dec. 2014 and another one has received the highest citations (51) among all the papers published in the last 5 years (2014-2018)."
18. *Honorary Professor*, Universitatea Politehnica Timisoara, Romania, with the mention "for valuable contributions to the higher education developemen, scientific research and good cooperation with Politehnica University Timisoara", Nov. 5th, 2020.
19. Ad Astra Awards for Excellence in Research, 2020 Edition, Dec. 29, 2020. (Premiile Ad Astra pentru Excelenta in cercetare, editia 2020, 29 Decemberie 2020.). Award for Excellence in Research for researchers with more than 7 years of experience and affiliation abroad.
20. Outstanding Associate Editor Award for the IEEE Antennas and Wireless Propagation Letters (for year 2020). "*For exceptional performance from 1 January to 31 December 2020 as an Associate Editor of the IEEE Antennas and Wireless Propagation Letters*".

Participation in international conferences, as a distinguished invited speaker; participation in the scientific committees of International Conferences (selection).

1. Conference organization: I have been involved in the organization and management of high quality conferences: e.g. Assistant Chair of the European Microwave Conf. 2002 Technical Program Committee and of the European Microwave Week 2002 Local Committee. Publication Chair of the same conference, 23-27 Sept. 2002, Milan, Italy;

4. Member of the judge panel-APMC 2011 Prize at the 2011 Asia-Pacific Microwave Conference (APMC), 5-8 Dec. 2011, Melbourne, Australia;

5. Special track Chair: 10th International Conference on Body Area Networks 28-30 Sept. 2015 Sydney, Australia;

6. General Chair of the 11th International Conference on Body Area Networks (BodyNets16) conference, Torino, Italy;

7. Publicity and Social Media Co-Chair, 13th International Conference on Body Area Networks (BodyNets18) conference, 2 - 3 Oct. 2018 Oulu, Finland;

8. Member of the Technical Program Committees (TPC) of more than 10 conferences, including for example iWAT. Since 2012 I am in the TPC of the International Symposium on Electronics and Telecommunications (ISETC), Timisoara, Romania (conference organized any second year);

9. Meta-Reviewer (equivalent to an Associated Editor in a journal) for the European Conference on Antennas and Propagation (EuCAP), since 2017;

10. Member of the organizing Committee: International Conference on Electromagnetics in Advanced Applications: (2012-present). In the last seven editions, I have co-chaired various sessions organized in collaboration with Prof. K. Esselle;

11. Distinguished invited speaker: L. Matekovits, "On the way to a Contrast Formulation centered Unified Multiphysics Theory for Cloaking", (Plenary talk), The 12th International Symposium on Electronics and Telecommunications 2016, (ISETC 2016), 27 - 28 Oct. 2016 Timisoara, Romania;

12. Invited speaker: "Exploiting graphene tunability in electromagnetic applications", IVth International Conference on Metamaterials and Nanophotonics (METANANO 2019), July 15-19, 2019, St. Petersburg, Russia;

13. Keynote speaker: International Conference Interdisciplinarity in Engineering - INTER-ENG 2019, 3 - 4 October 2019, University of Medicine, Pharmacy, Sciences and Technology of Târgu Mureş, Romania.

14. Plenary talk: Printed Implanted Antennas with Large Bio-metallic Ground Plane″, Proceedings of Recent Advances in Electrical, Electronics, Ubiquitous Communication, and Computational Intelligence (RAEEUCCI-2022), 22 - 24 April, 2022, SRM Insititute of Science and Technology, Kattankulathur, Chennai 603203, Tamilnadu, India.

15. Keynote speech: Width modulated microstrip line: control of media parameters for planar leaky weave antennas and for enhanced RCS reduction, International Conference on Recent Developments in Electronics and Communication Systems, (RDECS-2022), July 22 - 23, 2022, Aditya Engineering College, Surampalem, India-533437.

TEACHING ACTIVITY

For the full list of courses, see attached file with data downloaded from the Politecnico di Torino website (https://didattica.polito.it/pls/portal30/sviluppo.doc.attivita_per_anni?matricola=2837) – in Italian.

Formal responsibility of Bachelor's and Master of Science's degree courses in Italian and/or foreign universities.

1. Lecturer in different 2nd level courses at Politecnico di Torino: 2000-present. Electromagnetic Fields I and II, Advanced Antenna Engineering, Guiding electromagnetic systems, etc.;

2. Erasmus teaching mobility (different universities in Romania) - Universitatea Politehnica Timisoara (from a.y. 2004 to present, interruption for the Marie Curie IOF period), Universitatea Tehnică di Cluj-Nalpoca (a.y. 2013-2014), Universitatea Tehnică Gheorghe Asachi din Iaşi (a.y. 2007-2008);

3. Professor with contract: Aurel Vlaicu University of Arad (Romania): course Electromagnetic Fields and Electromagnetic compatibility: March-April 2005;

4. Lecturer-in-charge for different courses at Politecnico di Torino (from a.y. 2005 to present): Complementi di Campi Elettromagnetici, Radiating Electromagnetic systems, Radio Planning, etc.;

5. Associate Professor for the autumn semester 2021 – Saint Petersburg Polytechnic University (SPbPU), Russia.

Formal responsibility of PhD courses in Italian and/or foreign universities.

1. Lecturer-in-charge of the 3rd level course, Metamaterials: Theory and multiphysics applications (formally: Metamaterials: theory and applications in electromagnetics), held every second year since a.y. 2013-2014 (on-going);

2. Lecturer of the 3rd level course, Tecniche innovative per l'ottimizzazione (in English) a.y. 2013-14 and a.y. 2014-15.

Formal responsibility of Specializing Master's courses and Life Learning courses in Italian and/or foreign universities in PhD courses.

1. Lecturer-in-charge of the Master course, Fields and waves in communications (a.y. 2013-2014). Master in Future Broadband Networks (second level master);
2. Lecturer - PhD school, Universitatea Politehnica Timisoara, Sept. 3, 2014;
3. Lecturer - Summer school, Peter the Great St. Petersburg Polytechnic University, St. Petersburg, Russia, July 15-26, 2019 and July 6-11, 2020 and June 5-16, 2021.

INSTITUTIONAL OFFICES AND ROLES IN ITALIAN AND FOREIGN UNIVERSITIES AND/OR PUBLIC AND PRIVATE INSTITUTIONS WITH SCIENTIFIC AND/OR TECHNOLOGY TRANSFER AIMS

Institutional offices and roles in the Governing bodies (Academic Senate, Board of Governors) of Italian and/or foreign universities.

1. Reference lecturer for the *Master's Degree Course* in Electronic Engineering (Electronic Engineering) since the academic year 2018/19 (Politecnico di Torino). (https://didattica.polito.it/pls/portal30/sviluppo.vis_aiq_2013.visualizza?sducds=37013&tab=0&p_a_acc=2020, https://didattica.polito.it/pls/portal30/sviluppo.vis_aiq_2013.visualizza?sducds=37013&tab=0&p_a_acc=2023);
2. Reference lecturer for the *Master's Degree Course* in Communications and Computer Networks Engineering (Ingegneria Telematica e delle Comunicazioni) for the academic year 2020/21 (Politecnico di Torino). (https://didattica.polito.it/pls/portal30/sviluppo.vis_aiq_2013.visualizza?sducds=37030&tab=0&p_a_acc=2021);
3. Reference professor for the Master's Degree in Electronic engineering for the academic year 2019/20. The position represents one of the requirements for the accreditation of the CdS and may be interviewed by the evaluators during national and international accreditation visits (mail of June 26, 2019, from the Vice Rector for Education, Politecnico di Torino);
4. Non-IEEE Signatory Name for Politecnico di Torino for the
   a. 2020 IEEE-APS Topical Conference on Antennas and Propagation in Wireless Communications (APWC).
   b. 2021 International Conference on Electromagnetics in Advanced Applications (ICEAA) 10-14 Aug. 2021, in Honolulu, HI, USA and of the 2021 IEEE-APS Topical Conference on Antennas and Propagation in Wireless Communications (APWC) 10-14 Aug. 2021, in Honolulu, HI, USA.
   c. 2022 International Conference on Electromagnetics in Advanced Applications (ICEAA), 5-9 Sept. 2022, Cape Town, South Africa, and of the 2022 IEEE-APS Topical Conference on Antennas and Propagation in Wireless Communications (APWC), 5-9 Sept. 2022, Cape Town, South Africa.
   d. 2023 International Conference on Electromagnetics in Advanced Applications (ICEAA), 9-13 Oct. 2023, Venezia, Italy.

Institutional offices in teaching and research structures of Italian and Foreign Universities.

1. Full Member (Membro effettivo) of Collegio di Ingegneria Elettronica, delle Telecomunicazioni e Fisica (ETF) – Politecnico di Torino (2012-present);

2. Invited Member (Membro invitato) of Collegio di Ingegneria Biomedica – Politecnico di Torino - a.y. 2016-2017;

3. Full member of Collegio di Dottorato di ricerca in Ingegneria Elettrica, Elettronica e Delle Comunicazioni – Politecnico di Torino; continuously since 2014 (ciclo 30-38).

4. Honorary Fellow- Macquarie University, Sydney, Australia: from July 1, 2014 to June 30 2018 (4-year appointment);

5. Appointed alternate member of the Examining Commission for the State exams (Esame di Stato) for the qualification to practice the profession of Information Engineer for the sessions of the year 2019 (n. 970 of 21/05/2019 - MIUR).

6. Honorary Professor – Permanent, Polytechnic University of Timisoara (Universitatea Politehnica Timisoara), Piața Victoriei 2, Timișoara 300006, Romania (decision no. 179 of 09/07/2020 of the Senate of the University).

7. Invited professor for the autumn semester 2021 – Saint Petersburg Polytechnic University (SPbPU), Russia.

Management roles in Universities, as part of Faculty duties.

1. Honorary Fellow- Macquarie University, Sydney, Australia: from July 1, 2014, to June 30 2018, (4-year appointment).
2. Responsible of PhD student funds – (for which acting as tutor) Politecnico di Torino.
3. Honorary Professor – Permanent, Polytechnic University of Timisoara (Universitatea Politehnica Timisoara), Piața Victoriei 2, Timișoara 300006, Romania (decision no. 179 of 09/07/2020 of the Senate of the University).
4. "Referent" for Electronics field for Erasmus+ mobility program (partner countries USA) - 2020-to date.

Offices in the Governing bodies, Board of Governors, Scientific Advisory Boards of public and private institutions, with scientific and technology transfer aims.

1. Person in charge from Politecnico di Torino side for the Memorandum of Understanding with the Research Institute for Nanodevice and Bio Systems, Hiroshima University, Higashi-Hiroshima, Japan (start: May 1, 2016, valid for 5 years).

2. Project assessor (selection):
   - The Romanian Executive Agency for Higher Education, Research, Development and Innovation Funding (UEFISCDI);
   - Ministero dell'istruzione, università (Italy): Fondo per gli Investimenti della Ricerca di Base (FIRB), Scientific Independence of young Researchers (SIR);
   - Croatian Science Foundation (2018);
   - National Center of science and Technology Evaluation, Ministry of Education and Science, Republic of Kazakhstan (2020);
   - The Icelandic Research Fund (2022).

3. Evaluator for Academic Promotion at King Abdulaziz University, Saudi Arabia, The University of Technology Sydney, etc.

4. Member of the National Council for the Attestation of University Degrees, Diplomas and Certificates (CNATDCU), Romania, for the term 2020-2024. http://www.cnatdcu.ro/paneluri-cnatdcu/

5. Person in charge from Polito side for Erasmus+ student exchange with the University of California at Irvine (UCI), for the electronic field.

Ladislau Matekovits, (M'94–SM'11) received the degree in electronic engineering from Institutul Politehnic din Bucureşti, Bucureşti, Romania, and the Ph.D. degree (Dottorato di Ricerca) in electronic engineering from Politecnico di Torino, Torino, Italy, in 1992 and 1995, respectively. Since 1995, he has been with the Department of Electronics and Telecommunications, Politecnico di Torino, first with a post-doctoral fellowship, then as a Research Assistant. He joined the same Department as Assistant Professor in 2002 and was appointed as Senior Assistant Professor in 2005 and as Associate Professor in 2014 respectively. In February 2017 he obtained the Full Professor qualification (Italy). In late 2005, he was Visiting Scientist at the Antennas and Scattering Department, FGAN-FHR (now Fraunhofer Institute), Wachtberg, Germany. Beginning July 1, 2009, for two years he has been a Marie Curie Fellow at Macquarie University, Sydney, NSW, Australia, where in 2013 he also held a Visiting Academic position and in 2014 has been appointed as Honorary Fellow. Since 2020 he is Honorary Professor at Polytechnic University of Timisoara, Romania, and Associate of the Italian National Research Council. He has been appointed as Member of the National Council for the Attestation of University Degrees, Diplomas and Certificates (CNATDCU), Romania, for the term 2020-2024.

His main research activities concern numerical analysis of printed antennas and in particular development of new, numerically efficient full-wave techniques to analyse large arrays, and active and passive metamaterials for cloaking applications. Material parameter retrieval of these structures by inverse methods and different optimization techniques has also been considered. In the last years, bio-electromagnetic aspects have also been contemplated, as for example design of implantable antennas or development of nano-antennas for example for drug delivery applications.

He has published 400+ papers, including 110+ journal contributions, and delivered seminars on these topics all around the world: Europe, USA (AFRL/MIT-Boston), Australia, China, Russia, etc.. Prof. Matekovits has been invited to serve as Research Grant Assessor for government funding calls (Romania, Italy, Croatia, Kazakhstan, and Iceland) and as International Expert in PhD thesis evaluation by several Universities from Australia, India, Pakistan, Spain, etc.

Prof. Matekovits has been a recipient of various awards in international conferences, including the 1998 URSI Young Scientist Award (Thessaloniki, Greece), the Barzilai Award 1998 (young Scientist Award, granted every two years by the Italian National Electromagnetic Group), and the Best AP2000 Oral Paper on Antennas, ESA-EUREL Millennium Conference on Antennas and Propagation (Davos, Switzerland). He is recipient of the Motohisa Kanda Award 2018, for the most cited paper of the IEEE Transactions on EMC in the past five years, and more recently he has been awarded with the 2019 American Romanian Academy of Arts and Sciences (ARA) Medal of Excellence in Science and by the Ad Astra Award 2020, Senior researcher, for Excellence in Research.

He has been Assistant Chairman and Publication Chairman of the European Microwave Week 2002 (Milan, Italy), and General Chair of the 11th International Conference on Body Area Networks (BodyNets) 2016. Since 2010 he is member of the organizing committee of the International Conference on Electromagnetics in Advanced Applications (ICEAA) and he is member of the technical program committees of several conferences. He serves as Associated Editor of the IEEE ACCESS, IEEE Antennas and Wireless Propagation Letters and IET MAP and reviewer for different journals.