FACULTY OF HYDROTECHNICAL ENGINEERING



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RESEARCH CENTER FOR MODELING, DESIGNING AND BEHAVIOR MONITORING OF THE HYDROTECHNICAL DEVELOPMENTS

GENERAL PRESENTATION

The center was set up in 2001 and certified by the Romanian Research Authority in Higher Education (CNCSIS certificate no. 99 / CC-C, 11 May 2001 and after that, again in September 2006).

The main research fields of the center lies generally on water engineering, having as subfields:

- Water constructional works
- > Urban and rural sanitation
- ➤ Land reclamation an improvement arrangements.

Certificate

Based on the long experience of the researchers and the existing research infrastructure, the center is able to manage engineering projects in fields connected to water engineering.

MAIN ACTIVITIES

- managing research projects in water engineering
- design and technical assistance in Hydrotechnical structures
- water constructional works
- rivers regulation works
- waterways and harbors
- modern technologies in water engineering
- drinking and industrial water supply network and plants
- waste water treatment plants
- sewage network
- water biology and chemistry
- water quality monitoring
- numerical modeling in surface water and groundwater flow
- numerical modeling of the pollutants transport in groundwater
- land reclamation and improvement, irrigations and drainages
- > rural sustainable development
- soil science studies and erosion controls
- polluted soils rehabilitation
- surveying, cadastre
- waste disposal sites design and monitoring

PROJECTS

RESEARCH TEAM

Man, T. E., A., Constantinescu L., Halbac-Cotoara, Z.R., Beilicci, E., Beilicci, R.

Efficient management of the wet down fields from trans-boundary area (Hungary-Romania)

Contract no.: 38/2008/1/2009 Value: 63.261 RON Beneficiary: ANCS (NATIONAL AUTHORITY FOR RESEARCH)

Divertion of the drainage canal Hcn 953, (R45)

Contract no.: 134/26.11.2009 Value: 4.760 RON

Beneficiary: S.C. CARPATINA-FOREST

S.R.L. TIMIŞOARA

Irrigation arrangement by aspersion in Pecica, Arad County, for an area of 41 hectares

Contract no.: 116/03.11.2009
Value: 2.500 RON
Beneficiary: I.F. HEDEŞAN
Constantin A.T., Lazăr Gh., Man T.E.

River regulation works in pipe drain pipe solution (Crihala River) in Severin city, Mehedinti County

Contract no.: 109/ 21.10.09 Value: 7.655 RON

Beneficiary: SC ALPHA PROPERTY

DEVELOPMENT SRL

RESEARCH TEAM

Eles, G., Doandes, V., Popescu, D.

Complex surveying on Valiug, Timis-Trei Ape, Secu, and Gozna dams necessary for 2009 Report

Contract no.: BC 175/ 28.11.2008 Value: 15.000 RON Beneficiary: TMK RESITA

RESEARCH TEAM

Mirel I., Man E. T., Carabeț A., Stăniloiu C., Florescu C., Podoleanu C., Gherman V., Girbaciu A., Stefănescu C., Olaru I.

Research Institute for renewvable energies (ICER)- Biogas production branch

Contract no.: POS-CCE-A2-02.2.I-2007-1, I-

2007-2

Value: 15.000 €

Beneficiary: ANCS (National Autority for

Research)

RESEARCH TEAM

David, I., Man, T. E., Constantin, T. A., Carabet, A, Sumalan, I., Beiliccii R., Beilicci E., Stefanescu C., Visescu, M.

Study on development strategy and integrated use of the Barzava complex hydtrotechnical arrangements

Contract no.: 19/21.02.2008 Value: 30.000 €

Beneficiary: AC Management-Timisoara

RESEARCH TEAM

David I., Staniloiu, C., Eles G., Stefanescu, C., Iliuta, C.

Research and development in environment protection: Rainwaters and groundwaters in Timisoara city

Contract no.: 34/03.2008, 84/07.2009

Value: 61.800 RON

Beneficiary: Municipal Council Timisoara

RESEARCH TEAM

Bădăluță, M.C., Crețu, Gh., Man, T. E., Burtica G., Carabeț, A., Husaru, G., Alexoiae, L.

Researches regarding monitoring of the pollutant emissives in the environment

Contract no.: 106/2009 Value: 50.000 RON

Beneficiary: SC Linde Gaz România SRL

PUBLICATIONS

BOOKS

- David, I., Sumalan, I., Applied Hydraulics. Experimentally Themes. Second Part, Politehnica Publishing House, 70 pages, ISBN 978-973-625-615-8 (published in Romanian)
- 2. Roman, M., Mirel, I., *Geothermal waters treatment*, Matrix Publishing House, 267 pages, ISBN 978-973-755-4864 (published in Romanian)
- 3. Beilicci, E.B.M., *Ecohidrology. Aplications*, Politehnica Publishing House, 72 pages, ISBN 978-973-625-906-7 (published in Romanian)
- 4. Beilicci, E.B.M., Beilicci, R. F., *Solid runoff in hydrographical basins*, Politehnica Publishing House, 212 pages, ISBN 978-973-625-824-4 (published in Romanian)
- Man, T. E., David, I., Şumălan, I., Nicoară, Ş. V., Beilicci, R. F., Beilicci, E. B. M., 60 years period of hydrotechnical education in Timisoara, Eurobit Publishing House, 167 pages, ISBN 978-973-620-486-9 (published in Romanian)
- Creţu, Gh., Mirel, I., Man, T.E., Carabeţ, A., Sumalan, I., Bădăluţă, M. C., *Integrated water* management, Orizonturi Universitare Publishing House, 370 pages, ISBN 978-973-638-397-7 (published in Romanian)
- 7. Man, T. E., and others, *Prof.dr.eng. MAN TEODOR EUGEN at age of 60 years. Teaching and technical-scientific activity.* Family, Eurobit Publishing House, 187 pages, ISBN 978-973-620-506-4 (published in Romanian)
- 8. Constantinescu , L., Grozav, A., *Soil science-Practice*, Politehnica Timisoara Publishing

- House, 144 pages, ISBN 978-606-554-000-2 (published in Romanian)
- 9. Eles, G., *Topography with numerical applications*, Mirton Publishing House, 262 pages, ISBN 978-973-52-0768-7 (published in Romanian)
- Doandes, V., Popescu, D., Practical guide for lab and topographical practice, Politehnica Timisoara Publishing House, 68 pages, ISBN 978-973-625-959-3 (published in Romanian)

PUBLISHED PAPERS

- 1. Nemeş, N., Costescu, I.A., Pode V., Podoleanu, C., *Determination of the mobile phosphorus fraction in the soil variety taxonomy using ammonium lactate-acetate*, Revista de Chimie Bucureşti, Vol. 60, no. 9, Aug. 2009, pp. 976-979
- Costescu, I. A., Podoleanu C. E., Florescu, C. Hetes, D., Considerations regarding the human activity impact over the underground water resources and the drinking waters in the western part of Romania, Sustainability in Science Engineering (SSE 09) 27-29 May 2009. Timisoara. Romania, **WSEAS** Transactions Environment and on Development, ISSN 1790-2769, ISBN 978-960-474-080-2, pp. 179-184
- 3. Halbac-Cotoara-Zamfir, R., Costescu, I.A., Nemes, N., Sustainable rural development strategy from natural and technological risks, accessibility and population needs maps, Management of Technological Changes, ISBN 978-960-89832-8-1, pp. 89-92
- 4. Halbac-Cotoara-Zamfir, R., *The complex role of land drainage in a sustainable agriculture*, Management of Technological Changes, ISBN 978-960-89832-8-1, pp. 85-88
- 5. Carabeţ, A., Mirel, I., Pode, V., Florescu, C.; Podoleanu,C. E., Crişan, M., Modelling of Depollution Process in a Aquifer Through Injection and Extraction Wells and Treatment of Polluted Water at the Ground Surface, Chemical Abstract RCBUAU, Revista de chimie, Vol. 60, No.4, ISSN 0034-7552, pp. 427-430
- Gavris, G., Burtica, G., Caraban, A., Podoleanu, C. E., Gavris, M., Dem, D., Studies on Copper and Zinc Ions Recovery from Aqueous Solution by Chemical Precipitation, Revista de Chimie, Vol. 60(6), 0034-7752, pp. 611-616.
- 7. Nemes, N., Costescu, I.A., Pode, V., Podoleanu, C.E., Constantin, F., Determination of Mobile Phosphorus Fraction in the Soil Variety Taxonomy using Amonium Lactate- Acetate,

- Revista De Chimie, Vol. 60(6), ISSN 0034-7752, pp. 976-979
- 8. Badaluta Minda, C., Cretu Gheorghe, *The environmental impact assessment caused by the dykes' failure*, Environmental Engineering and Management Journal, ISSN 1582-9596, pp. 417-422
- David I., Analytical solution for design of large free-LNAPL pancake-like lens recovery using a well network, Proceedings of the 11th WSEAS International Conference on Sustainability in Science Engineering (SSE'09), Volume II, 2009, Published by WSEAS Press Vol II, ISSN 1790-2769, ISBN 978-960-474-080-2, pp. 419-422
- Man, E.T., Constantinescu, L., Ienci, I.C., ISO Standards in Force: Needs and Opportunities, ANNALS of FOOD SCIENCE and ECHNOLOGY, ISSN 2065-2828, pp. 564-569
- Man, E.T., Constantinescu, L., Determination of the economically and technically efficient drainage solutions for the main soil types affected by moisture excess in Timis, Arad, Bihor, Maramures and Satu-Mare Counties, ANNALS of FOOD SCIENCE and TECHNOLOGY, ISSN 2065-2828, pp. 570-575
- 12. Hălbac-Cotoară-Zamfir R., Costescu, I.A., Studies and researches regarding soil's humidity excess in Arad County (WESTERN ROMANIA), ANNALS of FOOD SCIENCE and TECHNOLOGY, ISSN 2065- 2828, vol. I, pp. 213-217
- 13. Hălbac-Cotoară-Zamfir R., Costescu I.A., A comparison of the head losses values for Timis County's drainage systems using the results obtained with DrenVSubIr and Espadren programs, ANNALS of FOOD SCIENCE and TECHNOLOGY,vol. I, ISSN 2065-2828, pp. 218-222
- 14. Badaluta Minda C., Cretu Gh., *Accidental Floods in Recent Romania*, ANNALS of FOOD SCIENCE and ECHNOLOGY, vol. 10, Issue 2, ISSN 2065-2828, pp. 510-516
- Carabeţ A., Bădăluţă C., Jurca I., Considerations concerning the risk induced by the floods and inundations in Roşia Montană, ANNALS of FOOD SCIENCE and ECHNOLOGY, vol. 10, Issue 2, ISSN 2065-2828, pp. 517-523
- Mirel, I., Sewerage system in vacuum solution for settlements located in the plain areas, AGIR Bulletin, XIV, no.2-3, 2009, ISSN 1224-7928, pp. 35-37

- 17. Mirel, I., *Water supply and sewerage lab from Faculty of Hydrotechnical Engineering Timisoara*, Hidrotehnica, vol. 54, nr. 8-9, pp. 22-33
- Staniloiu, C., Ştefănescu, C., Girbaciu, A., Trends and Recommendations for Adoption of Purification Technologies for Small Waste Water Treatment Plant, Scientific Bulletin of "Politehnica" University of Timişoara, Romania, Transactions on Hydrotehnics, vol. 54 (68), 2009, No.1, pp.9-12
- 19. Badaluta Minda, C., Cretu, Gh., *Monitoring of the Accidental Floods in Timis Bega System*, Scientific Bulletin of "Politehnica" University of Timişoara, Romania, 2009, Transactions on Hydrotehnics, vol. 54(68), No.1, pp. 13-16
- 20. Stefanescu, C., David, I., Staniloiu, C., *Permeable Pavements*, Scientific Bulletin of "Politehnica" University of Timişoara, Romania, Transactions on Hydrotehnics, vol. 54 (68), 2009, No.1, pp. 17-20
- 21. Ştefănescu, C., *Rainwater Catchment System*, Scientific Bulletin of "Politehnica" University of Timişoara, Romania, 2009, Transactions on Hydrotehnics, vol. 54 (68), No.1, pp. 21-24
- 22. Sumalan, I., *The Rehabilitation of the Old Water Structures in Banat Region, Romania*, Scientific Bulletin of "Politehnica" University of Timişoara, Romania, Transactions on Hydrotehnics, vol. 54(68), No.1, pp. 52-55
- 23. Beilicci, E. Beilicci, R., Forecast models for solid runoff in hydrographic basins, Hidrotehnica, vol. 54, nr. 1-2, pp. 48-56
- 24. Filimon, M.N., Borozan, A.B., Gotia, S.L., Popescu, R., Gherman, V.D., *Testing The Sensitivity of Staphylococcus Aureus Antibiotics*, Analele Universitatii din Oradea, Tom XVI, Nr. 2, 2009, pp. 70-73
- 25. Filimon, M.N., Gotia, S.L., Borozan, A., Popescu, R., Gherman, V. D., *Bacteriological Studies on River Timis with a Role in Evaluating Pollution*, Annals of RSCB, Vol. XIV/2, pp. 284-287
- Beilicci, E., Beilicci, R., Ştefănescu, C., The influence of domain gridding method regarding solid flow evaluation in a hydrographical basin, Scientific Bulletin of "Politehnica" University of Timişoara, Romania, Transactions on Hydrotehnics, vol. 54 (68), 2009, No.2, pp. 13-16
- 27. Podoleanu, C.,E., Contributions on Optimization of Longitudinal Horizontal Settling Tanks Exploitation, Scientific Bulletin of "Politehnica" University of Timişoara,

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- 28. Ştefănescu, C., Beilicci, E., Baliga, D., *The influence of rainfall movement, on runoff hydrograph*, Scientific Bulletin of "Politehnica" University of Timișoara, Romania, Transactions on Hydrotehnics, vol. 54 (68), 2009, No.2, pp. 23-26
- 29. Goloşie L., Man, T. E., Goloşie, M., Sustainable rural development of Rusca Montana and Ruschita communities from Caras-Severin County, Lucrări științifice, Management Agricol, USAMVB Timisoara, Seria I, vol.XI(1), ISSN 1453-1410, pp. 309-316
- 30. Iosip, C.D., Man, T.E., Răduică, R., *Durable development and environment protection*, Lucrări științifice, Management Agricol, USAMVB Timisoara, Seria I, vol.XI(1), ISSN 1453-1410, pp. 399-402
- 31. Iosip, C.D., Man, T.E., Mateoc-Sîrb, N., *Modernization of rural infrastructure through the accesssion of structural funds*, Lucrări științifice, Management Agricol, USAMVB Timisoara, Seria I, vol.XI(1), ISSN 1453-1410, pp. 403-408
- 32. Suiugan, M.C., Andrisca, S.G. Man, E.T., Water monitoring in Crisuri hydrographic space, Scientific Bulletin of the "Politehnica" University of Timisoara, Transaction on Hydrotechnics, vol. 54(68), 2009, No.1, ISSN 1224-6042, pp. 46-52
- 33. Costescu, I. A., Nemeş, N., Presentation of the WEAP model (The Water Evaluation and Planning System). case study: Hydrographic Basin of the River Bega, "Trends in The European Agriculture Development", Research Journal of Agricultural Science, vol. 41, ISSN 2066-1843, pp. 397-402
- 34. Costescu, I. A., Nicoleta, N., Land reclamation arrangements impact in soils evolution for Hydrographic Basin of the Bega River, Research Journal of Agricultural Science, vol. 41, ISSN 2066-1843, pp. 56-60
- 35. Nemeş N., Costescu I. A., Using the phosmod model for the phosphates accesibility modelling in the vegetable crops, Research Journal of Agricultural Science, vol. 41, ISSN 2066-1843, pp. 477-482
- 36. Nemeş, N., Costescu, I. A., Consequences upon the environment determinated by the human activity in Bistra couloir area, Research Journal of Agricultural Science, Vol. 41, vol. 41, ISSN 2066-1843, pp. 167-172

- 37. Lazăr, Gh., Constantin, A.T., Popescu-Busan, I.A., Nicoară, S.V., Stress and strain state modeling a concrete piles wall designed for hillside support, Scientific Bulletin of the "Politehnica" University of Timisoara, Transaction on Hydrotechnics, vol. 54 (68), 2009, No.1, ISSN 1224-6042, pp. 3-8
- 38. Hălbac Cotoară Zamfir, R., *EURURALIS A tool used for the study of EU27 rural areas future*, USAMVB, Management Agricol, Lucrari Stiintifice, Series I, vol. XI(1), 8, ISSN 1453-1410, pp. 277-284
- 39. Hălbac Cotoară Zamfir, R., *Green infrastructure and sustainable rural development*, USAMVB, Management Agricol, Lucrari Stiintifice, Series I, vol. XI(1), ISSN 1453-1410, pp. 285-290
- Hălbac Cotoară Zamfir, R., Designing a drip irrigation system using HydroCalc Irrigation Planning, Research Journal of Agricultural Science, vol. 41(1), ISSN 2066-1843, pp. 420-425
- 41. Hălbac Cotoară Zamfir, R., Results obtained in drainage arrangements design by using DrainSpace application, Research Journal of Agricultural Science, vol. 41(1), ISSN 2066-1843, pp. 426-431
- 42. Constantinescu, L., *Rehabilitation of the polluted soils- Zlatna area*, Research Journal of Agricultural Science, vol.41(2), ISSN 2066-1843, pp. 52-55
- 43. Preluschek, E., Gîrbaciu, C., Gîrbaciu, I. A., *Climate Modification and Some Consequences of These*, Scientific Bulletin of the "Politehnica" University of Timisoara, Transaction on Hydrotechnics, vol. 54 (68), 2009, no.1, ISSN 1224-6042, pp. 25-28
- 44. Nemeş, N., Costescu, I.A., Hălbac Cotoară Zamfir, R., *The Quantitative Prognoses of the Generated Wastes in Timişoara*, Scientific Bulletin of the "Politehnica" University of Timisoara, Transaction on Hydrotechnics, vol. 54(68), 2009, no.1, ISSN 1224-6042, pp. 29-32
- 45. Nemeş, N., Costescu, I.A., Hălbac Cotoară Zamfir, R., *Specific Fluxes of the Wastes in Timis County*, Scientific Bulletin of the "Politehnica" University of Timisoara, Transaction on Hydrotechnics, vol. 54 (68), 2009, no.1, ISSN 1224-6042, pp.33-36
- 46. Nemeş, N., Costescu, I.A., Podoleanu, C., Perspective for the Biogas Uses Like an Alternative Sources of Energy, Scientific Bulletin of the "Politehnica" University of Timisoara, Transaction on Hydrotechnics, vol. 54(68), 2009, no.1, ISSN 1224-6042, pp. 37-40

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- 48. Ene, C., Rogobete, Gh., *Analysis of Forest Fires Causes*, Scientific Bulletin of the "Politehnica" University of Timisoara, Transaction on Hydrotechnics, vol. 54 (68), 2009, No.1, ISSN 1224-6042, pp. 44-45
- Nemes, I., Land Reclamation Works Applied in the Amelioration Perimeter in Territorial Agrarian Fond Otelec-Uivar, Timiş County, Romania, Research Journal of Agricultural Science, vol. 41(2), ISSN 2066-1843, pp. 472-477
- Lazăr, I.Gh., Nicoara, S.V., Constantin, T.A., Popescu Buşan, A., Accidental Overflow Modeling for the Timis River on Section Şag – Grăniceri – Serbian Border, APRIL 11 – MAY 5, 2005, Scientific Bulletin of the "Politehnica" University of Timisoara, Transaction on Hydrotechnics, vol. 54 (68), 2009, No.2, ISSN 1224-6042, pp. 3-12
- 51. Popescu Buşan, A., Popescu-Busan, M.C., Ion, M., Nicoară, S.V., *Rehabilitation of a Nonpermenent Water Reservoir by Changing the High Waters Flow Regime*, Scientific Bulletin of the "Politehnica" University of Timisoara, Transaction on Hydrotechnics, vol. 54(68), 2009, no.2, ISSN 1224-6042, pp. 31-35
- 52. Golosie, L., Aggressiveness of anthropic environmental factors on sustainable development, Scientific Bulletin of the "Politehnica" University of Timisoara, Transaction on Hydrotechnics, Vol. 54 (68), 2009, No.2, ISSN 1224-6042, pp. 43-45
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- University of Reggio Calabria, Technology and Management to Ensure Sustainable Agriculture, Agro Systems, Forestry and Safety, ISBN 978-88-7583-031-2, pp. 1753-1758
- 2. Costescu I. A., Nemes, N., Nemes, I., An Actual View of Acid Soils an their Influence on Physical, Chemical and Biological Properties of Soils in Timiş County, the Western Part of Romania. XXXIII **CIOSTA CIGR** Conference 2009, University Reggio of Calabria, Technology and Management to Ensure Sustainable Agriculture, Agro Systems, Forestry and Safety, ISBN 978-88-7583-031-2, pp. 1685-1690
- 3. Bârliba L. L., Bârliba C., Eleş G., Mazilu M., Cadastral arrangements required for changing the land destination in order to develop a residential area in Timis County, XXXIII CIOSTA CIGR V Conference 2009, University of Reggio Calabria, Technology and Management to Ensure Sustainable Agriculture, Agro Systems, Forestry and Safety, ISBN 978-88-7583-031-2, pp. 613-618
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- 6. Bodog, M., Man, T. E., The establishment of the correlation between the deepness of the phreatic level and the humidity at the soil surface, in the experimental field from the waterworks Oradea, Bihor County, International "Trends Symposium in the European Development", Agriculture USAMVB, Timişoara, 2009, Proceedings of Research Journal of Agricultural Sciences 41, ISSN 2066-1844, pp. 379-384
- Constantinescu, L., Beilicci, E., Beilicci, R., Landfill of Radioactive Waste in Romania, International Scientific Conference, University of Miskolc-Hungary, Micro CAD 2009, ISBN 978-963-661-867-4, pp. 1-4
- **8.** Halbac Cotoara Zamfir, R., *A short monography of drainage arrangements in Romania*, The 33rd Annual Congress of the

- American Romanian Academy of Arts and Sciences (ARA), Proceedings of The 33 rd Annual Congress of the American Romanian Academy of Arts and Sciences, Vol.II, Polytechnic International Press, Montreal, Quebec, 23, 4, ISBN 978-2-553-01433-8
- 9. Cretu, Gh., Badaluta Minda, C., Considerations concerning some concepts in the flow systems management of the catchments, 9th International Multidisciplinary Scientific GeoConference SGEM, Bulgaria, 2009, 9th International Multidisciplinary Scientific GeoConference SGEM, Conference proceedings, ISBN 954918181-2, pp. 183-189
- 10. Bădăluță Minda C., Creţu, Gh., The problems regarding rehabilitation of the Bega Canal, Global Change, Challenge for Soil Management: From Degradation Through Soil and Water Conservation To Sustainable Soil Management, Serbia, 2009, Global Change, Conference proceedings, ISBN 978-86-7299-160-4, pp. T2/7
- 11. Mirel, I., Pentia, D., Olaru, I., Some considerations on the disinfection of water in swimming pools and natatoriums, International Symposium "The Environment and Industry", Bucharest, Volume 1, ISBN 1843-5831, pp. 172-179
- 12. Mirel, I., Olaru, I., Breb, C., Szigyarto, I., Considerations on the treatment of leachate from municipal waste landfills, International Symposium "The Environment and Industry", Bucharest, Volume 1, ISBN 1843-5831, pp. 259-266
- 13. Beilicci, R., Beilicci, E., Constantinescu, L., 3D modelings for confined and unconfined aquifers in landfill, International Scientific Conference MICROCAD, Miskolc, Hungary, 2009, Conference Proceedings Section A Waste disposal, site remediation and risk assessment, ISBN 978-963-661-866-7-0, ISBN 978-963-661-867-4, pp. 5-10
- **14.** Beilicci, E., Beilicci, R., Floods in medium watersheds of mountain regions, 7th International Conference European Water Resources Association EWRA, Lymassol, Cyprus, 2009, Conference Proceedings (CD), ISBN 978-9963-671-94-6, pp. 429-436
- 15. Stefănescu C., David I., Stăniloiu C., Visescu M., Environmental solutions to reduce surface run-off from rainfall in urban areas, The 33 rd Annual Congress of the American Romanian Academy of Arts and Sciences, Sibiu, Romania, 2009, Proceedings of The 33 rd Annual Congress of the American Romanian Academy of Arts and Sciences, Vol.II, Polytechnic

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- 17. Mirel, I., Fabry, G., Peter, A., Staniloiu C., Simon, A., Sewerage system in vacuum solution for study and research, 18th National conference on installations and ambient comfort, Timisoara, 2009, Conference proceedings, ISSN 1842-9491, pp. 346349

PhD THESIS

- 1. Campan, G., Irrigation schemes using the mobile irrigation and sprinkling equipment, Ph.D supervisor: Prof. Dr.Eng. Man Teodor Eugen
- 2. Capotescu, M.C., *Identifing and administration* of the underground facilities of the water supply and sewerage systems. Case study: *Timisoara*, Ph.D supervisor: Prof. Dr.Eng. Jura Cornel
- 3. Marinescu, L., *The calculus of the buried water structures*, Ph.D supervisor: Prof. Dr.Eng. Popa Gheorghe
- 4. Tambota, O., Agricultural and pedological measures for ecological reconstruction of the acid soils in Timis County, Ph.D supervisor: Prof. Dr.Eng. Rogobete Gheorghe
- 5. Panţu, H., *The modernization of Timiş-Bega hydrotechnical system*, Ph.D supervisor: Prof. Dr.Eng. Wehry Andrei
- 6. Pasztai, Z.A., Modern technologies for the execution of landfills. Case study: Oradea City, Ph.D supervisor: Prof. Dr.Eng. Wehry Andrei
- 7. Stroie, L., *Sterile waste stabilization of Banat region*, Ph.D supervisor: Prof.Dr.Eng. Rogobete Gheorghe
- 8. Crisan, M., *Environmental Monitoring Systems*, Ph.D supervisor: Prof. Dr.Eng. David Ioan

PhD STUDENTS

- **1.** Scientific Supervisor: Prof.Dr.Eng. Ioan David, *Hydraulics and Fluid Mechanics*
- ➤ Bakos (Pisleaga), M., The influence of the inhomogeneity on the flow and transport processes in aquifers

- Popescu Busan, A., The environmental impact of the hydraulic structures
- > Chebutiu, A., Management and environment impact rehabilitation of the industrial platform. Case study: Mociur-Reşiţa
- ➤ Ghitescu, A., Comparative analysis of the modeling methods in the rivers hydrodynamic
- ➤ Ieremciuc, M., Evaluation methods of the sanitary protection zones
- ► Iliuta, C., Technical solutions and the management of the rainwater
- Racelescu, R., The optimization of the water distribution and sewerage network
- Rada, M., The impact of the transportation system on the integrated hydrologic
- ➤ Visescu, M., Renewvable energies: The usage of the small deepness geothermal energy
- ➤ Hetes, D., Monitoring and statistical analysis of the remedial measures in constructions and elaboration on this base a new methodology for regional inspectorates
- ➤ Baliga, D.L., (first year PhD Student)
- Novac, I.A., (first year PhD Student)
- **2.** Scientific Supervisor: Prof. Dr. Eng. Gheorghe Cretu, *Water Management*
- ➤ Riti Adrian, Water developments impact upon the ecosystems in mining areas
- ➤ Podaru (Pepa), C.A., Water management quality models on a river
- ➤ Garbaciu, C., Contributions to the optimization of integrated water management systems
- Georgescu, A., Study of qualitative water management in Barzava river hydrographic basin for a clean water
- Damsescu, A., Researches regarding navigation on Danube River in extremely hydrological conditions on Bazias-Bechet section
- ➤ Bala, G., Researches regarding the sediment transport for complex arrangements in hydrographic basins
- Husaru, G., Eutrophication problems of the reservoires
- Aldescu, C. Flood study on Timis River in the concept more space for the river
- Cepeha D., Optimisation of the Timis-Bega water management system
- Alexoaie,L., (first year PhD Student)
- ➤ Phann, O., (first year PhD Student)
- Dumitrascu, M., (first year PhD Student)
- Munteanu, H., (first year PhD Student)
- Vasiloni, T., (first year PhD Student)

- **3.** Scientific Supervisor: Prof. Dr. Eng. Teodor Eugen Man, *Land Reclamation*
- Suiugan, M., Using of GIS in the water management from the hydrographic basin of Bihor county
- Pavel, C., Rehabilitation and modernization solutions of irrigation system Crivina-Vânju Mare
- ► Halbac Cotoara, R., Efficient drainage systems for humidity excess lands
- ➤ Gabor, A., The retehnologization of irrigation system Şagu-Fântânele-Arad
- ➤ Iosip, C. D., Economic reconstruction models and the influence of the financing programs on the sustainable rural development
- > Tentis, M., Hazards and risk in the Crisuri's hydrographic basin
- ➤ Olariu Casauteanu R., The role of the rural space infrastructure in the sustainable development evolution of the Romanian village
- Raduica, R., The management of the wastes in Romania. Case study: Timis county
- ➤ Ienci, C.I., (first year PhD Student)
- ➤ Gherman, G., (first year PhD Student)
- **4.** Scientific Supervisor: Prof.Dr.Eng. Gheorghe Rogobete, *Land Reclamation*
- ➤ Gheteu, M., Solutions for the rehabilitation of the terrain polluted with radioactive substances and heavy metals from Banat
- ➤ Grozav, A., Water and soil pollution phenomena -Case study of a section from hydrographic basin of the river Bârzava
- > Tudor, V., Phenomena of nitrates pollution of soils from the Down Plain of the Bârzava river
- Liuba C., Modern methods of soil erosion monitoring from Timiş County
- Ene, C. Forest fires management
- Bandu, A., Salts migration phenomena in the Timiş-Bega Down Plain
- > Crainic, G. The environmental impact of the closing and ecologic works of the mines in Bihor County
- ➤ Golosie, I. The sociology of disasters and engineering measures to diminishing the impact in mining zones in Banat region. Case study: Rusca Montana
- **5.** Scientific Supervisor: Prof.Dr.Eng. Mirel, I. *Sanitary Engineering*
- ➤ Barabas, K., *Technologies for sludge treatment*
- Moldovan, Gh., Contributions on the laws application in the environment protection
- ➤ Pistrui, I., Human settlements protection and environment legislation

- ➤ Pantea, E., The study of the waste water treatment from food industry
- ➤ Retezan. R., The drawing and exploitation optimization of the sanitation systems
- ➤ Mihart, D., The effects of the natural reservoirs on the environment quality
- Sandru, I,. Optimization of the urban sewerage systems management
- Olaru, I., Considerations regarding collecting transportation and neutralizing the domestic wastes
- Szigyarto, I., The impact of the urban sewerage sytems on environment
- Breb, C., Optimization of the rural sewerage systems
- ➤ Grozavescu, M., Considerations on the quantitative and qualitative changes of the water distribution network. Case study: Timisoara
- ➤ Sabau, E., Optimization of the combined sewerage systems
- **6.** Scientific Supervisor: Prof.Dr.Eng. C. Jura: *Sanitary Engineering*
- Paian, S., Water purification plant for surface water
- **7.** Scientific Supervisor: Prof.Dr.Eng. A. Wehry: *Land Reclamation*
- Stoica V. C., Ecological management solutions for waste products
- > Stoica D. M., The forecast of water quality evolution in Cibin river for the middle and lower basin
- Nuţaş Vancia G., Land reclamation and improvement evolution and efficiency in Timiş county
- ➤ Blaj Buran, C., Mathematic modeling of drainage arrangement efficiency
- Coput, F., Mathematic modeling of irrigation systems
- > Steolea, P., Gravitational irrigation for slope lands, as irrigation methods in relation with pressure
- **8.** Scientific Supervisor: Prof. Dr. Eng. Popa Gh. *Water Structures*
- Matei, F., Stress and strain state determination in the arch shape dams foundations

- > Maries, C., Water flow around a retention structure with low water head
- ➤ Riiosu, J., High waters management
- ➤ Botos, M., Running behavior study for temporary storage dams in case of turning into permanent ones
- ➤ Zaharia, M., The monitoring of the water flow rate for the Mures river on the Arad section
- Orlescu, C., Water tightening accomplishment an hydrotechnical retention and protection works
- ➤ Olaru, G., Contributions on the drawing up and calculus of the sluices
- > Zeiler, E., Optimization of the hydrotechnical schemes in order to evaluate the rivers hydraulic energy through small hydropower plants
- ➤ Bociort, L., Studying the flow rate transit on banked rivers with lateral polders

PERSPECTIVES

- updating the European trends in water engineering and applying them to Romanian realities;
- ensuring technical assistance for the design groups and companies in order to provide water supply projects for small communities
- ➤ a complete inventory of the companies acting in the Romanian west side of the country regarding research demands and in this way to set up new research projects;
- > studies, research and design for rehabilitation of the land reclamation arrangements;
- > enlarging the international cooperation in the field of water engineering researches;
- ➤ further co-operation between our research center and other research centers from Iasi, Bucharest and Constanta Universities in the field of the groundwater management and its protection against pollution;

CONTACT

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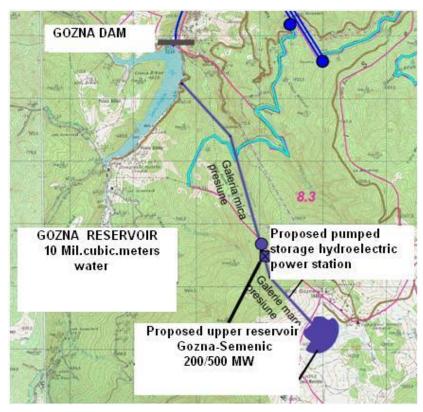
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General plan of a proposed pumped storage hdroelectric power station Gozna-Semenic



Complex surveying on Valiug, Timis-Trei Ape, Secu, and Gozna dams (Banat region) necessary for 2009 Report