

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 and 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

Halbac-Cotoara-Zamfir, R., Costescu, I.A., Dragomir, M. G., **Involvement and Role of Local Authorities in the Increase of Labor Force Occupancy - INTERREG IVC**
Project no. 0637R2 / 2011

Value: 13003 EURO
Beneficiary / Financier: FEDR

RESEARCH TEAM

Beilicci, E., Beilicci, R., David I., Sumalan, I., **Development of knowledge centers for life-long learning by involving of specialists and decision makers in flood risk management using advanced Hydroinformatic tools. LLP-LdV-Tol-2011-RO-002 - LIFELONG LEARNING PROGRAMME, LEONARDO DA VINCI, Transfer of innovation**
Project no. 5BA440F7 / 2011
Value: 330771 EURO
Beneficiary / Financier: EU

RESEARCH TEAM

Dejica-Cartis, D. C., Orlescu M., Dragomir M., Mitroi M., Costescu I. A., Carțis A., **Training courses within the project „Steps to the future – development strategy for the village of Ohaba Lungă”.**
Project no. COD SMIS 12653 / 2011
Value: 35000 LEI
Beneficiary: Ohaba Lunga Town Hall.

RESEARCH TEAM

Dejica-Cartis, D. C., Orlescu M., Dragomir M., Mitroi M., Costescu I. A., Carțis A., **“For future and progress – development strategy for the village of Boldur”.**
Project no. COD SMIS 12465 / 2011
Value: 24000 LEI
Beneficiary: Boldur Town Hall.

RESEARCH TEAM

Dejica-Cartis, D. C., Orlescu M., Dragomir M., Mitroi M., Costescu I. A., Carțis A., **“For a sustainable progress – development strategy for the village of Ghizela”.**
Project no. COD SMIS 12815 / 2011
Value: 24000 LEI
Beneficiary: Ghizela Hall.

RESEARCH TEAM

Man, T. E., Beilicci, R., Nistor, A., **FISHPOND RESERVOIR, Village Luncoiu de Sus, Hunedoara County**
Contract no. 104 /20.10.2011
Value: 6000 LEI
Beneficiary: private person.

RESEARCH TEAM

Crețu, Gh., Man, T. E., Burtica, G., Carabeț, A., Bădăluță Minda, C., Husaru, G., Alexoaie, L.

Research regarding pollutant emissions / imissions for the environment

Contract no. 106 / 2011
Value: 20000 LEI
Beneficiary: SC Linde Gaz România SRL

RESEARCH TEAM

Constantin, A.T., Lazăr, Gh.I., Florescu, C. Nicoara, S.V., Sumalan, I. Girbaci, C., Popescu-Busan, A.I., Ghitescu, M.A., Man, T.E. Beilicci, R.F., Jumanca, R.L., **Technical Design and consultancy performances for developing the Chevereșul Mare Fishpond, Timiș County.**

Contract no. 80/04.07.2011
Value: 68200 LEI
Beneficiary: SC COMPLEX LAC CHEVERS SRL Dumbravita

RESEARCH TEAM

Lazăr, G. I., Constantin, A. T., **Flooding study – Periam Port area on Mureș River, Timis County.**

Contract no. 15/19.01.2011
Value: 9323 LEI
Beneficiary: PROCAD SRL, Timișoara

RESEARCH TEAM

Man, T.E., Beilicci, R. F., Jumanca, R. L. Constantin, T.A., **Flexible self-adjusting apron (geo-membrane) on Aranca draining canal, km. 34+584 in Sânnicolau Mare, Timiș County.**

Contract no. 70/01.06.2011
Value: 12000 LEI
Beneficiary: Sânnicolau Mare Town Hall

RESEARCH TEAM

Doandes, V., Eles, G., Popescu, D., **Site technical view with topographic support for OCPI permit regarding the objectives mentioned by CU 5435/22.12.2010 and CU 1037/17.12.2010.**

Contract no. 44/15.03.2011
Value: 14570 LEI
Beneficiary: Institutul de Studii si Proiectari Hidroenergetice SA, Bucuresti

RESEARCH TEAM

Eles, G., Popescu, D., **Site technical view with topographic support for OCPI permit regarding the objectives mentioned by CU 5435/22.12.2010 and CU 1037/17.12.2010.**

Contract no. 7685/02.06.2011
Value: 6200 LEI
Beneficiary: S.C. Drumuri Municipale Timisoara SA

RESEARCH TEAM

Carabet, A., Florescu, C., Staniloiu, C.

Testing, analysis and technical consultancy performances (code CPV 7160000-4) regarding the specific works "Water purging stations for Constanta South – Mangalia urban area "

Contract no. 1/2011
Value: 63833 LEI
Beneficiary: RAJA CONSTANTA

RESEARCH TEAM

Carabet, A.

Technical expertise regarding File no. 4929/30/2010, Timis Court.

Contract no. 109/2011
Value: 9920 LEI
Beneficiary: SC SMITHFIELD PROCESARE SA, Timisoara

RESEARCH TEAM

Constantin, A.T., Lazăr, Gh.I., **Flooding study – Nadlac town area on Mureș River, Arad County.**

Contract no. 123 / 09.12.2011
Value: 18458 LEI
Beneficiary: SC GEOLINK SRL, Timișoara

PUBLICATIONS**BOOKS**

1. Halbac-Cotoara-Zamfir, R., *Romania's western part (Timis County) facing climatic changes* (English language), LAMBERT Academic Publishing House, 128 pages, ISBN 978-3-8433-7610-5, www.lap-publishing.com
2. Nemeș, I., *Construction technologies for Hydrotechnical and Land Reclamation Developments works* (Romanian language), Mirton Publishing House, Timisoara, 238 pages, ISBN 978-973-52-0942-1, www.mirton.ro
3. Nemeș, I., *Electronically measurements of distances* (Romanian language), Mirton Publishing House, Timisoara, 155 pages, ISBN 978-973-52-1049-6, www.mirton.ro
4. Halbac-Cotoara-Zamfir, R., *Efficiency of drowning-drainage arrangements* (Romanian language), Politehnica Publishing House, Timisoara, 203 pages, ISBN 978-606-554-316-4, <http://www.editurapolitehnica.upt.ro/>
5. Halbac-Cotoara-Zamfir, R., *Hydro-ameliorative works* (Romanian language), Politehnica Publishing House, Timisoara, 262 pages, ISBN 978-606-554-317-1, <http://www.editurapolitehnica.upt.ro/>

6. Costescu, I.A., *Environment protection* (Romanian language), Politehnica Publishing House, Timisoara, 224 pages, ISBN 978-606-554-393-5,
<http://www.editurapolitehnica.upt.ro/>

PUBLISHED PAPERS

1. Constantin, T.A., Lazar, Gh., Ghițescu, M.A., *Inundability study –Periam port area –Mureș River*, Scientific Bulletin of The "Politehnica" University of Timișoara, Romania, Transactions on Hydrotechnics, Tom 56(70), Fasc. 1, 2011, pp.3-10, ISSN 1224-6042
2. Receanu, R.G., Hertig, J.A., Fallot, J.M, Man, T.E., *Determination of extreme floods using a distributed hydrological model*, Scientific Bulletin of The "Politehnica" University of Timișoara, Romania, Transactions on Hydrotechnics, Tom 56(70), Fasc. 1, 2011, pp.33-36, ISSN 1224-6042
3. Vlaicu, I., Man, T.E., *The Extension and Modernisation of the Water and Sewerage Systems in the Timiș County*, Scientific Bulletin of The "Politehnica" University of Timișoara, Romania, Transactions on Hydrotechnics, Tom 56(70), Fasc. 1, 2011, pp.37-40, ISSN 1224-6042
4. Man, T.E., Tamas, M., Stana, O., *Socio-economic analysis of Anina locality. Proposals of measures for sustainable development*, Scientific Bulletin of The "Politehnica" University of Timișoara, Romania, Transactions on Hydrotechnics, Tom 56(70), Fasc. 1, 2011, pp.41-48, ISSN 1224-6042
5. Costescu, I.A., Hălbac Cotoară Z.R., *Measures taken to reach the "Climatic changes and clean energy" objective from the National Strategy of Sustainable Development, in Region V West Romania*, Scientific Bulletin of The "Politehnica" University of Timișoara, Romania, Transactions on Hydrotechnics, Tom 56(70), Fasc. 1, 2011, pp.49-54, ISSN 1224-6042
6. Constantinescu, L., *Air Pollution*, Scientific Bulletin of The "Politehnica" University of Timișoara, Romania, Transactions on Hydrotechnics, Tom 56(70), Fasc. 1, 2011, pp.55-58, ISSN 1224-6042
7. Constantinescu, L., *Urban Greening and Life Quality*, Scientific Bulletin of The "Politehnica" University of Timișoara, Romania, Transactions on Hydrotechnics, Tom 56(70), Fasc. 1, 2011, pp.63-66, ISSN 1224-6042
8. Podoleanu, C.E., Bordeasu, I., Barglazan, M., *Improving the reliability of a guide vane actuating mechanism for bulb –type units*, Scientific Bulletin of The "Politehnica" University of Timișoara, Romania, Transactions on Hydrotechnics, Tom 56(70), Fasc. 1, 2011, pp.67-72, ISSN 1224-6042
9. Baliga, D.L., *Impact of crops on groundwater remediation*, Scientific Bulletin of The "Politehnica" University of Timișoara, Romania, Transactions on Hydrotechnics, Tom 56(70), Fasc. 1, 2011, pp.73-76, ISSN 1224-6042
10. Barliba, L., Popescu, C., Eles, G., Barliba C., *Setting out the basic network to achieve the water supply network from a rural settlement of the west side of Romania*, XXXIV CIOSTA CIGR V CONFERENCE, EFFICIENT AND SAFE PRODUCTION PROCESSES IN SUSTAINABLE AGRICULTURE AND FORESTRY, VIENNA, pp.542-543, ISSN 978-3-200-02204-1,
<http://www.nas.boku.ac.at/ciosta2011.html>Man , T.E., Mutascu, G., *Rehabilitation of Drainage Multipurpose Arrangement and Soil Erosion Control Greoni-Ticvani, Caras-Severin County*, Scientific Bulletin of The "Politehnica" University of Timișoara, Romania, Transactions on Hydrotechnics, Tom 56(70), Fasc. 1, 2011, pp.77-82, ISSN 1224-6042
11. Nemeș, I., *Evolution of cadastral register in Banat*, Scientific Bulletin of The "Politehnica" University of Timișoara, Romania, Transactions on Hydrotechnics, Tom 56(70), Fasc. 1, 2011, pp.83-86, ISSN 1224-6042
12. Nemeș, I., Constantinescu, L., *Gully Erosion Effect from Torrential Basins*, Scientific Bulletin of The "Politehnica" University of Timișoara, Romania, Transactions on Hydrotechnics, Tom 56(70), Fasc. 1, 2011, pp.87-90, ISSN 1224-6042
13. Mirel, I., Carabeț, A., Patrick, M., Florescu, C., Stăniloiu, C., Gîrbaciu, A., *Self-Degradation of Water Quality in Distribution Networks on the Environment*, Scientific Bulletin of The "Politehnica" University of Timișoara, Romania, Transactions on Hydrotechnics, Tom 56(70), Fasc. 1, 2011, pp.91-96, ISSN 1224-6042

14. Bociort, L., Popa Gh., *A Mathematical Approach to Solve River Flooding Problems*, Scientific Bulletin of The "Politehnica" University of Timișoara, Romania, Transactions on Hydrotechnics, Tom 56(70), Fasc. 1, 2011, pp.97-100, ISSN 1224-6042
15. Lazar, I. Gh., Constantin, T.A., Nicoara S.V., Popescu-Busan, A.I., Ghițescu, M.A., *Water Flow Analysis at Mintia Dam on Mures River in Case of Endowing the Retaining Structure With a Small Hydropower Station*, Scientific Bulletin of The "Politehnica" University of Timișoara, Romania, Transactions on Hydrotechnics, Tom 56(70), Fasc. 2, 2011, pp.3-10, ISSN 1224-6042
16. Girbaci, I.A., Girbaci, C., Panfil, C., *Containerized water treatment plant for contaminated water and oi*, Scientific Bulletin of The "Politehnica" University of Timișoara, Romania, Transactions on Hydrotechnics, Tom 56(70), Fasc. 2, 2011, pp.15-18, ISSN 1224-6042
17. Stăniloiu, C., Borbely, B., Murariu, M., *Small waste water treatment plants, technologies, operation and performances*, Scientific Bulletin of The "Politehnica" University of Timișoara, Romania, Transactions on Hydrotechnics, Tom 56(70), Fasc. 2, 2011, pp.19-22, ISSN 1224-6042
18. Hetes, D., David, I., Badea, C., Podoleanu, C. E., *Some Environment Aspects Regarding the Fly Ash Dump Monitoring*, Scientific Bulletin of The "Politehnica" University of Timișoara, Romania, Transactions on Hydrotechnics, Tom 56(70), Fasc. 2, 2011, pp.23-26, ISSN 1224-6042
19. Girbaci, I.A., Girbaci, C., Bakos ,M., *Criteria for stability in numerical methods*, Scientific Bulletin of The "Politehnica" University of Timișoara, Romania, Transactions on Hydrotechnics, Tom 56(70), Fasc. 2, 2011, pp.27-30, ISSN 1224-6042
20. Panfil, C., Mirel, I., Girbaci, I.A., *Alternatives for collecting waste water from population centers located in low land areas*, Scientific Bulletin of The "Politehnica" University of Timișoara, Romania, Transactions on Hydrotechnics, Tom 56(70), Fasc. 2, 2011, pp.31-38, ISSN 1224-6042
21. Gherman, G., Man, T.E., Gherman, V.D., *SWOT analysis of Sasca Montana commune*, Scientific Bulletin of The "Politehnica" University of Timișoara, Romania, Transactions on Hydrotechnics, Tom 56(70), Fasc. 2, 2011, pp.39-42, ISSN 1224-6042
22. Rusu, R.M., *Evapotranspiration in urban water balance*, Scientific Bulletin of The "Politehnica" University of Timișoara, Romania, Transactions on Hydrotechnics, Tom 56(70), Fasc. 2, 2011, pp.43-46, ISSN 1224-6042
23. Constantinescu, L., Grozav A., Rogobete Gh., *Estimating water movement from salt movement*, Scientific Bulletin of The "Politehnica" University of Timișoara, Romania, Transactions on Hydrotechnics, Tom 56(70), Fasc. 2, 2011, pp.47-50, ISSN 1224-6042
24. Rogobete Gh., Grozav A., *Movement of water through the soil-plant-atmosphere system*, Scientific Bulletin of The "Politehnica" University of Timișoara, Romania, Transactions on Hydrotechnics, Tom 56(70), Fasc. 2, 2011, pp.51-54, ISSN 1224-6042
25. Boboescu ,I. Z., Mirel I., Gherman V.D., *Some considerations on fermentative biohydrogen production*, Scientific Bulletin of The "Politehnica" University of Timișoara, Romania, Transactions on Hydrotechnics, Tom 56(70), Fasc. 2, 2011, pp.55-60, ISSN 1224-6042
26. Goloșie, L., *Rock's instability after mining activity*, Scientific Bulletin of The "Politehnica" University of Timișoara, Romania, Transactions on Hydrotechnics, Tom 56(70), Fasc. 2, 2011, pp.61-66, ISSN 1224-6042
27. Nemes, I., Constantinescu L., *Climatic moisture deficit in the period 1998-2011 in climatic conditions of the Banat Plain*, Scientific Bulletin of The "Politehnica" University of Timișoara, Romania, Transactions on Hydrotechnics, Tom 56(70), Fasc. 2, 2011, pp.67-70, ISSN 1224-6042
28. Constantinescu, L., Nemeș I., *Soils subsidence computation in "Banatului" plain drainage systems*, Scientific Bulletin of The "Politehnica" University of Timișoara, Romania, Transactions on Hydrotechnics, Tom 56(70), Fasc. 2, 2011, pp.79-82, ISSN 1224-6042
29. Balaj, I. C., *Use of solar energy in the field of improved land, draining and irrigation systems*, Scientific Bulletin of The "Politehnica" University of Timișoara,

- Romania, Transactions on Hydrotechnics, Tom 56(70), Fasc. 2, 2011, pp.93-98, ISSN 1224-6042
30. Sumalan, I., *Considerations about the drawing of the open channels*, Scientific Bulletin of The "Politehnica" University of Timișoara, Romania, Transactions on Hydrotechnics, Tom 56(70), Fasc. 2, 2011, pp.99-102, ISSN 1224-6042
 31. Halbac-Cotoara-Zamfir,R., Costescu, I.A., *Calculation of distance between drains in controlled regime*, Research Journal of Agricultural Science, Vol. 42, pp.154-6, ISSN 2066-1843
 32. Beilicci, E., Beilicci, R. Gîrbaciu, C., *Study of Soil Erosion and Sediment Transport in Small Watersheds*, Recent Researches in Environment, Energy Planning and Pollution RES'11, EPESE'11, WWAF'11, Vol I, pp. 18-25, ISBN 978-1-61804-012-1
 33. Rogobete, G., Grozav, A., Tarau, D., *Solute transport, swelling and shrinking in salt-affected soils*, Research Journal of Agricultural Science, Vol. 43(3)1-529, pp.166-173, ISSN 2066-1843
 34. Rogobete, G., Grozav A., *Methods for assesment of soil erosion*, Research Journal of Agricultural Science, Vol. 43(3)1-529, pp.174-179, ISSN 2066-1843
 35. David, I., Visescu, M., *Analytical solution for estimating the influence of a pre-existing ground water flow on a geothermal heat production-injection well system*, International Review of Applied Sciences and Engineering, Vol. 2, No. 1, 2011, pp.13-17, ISBN 1585-1923 (Print), ISBN 1588-2519 (Online)
 36. Bârliba, L., Bârliba,C., Eleș, G., *Model for making of a geographic information system for the territorial area of locality Uivar, Timis county*,Analele Universității din Craiova, vol. XVI (LII), Biologie, Horticultură, Tehnologia prelucrării produselor agricole, Ingineria mediului, vol. XVI (LII), pp.39-44, ISSN 1453-1275
 37. Bârliba, L., Bârliba,C., Eleș, G., *Topocadastral works in order to determine and identify the surface of an agricultural area in Seitin, Arad county*, Analele Universității din Craiova, vol. XVI (LII), Biologie, Horticultură, Tehnologia prelucrării produselor agricole, Ingineria mediului, vol. XVI (LII), pp.45-48, ISSN 1453-1275
 38. Lazar Gh., Constantin A.T., Nicoara S.V., Popescu-Busan A.I., *Model of the accidental outflow on Timis river, sector Șag – Grâniceri –Serbian border, occured between april 11th – may 5th, 2005*, Hidrotehnica, vol. 56, No.1-2, 2011, pp.27-38, ISSN 0439-0962
 39. Mirel. I, Boboescu I.Z., Damian C., Bone S.T., *Bioenergetical energies for advanced water treatment*, ROM AQUA, No.1, vol. 73, XVII, pp.14-19, ISSN 1453-6986
 40. Nemes, I., Constantinescu, L., *Gully Erosion Effect on the Environment*, PRECISION AGRICULTURE, Haitca, Skiatos Greece, 6 pages on CD, ISSN 1385-2256, <http://2011.haicta.gr/>
 41. Nemes, I., Constantinescu, L., *Evolution of real estate advertising in Romania*, PRECISION AGRICULTURE, Haitca, Skiatos Greece, 6 pages on CD, ISSN 1385-2256, <http://2011.haicta.gr/>
 42. Receanu, R.,G. Hertig J.-A., Man, T. E., *A fine scale distributed hydrological model for the analysis of extreme flood events*, Environmental Engineering and Management Journal, 18 pages, ISSN 1582-9596, <http://omicron.ch.tuiasi.ro/EEMJ/issues/vol10/vol10no12.htm>
 43. Carabeț, A., Mirel, I., Florescu, C., Stăniloiu C., Gîrbaciu, A., Olaru, I., *Drinking water quality in water-supply networks*, Environmental Engineering and Management Journal, Vol.10, No. 11, pp.1599-1606, ISSN 1659-1665, <http://omicron.ch.tuiasi.ro/EEMJ/>
- CONFERENCE PAPERS**
1. Halbac-Cotoara-Zamfir,R., Costescu, I. A., Nemes, I., *The role of technological changes in urban regeneration and resilience improvement*, 8th International Conference in Management of Technological Changes, Alexandroupolis, Greece, 6 pages on CD, ISSN 1384-2257, www.cetex.tuiasi.ro/mtc2011/
 2. Halbac-Cotoara-Zamfir, R., Costescu, I. A., Nemes, I., *The management of technological changes role in increasing employment rate*, 8th International Conference in Management of Technological Changes, Alexandroupolis, Greece, 6 pages on CD, ISSN 1384-2257, www.cetex.tuiasi.ro/mtc2011/

3. Halbac-Cotoara-Zamfir, R., *Efficient methods for land drainage design using computerized non steady-state methods*, 39th International Symposium on Agricultural Engineering, Actual Tasks on Agricultural Engineering, Zagreb, Opatija, Croatia, pp.281-286, ISSN 1333-2651, www.atae.agr.hr
4. Halbac-Cotoara-Zamfir, R., *Different software for agriculture water management in Romania*, 39th International Symposium on Agricultural Engineering, Actual Tasks on Agricultural Engineering, Zagreb, Opatija, Croatia, pp. 289-296, ISSN 1333-2651, www.atae.agr.hr
5. Nemes, I., Constantinescu, L., *Solutions for rehabilitation of polluted areas by mining activities in Banat Region, Romania*, XXXIV CIOSTA CIGR V CONFERENCE, EFFICIENT AND SAFE PRODUCTION PROCESSES IN SUSTAINABLE AGRICULTURE AND FORESTRY, VIENNA, pp. 211-214, ISSN 978-3-200-02204-1, <http://www.nas.boku.ac.at/ciosta2011.html>
6. Halbac-Cotoara-Zamfir, R., Costescu, I. A., *The analysis of water-table variation using GDZ RoDrain application for some areas affected by humidity excess from western Romania*, XXXIV CIOSTA CIGR V CONFERENCE, EFFICIENT AND SAFE PRODUCTION PROCESSES IN SUSTAINABLE AGRICULTURE AND FORESTRY, VIENNA, pp.61-64, ISSN 978-3-200-02204-1, <http://www.nas.boku.ac.at/ciosta2011.html>
7. Halbac-Cotoara-Zamfir, R., Costescu, I. A., *Is Romania prepared for climatic changes from land reclamation and improvement arrangements point of view?*, XXXIV CIOSTA CIGR V CONFERENCE, EFFICIENT AND SAFE PRODUCTION PROCESSES IN SUSTAINABLE AGRICULTURE AND FORESTRY, VIENNA, pp.65-68, ISSN 978-3-200-02204-1, <http://www.nas.boku.ac.at/ciosta2011.html>
8. Barliba, L., Popescu, C., Eles, G., Barliba C., *Setting out the basic network to achieve the water supply network from a rural settlement of the west side of Romania*, XXXIV CIOSTA CIGR V CONFERENCE, EFFICIENT AND SAFE PRODUCTION PROCESSES IN SUSTAINABLE AGRICULTURE AND FORESTRY, VIENNA, pp.542-543, SSN 978-3-200-02204-1, <http://www.nas.boku.ac.at/ciosta2011.html>
9. Barliba L., Popescu C., Eles G., Barliba C., *Achieving a landscape for the rearrangement of a parcel situated on a river bank from the west side of Romania*, XXXIV CIOSTA CIGR V CONFERENCE, EFFICIENT AND SAFE PRODUCTION PROCESSES IN SUSTAINABLE AGRICULTURE AND FORESTRY, VIENNA, pp.541-542,ISSN 978-3-200-02204-1, <http://www.nas.boku.ac.at/ciosta2011.html>
10. Vaduva R., *Landscape sensitivity in Rânca touristic area in the context of sustainable development*, The 35th Annual congress of the American-Romanian Academy of Arts and Sciences (ARA 35) „Science and Art in the Informatics Era”, Timișoara, România, Julie 2011, 3 , ISSN 978-1-935924-02-9, 978-606-554-300-3, <http://ara.mec.upt.ro/>
11. Hălăbac Cotoară Zamfir R., Costescu I. A., *The analysis of water-table variation using GDZ RoDrain application for some areas affected by humidity excess from western Romania*,XXXIV CIOSTA CIGR V Conference 2011” Efficient and safe production processes in sustainable agriculture and forestry”, pp.274-275, ISBN 978-3-200-02204-1
12. Hălăbac Cotoară Zamfir R., Costescu I. A., *Opinions and researches about the possibility of applying controlled drainage in western Romania*,XXXIV CIOSTA CIGR V Conference 2011” Efficient and safe production processes in sustainable agriculture and forestry”, pp.599-600, ISBN 978-3-200-02204-2
13. Retezan, R., Mirel, I., *Methods for ensuring the water to consumers – quantities requirements*, International Conference on Building Services and Ambient Comfort, pp.34-43, ISSN 1842-9491
14. Mirel, I., Pentia, D., Olaru, I., *Water quality in swimming pools*, International Conference on Building Services and Ambient Comfort, pp. 95-106, ISSN 1842-9491
15. Stefanescu, C., David, I., Man ,T.E., *Parking places arrangement based on the principle of minimum impact upon storm water running*, „The road and environment" Conference, Timisoara, April, page no.29, pp.29-36, ISSN 2248-3454
16. Retezan, A., Man ,T.E, Dimitriu, M., Pandelea, Gh., Avramescu, C., Nani, V., Vertan Gh., *The study of ambient comfort in education*

buildings based on subjective and objective approaches, The 46th national conference on plumbing – Installations for the third millennium; Increase of energetic performance, 19-21 October, SINAIA, pp.411-420, ISSN 978-973-755-755-1, <http://www.siear.ro/46cni2011.php>

PhD THESIS

1. Grozav, A., *Water and soil pollution phenomena -Case study of a section from hydrographic basin of the river Bârzava*, Ph.D Supervisor: Prof. Dr.Eng. Gheorghe Rogobete
2. Bakos (Pisleaga), M., *The influence of the inhomogeneity on the flow and transport processes in aquifers*, Ph.D Supervisor: Prof. Dr.Eng. David Ioan
3. Olaru, I., *Considerations regarding collecting transportation and neutralizing the domestic wastes*, Ph.D Supervisor: Prof. Dr.Eng. Mirel Ion
4. Receanu, R., *Hydrological modeling of the wet zones as infrastructure for sustainable rural development*, Ph.D Supervisor: Prof. Dr.Eng. Man Teodor Eugen
5. Visescu, M., *The impact of shallow geothermal exploitation systems on the underground thermal regime*, Ph.D Supervisor: Prof. Dr.Eng. David Ioan

PhD STUDENTS

1. Scientific Supervisor: Prof.Dr.Eng. Ioan David, *Hydraulics and Fluid Mechanics*
 - Hetes, D., *Monitoring and statistical analysis of the remedial measures in constructions and elaboration on this base a new methodology for regional inspectorates*
 - Iliuta, C., *Technical solutions and the management of the rainwater*
 - Ieremciuc, M., *Evaluation methods of the sanitary protection zones*
 - Racelescu, R., *The optimization of the water distribution and sewerage network*
 - Rada, M., *The impact of the transportation infrastructure on the integrated hydrologic cycle*
 - Baliga, D., *The study of the aquifers pollution reducing by the integration of the natural attenuation processes*
 - Vaduva, R., *Performing of the risks maps associated floods by GIS*

2. Scientific Supervisor: Prof.Dr.Eng. Gheorghe Cretu, *Water Management*
 - Podaru (Pepa), C.A., *Water management quality models on a river*
 - Riti, A., *Water developments impact upon the ecosystems in mining areas*
 - Georgescu, A., *Study of qualitative water management in Barzava river hydrographic basin for the concept “ clean water”*
 - Alexoaie, L., *Study regarding the wet lands integration in the flood management*
 - Phann, O., *Study of the emissive gases capture and their impact upon surface waters*
 - Munteanu, H., *Studies on self purification processes on Bega hydrographic basin*
 - Rusu, R., *(first year PhD Student)*
 - Codea, D., *(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*
 - Gabor, A., *The retehnologization of irrigation system Şagu-Fântânele-Arad*
 - Raduica, R., *The management of the wastes in Romania. Case study: Timis county*
 - Stana, O., *Sustainable development of a Periam locality. Timis County*
 - Gherman, G., *Actual and future aspects regarding the sustainable development of the Sasca-Montana. Caras Severin County*
 - Blaj (Buran), C., *Mathematic modeling of drainage arrangement efficiency*
 - Coput, F., *Mathematic modeling of irrigation systems efficiency*
 - Tămaş, M.T., *Sustainable development of the Anina City*
 - Balaj, I.C., *(first year PhD Student)*
 - Molnar, P., *(first year PhD Student)*
 - Jumanca, R., *(first year PhD Student)*
4. Scientific Supervisor: Prof.Dr.Eng. Gheorghe Rogobete, *Land Reclamation*
 - Ene, C. *Forest fires management*
 - Bandu, A., *Salts migration phenomena in the Timiş-Bega Down Plain*
 - Crainic, G. *The study of flow rate along the rivers with lateral reservoirs*

- Golosie, L., *Socializing disasters and engineering methods to diminish the impact in the mining zones in Banat*

Scientific Supervisor: Prof.Dr.Eng. Mirel, I.
Sanitary Engineering

- Panfil, C., *The study of alternate sewage systems*
- Isacu, M.D., *Study of the sewerage systems maintenance and their impact on environment*
- Pistrui, I., *Human settlements protection and environment legislation*
- Moldovan, Gh., *Contributions on the laws application in the environment protection*
- Szigyarto, I., *The impact of the urban sewerage systems on environment*
- Breb, C., *Optimization of the rural sewerage systems*
- Boboiescu, I., *Study of the biological processes in the purification technologies*
- Bone, T., *Biological technologies for waste waters purification*

6. Scientific Supervisor: Prof. Dr. Eng. Popa
Gheorghe, *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 dams storage in case of turning into permanent ones*
- Orlescu, C., *Water tightening accomplishment an hydrotechnical retention and protection works*

- Bociort, L., *Studying the flow rate transit on banked rivers with lateral polders*
- Schipor, F., *Optimization of the waste waters purification plants of small and medium size*

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

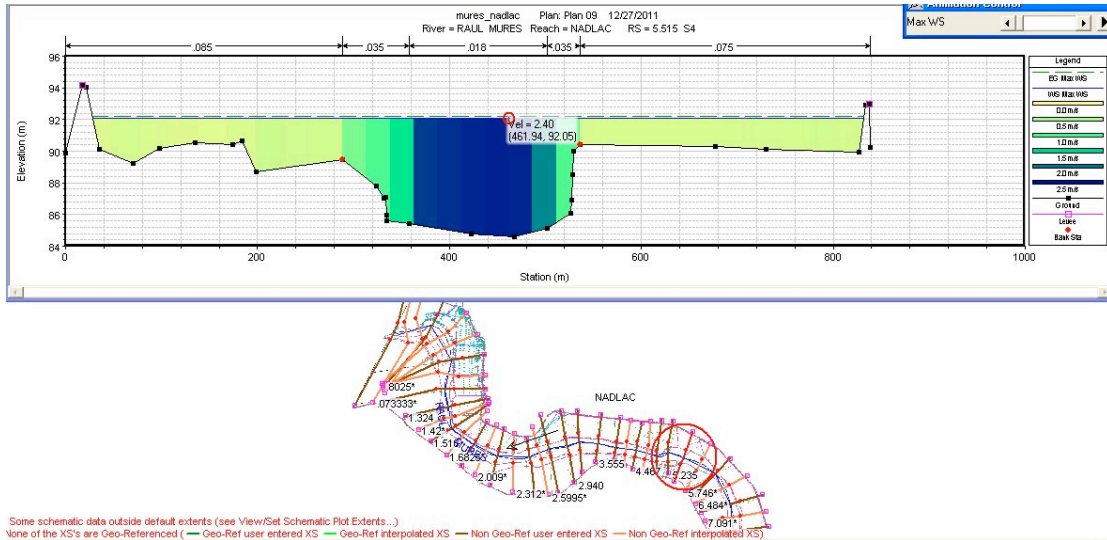
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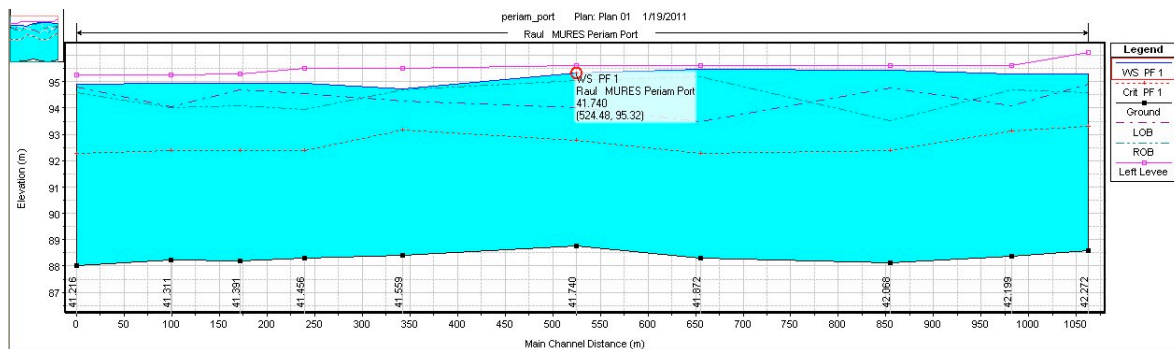
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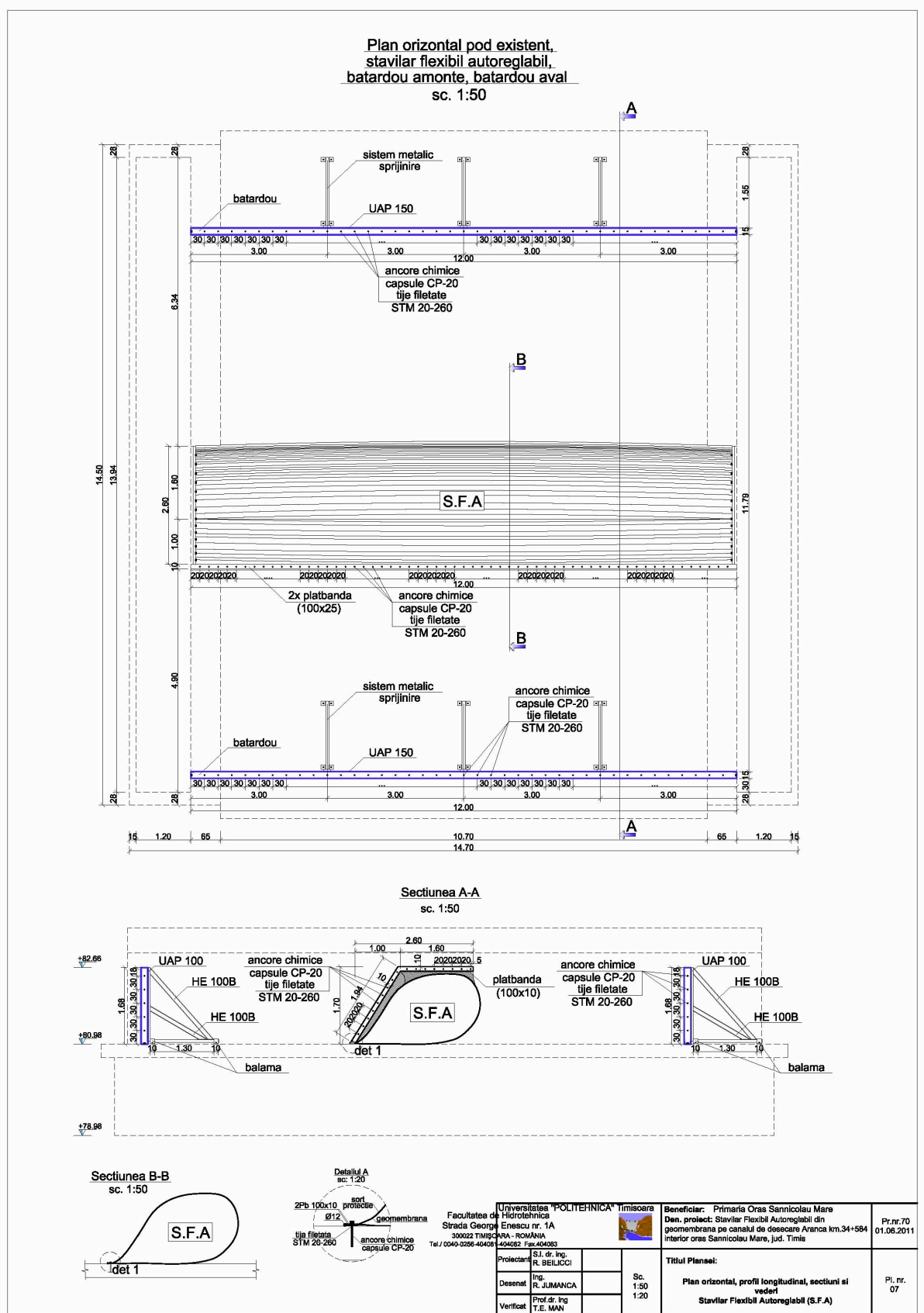
Project 123 / 09.12.2011.Flooding study - Nadlac on Mureș River.Water levels on section



Project 123 / 09.12.2011.Flooding study - Nadlac on Mureș River.Photo of modeled area



Project 15/19.01.2011. Flooding study – Periam Port on Mureș River.Logitudinal water levels



Project 70/01.06.2011.Flexible self-adjusting apron. Longitudinal profile, cross-sections

