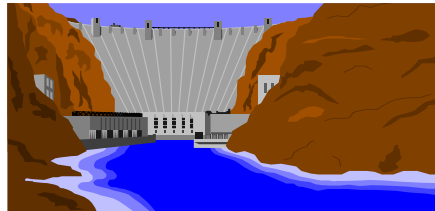


FACULTY OF HYDROTECHNICAL ENGINEERING



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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).

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.

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., Wehry, A., Constantinescu L., Halbac-Cotoara, Z.R.

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

Contract no. 38/2008
Value: 86,345 lei
Beneficiary: ANCS (National Authority for Research)

RESEARCH TEAM

Cretu, Gh., Badaluta Minda, C.

Researches regarding identifying, understanding, simulation and calculus flooding mechanism resulted from linear defence systems breaking

Contract no. 169/2008
Value: 21,223 lei
Beneficiary: CNCSIS (National Authority for Research) /TD Program

RESEARCH TEAM

Cretu, Gh., Badaluta Minda, C.

Integrated water management

Contract no. 4/2008
Value: 29,225 lei
Beneficiary: Local Water Authorities

RESEARCH TEAM

Cretu, Gh., Badaluta Minda, C.

Sustainable development of the water resources

Contract no. 5/2008
Value: 37,925 lei
Beneficiary: Local Water Authorities

RESEARCH TEAM

Beilicci E., Beilicci R.

Water supply system sewage system and waste water treatment in Giarmata, Timis County, complet design

Contract no. 2/2008
Value: 18,700 lei +taxes
Beneficiary: SC P.I.R.-Pool & Idroesse Romania SA

RESEARCH TEAM

David I.; Staniloiu C.; Achim C.; Iliuta C.

Research and development in environment protection: Pluvial water research in Timisoara city

Contract no. 34/2008
Value: 22,000 lei
Beneficiary: Municipal Council Timisoara

RESEARCH TEAM

David I.; Constantin T.A., Visescu M

Study on development strategy and integrated use of the complex hydrotechnical arrangement up Barzava River

Contract no. 19/ 2008
Value: 10,000 Euro
Beneficiary: SC AC Management SRL

RESEARCH TEAM

Nemeş, I., Nemeş, N., Costescu, A.

Technical assistance for land improvement in the perimeter Otelec-Uivar, Timis County

Contract no. 135/2008
Value: 2,500 lei
Beneficiary: Division for Agriculture and Rural Development, Timis

RESEARCH TEAM

Constantin, A.T., Ion M., Lazăr Gh., Beilicci R.F., Nicoară Ş.V., Popescu-Buşan A.I Gîrbaciu C.

Technical project and details(Checking for A7, B5, D, BC Romanian Standards requests) : Slope straightening in the area of commercial store Plus-Deva City

Contract no. 137/08
Value: 23,800 lei
Beneficiary: SC Primavera Design SRL Deva

RESEARCH TEAM

Lazar, Gh., Michael, I., Nicoară, S. V., Constantin, A. T. Gârbaciu, C., Popescu Buşan, A.

Special studies regarding the performing of the closing dike of the Drobeta Turnu Severin waste landfill located along Topolnita River

Contract no. 83/2008
Value: 20,000 lei
Beneficiary: BRATNER SERVICII ECOLOGICE S.A.

RESEARCH TEAM

Eles, G.C., Popescu, D.

Performing digital and analogical mapping (1 :250) for dam Liebling (Tofaia), Timis County, for rehabilitation

Contract no. 32/2008
Value: 3,120 lei
Beneficiary: SC MAGUS SRL Timișoara

RESEARCH TEAM

Michael, I., Lazar, Gh., Nicoară, S.V., Constantin, A. T., Gârbaciu, C., Popescu Buşan, A. I.

Synthesis report regarding the behavior of the complex hydrotechnical node Bega – Timișoara during Nov.2006- Nov.2008 period

Contract no. 176/2008
Value: 12,000 lei
Beneficiary: S.C. Colterm S.A. Timișoara, Electrocentrale Timișoara Branch

PUBLICATIONS**BOOKS**

- David, I., Sumalan, I., Beilicci, R., Achim, C. *Hydraulics. Experimentally Themes. First Part*, Politehnica Publishing House, Timisoara 2008, 70 pages, ISBN 978-973-625-614-1, (published in Romanian)
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- Racovicean, M., Doandes, V., *Cadastrre and topography notions necessary in immovable evaluation*, Marineasa Publishing House, Timisoara, 2008, 160 pages, ISBN 978-973-631-476-6, (published in Romanian)
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1. Cretu, Gh., Badaluta Minda, C., *The environmental impact assessment caused by the dykes' failure*, Environmental Engineering and Management Journal, ISSN 1582-9596, (in curs de publicare)
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3. Carpa, R., Gherman, V.D., Bularda, D., M., Motoc, M., *Physical-chemical and bacteriological characterization of the soil types from various altitudinal vegetation zones in the Parang Mountains*, Revista de Chimie, Vol 59, Nr. 9, ISSN 0034-7752, pp. 1057-1061
4. Gherman, V.D., Breheret, J.G., Negrea, A., Motoc, M., Carpa, R., Radu, F.A., *The Sulphur and Iron Metabolism in Acidophilic Microbial Gelatinous Formations from an Auriferous Sulphides Mine from the S-W of Romania*, Revista de Chimie, vol 59, Nr 10, ISSN 0034-7752, pp. 1164-1168
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1. Bădăluță Minda, I.C., *The study of the flooding occurred by the damages of the defense works*, Ph.D supervisor: Prof. Dr.Eng. Crețu Gheorghe
2. Talau, M. *Researches regarding the flow rates forecast in dry periods in a arranged hydrographic basin*, Ph.D supervisor: Prof. Dr.Eng. Crețu Gheorghe
3. Nagy, C. *Optimization of the water management system in dry periods*, Ph.D supervisor: Prof. Dr.Eng. Crețu Gheorghe
4. Nemes, N., *Phenomena of retention and mobility of phosphorus inside the soils waters of the hydrographic basin of Bistra-Caraș-Severin*, Ph.D supervisor: Prof. Dr.Eng. Gheorghe Rogobete
5. Costescu, I., *Integrated management of the quality of soils and surfaces water in the hydrographic basin of Bega river*, Ph.D supervisor: Prof. Dr.Eng. Gheorghe Rogobete
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9. Muj, S., *Contributions on spatial design of the hydropower infrastructure*, Ph.D supervisor: Prof. Dr.Eng. Gheorghe Popa

PhD STUDENTS

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 - Popescu Busan, A., *The environmental impact of the hydraulic structures on rivers*
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 - Visescu, M. (first year PhD Student)
 - Hetes, D. (first year PhD Student)
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 - 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*
- Mihoc, L.V. (first year PhD Student)
- 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*
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- 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*
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- Olaru, G., *Contributions on the drawing up and calculus of the sluices*
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- Bociort, L. (first year PhD Student)

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

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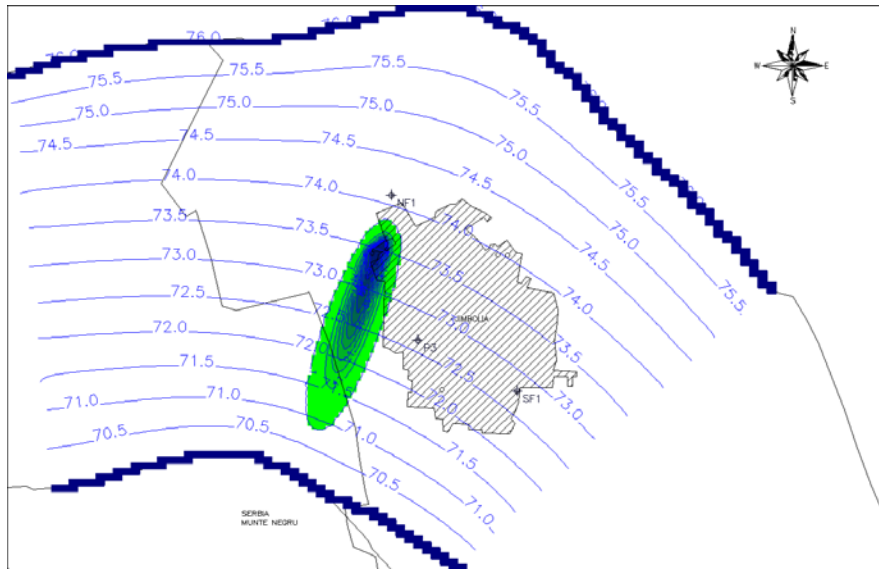
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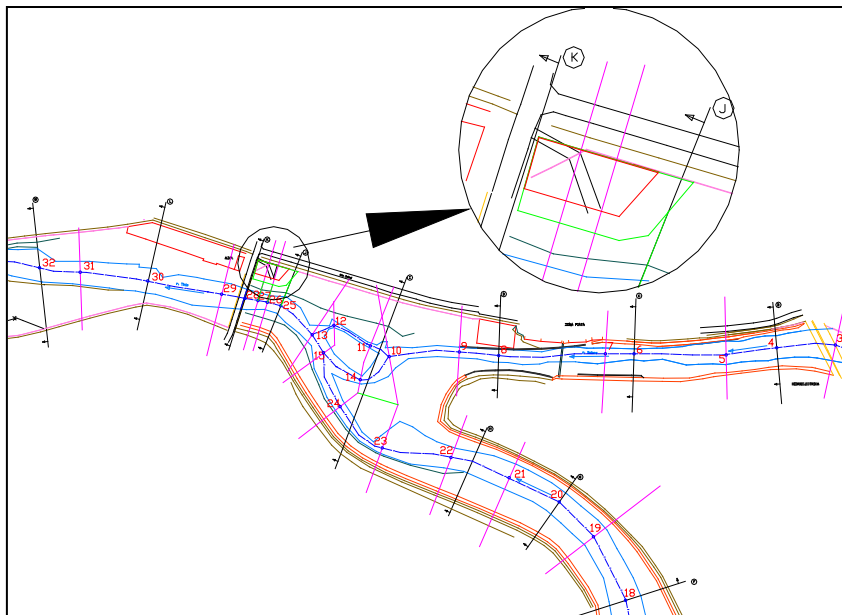
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Studies regarding the dams safety running



Studies. Modeling Landfill sites



Studies regarding the location of the building in the major valley of the river