

SIMI SCIENTIFIC COMMITTEE

Section: Pollution Assessment and Management Systems

Prof. Dr. Eng. Ioan BICA

SHORT PROFESSIONAL INFO

Professor Ioan Bica is a civil engineer with 38 years professional experience. He has a wide range of experience in water and groundwater resources management, environment politics, environment impact assessment, environment legislation and protection. He is also highly specialized in the area of groundwater and soil decontamination and remediation techniques. Author and co-author of 3 patent in the field of Hydraulics and Groundwater Protection (Midia Petrochemical Plant, Borzesti Refinery); Author and co-author of many original projects for groundwater and soil decontamination, environmental impact and risk assessment, strategic environment assessment (more than 70 studies); Author and co-author of training and scientific manuals; High level researcher in Water Management, Applied Hydraulics and in Soil and Groundwater management and quality protection. He is Director for Research projects financed under Governmental Program (Assessment and remediation of past contamination of aquifers - ERPISA) – Research of Excellency (CEEEX 2005). He was also responsible for the contract: *An integreted framework of methods, technologies, tools and policies for improvement of brownfield regeneration in Europe – TIMBRE. Contract FP7-ENV, Grant no. 265364*; Teaching (35 years university level experience).



ACTUAL POSITION

- **Professor**, Hydraulic and Environmental Department, Technical University of Civil Engineering Bucharest;
- **Vice-President**, Romanian Water Association;
- **President**, Romanian Environment Association, Muntenia Subsidiary

ACADEMIC QUALIFICATION

- **Civil engineer** - Technical University of Civil Engineering Bucharest, 1969-1973
- **PhD in Civil Engineering** - Technical University of Civil Engineering Bucharest, Faculty of Hydrotechnics, 1987
- **Post-doctoral diploma Techniques for contaminated sites remediation** - Post doctoral specialisation University of Stuttgart, Hydraulic Institute: 1995 – 1996

RESEARCH INTEREST

- Groundwater resources management and protection;
- Pollutants migration assessment and techniques for contaminated sites remediation;
- Experience in Environment Protection Field: ESIA, SEA, EMS and Environmental Risk Assessment;
- Experience in master planning for infrastructure developments.

SCIENTIFIC PUBLICATIONS / AWARDS

A. Scientific papers (selected published papers)

1. **Bica I.**, Problems of groundwater quality in the industrial platforms area. Centre European de Competence Professionnelle Technique. INP Toulouse, University "Politehnica" Bucharest, 1994.
2. Manescu M., **Bica I.**, Dobrescu V., Stan I., *The pollution of groundwater with petrochemical products in the Ploiesti area.* International symposium of hydrogeology "Impact of industrial activities on groundwater". Constanta (Romania), 1994.
3. Iamandi C., **Bica I.**, Manescu, M., *About the oil pollutant migration in the soil.* International Conference on Hydro - Science and Engineering. Beijing, 1995.
4. **Bica I.**, *The analyse of using pomp and treated method in aquifer decontamination.* Review "Hidrotehnica", vol. 42, no. 7, pp. 13 – 17, Bucharest, 1997.
5. **Bica I.**, Mathematical modelling of subsurface environment processes. Scientific seminar: Expo Water 2001, ARA, Bucharest, 2001.
6. **Bica I.**, Setting goals for groundwater clean-up. Stability pact for South Eastern Europe. Impact of hazardous compounds on water resources. Dresden, Germany 2001.
7. **Bica I.**, C., Ștefan. Evaluation of groundwater pollution in the refineries area. Case Study. International Conference on Water Resources and Environmental Research (ICWRER), Dresden, July 22nd - 25th, 2002.
8. **Bica I.**, D. Gaitanaru (2012) - "Case study: Brownfield Revitalization - An Integrated Approach", Lecture notes: Solving Contaminant Problems for a Sustainable Environment through Application of Environmental Engineering and Science Concepts, Editors: David T. Long and Thomas C. Voice, Conspress, Bucharest, ISBN-978-973-100-205-7, pp 251-264.
9. M. A., Sandu, **Bica I.**, Vîrsta A., Preda M.,- Human health risk of contamination by polychlorinated biphenyls in the area of Bucharest city. - Albena : 13th International Multidisciplinary Scientific GeoConference SGEM 2013. pg. 545-552.

B. BOOKS

10. **Bica I.**, *Groundwater pollution. Techniques for remediation.* Printing House *H*G*A, Bucharest, 1998.
11. **Bica I.**, *Environmental impact assessment.* Printing House Matrixrom, Bucharest, 1999.
12. **Bica I.**, *Environment protection. Politics and instruments.* Printing House *H*G*A*, Bucharest, 2002
13. **Bica I.**, Mocanu VD, *Artificial groundwater recharge.* Printing House Orizonturi Universitare, Timisoara 2002.
14. **Bica I.**, Remediation of contaminated sites. Editura Orizonturi Universitare, Timisoara 2014.