

SIMI SCIENTIFIC COMMITTEE

Section: Pollution Assessment and Management Systems

SR eng. Alexandru Cristian Paul TEODORESCU

SHORT PROFESSIONAL INFO

Senior researcher 1st degree with various technical competences:

- 40 years' experience in management/synthesis/optimization of industrial systems (chemical industry, power production), 38 years' experience in computer programming, 33 years' experience in catalysis (catalyst synthesis, characterization, zeolite and nano-materials, lab-scale and pilot plant testing, advanced chemical technologies based on zeolites and nanomaterials, mathematical modeling, engineering) and biocatalysis (enzymes, bioengineering), 29 years' experience in complex project implementation (design of chemical plants, environmental impact assessment), 23 years' experience in Education, as associate professor of Chemical Engineering / Chemical Reactor Engineering / Computer Programming at various Bucharest universities, 23 years' experience trainer / instructor in environmental science, corporate social responsibility, sustainable development in the mainframe of various international or domestic R&D Projects. 18 years' experience in pollution prevention & environmental protection, non-conventional/renewable energy & raw materials, valuables from wastes, in various industries.
- 18-year experience in implementing projects in underdeveloped areas (the Jiu Valley mining area, one of the poorest in Romania, the N-E Development Region of Romania)
- 14 years' experience in management of international projects (financed or involving Agencies and Companies from UK, USA, Switzerland, Spain, France, Germany, Hungary, Czech Republic, Poland, Bulgaria, The Netherlands, Norway) and cooperation with EU and NATO structures (PHARE, EU-COST, INCO-COERNICUS, LIFE+, NATO Science for Peace)
- 13-year experience in strategic planning, sustainable strategy development, environmental management accounting (including implementation of EMA and recent ISO 14051 documents for material and energy flow accounting)
- 8 years in industrial risk assessment – mitigation policies, e.g., assisting the Galati Power Plant to set up its risk assessment – mitigation procedures for getting the operating licence. It included detailed analysis of Company's policies, procedure elaboration, detailed risk calculation (e.g., for accidents like explosion, floods, BLEVE, etc.). Scenarios devised by the undersigned included all kind of effects upon the neighbouring communities.
- 13-year experience in best available technologies (BAT-BREF) implementation, including specific Projects at Romanian Companies (a textile company, a petroleum refinery, a dye & varnish producer, a fertilizer company, a manufacturer of explosives, a power plant, etc.).
- 8-year experience in setting-up the documentation for integrated environment permits for Romanian and foreign Companies



Author/co-author of ca.150 publications (books, papers, conferences) in the field of chemical engineering, environmental science, industrial ecology, management and optimization of processes.

Co-author of the Book “Chemical, Petrochemical and Oil Industry” (In Romanian), AGIR, Bucharest, 2016.

Co-author of the Romanian Encyclopedia of Chemistry (1982-1993)

Co-author of 2 Chapters in the book “Sustainable Development - Authoritative and Leading Edge Content for Environmental Management” (ISBN 978-953-51-0682-1; 2012)

ACTUAL POSITION

Senior Scientific Consultant (free-lancer).

Senior Consultant Energy & Environment, International Development Norway – Trondheim.

Senior Scientific Consultant, Chemical Engineering, Energy, Environment, GEC-Bucovina Suceava.

Senior Scientific Researcher, Risk Modelling, Insurance & Reinsurance Company (Romanian).

ACADEMIC QUALIFICATION / TRAINING COURSES

2002: Certificate in COMFAR programming, UNIDO Center – Vienna.

2002: Cleaner Production, Waste use, treatment, environmental impact assessment, sustainable enterprise strategy, UNIDO Center – Vienna

1978: Expert in computer programming, hardware maintenance, ELWRO computer manufacturing enterprise – Wroclaw, Poland;

1977: Management techniques, decision making expertise, process optimization, CEPECA Center for management training - Bucharest

1972: BSc in Engineering work in chemical processes, University “Politehnica” – Bucharest, Faculty of Chemical Engineering.

RESEARCH INTEREST

- Energy and Environment,
- Strategic Management,
- Sustainable development
- Advanced Chemical Technologies,
- Cleaner Production,
- Sustainable Enterprise Strategy,
- Material and Energy balances optimization,
- Environmental Accounting,
- Employee Engagement,
- Corporate Social Responsibility;
- Identification and characterization of potential symbiotic partnerships

AWARDS

Patents awarded: RO-96839; RO-96838; RO-97225; RO-100113; RO-104863; RO-104865; RO-105342. in the field of chemical technologies based on synthesis gas.

First Prize awarded by the Romanian Agency for Scientific Research (ANCS) in 2007 in the area of Complex R&D Projects, for the Project: “*Integrated Support For Sustainable Development Of Companies By Implementing Eco-Efficiency Principles*”. The Project included technology assessment, environmental

impact evaluation and accounting, sustainable enterprize strategy. for 4 different industrial platforms in Romania.