

## **SIMI SCIENTIFIC COMMITTEE**

*Section: Sustainable Environmental Technologies*

**Ph.D. Eng. Gheorghe BATRINESCU**

### **SHORT PROFESSIONAL INFO**

Postdoc researcher with expertise in chemistry, advanced materials and environmental protection. He started his research career in 1987 in chemistry food and since 1993 has conducted research for 12 years in the field of advanced materials. Starting with 2005 develops its research activity in the field of environmental protection. He is author/co-author of scientific papers from which 16 ISI quoted articles, 8 patents (4 as first author), 4 books (2 as first author) and 4 book chapters (2 as first author).



Ph.D in Chemistry with the theme: “*Membranes with immobilized enzymes*”. Has participated in over 75 national/international research projects (8 as project manager, 32 as scientific responsible).

### **ACTUAL POSITION**

Head of the Department of Environmental Technologies and Technological Transfer;

Senior Researcher (first degree);

National Research and Development Institute for Industrial Ecology – ECOIND

University lecturer / University of Agricultural Sciences and Veterinary Medicine, Faculty of Biotechnology

### **ACADEMIC QUALIFICATION**

- PhD diploma (Order of the Ministry of Education and Research 3876/19.05.2004), "Babes-Bolyai" University of Cluj-Napoca, 2004.
- Licence diploma no. 4461/1986 - Chemical Engineer - Faculty of Industrial Chemistry, Department of Organic Chemical Technology, Polytechnic Institute of Bucharest.

### **RESEARCH INTEREST**

- Assessment and monitoring the quality status of environmental components affected by anthropogenic activities;
- Waste management (determining the energy potential of landfill compliant and non-compliant; determining the hazards of different types of waste in accordance with the law; waste treatment technologies);
- Membranes and membrane processes (obtaining of simple and functionalized membranes; implementation of advanced separation technologies based on material type permselective membranes in water treatment processes for surface or deep in drinking water and wastewater treatment processes).

### **SCIENTIFIC PUBLICATIONS / AWARDS (selection)**

#### **ISI articles**

1) **Gheorghe Batrinescu**, Mirela Alina Constantin, Adriana Cuciureanu, Gheorghe Nechifor, 2014, Polysulfone-Polyaniline – Tipe Membranes Obtained in a Steady-State System: Structural and

Hydrodynamic Characteristics, *POLYMER ENGINEERING AND SCIENCE*, Vol. 54, Issue 7, 1640-1647, Print ISSN 0032-3888, Online ISSN 1548-9596;

2) **Gheorghe Batrinescu**, Elena Birsan, Georgiana Vasile, Bogdan Stanescu, Elena Stanescu, Iuliana Paun, Marinela Petrescu, Constantin Filote, 2011, Identification of the aquatic ecosystems integrating variables in the Suceava hydrographic basin and their correlations, *JOURNAL OF ENVIRONMENTAL PROTECTION AND ECOLOGY*, vol. 12, Issue 4, 1627-1643, Print ISSN 1311-5065;

3) **Gheorghe Batrinescu**, Dana Garganciuc, Ovidiu Popa, Mihaela Olteanu, 2008, Kinetic study of maltodextrine saccharification process using Amyloglucosidase covalently immobilised, *REVISTA DE CHIMIE*, vol.59, Issue 1, 30-32, Print ISSN 0034-7752;

4) **Gheorghe Batrinescu**, Ileana Niculescu, Marinela Petrescu, Margareta Nicolau, 2008, Implementation of the conformation measures of the economical agents to the national legislative requirements regarding the limitations of volatile organic compounds emissions, *JOURNAL OF ENVIRONMENTAL PROTECTION AND ECOLOGY*, vol. 9, Issue 3, 710-721, Print ISSN 1311-5065;

5) Bogdan Stanescu, Elena Stanescu, **Gheorghe Batrinescu**, 2015, Vulnerabilities and risks induced by the emissions of non-compliant landfills after period. Case study, *JOURNAL OF ENVIRONMENTAL PROTECTION AND ECOLOGY*, vol. 16, Issue 1, 74-80, Print ISSN 1311-5065.

6) Bogdan Stanescu, **Gheorghe Batrinescu**, Adriana Cuciureanu, Lidia Kim, D. Scradeanu, M. Scradeanu, 2014, Practical aspects of hydrogeological investigations and assessment of the environmental components pollution in urban areas. Case study, *JOURNAL OF ENVIRONMENTAL PROTECTION AND ECOLOGY*, vol. 15, Issue 3, 870-877, Print ISSN 1311-5065;

7) Michaela Bianca Vac (Soporan), Vasile Filip Soporan, **Gheorghe Batrinescu**, Emanuela Adina Cocis, 2013, Assessment methodology for non-compliant landfills, *ENVIRONMENTAL ENGINEERING AND MANAGEMENT JOURNAL*, vol.12, Issue 2, 387-391, Print ISSN 1582-9596;

8) Bogdan Stanescu, **Gheorghe Batrinescu**, Lidia Kim, 2013, Establishing interrelations between saturated and unsaturated zone premises for studying hazards near municipal landfills. Case study, *JOURNAL OF ENVIRONMENTAL PROTECTION AND ECOLOGY*, vol. 14, Issue 4, 1608-1613, Print ISSN 1311-5065;

9) Catalina Stoica, Irina Lucaciu, **Gheorghe Batrinescu**, Bogdan Stanescu, Elena Birsan, 2012, Evolution of an aquatic ecosystem (the Suceava river) for a 3-year period in terms of ecological dynamics, *JOURNAL OF ENVIRONMENTAL PROTECTION AND ECOLOGY*, vol. 13, Issue 1, 61-68, Print ISSN 1311-5065;

10) Adriana Cuciureanu, **Gheorghe Batrinescu**, Niculina Nina Badea, Doina Antoneta Radu, Gheorghe Nechifor, 2010, The Influence of Changing the Polyaniline and Polysulphone Ratio on Composite PSF-PANI Membranes Performances, *MATERIALE PLASTICE*, Vol.47, Issue 4, 416-420, Print ISSN 0025-5289;

### **Books**

1) **Gheorghe Batrinescu**, Gabriela Roman, Dana Garganciuc, Georgeta Popescu, 2006, MEMBRANE CU ENZIME IMOBILIZATE, Ed.Carteja Universitara, Bucuresti, ISBN (10)973-731-372-0; ISBN (13) 978-973-731-372-0, 225 pg. (in Romanian);

2) **Gheorghe Batrinescu**, Dana Garganciuc, Gabriela Paun-Roman, Georgeta Popescu, Carol Lehr, 2006, PROCESE DE MEMBRANA IN BIOTEHNOLOGII, Ed.Ars Docendi, Bucuresti, ISBN (10)973-558-270-8; ISBN (13) 978-973-558-270-8, 215 pg. (in Romanian);

### **Book chapters**

1) **G. Batrinescu**, L. Constantin, A. Cuciureanu, M.A.Constantin, „*Conducting Polymers*”, Edited by Faris Yilmaz, ISBN 978-953-51-2691-1, under CC BY 3.0 license, in subject *Conductive Polymer – Based Membranes*, chapter 1, pg. 1-26, 2016;

2) Aurelia Cristina Nechifor, 2009, MEMBRANE POLIMERICE, Ed. Printech, ISBN 978-606-521-427-9, 200 pg.; **Cap.7 – Gheorghe Batrinescu, Ovidiu Popa, Gabriela Paun Roman, Aurelia Cristina Nechifor**, NANOCOMPOZITE IN SEPARARI MEMBRANARE, pg. 171-200; (in Romanian)

3) Gheorghe Nechifor, 2011, MEMBRANE MATERIALS. MEMBRANES. MEMBRANE PROCESSES, Vol. I, Ed. Printech, ISBN 978-606-521-710-2, 386 pg.; **Cap. 10 – Adriana Cuciureanu, Gheorghe Batrinescu**, ASPECTE PRIVIND PERFORMANTELE MATERIALELOR MEMBRANARE IN SEPARAREA PROTEINELOR, pg.218-239. (in Romanian)

**Awards:** 12 medals and 4 excellence diplomas awarded at international scientific events