

## **SIMI SCIENTIFIC COMMITTEE**

*Section: Sustainable Environmental Technologies*

### **Ph.D. Eng. Lucian – Alexandru Constantin**

#### **SHORT PROFESSIONAL INFO**

Postdoc researcher with chemical engineering background. Author/co-author of scientific papers from which 11 ISI quoted articles (6 related to heterogeneous photocatalyse kinetics and mechanisms and 1 related to PMR application in wastewater treatment) and 2 book chapters (1 dedicated to membrane processes). Ph.D. in engineering sciences with the theme “*TiO<sub>2</sub> heterogeneous photocatalyse in advanced treatment of wastewater containing organic pollutants*” and participated as team member or project responsible in 28 national /international environmental research projects.



#### **ACTUAL POSITION**

Scientific Researcher 3rd degree

National Research and Development Institute for Industrial Ecology – ECOIND

Environmental Technologies and Technological Transfer Department

#### **ACADEMIC QUALIFICATION**

- PhD diploma (Order of Ministry of National Education and Scientific Research 3209/23.02.2016) – Doctoral School for Applied Chemistry and Materials Science, University Politehnica of Bucharest, 2013-2016
- Licence diploma (Business Administration) - Faculty of Business Administration - Athenaeum University, 2005-2008
- Master diploma (Synthesis of Macromolecular Compounds) – Faculty of Chemical Engineering, University Politehnica of Bucharest, 1998-1999
- Licence diploma, - Faculty of Chemical Engineering, University Politehnica of Bucharest, 1990-1998

#### **RESEARCH INTEREST**

- Water and wastewater treatment technologies
- Heterogenous photocatalysis
- Membrane processes
- Sustainable development

#### **SCIENTIFIC PUBLICATIONS / AWARDS**

##### *ISI articles*

- T. Oncescu, I. Nițoi, P. Oancea, M. Ștefănescu, **L. Constantin**, L. Dinu, *Photosensitized Chlorobenzene Degradation by UV/H<sub>2</sub>O<sub>2</sub> Oxidation*, Journal of Advanced Oxidation Technologies (JAOT), vol.11, no.1, pg 149-154, 2008, ISSN: 1203-8407, WOS:000252982700021
- M. Nicolau, V. Pătroescu, C. Cosma, L. Dinu, C. Bumbac, **L. Constantin**, *Intensive Biological Process based on SBR Reactor for Industrial Wastewater treatment*, Revista Romana de Chimie, vol.59, no.10, pg 1106-1111, 2008, ISSN: 0034-7752, WOS:000261428800009

- M. Teodorescu, I. Dumitrescu, E. Cristian, **L. Constantin**, L. Gherghe, *Defining and Monitoring Meaningful Eco-Efficiency Indicators for Tracking Business Performance*, Journal of Environmental Protection and Ecology (JEPE), vol 12, no 3A, pg 1458-1469, 2011, ISSN: 1311-5065, WOS:000208898800029
- **L. Constantin**, M. Teodorescu, *Implementation of Environmental Management Accounting System in Romanian Company – Methodology and Case Studies*, Journal of Environmental Protection and Ecology (JEPE), vol 13, no 1, pg 319-324, 2012, ISSN: 1311-5065, WOS: 000302843500040
- Nițoi, P. Oancea, M. Răileanu, M. Crișan, **L. Constantin**, I. Cristea, *UV–VIS photocatalytic degradation of nitrobenzene from water using heavy metal doped titania*, Journal of Industrial and Engineering Chemistry, Vol.21, pp.677-682, 2015, ISSN: 1226-086X, WOS:000350079800089
- Nițoi, P. Oancea, I. Cristea, **L. Constantin**, Gh., Nechifor, *Kinetics and mechanism of chlorinated aniline degradation by TiO<sub>2</sub> photocatalysis*, Journal of Photochemistry and Photobiology A: Chemistry, 298, pp. 17–23, 2015, ISSN: 1010-6030, WOS:000347595300003
- **L. Constantin**, I. Nițoi, I. Cristea, P. Oancea, C. Orbeci, A. C. Nechifor, *Degradation of Triclosan by TiO<sub>2</sub> – UV irradiation in aqueous solutions*, Revista de Chimie, Vol. 66, No.5, pp. 597-600, 2015, ISSN: 0034-7752, WOS:000355126000001
- I. Nițoi, P. Oancea, **L. Constantin**, M. Răileanu, M. Crișan, I. Cristea, C. Cosma, *Relationship between structure of some nitroaromatic pollutants and their degradation kinetic parameters in UV-VIS/TiO<sub>2</sub> system*, Journal of Environmental Protection and Ecology (JEPE), vol 17, no 1, pg 315-322, 2016, ISSN: 1311-5065, WOS:000375503300036
- R. Szep, R. Keresztes, **L. Constantin**, *Multi-model assessment on trophospheric ozone pollution indices of risk to human health and crops, and ozone deposition in in Ciuc depression Romania*, Revista de Chimie, vol. 67, no. 3, pg 408-413, 2016, ISSN: 0034-7752, WOS:000375364800004
- **L. A. Constantin**, I. Nițoi, I. Cristea, P. Oancea, *Kinetics of 5-Fluorouracil degradation by heterogenous TiO<sub>2</sub> photocatalysis*, Revista de Chimie, vol.67. no.8, pp.1447-1450, 2016, ISSN: 0034-7752, WOS:000384514200007
- I.V. Patroescu, L.R. Dinu, **L.A. Constantin**, M. Alexie, G. Jinescu, *Impact of temperature on groundwater nitrification in an up-flow biological aerated filter using expanded clay as filter media*, Revista de Chimie, vol. 67, no. 8, pg. 1433-1435, 2016, ISSN: 0034-7752, WOS:000384514200004

### Book chapters

- C. Teodorescu, **L. Constantin**, M. Nicolau, A. Ballo, C. Cosma, *"Sustainable Development - Authoritative and Leading Edge Content for Environmental Management"*, Edited by Sime Curkovic, ISBN 978-953-51-0682-1, under CC BY 3.0 license, in subject *Knowledge-Based Development in Small Communities - Efficient Management Based on Local Expertize*, chapter 12, pg. 263-290, 2012
- 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

### ISI Proceedings

- **L.A. Constantin**, I. Nițoi, G. Batrinescu, I. Cristea, G. Nechifor, *Degradation of triclosan from aqueous systems using a photocatalytic membrane reactor*, 15th International Multidisciplinary GeoConferences SGEM, 16-25 June 2015, Albena, Bulgaria, Book 5, vol 1, pg 191-205, 2015, **ISI Proceedings**, WOS:000370813400025, ISBN:978-619-7105-39-1, ISSN: 1314-2704
- Nițoi, **L.A. Constantin**, P. Oancea, I. Cristea, M. Crișan, *TiO<sub>2</sub> solar light photocatalysis a promising treatment method of wastewater with trinitrotoluene content*, 15th International Multidisciplinary GeoConferences SGEM, 16-25 June 2015, Albena, Bulgaria, Book 5, vol 1, pg 969-976, 2015, **ISI Proceedings**, WOS:000370813400129, ISBN:978-619-7105-39-1, ISSN: 1314-2704
- T. Galaon, **L. Constantin**, J. Petre, L.F. Pascu, C.B. Lehr, *Nitrosoamines determination in drinking water using a new GC-MS/MS method coupled with automated solid phase extraction*, 16th International Multidisciplinary GeoConferences SGEM, 30 June – 6 July 2016, Albena, Bulgaria, Book 5, vol 1, pg 471-478, 2016
- L.R. Dinu, **L.A. Constantin**, I. Cristea, V. Bădescu, V. Dediu, *Mine water treatment from batch test and assessments of steady state operation*, 16th International Multidisciplinary GeoConferences SGEM, 30 June – 6 July 2016, Albena, Bulgaria, Book 5, vol 1, pg 443-448, 2016, **ISI Proceedings**, ISBN 978-619-7105-65-0 / ISSN 1314-2704
- L. R. Dinu, **L. A. Constantin**, C. Cosma, M. Alexie, I. Nițoi, *A sustainable approach for the mine water treatment*, 16th International Multidisciplinary GeoConferences SGEM, 30 June – 6 July 2016, Albena, Bulgaria, Book 5, vol 1, pg 11-17, 2016, **ISI Proceedings**, ISBN 978-619-7105-65-0 / ISSN 1314-2704