



Dr. AC Marius-Mihai Zaharia

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Brainmap codes: U-1700-032K-5029

Specialist in the field of chemistry, subdomains polymer chemistry/organic chemistry, biochemistry and toxicology.

Scientific profile

Articles ISI Published: **23**

Articles without ISI Published: **9**

Articles in conference volume: **11**

h-Index: **7**

Total number of citations (without self-citations): **92**

Patent: **1**

Projects: Project leader: **4**

Member of the project: **8**

Scholarship: - POSDRU mobility -University of Chemical Technology and

Metallurgy, Analytical Chemistry Department, Sofia, Bulgaria.

- LLP ERASMUS – mobility of study Marmara University, Faculty of Engineering, Environmental Engineering Department, Istanbul, Turkey

Laboratory Skills

Chemical synthesis of ion exchangers, toxicity determination, biochemical test, photocatalysis, data computing and tests on plants and microorganisms, knowledge on anaerobic treatment of wastewater using an anaerobic baffled reactor, volatile fatty acids determination, operating anaerobic baffled reactor for the treatment of high strength wastewater.

Trained to use the following instruments

HPLC system (*UltiMate 3000SD HPLC System and Chromeleon 7.2.6 software, Thermo Scientific; Agilent 1100 HPLC System and Agilent software from Agilent Technologies*), FT-IR spectrophotometer (*Jasco 660 plus*), FTIR-ATR (*IR Tracer-100 FT-IR spectrometer (Shimadzu Corporation, Japan) equipped with a GladeATR module (PIKE Technologies, USA)*), UV-Vis spectrophotometer (*Libra S35 PC*), spectrofluorimetric (*SMF25, Kontron*), X-ray diffraction (*Rigaku Miniflex 600 diffractometer*), GC-TCD (Gas Chromatography Thermal conductivity detector), Morphology G3 (*Malvern Instruments, Malvern, UK*), Mütek Particles Charge Detector (*PCD 03, Mütek GmbH*).

Awards: _____

- UAIC Excellence Diploma (2015) – for the results obtained during PhD studies.
- Best poster award at IasiCHEM 2018 conference held during October 25-26 in Iasi, Romania.
- Best poster award at the 8th European Chemistry Congress held during June 21-23, 2018, in Paris, France

Relevant articles published in the field of the project (max.5): _____

1. **Marius-Mihai Zaharia**, Florin Bucatariu, Florica Doroftei, Diana-Felicia Loghin, Ana-Lavinia Vasiliu, Marcela Mihai. Multifunctional CaCO₃/polyelectrolyte sorbents for heavy metal ions decontamination of synthetic waters, *Colloids Surf. A Physicochem. Eng. Asp.*, **613**, 126084, **2021**.
2. **Marius Zaharia**, Marcela Mihai, Tiberiu Roman, Gheorghita Zbancioc, Aurel Pui, Robert Vasile Gradinaru, Cristian Logigan, Gabi Drochioiu, Unusual ferrite induced photohydrolysis of dinitrophenols to nonaromatic and nontoxic derivatives, *J. Photochem. Photobiol. A*, **394**, 112497, **2020**.
3. Tudor Cosmin Iurcovschi, Viorica Vasilache, Ion Sandu, **Marius Zaharia**, Olga Pintilie, Andrei Victor Sandu. New Ecological Solutions Involved in the Cleaning of a 19th Century Icon, *Appl. Sci.* **10**(3), 1175, **2020**.
4. Florin Bucatariu, Claudiu-Augustin Gheorghita, **Marius-Mihai Zaharia**, Simona Schwarz, Frank Simon, Marcela Mihai. Removal and separation of heavy metal ions from multi-component simulated waters using silica/polyethyleneimine composite microparticles, *ACS Appl. Mater. Interfaces*, **12**, 37585–37596, **2020**.
5. Claudiu-Augustin Gheorghita, Konstantin B.L. Borchert, Ana-Lavinia Vasiliu, **Marius-Mihai Zaharia**, Dana Schwarz, Marcela Mihai. Porous thiourea-grafted-chitosan hydrogels: synthesis and sorption of toxic metal ions from contaminated waters, *Colloids Surf. A Physicochem. Eng. Asp.*, **607**, 125504, **2020**