

**Universitatea Națională de Știință și Tehnologie POLITEHNICA București**

Facultatea: **Inginerie Chimica si Biotehnologii**

Departamentul: **Chimie Anorganica, Chimie Fizica si Electrochimie**

Nume Prenume: **Maria MIHALY**

Gradul didactic: **Conferentiar**

## **LISTA**

### **lucrărilor științifice în domeniul disciplinelor din postul didactic**

#### **A. Teza de doctorat**

T1. *Nanostructuri de tipul  $SiO_2 - C_{60}$  obtinute prin microemulsionare cu aplicatii in separari cromatografice*, **Doctor in Chimie**, 2007.

#### **B. Cărți si capitole în cărți publicate în ultimii 10 ani**

##### **B1. Cărți**

1. **Maria MIHALY**, Nicoleta-Liliana OLTEANU, *MICROEMULSII NEIONICE: formulari, tranzitii de faze asociate, aplicatii*, Editura ELECTRA, Bucuresti, 2014 (ISBN: 978-606-507-075-2) – monograph
2. Adina Roxana PETCU, Aurelia MEGHEA, **Maria MIHALY**, *SISTEME NANOHETEROGENE PENTRU EXTRACTIA SI FOTODEGRADAREA AMESTECURILOR DE COLORANTI*, Editura PRINTECH, Bucuresti, 2018, (ISBN: 978-606-23-0901-5).
3. Cosmina Andreea MARIN, Ileana RAU, **Maria MIHALY**, *SISTEME HIBRIDE BIOPOLIMERI – PAMANTURI RARE CU APLICATII IN FOTONICA*, Editura PRINTECH, Bucuresti, 2018, (ISBN: 978-606-23-0894-0).

##### **B2. Capitole de cărți**

#### **C. Lucrări indexate ISI/BDI publicate în ultimii 10 ani**

1. Zamfir, A., Meghea, A., **Mihaly, M.**, *Physical-chemical characterization of some mining waste for capitalization*, UNIVERSITY POLITEHNICA OF BUCHAREST SCIENTIFIC BULLETIN SERIES B-CHEMISTRY AND MATERIALS SCIENCE, 85(3), 113-122, 2023, (ISSN: 1454-2331; WOS: 001052966300010, FI = 0,5).
2. Branzei, M., Cojocaru, MO., **Mihaly, M.**, Niculescu, RS., Coman, TA., Turcu, RN., Popescu-Arges, AC., Pencea, I, *A new approach for heat yield measurement of TAE aluminothermic tests carried on iron bearing powdered wastes*, UNIVERSITY POLITEHNICA OF BUCHAREST SCIENTIFIC BULLETIN SERIES B-CHEMISTRY AND MATERIALS SCIENCE, 83(4), 229-240, 2021, (ISSN: 1454-2331; WOS: 000731356100019, FI = 0,5).
3. Nita, AI., Catana, D., Vasile, A., Milasan, AR., Dragoescu, MF., Bors, AM, **Mihaly, M.**, *Key parameters to monitor the used metalworking fluids*, UNIVERSITY POLITEHNICA OF BUCHAREST SCIENTIFIC BULLETIN SERIES B-CHEMISTRY AND MATERIALS SCIENCE, 83(4), 29-42, 2021, (ISSN: 1454-2331; WOS: 000731356100003, FI = 0,5).

4. Popescu-Arges, A.C., **Mihaly, M.**, Pencea, I, Turcu, R.N., Branzei, M., Cojocaru, M.O., Berbecaru, A.C., Coman, T.A., Milasan, A.R., Predescu, C., *Complex characterization of the metallurgical solid wastes for aluminothermic 4R approach*, UNIVERSITY POLITEHNICA OF BUCHAREST SCIENTIFIC BULLETIN SERIES B-CHEMISTRY AND MATERIALS SCIENCE, 83(2), 291-302, 2021, (ISSN: 1454-2331; WOS: 000661663200025, FI = 0,5).
5. Vasile, A., Milasan, A.R., Andrei, A.E., Turcu, R.N., Dragoescu, M.F., Axinte, S., **Mihaly, M.**, *An integrated value chain to iron-containing mine tailings capitalization by a combined process of magnetic separation, microwave digestion and microemulsion - assisted extraction*, PROCESS SAFETY AND ENVIRONMENTAL PROTECTION, 154, 118-130, 2021, DOI: 10.1016/j.psep.2021.08.012, (ISSN: 0957-5820; WOS: 000704336900011, FI = 6,158).
6. Predeanu, G., Slavescu, V., Balanescu, M., Mihalache, R.D., **Mihaly, M.**, Marin, A.C., Meghea, A., Valentim, B., Guedes, A., Abagiu, A.T., Popescu, L.G., Manea-Saghin, A.M., Vasile, B.S., Dragoescu, M.F., *Coal bottom ash processing for capitalization according to circular economy concept*, MINERALS ENGINEERING, 170, 2021, DOI: 10.1016/j.mineng.2021.107055, (ISSN: 0892-6875; WOS: 000687771400007, FI = 4,765).
7. Visa, M., Cosnita, M., Moldovan, M., Marin, C.A., **Mihaly, M.**, *Fly Ash Waste Recycling by Pt/TiO<sub>2</sub> Incorporation for Industrial Dye Removal*, INTERNATIONAL JOURNAL OF ENVIRONMENTAL RESEARCH AND PUBLIC HEALTH, 18(8), 3887-3887, 2021, DOI: 10.3390/ijerph18083887, (ISSN: 1660-4601; WOS: 000644094200001, FI = 3,390).
8. Cadar, D., Olteanu, N.L., Andrei, E.A., Petcu, A.R., Marin, C.A., Meghea, A., Mihaly, M., *Synergism of thiocyanate ions and microinterfacial surface as driving forces for heavy multi-metals extraction*, ARABIAN JOURNAL OF CHEMISTRY, 11(4), 501-512, 2018, DOI: 10.1016/j.arabjc.2017.11.018, (ISSN: 1878-5379; WOS:000438122800006, FI = 4,762).
9. Cadar, D., Olteanu, N.L., Andrei, E.A., Meghea, A., Petcu, A.R., **Mihaly, M.**, *Fluid structures used for wastewaters treatment with complex load*, SEPARATION AND PURIFICATION TECHNOLOGY, 197, 1-7, 2018, DOI: 10.1016/j.seppur.2017.12.042, (ISSN: 1383-5866; WOS:000428973600001, FI = 5.774).
10. Cadar, D., Olteanu, N.L., Petcu, A.R., Meghea, A., **Mihaly, M.**, *Efficient recovery of metals from aqueous media by two phase microemulsion system*, UPB SCIENTIFIC BULLETIN, SERIES B: CHEMISTRY AND MATERIALS SCIENCE, 79(2), 13-24, 2017, DOI: 10.1016/j.psep.2017.05.014, (ISSN: 1454-2331; WOS: 000405523600002).
11. Cadar, D., Olteanu, N.L., Rogozea, E.A., Petcu, A.R., Meghea, A., **Mihaly, M.**, *Recovery of targeted hydrophilic compounds from simulated wastewaters using nonionic microemulsion systems*, PROCESS SAFETY AND ENVIRONMENTAL PROTECTION, 109, 648-658, 2017, DOI: 10.1016/j.psep.2017.05.014, (ISSN: 0957-5820; WOS: 000406732400055, FI = 4,966).
12. Petcu, A.R., Meghea, A., Rogozea, E.A., Olteanu, N.L., Lazar, C.A., Cadar, D., Crisciu, A.V., **Mihaly, M.**, *No Catalyst Dye Photodegradation in a Microemulsion Template*, ACS SUSTAINABLE CHEMISTRY AND ENGINEERING, 5(6), 5273-5283, 2017, DOI: 10.1021/acssuschemeng.7b00616, (ISSN: 2168-0485; WOS: 000402950000089, FI = 7,632).
13. Rogozea, E.A., Petcu, A.R., Olteanu, N.L., Lazar, C.A., Cadar, D., **Mihaly, M.**, *Tandem adsorption-photodegradation activity induced by light on NiO-ZnO p-n couple modified silica nanomaterials*, MATERIALS SCIENCE IN SEMICONDUCTOR PROCESSING, 57, 1-11,

- 2017, DOI: 10.1016/j.mssp.2016.10.006, (ISSN: 1369-8001; WOS: 000388086700001, FI = 3,085).
14. Olteanu, N.L., Lazar, C.A., Petcu, A.R., Meghea, A., Rogozea, E.A., **Mihaly, M.**, *One-pot synthesis of fluorescent Au@SiO<sub>2</sub> and SiO<sub>2</sub>@Au nanoparticles*, ARABIAN JOURNAL OF CHEMISTRY, 9(6), 854-856, 2016, DOI: 10.1016/j.arabjc.2015.12.014, (ISSN: 1878-5352, WOS: 000387626300011, FI = 4,762).
  15. Lazar, C.A., Kajzar, F., **Mihaly, M.**, Rogozea, A.E., Petcu, A.R., Olteanu, N.L., Rau, I., *Novel materials based on DNA-CTMA and lanthanide (Ce<sup>3+</sup>, Pr<sup>3+</sup>)*, BIOPOLYMERS, 105(9), 613-617, 2016, DOI: 10.1002/bip.22861, (ISSN: 1097-0282, WOS: 000379167500001, FI = 1,910).
  16. Rogozea, E.A., Olteanu, N.L., Petcu, A.R., Lazar, C.A., Meghea, A., **Mihaly, M.**, *Extension of optical properties of ZnO/SiO<sub>2</sub> materials induced by incorporation of Au or NiO nanoparticles*, OPTICAL MATERIALS, 56, 45-48, 2016, DOI: 10.1016/j.optmat.2015.12.020, (ISSN: 0925-3467; WOS: 000375517200009, FI = 2,779).
  17. Lazar, C.A., Kajzar, F., **Mihaly, M.**, Pirvu, C., Petcu, A.R., Olteanu, N.L., Rau, I., *DNA based materials doped with praseodymium (III) hydroxide nanoparticles*, OPTICAL MATERIALS, 56, 3-7, 2016, DOI: 10.1016/j.optmat.2015.11.011, (ISSN: 0925-3467; WOS: 000375517200002, FI = 2,779).
  18. Olteanu, N.L., Rogozea, E.A., Petcu, A.R., Lazar, C.A., Meghea, A., **Mihaly, M.**, *"One-pot" synthesis of Au-ZnO-SiO<sub>2</sub> nanostructures for sunlight photodegradation*, JOURNAL OF MOLECULAR CATALYSIS A-CHEMICAL, 414, 148-159, 2016, DOI: 10.1016/j.molcata.2016.01.007, (ISSN: 1878-5352; WOS: 000370914500018, FI = 3,687).
  19. Petcu, A.R., Rogozea, E.A., Lazar, C.A., Olteanu, N.L., Meghea, A., **Mihaly, M.**, *Specific interactions within micelle microenvironment in different charged dye/surfactant systems*, ARABIAN JOURNAL OF CHEMISTRY, 9(1), 9-17, 2016, DOI: 10.1016/j.arabjc.2015.09.009, (ISSN: 1878-5352; WOS: 000370209900002, FI = 4,762).
  20. Petcu, A.R., Lazar, C.A., Rogozea, E.A., Olteanu, N.L., Meghea, A., **Mihaly, M.**, *Nonionic microemulsion systems applied for removal of ionic dyes mixtures from textile industry wastewaters*, SEPARATION AND PURIFICATION TECHNOLOGY, 158, 155-159, 2016, DOI: 10.1016/j.seppur.2015.12.002, (ISSN: 1383-5866; WOS: 000369461700020, FI = 5,774).
  21. Rogozea, E.A., Meghea, A., Olteanu, N.L., Bors, A., **Mihaly, M.**, *Fullerene-modified silica materials designed for highly efficient dyes photodegradation*, MATERIALS LETTERS, 151, 346-348, 2015, DOI: 10.1016/j.matlet.2015.03.069, (ISSN: 1873-4979; WOS: 000355497200033, FI = 3,204).
  22. Feraru, L. D., **Mihaly, M.**, Meghea, A., *Chromatic analysis of blue ballpoint pen inks and related dyes*, COLOR RESEARCH AND APPLICATION, 40(2), 169-177, 2015, DOI: 10.1002/col.21866, (ISSN: 1520-6378; WOS: 000348640400007; FI = 1,091).
  23. Lazar, C.A., Rau, I., **Mihaly, M.**, *Microemulsions based templates for synthesis of DNA materials modified with lanthanide nanoparticles*, UPB SCIENTIFIC BULLETIN, SERIES B: CHEMISTRY AND MATERIALS SCIENCE, 77(4), 209-220, 2015 (CODEN: SBUPD, ISSN: 1454 – 2331).
  24. Petcu, A.R., Meghea, A., **Mihaly, M.**, *Non-ionic surfactant self-assembling promoted by different dyes in aqueous media*, UPB SCIENTIFIC BULLETIN, SERIES B: CHEMISTRY AND MATERIALS SCIENCE, 77(4), 75-86, 2015 (CODEN: SBUPD, ISSN: 1454 – 2331).

25. Rogozea, A.E., Olteanu, N.L., Crisciu, A.V., Petcu, A.R., **Mihaly, M.**, *Highly homogeneous nanostructured templates based on environmental friendly microemulsion for nanomaterials processing*, MATERIALS LETTERS, 132, 346-348, 2014, DOI: 10.1016/j.matlet.2014.06.072, (ISSN: 1873-4979; WOS: 000340329000091, FI = 3,204).
26. **Mihaly, M.**, Lacatusu, I., Olteanu, N.-L., Meghea, A., *A systematic methodology to design silica templates: Silica microemulsion formulation and nanodroplet type and size estimation*, COMPTES RENDUS CHIMIE, 17(4), 342-351, 2014, DOI: 10.1016/j.crci.2013.09.018, (ISSN: 1631-0748; 1878-1543; WOS: 000334155600007; FI = 2,380).

## D. Lucrări publicate în ultimii 10 ani în reviste și volume de conferințe cu referenți

### D1. Reviste

### D2 Selecție cu maximum 20 lucrări în volume de conferințe

1. Bors, A.M., Meghea, I., **Mihaly, M.**, Munteanu, C., Badea, M., *Sustainable use of sludge in order to counteract the effects of global warming*, International Multidisciplinary Scientific Geoconference SGEM, ISI Thompson indexed, Conference Proceeding, vol. 1, 533–540, Albena, BULGARY, 2015, ISBN 978-619-7105-38-4, ISSN 1314-2704.
2. **Mihaly, M.**, Rogozea, E.A., Olteanu, N.L., Petcu, A.R., Lazar, A.C., Meghea, A., *Tuning the colour of solar absorbers by changing chromophore nature and nanoparticle size*, Fourth Edition of Conference for Sustainable Energy, Conference Proceeding, 311-325, 2014, Brasov, ROMANIA, Springer, ISBN 978-3-319-09707-7, ISSN 2352-2534.
3. Anicai, L., **Lazar, A.C.**, **Mihaly, M.**, Enachescu, M., *An electrochemical approach for biomolecules detection involving electrocatalytic gold nanoparticles*, 38th Annual Congress of American Romanian Academy, 2014, California, USA, Conference Proceeding, ARA Publisher, ISBN: 978-1-935924-17-315-19.
4. Ion, R.-M., Fierascu, R.-C., Fierascu, I., Bunghez, I.-R., Turcanu-Carutiu, D., Opreanu, M., Meghea, A., **Mihaly, M.**, Rogozea, A., Blajan, O., *Innovative method based on nanomaterials for cultural heritage conservation*, The 6<sup>th</sup> Edition of EUROINVENT, Conference Proceeding, 449-460, Iasi, ROMANIA, 2014, ISBN: 978-606-714-037-8.

### E. Brevete obținute în întreaga activitate

1. Visa, M., Duta-Capra, A., **Mihaly, Maria.**, Olteanu, N. L., Andrei, A. E., Petcu, A. R., Marian, C. A., *Procedeu de obtinere a unui material compozit din cenusa de termocentrala, TiO<sub>2</sub> si nanoparticule de platina functionalizate*, RO132548-B1, RO-BOPI 2/2022.
2. Bendas, G., Schlesinger, M., Borsing, L., Cevher, E., **Mihaly, M.**, Enachescu, M., Calin, M., Simionescu, M., Zeisig, R., Hoffmann, A., *Method to block site-specifically chemokine-related inflammatory processes in vascular diseases and metastasis*, EP2832373B1/12.04.2017.