

PERSONAL INFORMATION

Adriana Teodora Marinoiu

 93, Tudor Vladimirescu, Baile Govora, Valcea, 245200, ROMANIA

 +4-0350-414095; +4-0250-732744

 adriana.marinoiu@icsi.ro

Sex Female | Date of birth 16/01/1977 | Nationality Romanian

OCCUPATIONAL FIELD

Academic (research)

WORK EXPERIENCE

April 2019 - present

Scientific Researcher 1st degree

National Research & Development Institute for Cryogenics & Isotopic Technologies – ICSI Rm. Valcea, ICSI Energy Department, 4, Uzinei street, Ramnicu Valcea, Romania (<http://www.icsi.ro>)

- Manager and scientific responsible of national project in the ICSI Energy Department;
- Developing of one step synthesis of noble metal nanoparticles supported on reduced graphene oxide using an eco-friendly microwave-assisted process;
- Developing of chemical routes for metal nanoparticles decorated on graphene/ graphene oxide;
- Developing of metal nanoparticles decorated on carbon nanofiber using electrospinning;

Business or sector Academic research and development

March 2018 - present

Coordinator of Research Group “New materials for H2 energy”

National Research & Development Institute for Cryogenics & Isotopic Technologies – ICSI Rm. Valcea, ICSI Energy Department, 4, Uzinei street, Ramnicu Valcea, Romania (<http://www.icsi.ro>)

- Manager and scientific responsible of national projects in the ICSI Energy Department;
- Management of human resources;
- Developing of new methods for graphene-based materials preparation using a low-time consuming procedure;
- Developing a carbon fibre manufacturing technology by electrospinning;

Business or sector Academic research and development

2016 - 2019

Scientific Researcher 2nd degree with a permanent position

National Research & Development Institute for Cryogenics & Isotopic Technologies – ICSI Rm. Valcea, ICSI Energy Department, 4, Uzinei street, Ramnicu Valcea, Romania (<http://www.icsi.ro>)

- Manager and scientific responsible of national projects in the National Centre for Hydrogen and Fuel Cells;
- Development of catalysts based on noble and non-noble metals;
- Syntheses of graphene doped metal/non-metal for use as electrodes in PEM Fuel Cells;
- Development of new methods for catalyst deposition for proton exchange fuel cells PEM Fuel Cells;
- Developing of new procedures for realization of electrodes for the fuel cell using various spray techniques;
- Elaboration of a competitive technology for the production of the membrane electrode assemblies MEA;
- Developing new techniques for characterizing fuel cell materials;
- Characterization of PEM Fuel Cells using Electrochemical Measurements such as polarization curves (I-V), Impedance Spectroscopy (EIS);
- Research regarding the energetic technologies: fuel cell development;

Business or sector Academic research and development

2012 - 2016

Scientific Researcher 3rd degree with a permanent position

National Research & Development Institute for Cryogenics & Isotopic Technologies – ICSI Rm. Valcea, ICSI Energy Department, 4, Uzinei street, Ramnicu Valcea, Romania (<http://www.icsi.ro>)

- Applied research in the field of proton exchange membrane fuel cells;
- Synthesis of graphene-based materials for use as electrodes in PEMFC;
- Characterization of total surface area by specific surface area, porosity and particle size distribution;
- Studies for fuel cell systems for increasing the performance based on parameters optimization;
- Preparation and characterization of new catalytic materials for the retention of carbon monoxide from the gaseous hydrogen mixture;
- Methods and technologies for hydrogen separation and purification;
- Investigations on new methods for hydrogen obtaining and hydrogen storage;
- Preparation and characterization of new catalytic materials for catalytic reaction between hydrogen and carbon dioxide, with the formation of methane. Research on development and implementation of pilot or industrial-scale technologies.

Business or sector Academic research and development

2006 - 2012 **Scientific Researcher**

Research Centre -OLTCHIM SA, 1, Uzinei street, Ramnicu Valcea, Romania (<http://www.oltchim.ro>)

- Scientific research in the field of industry and energy usage;
- Syntheses of organic and inorganic compounds, experimental studies on catalytic hydrogenation;
- Development of various technologies for polyether polyols preparation;
- Catalyst preparation and testing in the hydrogenation of glycerol;
- Research activities to reduce negative environmental impacts caused by industrial activities.

Business or sector Research & Development

2000 - 2006 **Chemical Engineer**

Research Centre -OLTCHIM SA, 1, Uzinei street, Ramnicu Valcea, Romania (<http://www.oltchim.ro>)

- Research activities in the field of reliability and risk assessment for industrial plants (e.g. propenoxide and propylene glycol plants, polyols polyether's installations);
- Studies regarding the impact of industrial activities on the environment;
- Supervision and coordination of investment works in order to enlarge the industrial capacity;
- Process engineering in industrial plant regarding polyether polyols obtaining;
- Participation at writing and implementing quality assurance in industrial plant system.

Business or sector Research & Development

EDUCATION AND TRAINING

15-22.05.2015 / 12-25.06.2017

Training in Surface area and pore size analysis

Level 6 - Second stage of tertiary education

Quantachrome Instruments Inc.Boynton

11-14.06.2012

Training in ultrasonic spray systems for applying precise, thin film coatings

Level 6 - Second stage of tertiary education

Sono-Tek Corporation

2001 – 2009

PhD in Chemical Engineering

Level 6 - Second stage of tertiary education

„Gh. Asachi” Technical University of Iasi, Faculty of Chemical Engineering and Environmental Protection

- Title of doctoral thesis: Catalytic Hydrogenation of Glycerol Catalysts development, Syntheses of organic and inorganic compounds, experimental studies on catalytic hydrogenation

2002 - 2006 **Bachelor degree- Public Administration**
 „Al.I. Cuza” University of Iasi, Faculty of Economics and Business Administration
 ▪ Learning Public Administration

2000 – 2001 **Master in Ecological Catalysis** Level 5 - Second stage of tertiary education
 Gh. Asachi” Technical University of Iasi, Faculty of Chemical Engineering and Environmental Protection

1995 - 2000 **Bachelor degree** Level 5 - First stage of tertiary education: ISCED 5A
 “Gh. Asachi” Technical University of Iasi, Faculty of Chemical Engineering and Environmental Protection
 ▪ Organic Chemical Engineering

PERSONAL SKILLS

Mother tongue(s) Romanian

Self-assessment

	UNDERSTANDING		SPEAKING		WRITING
	Listening	Reading	Spoken interaction	Spoken production	
English	B2	C1	C1	B2	B2
	-				

Levels: A1/2: Basic user - B1/2: Independent user - C1/2 Proficient user
 Common European Framework of Reference for Languages

Communication skills ▪ Friendly, Trustworthy, Hard-working, Communicative, Highly organized, Problem solver, Team player – in the expertise area

Organisational / managerial skills ▪ Competent organizer and coordinator, empathic with colleagues, innovative in projects development

Job-related skills

- Technical skills in the area of PEM fuel cells and electrodes for PEM Fuel Cells: deposition of catalytic inks using ultrasonic technique, membrane electrode assembly (MEA) fabrication; electrochemical techniques for characterizing fuel cell using different measurements, e.g. polarization curve (I-V), cyclic voltammetry (CV), linear sweep voltammetry (LSV), electrochemical impedance spectroscopy (EIS);
- Technical skills in the area of carbon materials preparation: synthesis of graphene-based materials using various chemical procedures and microwave method;
- Technical skills in the area of catalysts preparation: development of catalysts based on noble and non-noble metals decorated on graphene base materials synthesis; metal nanoparticles functionalized on reduced graphene oxide surface; hybrid nanocomposites prepared by MW process; core-shell micro and nanoparticles
- Technical skills in preparation of hydrophobic materials for gas diffusion layer (GDL) based on carbon nanofibers obtained via electrospinning process
- Technical skills on characterization of catalysts: specific surface area (BET), porosity (BJH), particle size distribution

Computer skills ▪ Productivity suite: Microsoft Office; Multimedia software & Internet browsers

Other skills ▪ Open-minded, curious and inventive

Driving licence ▪ B

ADDITIONAL INFORMATION

Publications
Presentations
Projects
Conferences
Seminars
Honours and awards
Memberships
References

Publication:

- <http://orcid.org/0000-0001-5745-8029>;
- <https://www.brainmap.ro/adriana-marinoiu>; <https://www.mendeley.com/profiles/adriana-marinoiu/>;
- https://www.researchgate.net/profile/Adriana_Marinoiu;
- 61 - papers indexed in Scopus; H-index Scopus = 12;
- <https://www.scopus.com/authid/detail.uri?authorId=30767637700>;
- 36 - papers indexed in WOS (14 Q1; 7 Q2; 15 Q3); Hirsh-index WOS = 10;
- <https://app.webofknowledge.com/author/record/1404486>;
- 104 - papers indexed in Google Scholar; H-index GS = 13, i10-index =20;
- <https://scholar.google.com/citations?user=D8TY2NgAAAAJ&hl=ro>;
- 10 - Patent and patent requests

List of relevant published papers

Published papers indexed by Thomson Reuters Master Journal List (ex-ISI Master Journal List) with impact factor (IF):

- **Marinoiu A.**, Andrulevicius M., Tamuleviciene A., Tamulevicius T., Raceanu M., Varlam M., Synthesis of well dispersed gold nanoparticles on reduced graphene oxide and application in PEM fuel cells, *Applied Surface Science*, vol. 504, nr 1, pag 144511, ISBN/ISSN 0169-4332, **2020** Factor Impact: 6.182
- **Marinoiu A.**, Andrulevicius M, Tamuleviciene A, Tamulevicius T, Carcadea E, Raceanu M, High performance catalytic system with enhanced durability in PEM fuel cell, *International Journal of Hydrogen Energy*, 45 (17), pp. 10409-10422, **2020**, impact factor: 4,939
- **Marinoiu A.**, Raceanu M, Carcadea E, Andrulevicius M, Tamuleviciene, A., Tamulevicius, T., Capris C, Varlam M, Efficient method to obtain Platinum–Cobalt supported on graphene oxide and electrocatalyst development, *International Journal of Hydrogen Energy*, 45 (49), pp. 26226-26237, **2020**, impact factor/ 2019 : 4,939;
- **Marinoiu, A.**, Carcadea E, Sacca A, Carbone, A., Sisu, C., Dogaru, A, Raceanu M,Varlam M, One-step synthesis of graphene supported platinum nanoparticles as electrocatalyst for PEM fuel cells, *International Journal of Hydrogen Energy*, **2020**, impact factor: 4,939
- Humelnicu, A.-C., Samoila, P., Asandulesa, M., Cojocaru C, Bele A, **Marinoiu, AT**, Sacca, A., Harabagiu, V., Chitosan-sulfated titania composite membranes with potential applications in fuel cell: Influence of cross-linker nature, *Polymers*, 12 (5), art. no. 1125, **2020**, Impact factor: 3,426
- Carcadea, E., Varlam, M., Ismail, M., Ingham, D.B., **Marinoiu, A.**, Raceanu, M., Jianu, C., Patularu, L., Ion-Ebrasu, D., *PEM fuel cell performance improvement through numerical optimization of the parameters of the porous layers*, *International Journal of Hydrogen Energy*, 45 (14), pp. 7968-7980., 1879-3487, **2020**, Impact factor: 4.939
- Elena Carcadea, Mohammed S Ismail, Derek Bin Ingham, Laurentiu Patularu, Dorin Schitea, **Adriana Marinoiu**, Daniela Ion-Ebrasu, Dan Mocanu, Mihai Varlam, Effects of geometrical dimensions of flow channels of a large-active-area PEM fuel cell: A CFD study, *International Journal of Hydrogen Energy*, **2020**, Impact factor: 4.939
- **Marinoiu, A.**, Raceanu, M., Andrulevicius, M., Tamuleviciene, A., Tamulevicius, T., Nica, S., Bala, D., Varlam, M., *Low-cost preparation method of well dispersed gold nanoparticles on reduced graphene oxide and electrocatalytic stability in PEM fuel cell*, *Arabian Journal of Chemistry*, vol 13 (1), pp. 3585-3600, ISSN: 18785352, Factor Impact 4.762
- Lazar, O.-A., **Marinoiu, A.**, Raceanu, M., Pantazi, A., Mihai, G., Varlam, M., Enachescu, M., *Reduced graphene oxide decorated with dispersed gold nanoparticles: Preparation, characterization and electrochemical evaluation for Oxygen reduction reaction*, *Energies*, 13 (17), art. no. 4307, Impact factor: 2.702
- Bizon, N, Raceanu, M, Koudoumas, E, **Marinoiu, A** Karapidakis, E, Carcadea, E, *Renewable/Fuel Cell Hybrid Power System Operation Using Two Search Controllers of the Optimal Power Needed on the DC Bus*, *Energies*, 13 (22), Impact factor: 2.702
- **Adriana Marinoiu**, Radu Andrei, Irina Vagner, Violeta Niculescu, Felicia Bucura, Marius Constantinescu, Elena Carcadea, One Step Synthesis of Au Nanoparticles Supported on Graphene Oxide Using an Eco-Friendly Microwave-Assisted Process, *Materials Science*, 26, 3, 249-254, 2020, Impact factor/2019: 0.16
- Andrei, R.D., **Marinoiu, A.**, Marin, E., Enache, S., Carcadea, E., Carbon nanofibers production via the electrospinning process, *Energies*, 13 (11), art. no. 3029, DOI: 10.3390/ en13113029, Impact factor/2019: 2,702
- **Marinoiu A.**, Raceanu M., Carcadea E., Varlam M., Stefanescu I., Iodinated carbon materials for oxygen reduction reaction in proton exchange membrane fuel cell. Scalable synthesis and electrochemical performances, *Arab J Chem* 2019;12:868–80, Factor Impact 4.762
- Carcadea E., Varlam M., **Marinoiu A.**, Raceanu M., Ismail MS., Ingham DB., Influence of catalyst structure on PEM fuel cell performance – A numerical investigation, *Int J Hydrogen Energy* 2019. Impact factor: 4.939

- Vasut Felicia, Oubraham Anisoara, Soare Amalia, **Marinoiu Adriana**, Ion-Ebrasu Daniela, Dragan Mirela, Platinum supported on graphene - PTFE as catalysts for isotopic exchange in a detritiation plant, FUSION ENGINEERING AND DESIGN, Vol. 146 (A) SI, pp 149-152
- **Marinoiu, Adriana**; Cobzaru, Claudia; Carcadea, Elena; Raceanu, Mircea; Schitea, Dorin; Varlam, Mihai; Stefanescu, Ioan, New catalysts used in the hydrogenolysis reaction of glycerol , Environmental Engineering & Management Journal (EEMJ) . Jan2019, Vol. 18 Issue 1, pp 195-202. 8p.
- Cobzaru C., **Marinoiu A.**, Apostolescu GA, Tataru-Farmus RE, Cernatescu C, Mathematical modeling for kinetics of Fe³⁺ exchange ion pretreated analcime, Revue Roumaine de Chimie, May 2019, Vol. 64 Issue 5, pp 403-407
- **Adriana Marinoiu**, Mircea Raceanu, Elena Carcadea, Mihai Varlam, Iodine-doped graphene – Catalyst layer in PEM fuel cells, *Applied Surface Science*, **456**, **2018**, 238-245, (IF=4.439)
- **Adriana Marinoiu**, Mihai Varlam, Elena Carcadea, Mircea Raceanu, Amalia Soare, Ioan Stefanescu, A Class of High Performance Electrocatalysts for Oxygen Reduction Reaction of Fuel Cells, using Iodine Doped Graphene, *Materials Today: Proceedings* **5**, **2018**, 15915–15922
- **Adriana Marinoiu**, Mircea Raceanu, Mindaugas Andrulavicius, Asta Tamuleviciene, Tomas Tamulevicius, Simona Nica, Daniela Bala, Mihai Varlam, Low-cost preparation method of well dispersed gold nanoparticles on reduced graphene oxide and electrocatalytic stability in PEM Fuel Cell, Accepted, Arabian Journal of Chemistry, [ISSN 1878-5352](https://doi.org/10.1016/j.arabjc.2018.12.009) ; DOI information: 10.1016/j.arabjc.2018.12.009
- [Carcadea E](#), [Varlam M](#), [Ingham DB](#), [Ismail MS](#), [Patularu L](#), **Marinoiu A** , [Schitea D](#), The effects of cathode flow channel size and operating conditions on PEM fuel performance: A CFD modelling study and experimental demonstration, INTERNATIONAL JOURNAL OF ENERGY RESEARCH, **2018**, Volume 42, Issue: 8, 2789-2804, DOI: 10.1002/er.4068 (IF=3.009)
- Elena Carcadea, Mihai Varlam, **Adriana Marinoiu**, Mircea Raceanu, M. S. Ismail, D.B. Ingham, Influence of catalyst structure on PEM fuel cell performance - A numerical investigation, *International Journal of Hydrogen Energy*, **2018**, doi: 10.1016/j.ijhydene.2018.12.155, (IF 4.229)
- C. Cobzaru, **A. Marinoiu**, C. Cernatescu, A.C.Puitel, A. Soare, Experimental Studies for the Cinnamaldehyde Adsorption on Dealuminated Clinoptilolite Using as Carrier, REV.CHIM.(Bucharest), 69, No. 3, **2018** (IF=1.412)
- **Marinoiu A**, Raceanu M, Carcadea E, Varlam M, Stefanescu I. Low cost iodine intercalated graphene for fuel cells electrodes. *Appl Surf Sci* **2017**; 424:93-100 doi:10.1016/j.apsusc.2017.01.295. (IF=4.439)
- **Marinoiu A**, Raceanu M, Carcadea E, Varlam M, Balan D, Ion-Ebrasu D, Stefanescu I, Enachescu M, Iodine-Doped Graphene for Enhanced Electrocatalytic Oxygen Reduction Reaction in Proton Exchange Membrane Fuel Cell Applications. *J Electrochem Energy Convers Storage* **2017**;14:31001. doi:10.1115/1.4036684. (IF=1.429)
- **Marinoiu A**, Gatto I, Raceanu M, Varlam M, Moise C, Pantazi A, Jianu C, Stefanescu I, Low cost iodine doped graphene for fuel cell electrodes. *Int J Hydrogen Energy* **2017**. doi:10.1016/j.ijhydene.2017.07.036. (IF=4.229)
- **Marinoiu A**, Raceanu M, Carcadea E, Varlam M, Soare A, Stefanescu I. Doped Graphene as Non-Metallic Catalyst for Fuel Cells. *Mater Sci* **2017**;23:108–13. doi:10.5755/j01.ms.23.2.16216. (IF=0.393)
- Rahul Krishna, Diana M. Fernandes, **Adriana Marinoiu**, Joao Ventura, Cristina Freire, Elby Titus, [Facile synthesis of well dispersed Pd nanoparticles on reduced graphene oxide for electrocatalytic oxidation of formic acid](#), *Int J Hydrogen Energy*, **2017**, 42 (37): 23639-23646 (IF=4.229)
- Irina Petreanu, **Adriana Marinoiu**, Claudia Sisu, Mihai Varlam, Radu Fierascu, Paul Stanescu, Mircea Teodorescu, Synthesis and testing of a composite membrane based on sulfonated polyphenylene oxide and silica compounds as proton exchange membrane for PEM fuel cells, *Materials Research Bulletin* **2017** 96:136–142, (IF=2.873)
- **Adriana Marinoiu**, Elena Carcadea, Claudia Cobzaru, Corina Cernatescu, Numerical Approach for Catalytic Conversion of CO₂ to Methane over Nickel Base Catalysts, *REV. CHIM.* (Bucharest), 68, No. 1, **2017**, pp. 128-133, ISSN: 0034-7752, (IF=1.412)
- **Marinoiu A**, Raceanu M, Carcadea E, Varlam M, Stefanescu I. Iodinated carbon materials for oxygen reduction reaction in proton exchange membrane fuel cell. Scalable synthesis and electrochemical performances. *Arab J Chem* **2016**. doi:10.1016/j.arabjc.2016.12.002. (IF=3.153)
- **Marinoiu A**, Raceanu M, Carcadea E, Varlam M, Stefanescu I. Iodinated carbon materials for oxygen reduction reaction in proton exchange membrane fuel cell. Scalable synthesis and electrochemical performances. *Arab J Chem* **2016**. doi:10.1016/j.arabjc.2016.12.002. (IF=3.153)
- **A. Marinoiu**, [M. Raceanu](#), [E. Carcadea](#), [D. Marinescu](#), [C. Teodorescu](#), [A. Mellichio](#), [M. Varlam](#), [I. Stefanescu](#), Convenient graphene based materials as potential candidates for low cost fuel cell catalysts, *Reac Kinet Mech Cat*, **2016**, 118:281–296, DOI 10.1007/s11444-016-0999-4, factor impact: 1,170
- **A. Marinoiu**, C. Cobzaru, E. Carcadea M. Raceanu, I. Atkinson, M. Varlam, I. Stefanescu, An Experimental Approach for Finding Low Cost Alternative Support Material in PEM Fuel Cells, *Rev. Roum. Chim.*, **2016**, 61(4-5), 433-440
- E. Georgescu, A. Nicolescu, F. Georgescu, S. Shova, **A. T Marinoiu**, F. Dumitrascu, Fine tuning the outcome of 1,3-dipolar cycloaddition reactions of benzimidazolium ylides to activated alkynes, *Tetrahedron* **72** (2016) 2507e2520, factor impact 2.641
- C. Cobzaru, **A. Marinoiu**, G.A. Apostolescu, R.E. Tataru-Farmus, N. Apostolescu and C. Cernatescu, Behaviour of Pre-treated Clinoptilolite Volcanic Tuff used in Ion Exchange Process with Ca²⁺, Ni²⁺ and NH⁴⁺ Ions Described by a Numerical Study, *Rev. Roum. Chim.*, **2016**, 61(4-5), 427-432

- C. Cernatescu, C. Cobzaru, G.A. Apostolescu, N. Apostolescu, **A. Marinoiu**, Quaternization of N-Methylated Phenyl-Benzimidazole Azomethines to Benzimidazolium Salts, *Rev. Roum. Chim.*, **2016**, 61(61-67), 591-596
- **A. Marinoiu**, **M. Raceanu**, **E. Carcadea**, **D. Marinescu**, **C. Teodorescu**, **A. Mellichio**, **M. Varlam**, **I. Stefanescu**, Convenient graphene based materials as potential candidates for low cost fuel cell catalysts, *Reac Kinet Mech Cat*, **2016**, 118:281–296, DOI 10.1007/s11144-016-0999-4, (IF: 1,515)
- **A. Marinoiu**, C. Cobzaru, E. Carcadea, M. Raceanu, I. Atkinson, M. Varlam, I. Stefanescu, An Experimental Approach for Finding Low Cost Alternative Support Material in PEM Fuel Cells, *Rev. Roum. Chim.*, **2016**, 61(4-5), 433-440, (IF: 0.37)
- **A. Marinoiu**, C. Cobzaru, M. Raceanu, M. Varlam, E. Carcadea, C. Cernatescu, I. Stefanescu, Carbon dioxide conversion to methane over supported nickel base catalysts, *Rev. Roum. Chim.*, 60(2-3), **2015**, 249-256. factor impact: **0,311**
- **A. Marinoiu**, C. Cobzaru, E. Carcadea, M. Raceanu, D. Schitea, M. Varlam, I. Stefanescu, New catalysts used in the hydrogenolysis reaction of glycerol, *Environmental Engineering and Management Journal*, accepted, **2015**, <http://omicron.ch.tuiasi.ro/EEMJ/>
- **A. Marinoiu**, C. Cobzaru, E. Carcadea, M. Raceanu, C. Capris, V. Tanislav, C. Teodorescu, I. Iordache, Numerical analysis of Cu and Ni based catalysts in hydrogenation process of glycerol, *Environmental Engineering and Management Journal*, **2015**, Vol.14, No. 9, 2201-2211 <http://omicron.ch.tuiasi.ro/EEMJ/> factor impact: **1,065**
- Cobzaru C., **Marinoiu A.**, Cernatescu C., Apostolescu G., The behaviour of dealuminated natural zeolites in sorption process with Cu(II) ions studied by mathematical model *Rev. Roum. Chim.*, **2015**, 60(7-8), 823-835
- Cernatescu C., Apostolescu A.G., Cobzaru C., Tătaru-Fărmas R.E., Apostolescu N., Marinoiu A., Synthesis and physico-chemical behaviour studies for a new benzimidazole azodye *Rev. Roum. Chim.*, **2015**, 60(7-8), 837-844.
- C. Cobzaru, **Adriana Marinoiu**, Corina Cernatescu, Sorption of vitamin C on acid modified clinoptilolite, *Rev. Roum. Chim.*, 60(2-3), **2015**, 241-247
- C. Cobzaru, G. Bordeianu, **A. Marinoiu**, G.A. Apostolescu, C. Cobzaru, R.E. Tataru-Farmus, D. Ungureanu, C. Cernatescu, N. Apostolescu, The Effect of Storage Time on The Composition of The Olive and Sunflower Oils, *Key Engineering Materials*, Vol 660, **2015**, pp 132-137
- **A. Marinoiu**, C. Cobzaru, M. Raceanu, M. Varlam, E. Carcadea, C. Cernatescu, I. Stefanescu, Carbon dioxide conversion to methane over supported nickel base catalysts, *Rev. Roum. Chim.*, 60(2-3), **2015**, 249-256.
- C. Cobzaru, **A. Marinoiu**, C. Cernatescu, Sorption of vitamin C on acid modified clinoptilolite, *Rev. Roum. Chim.*, 60(2-3), **2015**, 241-247.
- **A. Marinoiu**, **M. Raceanu**, **C. Cobzaru**, **C. Teodorescu**, **D. Marinescu**, **A. Soare**, **M. Varlam**, Low temperature CO retention using hopcalite catalyst for fuel cell applications. *Reaction Kinetics, Mechanisms and Catalysis* **2014**; 112(1):37-50 (IF: 1,515)
- **A. Marinoiu**, C. Cobzaru, E. Carcadea, M. Raceanu, I. Petreanu, M. Varlam, Study about glycerol hydrogenolysis using copper chromite catalysts mixed with bases, *Revue Roumaine de Chimie*, 59(8), **2014**, 657-662; (IF: 0.37)
- M. Raceanu, **A. Marinoiu**, M. Culcer, M. Varlam, N. Bizon, Preventing reactant starvation of a 5 kW PEM fuel cell stack during sudden load change *Proceedings of the 6th International Conference on Electronics, Computers and Artificial Intelligence (ECAI)*, Book Series: International Conference on Electronics Computers and Artificial Intelligence, pp. 55-60, **2014**, ISSN: 2378-7147, ISBN: 978-1-4799-5479-7 DOI: [10.1109/ECAI.2014.7090147](https://doi.org/10.1109/ECAI.2014.7090147)
- **A. Marinoiu**, **M. Raceanu**, **C. Cobzaru**, **C. Teodorescu**, **D. Marinescu**, **A. Soare**, **M. Varlam**, Low temperature CO retention using hopcalite catalyst for fuel cell applications. *Reaction Kinetics, Mechanisms and Catalysis* **2014**; 112(1):37-50
- **A. Marinoiu**, C. Cobzaru, E. Carcadea, M. Raceanu, C. Capris, V. Tanislav, C. Teodorescu, I. Iordache, Numerical analysis of Cu and Ni based catalysts in hydrogenation process of glycerol, *Environmental Engineering and Management Journal*, accepted, **2014**, <http://omicron.ch.tuiasi.ro/EEMJ/>
- **A. Marinoiu**, C. Cobzaru, E. Carcadea, M. Raceanu, A. Enache, M. Varlam, I. Iordache Mathematical modeling of the glycerol hydrogenolysis using copper chromite catalysts. The effect of additional bases. *Environmental Engineering and Management Journal*, accepted, **2014**, <http://omicron.ch.tuiasi.ro/EEMJ/>
- C. Cobzaru, C. Cernatescu, **A. Marinoiu**, Dealuminated natural zeolites for applications in wastewater purifications. I. The acid treatment of the native clinoptilolite and its Na form, *Revue Roumaine de Chimie*, 59(6-7), **2014**, 597-602;
- **A. Marinoiu**, C. Cobzaru, E. Carcadea, M. Raceanu, I. Petreanu, M. Varlam, Study about glycerol hydrogenolysis using copper chromite catalysts mixed with bases, *Revue Roumaine de Chimie*, 59(8), **2014**, 657-662;
- C. Cobzaru, C. Cernatescu, **A. Marinoiu**, Modified clinoptilolite used for removing azomethines from wastewaters. II. Adsorption of azomethines from wastewaters on clinoptilolite, *Rev. Roum. Chim.*, 59(11-12), **2014**, 1091-1098.
- **A. Marinoiu**, C. Cobzaru, E. Carcadea, C. Capris, V. Tanislav, M. Raceanu, Hydrogenolysis of glycerol to propylene glycol using heterogeneous catalysts in basic aqueous solutions. *Reaction Kinetics, Mechanisms and Catalysis*, **2013**, 109 (1), 63-73.
- **A. Marinoiu**, G. Ionita, C.-L. Gaspar, C. Cobzaru, D. Marinescu, C. Teodorescu, S. Oprea, Selective hydrogenolysis of glycerol to propylene glycol using heterogeneous catalysts, *Reaction Kinetics Mechanisms and Catalysis* 99(1), **2010**, 111-118;
- **A. Marinoiu**, G. Ionita, C.-L. Gaspar, C. Cobzaru, S. Oprea, Glycerol Hydrogenolysis to Propylene Glycol, *Reaction Kinetics and Catalysis Letters*, 97, **2009**, 315-320;

- C. Cobzaru, C. Cibotaru, A. Rotariu, **A. Marinoiu**, S. Oprea, [Kinetic study of the sorption process with Cu\(II\) ions on clinoptilolite and analcime. Effects of temperature and particle size](#), *Chemical Industry & Chemical Engineering Quarterly* 15 (2), **2009**, p.63-67

Published papers indexed by Thomson Reuters Master Journal List (ex-ISI Master Journal List) without impact factor (IF):

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