



Europass Curriculum Vitae

Personal information

First name(s) / Surname(s) Marinoiu Teodora Adriana
Address(es) Tudor Vladimirescu, 93, Baile Govora, Valcea, Romania, ROMANIA
Telephone(s) +4-0350-414095; +4-0250-732744
Fax(es) +4-0250-732746
E-mail adriana.marinoiu@icsi.ro
Nationality Romanian
Date of birth [REDACTED]
Gender Female

Occupational field **Academic (research)**

Work experience

Dates	April 2024-present
Occupation or position held	Coordinator of Research Group “Hydrogen Research CNHPC”
Main activities and responsibilities	<ul style="list-style-type: none">▪ Manager and scientific responsible of national projects in the ICSI Energy Department▪ Management of human resources▪ Development of innovative Catalyst-Coated Membranes (CCMs)/Catalyst-Coated Electrodes (CCEs) and Membrane Electrode Assemblies (MEAs).▪ Development of new methods for the preparation of graphene-based materials using low-time-consuming procedures▪ Development of carbon fiber manufacturing technology by electrospinning▪ Responsible IOSIN - National Interest Plant- National Center for Hydrogen and Fuel Cells
Dates	March 2024-present
Occupation or position held	Responsible IOSIN
Main activities and responsibilities	<ul style="list-style-type: none">▪ Coordinates the maintenance and operation of the National Interest Plant - National Center for Hydrogen and Fuel Cells▪ Organizes the CNHPC exploitation activity on the basis of short- and medium-term programs and defines working priorities▪ Represents IOSIN CNHPC at national and international level, makes decisions regarding the needs and requirements of human resources▪ Coordinates the priority areas of the CNHPC, organizes working meetings, coordinates the elaboration of specific reports▪ Coordinates the operations, maintenance and operation of the technological line of material production (Mat-4-H)▪ Participates in the operation activities of the fuel cell production technology line (Gas-to Power)▪ Provides adequate technical support for the development of exploitation/research activities in the field specific to the technological line it coordinates▪ Maintenance, operation and operation of spray coating system (deposition).
Dates	March 2018-April 2024
Occupation or position held	Coordinator of Research Group “New materials for H₂ energy”
Main activities and responsibilities	<ul style="list-style-type: none">▪ 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 procedures▪ Developing a carbon fibers manufacturing technology by electrospinning▪ Deputy Responsible IOSIN
Name and address of employer	National Research & Development Institute for Cryogenics & Isotopic Technologies, ICSI ENERGY (former National Centre for Hydrogen and Fuel Cell), Uzinei street, no.4, Ramnicu Valcea, Romania
Type of business or sector	Academic research and development

Dates	April 2019-present
Occupation or position held	Scientific Researcher 1st degree
Main activities and responsibilities	<ul style="list-style-type: none"> ▪ Manager and scientific responsible of national project in the ICSI Energy Department ▪ Development of one step synthesis of noble metal nanoparticles supported on reduced graphene oxide using an eco-friendly microwave-assisted process ▪ Development of chemical routes for metal nanoparticles decorated on graphene/ graphene oxide ▪ Development of metal nanoparticles decorated on carbon nanofiber using electrospinning ▪ Coordinates the maintenance, operation and operation of the equipment Automated sorption analyzer AUTOSORB-iQ-C for the realization of specific surface analysis (BET) and porosity determination - BET analysis responsible
Name and address of employer	National Research & Development Institute for Cryogenics & Isotopic Technologies , National Centre for Hydrogen and Fuel Cell, Uzinei street, no.4, Ramnicu Valcea, Romania
Type of business or sector	Academic research and development
<hr/>	
Dates	2016-2019
Occupation or position held	Scientific Researcher 2nd degree with a permanent position
Main activities and responsibilities	<ul style="list-style-type: none"> ▪ Manager and scientific responsible of national projects in the National Center 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 ▪ Development 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 (MEAs) ▪ Development 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 ▪ Coordinates the maintenance, operation and operation of the equipment Automated sorption analyzer AUTOSORB-iQ-C for the realization of specific surface analysis (BET) and porosity determination - BET analysis responsible ▪
Name and address of employer	National Research & Development Institute for Cryogenics & Isotopic Technologies , National Centre for Hydrogen and Fuel Cell, Uzinei street, no.4, Ramnicu Valcea, Romania
Type of business or sector	Academic research and development
<hr/>	
Dates	2012 - 2016
Occupation or position held	Scientific Researcher 3rd degree with a permanent position
Main activities and responsibilities	<ul style="list-style-type: none"> ▪ 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
Name and address of employer	National Research & Development Institute for Cryogenics & Isotopic Technologies , Uzinei street, no.4, Ramnicu Valcea, Romania
Type of business or sector	Research & Development
<hr/>	
Dates	2006 - 2012
Occupation or position held	Scientific Researcher

Main activities and responsibilities	<ul style="list-style-type: none"> ▪ 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 ▪ Catalysts preparation and testing in the hydrogenation of glycerol ▪ Research activities to reduce negative environmental impacts caused by industrial activities
Name and address of employer	Research Center -OLTCHIM SA , Uzinei street, no.1, Ramnicu Valcea, Romania
Type of business or sector	Research & Development
<hr/>	
Dates	2000-2006
Occupation or position held	Chemical Engineer
Main activities and responsibilities	<ul style="list-style-type: none"> ▪ Research activities in the field of reliability and risk assessment for industrial plants (e.g. propenoxyde and propylene glycol plants, polyols polyethers 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
Name and address of employer	Industrial plant OLTCHIM SA , Uzinei street, no.1, Ramnicu Valcea, Romania
Type of business or sector	Research & Development
<hr/>	
Education and training	
Dates	2024
Title of qualification awarded	Official Training for SonoTek Ultrasonic Coating Systems
Principal subjects/occupational skills covered	Fabrication of carbon coated membrane (CCM) for PEM FCs and electrolyzers by using Ultrasonic coating system <i>model FlexiCoat</i> ,
Name and type of organisation providing education and training	Sono-Tek Corporation, Milton, USA
Level in national or international classification	Level 6 - Second stage of tertiary education
<hr/>	
Dates	10.04.-19.04.2024
Title of qualification awarded	Operational and Technical Training on Micromeritics Tristar II
Principal subjects/occupational skills covered	Plus 3030 physical adsorption analyzer
Name and type of organisation providing education and training	G&G Instruments Kft, Budapest, Himeshaza u. 12
Level in national or international classification	Level 6 - Second stage of tertiary education
<hr/>	
Dates	15-22.05.2015 / 12-25.06.2017
Title of qualification awarded	Training in Surface area and pore size analysis
Principal subjects/occupational skills covered	BET method for determination of Specific surface area, BJH method for analysis of pore size distribution
Name and type of organisation providing education and training	Quantachrome Instruments Inc. Boynton, USA
Level in national or international classification	Level 6 - Second stage of tertiary education
<hr/>	
Dates	11-14.06.2012
Title of qualification awarded	Training in ultrasonic spray systems for applying precise, thin film coatings
Principal subjects/occupational skills covered	Fabrication of carbon coated membrane (CCM) for PEM FCs and electrolyzers by using Ultrasonic coating system <i>model ExactaCoat</i>
Name and type of organisation providing education and training	Sono-Tek Corporation
Level in national or international classification	Level 6 - Second stage of tertiary education

<p>-----</p> <p>Dates</p> <p>Title of qualification awarded</p> <p>Principal subjects/occupational skills covered</p> <p>Name and type of organisation providing education and training</p> <p>Level in national or international classification</p>	<p>2001 – 2009</p> <p>PhD in Chemical Engineering Title of doctoral thesis: Catalytic Hydrogenation of Glycerol</p> <p>Catalysts development, Syntheses of organic and inorganic compounds, experimental studies on catalytic hydrogenation</p> <p>„Gh. Asachi” Technical University of Iasi, Faculty of Chemical Engineering and Environmental Protection</p> <p>Level 6 - Second stage of tertiary education</p>																														
<p>Dates</p> <p>Title of qualification awarded</p> <p>Main activities and responsibilities</p> <p>Name and address of employer</p> <p>Type of business or sector</p>	<p>2002 - 2006</p> <p>Bachelor degree- Public Administration</p> <p>Learning Public Administration</p> <p>„Al.I. Cuza” University of Iasi, Faculty of Economics and Business Administration</p>																														
<p>Dates</p> <p>Title of qualification awarded</p> <p>Principal subjects/occupational skills covered</p> <p>Name and type of organisation providing education and training</p> <p>Level in national or international classification</p>	<p>2000 – 2001</p> <p>Master in Ecological Catalysis</p> <p>„Gh. Asachi” Technical University of Iasi, Faculty of Chemical Engineering and Environmental Protection</p> <p>Level 5 - First stage of tertiary education</p>																														
<p>-----</p> <p>Dates</p> <p>Title of qualification awarded</p> <p>Principal subjects/occupational skills covered</p> <p>Name and type of organisation providing education and training</p> <p>Level in national or international classification</p>	<p>1995 - 2000</p> <p>Bachelor degree</p> <p>Organic Chemical Engineering</p> <p>„Gh. Asachi” Technical University of Iasi, Faculty of Chemical Engineering and Environmental Protection</p> <p>Level 5 - First stage of tertiary education: ISCED 5A</p>																														
<p>Personal skills and competences</p> <p>Mother tongue(s)</p> <p>Other language(s)</p> <p>Self-assessment</p> <p><i>European level (*)</i></p> <p>English</p>	<p>Romanian</p> <table border="1"> <thead> <tr> <th colspan="4">Understanding</th> <th colspan="4">Speaking</th> <th colspan="2">Writing</th> </tr> <tr> <th colspan="2">Listening</th> <th colspan="2">Reading</th> <th colspan="2">Spoken interaction</th> <th colspan="2">Spoken production</th> <th colspan="2"></th> </tr> </thead> <tbody> <tr> <td>B2</td> <td>Independent user</td> <td>C1</td> <td>Proficient user</td> <td>C1</td> <td>Proficient user</td> <td>B2</td> <td>Independent user</td> <td>B2</td> <td>Independent user</td> </tr> </tbody> </table> <p>(*) Common European Framework of Reference for Languages</p>	Understanding				Speaking				Writing		Listening		Reading		Spoken interaction		Spoken production				B2	Independent user	C1	Proficient user	C1	Proficient user	B2	Independent user	B2	Independent user
Understanding				Speaking				Writing																							
Listening		Reading		Spoken interaction		Spoken production																									
B2	Independent user	C1	Proficient user	C1	Proficient user	B2	Independent user	B2	Independent user																						
<p>Social skills and competences</p>	<p>Friendly, Trustworthy, Hard-working, Communicative, Highly organized, Problem solver, Team player – in the expertise area</p>																														
<p>Organisational skills and competences</p>	<p>Competent organizer and coordinator, empathic with colleagues, innovative in projects development</p>																														
<p>Technical skills and competences</p>	<p>Technical skills in the area of fuel cells and electrodes for PEM Fuel Cells: Synthesis of graphene based materials; development of catalysts based on noble and non-noble metals; electrochemical techniques for characterizing fuel cell materials using polarization curve (I-V), electrochemical Measurements Impedance Spectroscopy (EIS); Technical skills in the area of carbon materials preparation: graphene base materials synthesis, characterization of total surface area by specific surface area, porosity, pore size distribution; particle size distribution (DLS);</p>																														
<p>Other skills and competences</p> <p>Driving licence</p>	<p>Open-minded, curious and inventive</p> <p>B category</p>																														

Annexes | **Annex 1:** List of Published papers indexed by Thomson Reuters Master Journal List (ex-ISI Master Journal List) with impact factor (IF)
Annex 2: Published papers indexed by Thomson Reuters Master Journal List (ex-ISI Master Journal List) without impact factor (IF)
Annex 3: List of published books/chapters
Annex 4: The experience accumulated in research projects
Annex 5: Patent applications
Annex 6: International recognition

Member professional organizations

General Secretary of the Romanian Association for Hydrogen Energy
Member of the Romanian Chemical Society

Summary main achievements:

Identification data:

BrainMap ID: U-1700-035M-8251

Researcher ID: <http://www.researcherid.com/rid/C-8903-2014>

SCOPUS author ID: 30767637700 <https://www.scopus.com/authid/detail.uri?authorId=30767637700>

ORCID: <http://orcid.org/0000-0001-5745-8029>

H-index: 21 (*Scopus*); 20 (*Web of Science*); 22 (*Google Scholar*)

Date: 22.05.2026

Signature: Marinouiu Adriana

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

1. Tiliakos, A., **Marinoiu, A.**, Tudorache, D., & Jaroniec, M. (2025). Editorial on hot topics in surface science:(Nano) catalysis for energy, environmental, and industrial applications (HTSS-NCEEIA). *Applied Surface Science Advances*, 27, 100742, (IF/2023=7.5, **Q1**).
2. lordache, M., Oubraham, A., Bazga, M., Ungureanu, G. E., Borta, S. E., & **Marinoiu, A.** (2025). Assessing the Efficacy of Seawater Batteries Using NASICON Solid Electrolyte. *Applied Sciences*, 15(7), 3469, (IF/2023=2.5, **Q2**).
3. **Marinoiu, A.**, lordache, M., Borta, E. S., & Oubraham, A. (2024). Graphene-Based Nanostructured Cathodes for Polymer Electrolyte Membrane Fuel Cells with Increased Resource. *C*, 10(4), 105, (IF/2023=3.9, **Q2**).
4. lordache, M., Oubraham, A., Borta, S., Ungureanu, G., & **Marinoiu, A.** (2024). Testing the Stability of NASICON Solid Electrolyte in Seawater Batteries. *Energies*, 17(21), 5241, (IF/2023=3.0, **Q3**).
5. Marin, M. M., Biru, I. E., Stavarahe, C. E., Avramescu, S. M., Vasilevici, G., **Marinoiu, A.**, ... & Verziu, M. N. (2024). Conversion of limonene to limonene diol over activated carbon supported Ti catalyst. *Biomass Conversion and Biorefinery*, 1-8, (IF/2023=2.5, **Q3**).
6. lordache, M., Oubraham, A., Petreanu, I., Sisu, C., Borta, S., Capris, C., ... & **Marinoiu, A.** (2024). NASICON Membrane with High Ionic Conductivity Synthesized by High-Temperature Solid-State Reaction. *Materials*, 17(4), 823, (IF/2023=3.1, **Q1**).
7. Oubraham, A., lordache, M., Marin, E., Sisu, C., Borta, S., Soare, A., ... & **Marinoiu, A.** (2024). Preparation of Copper-Based Catalysts for Obtaining Methanol by the Chemical Impregnation Method. *Materials*, 17(4), 847, (IF/2023=3.1, **Q1**).
8. Nicolescu, A., Airinei, A., Georgescu, E., Georgescu, F., Tigoianu, R., Dumitrascu, F., **Adriana T. MARINOIU** & Deleanu, C. (2023). Synthesis and spectroscopic properties of novel indolizines and azaindolizines. *Revue Roumaine de Chimie*, 68(5), 241-252, (IF/2023=0.4, **Q4**).
9. Oubraham, A., Ion-Ebrasu, D., Vasut, F., Soare, A., Sorlei, I. S., & **Marinoiu, A.** (2023). Platinum-functionalized graphene oxide: One-pot synthesis and application as an electrocatalyst. *Materials*, 16(5), 1897, (IF/2023=3.1, **Q1**).
10. lordache, M., Oubraham, A., Sorlei, I. S., Lungu, F. A., Capris, C., Popescu, T., & **Marinoiu, A.** (2023). Noble metals functionalized on graphene oxide obtained by different methods—new catalytic materials. *Nanomaterials*, 13(4), 783, (IF/2023=4.4, **Q2**).
11. Tiliakos, A., lordache, M., & **Marinoiu, A.** (2021). Ionic conductivity and dielectric relaxation of NASICON superionic conductors at the near-cryogenic regime. *Applied Sciences*, 11(18), 8432, (IF/2023=2.5, **Q2**).
12. 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* Volume 46, Issue 25, 9 April 2021, Pages 13572-13582, (IF/2023=8.1, **Q1**).
13. **Adriana Marinoiu**, Elena Carcadea, Ada Sacca, Alessandra Carbone, Claudia Sisu, Andreea Dogaru, Mircea Raceanu, Mihai Varlam, One-step synthesis of graphene supported platinum nanoparticles as electrocatalyst for PEM fuel cells, *International Journal of Hydrogen Energy* Volume 46, Issue 22, 26 March 2021, Pages 12242-12253, (IF/2023=8.1, **Q1**).
14. **Marinoiu, A.**; Raceanu, M.; Carcadea, E; Varlam, M. Nitrogen-Doped Graphene Oxide as Efficient Metal-Free Electrocatalyst in PEM Fuel Cells, *NANOMATERIALS*, 2023, 13(7), 1233. /10.3390/nano13071233, WOS:000969700900001, (IF/2022 = 5.3 **Q1**).
15. Tiliakos, A; lordache, M.; Raceanu, M.; **Marinoiu, A.**, Remediation of activation energy anomalies, scaling distortions, and bandwidth limitations in superionic conductivity modeling of NZSP NaSICON synthesized by an augmented SSR method. *Ceramics International* **2023**, 49(7), pp: 10588-607, ISSN 0272-8842, 10.1016/j.ceramint.2022.11.246, (IF/2022 = 5.2 **Q1**).
16. **Marinoiu, A.**, lordache, M., & Tiliakos, A. 2022. Solid-state synthesis of optimized NASICON Na₃Zr₂Si₂PO₁₂ ceramic membranes. *Rev. Roum. Chim.*, 67(1-2), 59-66,(IF/2023=0.4, **Q4**).
17. **Marinoiu A.**; Ion-Ebrasu D.; Soare A.; Raceanu M. Iodine-Doped Graphene Oxide: Fast Single-Stage Synthesis and Application as Electrocatalyst. *Materials* 2022, 15(17):6174 (IF/2021 = 3.748 **Q1**).
18. **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 **Q1**
19. **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; **Q1**
20. **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; **Q1**
21. **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; **Q1**

22. Humelnicu, A.-C., Samoila, P., Asandulesa, M., Cojocar 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; **Q1**
23. 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 **Q1**
24. 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 **Q1**
25. **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, **Q2**
26. 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, **Q3**
27. 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), 2020, Impact factor: 2.702, **Q3**
28. **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 , **Q3**
29. Andrei, R.D., **Marinoiu, A.**, Marin, E., Enache, S., Carcadea, E., Carbon nanofibers production via the electrospinning process, *Energies*, 13 (11), art. no. 3029, 2020, DOI: 10.3390/en13113029, Impact factor/2019: 2,702; **Q3**
30. **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, **Q2**
31. 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, **Q1**
32. 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, **Q1**
33. **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, IF 0.9, **Q4**
34. .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, **Q4**
35. **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), **Q1**
36. **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
37. **Adriana Marinoiu**, Mircea Raceanu, Mindaugas Andrulevicius, 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 ; DOI information: 10.1016/j.arabjc.2018.12.009, **Q2**
38. 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, **Q1**)
39. 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, **Q1**)
40. 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), **Q4**
41. **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), **Q1**
42. **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)
43. **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, **Q1**)

44. **Marinoiu A**, Răceanu 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)
45. 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, **Q1**)
46. 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, **Q2**)
47. **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), **Q4**
48. **Marinoiu A**, Răceanu 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), **Q2**
49. **Marinoiu A**, Răceanu 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), **Q2**
50. **A. Marinoiu**, M. Răceanu, 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, factor impact: 1,170, **Q4**
51. **A. Marinoiu**, C. Cobzaru, E. Carcadea M. Răceanu, 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, **Q4**
52. 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
53. 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, **Q4**
54. 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
55. Cobzaru, C., Bordeianu, G., Apostolescu, G. **A., Marinoiu**, A., & Cernatescu, C. (2016). Quality evaluation of the olive oil during storage time. *Revue Roumaine de Chimie*, 61(8-9), 705-710
56. **A. Marinoiu**, M. Răceanu, 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), **Q4**
57. **A. Marinoiu**, C. Cobzaru, E. Carcadea M. Răceanu, 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), **Q4**
58. **A. Marinoiu**, C. Cobzaru, M. Răceanu, 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, **Q4**
59. **Marinoiu, A.**, Cobzaru, C., Carcadea, E., Răceanu, M., Schitea, D., Varlam, M., & Stefanescu, I. (2019). New catalysts used in the hydrogenolysis reaction of glycerol. *Environmental Engineering & Management Journal (EEMJ)*, 18(1), <http://omicron.ch.tuiasi.ro/EEMJ/>, **Q4**
60. **A. Marinoiu**, C. Cobzaru, E. Carcadea, M. Răceanu, C. Capris, V. Tanişlav, 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, **Q4**
61. 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, **Q4**
62. Cernatescu C., Apostolescu A.G., Cobzaru C., Tătaru-Fărmus 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, **Q4**
63. C. Cobzaru, **Adriana Marinoiu**, Corina Cernatescu, Sorption of vitamin C on acid modified clinoptilolite, *Rev. Roum. Chim.*, 60(2-3), 2015, 241-247, **Q4**
64. 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
65. **A. Marinoiu**, C. Cobzaru, M. Răceanu, 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, **Q4**.
66. C. Cobzaru, **A. Marinoiu**, C. Cernatescu, Sorption of vitamin C on acid modified clinoptilolite, *Rev. Roum. Chim.*, 60(2-3), 2015, 241-247, **Q4**.
67. **A. Marinoiu**, M. Răceanu, 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), **Q4**

68. **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), [Q4](#)
69. 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, [Q4](#)
70. **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, [Q4](#)
71. **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, [Q4](#)
72. **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, [Q4](#)
73. 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, [Q4](#)
74. **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, [Q4](#)
75. 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, [Q4](#)
76. **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.
77. **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
78. **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, [Q4](#)
79. 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, [Q4](#).

Annex 2:

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

1. **A. Marinoiu**, S-I. Pintilie, I. Vagner, M. Varlam, Nitrogen-iron supported on Graphene Oxide as efficient ORR catalyst, Proceedings of 2025 IEEE 15th International Conference "Nanomaterials: Applications & Properties" (IEEE NAP-2025).
2. **A. Marinoiu**, Development of Membrane Electrode Assembly based on One-dimension Nanostructures Abstract Book of the 27th International Conference-School "Advanced Materials and Technologies" - AMT 2025; p. 137, DOI: 10.5755/e01.2669-1930.2025, ISSN 2669-1930 (on-line).
3. **A. Marinoiu**, Iron Nanoparticles Supported on Reduced Graphene Oxide as Nonprecious Metal Catalysts for Low Temperature PEM Fuel Cells, Abstract Book of the 27th International Conference-School "Advanced Materials and Technologies" - AMT 2025; p. 138, DOI: 10.5755/e01.2669-1930.2025, ISSN 2669-1930 (on-line)
4. **Adriana Marinoiu**, Mihaela Iordache, Gheorghe Ungureanu, Anișoara Oubraham, Irina Vagner Long-Term Stability of Hydrogen Production from Sodium Borohydride Hydrolysis, *Journal Interdiscip Res App Mod Sci Emer Techn*, Volum 1 Issue 1, pp. 01-09. <https://doi.org/10.63620/MKIRAMSET.2025.1002>.
5. Daniela ION-EBRASU, Alin CHITU, Ana NASTURE, Elena CARCADEA, **Adriana MARINOIU**, Jeni A. VILAG, Valeriu A. VILAG, Cosmin P. SUCIU, Cathode vapor fed (CVF) PEM water electrolysis cell for 1Newton class propulsion system. Proceeding 11th European Conference for AeroSpace Sciences (EUCASS) - 30th June to 4th July 2025, Roma, Italia, DOI: 10.13009/EUCASS2025-188
6. **Marinoiu, A.**, Carcadea, E., & Raceanu, M. (2024, September). Pt-Fe Nanoparticles Supported on Graphene Oxide for Durable Proton Exchange Membrane Fuel Cells. In 2024 IEEE 14th International Conference Nanomaterials: Applications & Properties (NAP) (pp. 1-5). IEEE.
7. BRILL C., CURUIA M., VARLAM M., JIANU C., **Marinoiu A.**, BADESCU V., Cryogenic performance of a conduction cooled cryostat for hydrogen isotopes separation experiments at low temperature, 16TH CRYOGENICS 2021, IIR INTERNATIONAL CONFERENCE, Page 203-209, DOI10.18462/iir.cryo.2021.0009, Cryogenic performance of a conduction-cooled cryostat for low-temperature hydrogen isotope separation experiments.
8. **Adriana Marinoiu**, Geanina Mihai, Oana Lazar, Sabrina Rosoiu, Mariana Prodana, Claudia Sisu, Mircea Raceanu, Marius Enachescu, Facile Preparation of Graphene-supported Platinum-Cobalt Nanoparticles and their Use as Electrocatalyst in PEM

Fuell Cells, Nanomaterials - functional properties and applications, Vol. 28, Micro-and Nanoengineering (The 18th edition of the National Seminar for Nanoscience and Nanotechnology, Iasi, 24-25 October 2019), https://www.link2nano.ro/acad/mne/nanomaterials_vol28, Editura Academiei Române București, 2020.

9. **Adriana Marinoiu**, Geanina Mihai, Oana Lazar, Sabrina Rosoiu, Mariana Prodana, Claudia Sisu, Mircea Raceanu, Marius Enachescu, Facile Preparation of Graphene-supported Platinum-Cobalt Nanoparticles and their Use as Electrocatalyst in PEM Fuel Cells, Nanomaterials - functional properties and applications, Vol. 28, Micro-and Nanoengineering, (The 18th edition of the National Seminar for Nanoscience and Nanotechnology, Iasi, 24-25 October 2019), https://www.link2nano.ro/acad/mne/nanomaterials_vol28, Editura Academiei Române București, 2020
10. Irina Petreanu, Claudia Sisu, Amalia Soare, Radu Dorin Andrei, Catalin Capris, **Adriana Marinoiu**, Preparation of the Ni Doped Carbon Nanofibers Synthesized by Electrospinning, Smart Energy and Sustainable Environment, Vol. 23, Iss. 1, (2020): 5-12, indexat BDI, Romania
11. Violeta Niculescu, Marius Miricioiu, Amalia Soare, **Adriana Marinoiu**, Daniela Ebrasu-Ion, Marius Constantinescu, Felicia Bucura, SBA-3-based nanocatalysts application in Nile Blue removal from wastewater, 1st International Electronic Conference on Catalysis Sciences–ECCS2020, 10-30 November 2020, Sectiune: Catalyst Synthesis and Characterization, Submission ID: sciforum-033360, Published: 09 November 2020 by MDPI in 1st International Electronic Conference on Catalysis Sciences, DOI: 10.3390/ECCS2020-07619, MDPI, Elvetia
12. **Adriana Marinoiu**, Catalin Jianu, Claudia Cobzaru, Mircea Raceanu, Catalin Capris, Amalia Soare, Irina Petreanu, Elena Carcadea, Facile synthesis of well dispersed Au nanoparticles on reduced graphene oxide, Progress of Cryogenics and Isotopes Separation Volume 20, p 5-14, issue 2/2017
13. Elena Carcadea, Mihai Varlam, **Adriana Marinoiu**, Mircea Raceanu, Catalin Jianu, Ioan Stefanescu, Patularu Laurentiu, A CFD Investigation Regarding the Catalyst Layer Structure Influence on the PEM Fuel Cell Performance, Progress of Cryogenics and Isotopes Separation, Vol. 20, issue 1/2017, ISSN: 1582-2575, pp. 45-54
14. **Adriana Marinoiu**, Elena Carcadea, Mircea Raceanu, Mihai Varlam, Catalin Jianu, High Performance Electrocatalysts for Oxygen Reduction Reaction of Fuel Cells based on Iodine Doped Graphene, Proceeding 19th International Conference- School August 27-31.08.2017, Lituania, ISSN 1822-7759 p. 132
15. **Adriana Marinoiu**, Elena Carcadea, Irina Petreanu, Elena Marin, Bianca Sucea, Amalia Soare, Mircea Raceanu, Iodine Doped Graphene Synthesis Via a Facile Electrophilic Substitution. High Performance as Orr Electrocatalyst for PEMFC, Progress of Cryogenics and Isotopes Separation, Volume 19, issue 2/2016, p. 43-52
16. **Adriana Marinoiu**, Elena Carcadea, Irina Petreanu, Elena Marin, Bianca Sucea, Amalia Soare, Synthesis and Characterization of Iodine Doped Graphene by an Uncatalyzed Reaction, Progress of Cryogenics and Isotopes Separation Volume 19, issue 1/2016, p 19-26
17. **Adriana Marinoiu**, Elena Carcadea, Irina Petreanu, Claudia Susu, Constantin Teodorescu, Mircea Raceanu, Preparation of iodine doped graphene as catalyst for PEM fuel cell, IVth International Symposium on Innovative Materials for Processes in Energy Systems, IMPRES 2016-087, 23-26 octombrie 2016, Taormina, Italia, p 221-222, ISBN 978-4-944005-21-5
18. C. Cobzaru, **A. Marinoiu**, G. A. Apostolescu, RE Tataru-Farmus, N. Apostolescu, C. Cernatescu, Ammonia Removal from Aqueous Solution by Ion Exchange using Clinoptilolite and Verification of the Process through a Numerical Study, Progress of Cryogenics and Isotopes Separation Volume 19, issue 1/2016, 27-34
19. **Adriana Marinoiu**, Elena Carcadea, Mircea Raceanu, Claudia Cobzaru, Mihai Varlam, Carbon Dioxide Conversion To Methane Over Nickel Base Catalyst Advances in Environmental and Agricultural Science, WSEAS, Energy, Environmental and Structural Engineering Series/ 32, 2015, ISBN: 978-1-61804-270-5, ISBN: 978-1-61804-270-5
20. **A. Marinoiu**, Elena Carcadea, M. Raceanu, I. Petreanu, E. Marin, C. Teodorescu, A review regarding a “man-portable” lightweight flexible fuel cell concept small power supply, Progress of Cryogenics & Isotopes Separation, 2015, vol 18, nr 1, p. 81-88, Abstracting and indexing in: Contemporary Science Association, EBSCO, Ulrich's Periodicals Directory, National Institute of Scientific Information (INIS)
21. **A. Marinoiu**, C. Cobzaru, C. Cernatescu, T. Popescu, Catalytic Hydrogenation of Carbon Dioxide over Pd base catalyst, Bulletin of the Polytechnic Institute of Iasi, Section Chemistry and Chemical Engineering, 2015, Tome LXI(LXV), Fasc.2
22. **A. Marinoiu**, I. Petreanu, C. Teodorescu, C. Sisu, M. Varlam, Dezvoltarea de electrozi pe baza de grafene pentru pilele de combustibil de tip PEM, Volumul Conferintei “Stiinta moderna si energia - Producerea, Transportul si utilizarea energiei”, Editia 34, pg. 33-41, ISSN: 2066-4125, 2015, Cluj Napoca
23. M. Raceanu, N. Bizon, M. Iliescu, M. Culcer, **A. Marinoiu**, L. Patularu, D. Schitea, M. Varlam, I. Stefanescu, Performanta pilei de combustibil de tip PEM utilizand diferite moduri de alimentare cu hidrogen, Volumul Conferintei “Stiinta moderna si energia - Producerea, Transportul si utilizarea energiei”, Editia 34, pg. 73-88, ISSN: 2066-4125, 2015, Cluj Napoca
24. Elena Carcadea, M. Varlam, I. Stefanescu, D. Ingham, **A. Marinoiu**, L. Patularu, M. Raceanu, D. Schitea, A CFD Simulation for an Air Breathing PEMFC for Power Source Portable Applications, ECS Transaction, doi: 10.1149/06917.0971ecst ECS Trans., 2015, vol 69, nr 17, 971-982
25. M. Raceanu, M. Iliescu, M. Culcer, **A. Marinoiu**, M. Varlam, N. Bizon, Fuelling Mode Effect on a PEM Fuel Cell Stack Efficiency, Progress of Cryogenics & Isotopes Separation, 2015, vol 18, nr 1, p. 15-24, Abstracting and indexing in: Contemporary Science Association, EBSCO, Ulrich's Periodicals Directory, National Institute of Scientific Information (INIS)

26. **A. Marinoiu**, C. Cobzaru, S. Mosteanu, I. Petreanu, M. Raceanu, C. Capris, I. Iordache, Study about the development of a portable fuel cell system containing an integrated hydrogen generator, Bulletin of the Polytechnic Institute of Iasi, Section Chemistry and Chemical Engineering, 2014, Tome LX(LXIV), Fasc.1. ISSN 0254-7104."
27. **A. Marinoiu**, D. Schitea, C. Cobzaru, I. Petreanu, I. Iordache, S. Mosteanu, L. Pătularu, A new approach for optimizing the main components for Pem fuel cell, Bulletin of the Polytechnic Institute of Iasi, Section Chemistry and Chemical Engineering, 2014, Tome LX(LXIV), Fasc.1. ISSN 0254-7104
28. **A. Marinoiu**, C. Teodorescu, D. Marinescu, M. Varlam, C. Cobzaru, A. Soare, C. Ionescu, Graphene-based materials for fuels cell applications, Bulletin of the Polytechnic Institute of Iasi, Section Chemistry and Chemical Engineering, 2014, Tomul LX (LXIV), Fasc. 2, p. 9-18, ISSN 0254-7104
29. C. Cernatescu, C. Cobzaru, R. Canta, **A. Marinoiu**, Synthesis of four new hydroxyl azomethines, Bulletin of the Polytechnic Institute of Iasi, Section Chemistry and Chemical Engineering, 2014, Tomul LX (LXIV), Fasc. 2, p.57-66, ISSN 0254-7104
30. C. Cobzaru, G. Bordeianu, **A. Marinoiu**, G. Apostolescu, C. Cernătescu, D. Ungureanu, Hemp (Cannabis sativa L.)–The miracle plant, Bulletin of the Polytechnic Institute of Iași, Section Chemistry and Chemical Engineering, 2014, Tome 60 (3 - 4), Tomul LX (LXIV), Fasc. 3-4, p. 23-33, ISSN 0254-7104
31. Mircea Raceanu, **Adriana Marinoiu**, Mihai Culcer, Mihai Varlam, Nicu Bizon, Preventing reactant starvation of a 5 kW PEM fuel cell stack during sudden load change, IEEEExplore, Published in: Electronics, Computers and Artificial Intelligence (ECAI), 2014 6th International Conference, 2014, pp:55–60, dx.doi.org/10.1109/ ECAI.2014.7090147
32. **A. Marinoiu**, E. Carcadea, R. Ionete, M. Raceanu, C. Cobzaru, I. Iordache, C. Teodorescu, A. Enache, M. Varlam, Carbon Dioxide Reusing for Methane Fuel Obtaining Over Heterogeneous Catalysts as a Possible Source of Energy, Progress of Cryogenics and Isotopes Separation, 17(1), 2014, 23-30, ISSN 1582-2575
33. **Adriana Marinoiu**, Elena Carcadea, Irina Petreanu, Claudia Șișu, Mircea Răceanu, Cătălin Capriș, Vasile Tanislav, Dorin Schitea, Daniela Ebrasu, Laurențiu Pătularu, Carbon Monoxide Retention for Fuel Cell Application Using Heterogeneous Catalysts, Progress of Cryogenics & Isotopes Separation, vol. 17, nr. 1/2014, pp. 39-50, ISSN: 1582-2575
34. **Adriana Marinoiu**, Elena Carcadea, Mircea Răceanu, Irina Petreanu, Mihai Varlam, The Use of Nickel as Catalyst for Carbon Dioxide Hydrogenation, Progress of Cryogenics & Isotopes Separation, vol. 17, nr. 2/2014, pp. 101-112
35. Pătularu, L.; Schitea, D.; Enache, S.; Varlam, M.; Daniela, Ion-Ebrasu; Carcadea, E.; **Marinoiu, A.**; Răsoi, G.; Crăciunescu, A., PEMFC Short Stack Development at ICSI Ramnicu Valcea, from Sketch to Applications, Progress of Cryogenics & Isotopes Separation. 2014, Vol. 17 Issue 2, pp. 89-100
36. Carcadea, Elena; Varlam, Mihai; Ștefănescu, Ioan; Pătularu, Laurențiu; **Marinoiu, Adriana**; Tanislav, Vasile; Enache, Stănică. Effects of Flow Field on PEM Fuel Cell Performance, Progress of Cryogenics & Isotopes Separation, 2014, Vol. 17 Issue 2, pp. 81-88
37. **Adriana Marinoiu**, Mihai Varlam, Ioan Iordache, Ioan Ștefănescu, Use of new carbonic materials in the catalyze of electrochemical processes with applications for fuel cells, Conference Volume "Modern Science and Energy - Energy production, transport and use ", pg. 97-101, ISSN: 2066-4125, 2014, Cluj Napoca
38. D. Schitea, I. Ștefănescu, M. Varlam, L. Patularu, **Adriana Marinoiu**, M. Raceanu, Gas humidification systems in PEMFC, Conference Volume "Modern science and energy - Energy production, transport and use ", pg. 130-142, ISSN: 2066-4125, 2014, Cluj Napoca
39. Ioan Ștefănescu, Ioan Iordache, Mihaela Buga, Dorin Schitea, **Adriana Marinoiu**, Mihai Balan, Underground storage of hydrogen, aspect from Romania, Conference Volume "Modern science and energy - Energy production, transport and use ", ISSN: 2066-4125, 2014, Cluj Napoca
40. M. Raceanu, N. Bizon, M. Iliescu, M. Culcear, **A. Marinoiu**, L. Patularu, D. Schitea, M. Varlam, I. Ștefănescu, Performance of PEM type fuel cell using different hydrogen supply modes, Conference Volume "Modern science and energy - Energy production, transport and use ", Editia 34, pg. 73-88, ISSN: 2066-4125, 2015, Cluj Napoca
41. E. Carcadea, M Varlam, **A. Marinoiu**, I. Ștefănescu, M. Raceanu, L. Patularu, D. Ebrasu, V. Tanislav, C. Capris, The Influence of Catalyst Properties, on CO Oxidation, Reaction – A Theoretical Approach, Progress of Cryogenics & Isotopes Separation, 2014, Vol. 17 Issue 1, pp. 31-38, ISSN: 1582-2575
42. Elena Carcadea, Mihai Varlam, Mircea Raceanu, Mariana Iliescu, Adrian Enache, Mihai Culcer, Daniela Ebrasu, **Adriana Marinoiu**, Vasile Tanislav, Catalin Capris, Energy Systems Based on Renewable Resources and Hydrogen Storage, - an overview and a scenario analysis, Progress of Cryogenics and Isotopes Separation Volume 16, issue 1/2013
43. **Adriana Marinoiu**, Elena Carcadea, Irina Petreanu, Mircea Raceanu, Laurentiu Patularu, Daniela Ion, Dorin Schitea, The Catalytic Conversion of Renewable Feedstocks, The 19-th Conference "Progress in Cryogenics and Isotopes Separation", 10-11 oct. 2013, Volume 16, issue 1/2013, 39-44, ISSN: 1582-2575
44. **A. Marinoiu**, E. Carcadea, C. Cobzaru, C. Capris, V. Tanislav, M. Raceanu, I. Iordache, The efficient catalytic conversion of glycerol into valuable chemicals, Progress of Cryogenics and Isotopes Separation, 16 (1), 2013, 43-50
45. **A. Marinoiu**, C.Cobzaru, E. Carcadea, V. Tanislav, C. Capris, Mathematical Modeling of Catalytic Hydrogenation Process of Glycerol to Propylene Glycol, Progress of Cryogenics and Isotopes Separation, 2012, 15 (2), 35-40, ISSN: 1582-2575
46. C.Cobzaru, C. Cernătescu, **A. Marinoiu**, G. Bordeianu, Grapes. Chemical composition, extraction and application, Bulletin of the Polytechnic Institute of Iași, Section Chemistry and Chemical Engineering, 2013, Tome 59 (3), 2013, ISSN 0254-7104

47. M. Raceanu, **A. Marinoiu**, C. Cobzaru, E. Carcadea, M. Varlam, D. Schitea, Effect of the catalytic ink preparation method on the performance of membrane electrode assemblies, Bulletin of the Polytechnic Institute of Iași, Section Chemistry and Chemical Engineering, 2013, Tome 59 (3), 2013, ISSN 0254-7104
48. C. Cobzaru, C. Cernătescu, **A. Marinoiu**, Aloe Vera (Aloe Barbadensis Miller) Characterization and Application. Bulletin of the Polytechnic Institute of Iași, Section Chemistry and Chemical Engineering, 2013, Tome 59 (4), ISSN 0254-7104
49. I. Petreanu, **A. Marinoiu**, C. Cobzaru, A. Soare, E. Carcadea, C. Capris, V. Tanislav, M.S.Teodorescu, Sulfonated Aromatic Polymers As Approach To Achieve Proton Exchange Membrane For PEM Fuel Cell, Bulletin of the Polytechnic Institute of Iași, Section Chemistry and Chemical Engineering, 2013, Tome 59 (4), ISSN 0254-7104.

Annex 3:

List of published books/chapters

1. Mihaela Iordache, Anisoara Oubraham, Simona Borta, George Ungureanu, **Adriana Marinoiu**, "Testing the Stability of NASICON Solid Electrolyte in Seawater Batteries" în cartea "Top 10 Advances in Energy Research ", 1-30, 202, ISBN 978-81-945175-4-2, Editura: Hyderabad, India: Vide Leaf (2025).
2. **A Marinoiu**, G Mihai, O Lazar, S Rosoiu, M Prodana, C Sisu, M Raceanu, M Enachescu, Facile Preparation of Graphene-supported Platinum-Cobalt Nanoparticles and their Use as Electrocatalyst in PEM Fuel Cells/ Nanomaterials - functional properties and applications, Vol. 28 Micro-and Nanoengineering, The 18th edition of the National Seminar for Nanoscience and Nanotechnology
3. Raceanu M, Bizon N, **Marinoiu A**, Varlam M, Design and Experimental Investigations of an Energy Storage System in Microgrids. Power Systems, Springer Nature Cham; 2020. doi:10.1007/978-3-030-23723-3_9
4. Mircea Raceanu, Nicu Bizon, **Adriana Marinoiu**, Mihai Varlam, Design and Energy Analysis for Fuel Cell Hybrid Electric Vehicle/ Numerical Methods for Energy Applications. ISBN 978-3-030-62190-2, Mahdavi Tabatabaei and Bizon, Springer, Cham, 2020.
5. **Adriana Marinoiu**, Elena Carcadea, Mircea Raceanu and Mihai Varlam, **Chapter 5:** Iodine Doped Graphene for Enhanced Electrocatalytic Oxygen Reduction Reaction in PEM Fuel Cell Applications, in **Book:** Advances In Hydrogen Generation Technologies; Published: August 22nd 2018 DOI: 10.5772/intechopen.76495, ISBN: 978-1-78923-535-7
6. **Adriana Marinoiu**, Mircea Raceanu, Elena Carcadea, Aida Pantazi, Raluca Mesterca, Oana Tutunaru, Simona Nica, Daniela Bala, Mihai Varlam, Marius Enachescu, **Chapter title:** Noble metal dispersed reduced graphene oxide and its application in PEM Fuel Cells, **Book title:** Electrocatalysts for Fuel Cells and Hydrogen Evolution: Theory to Design, , ISBN: 978-953-51-6257-5.

Annex 4:

The experience accumulated in research projects

Relevant Research Projects

1. "The Romanian HUB for Hydrogen and New Energy Technologies - **Ro-HydroHub**", financing contract G 2024-81692/390006 din 13.11.2024, cod SMIS: 304724, *management team member*
2. **PN 23 15 01 03**, "Optimization and validation of nanostructured catalytic systems and innovative component manufacturing technology for membrane-electrode assemblies with increased durability, with applications in PEM fuel cells", 2023-2026, *project manager*
3. **PN-III-P2-2.1-PED-2021-0840**, "Scalable advanced methods for the synthesis in a single stage of graphene materials decorated with catalysts and the development of integrated electrodes for fuel cells", 2022-2023, *project manager*
4. **PN 23 15 01 04**, "Tehnologii chimice și electrochimice pentru conversia dioxidului de carbon în compuși cu rol energetic – CO₂Out", 2023-2026, *project participation*
5. **PN-III-P2-2.1-PED-2019-1894**, "Graphene-based electrodes manufactured exclusively by laser techniques for PEM fuel cells produced by laser pyrolysis of a polymer matrix with integrated catalytic organometallic complexes", implementation period: 12.11.2020 - 11.11.2022, *project manager*
6. **PN-III-P2-2.1-PED-2019-2079**, denumire proiect "Associating the quantum selection process with the synthesis of metal-organic networks (MOF) to develop a new isotopic separation technology", implementation period: 23.10 - 22.10.2022, *project participation*
7. **Bilateral Agreement CNR/RA Joint Research Projects 2020-2023**, *partner responsible*
8. **Project PN 19 12 02 01**, Innovative PEM fuel cell electrodes with improved performance and increased durability based on functionalised graphene materials, 2019, *project manager*
9. **Project PN 18 12 01 02**, Nanostructured materials based on graphene - metal nanoparticles for ORR electrodes applications in the PEMFC field, 2018, *project manager*
10. **Project PN 16 36 01 02**, Unconventional electrodes based on graphene materials with applications in PEM type fuel cells, 2016-2017, *project manager*
11. **Project PN 09 19 01 11** Prospects and technical-economic opportunities for CO₂ recycling to methane using renewable energy,, Ctr. 19N/2009- 2014, *project manager*

12. **Project PN 09 19 01 16** The use of new technologies for the synthesis of nano-composite graphene base materials with catalytic and electrocatalytic properties for PEMFC applications- 2015, *project manager*
13. **Project PNCDI II, Contract nr. 284/2014**, Development of a portable power generator - type feeder, based on hydrogen electrochemistry, designed to maintain energy support of combat equipment in the tactical field, 2014-2016, *project participation*
14. **Project PN 09 19 01 09** "Theoretical and experimental investigations regarding the systems for CO retention at low temperature for PEM fuel cell and their applications"- 2014, *project participation*
15. **Project PN 09 19 01 08** Studies on the development of thermocatalytic processes and types of catalysts used for applications in the field of renewable energy production, Ctr. 19N/2009, 2013 *project participation*.

Annex 5: Patent and patent requests

1. **Marinoiu Adriana**, Carcaea Elena, Marin Elena, Capris Ioan Catalin, Varlam Mihai, Process of obtaining carbon fibers decorated with Pd nanoparticles, with application in fuel cells, Patent No. 138104/30.01.2026.
2. Marin Elena, **Marinoiu Teodora-Adriana**, Oubraham Anisoara, Borta Elena Simona, Niculescu Violeta-Carolina, Carcadea Elena, Carbonaceous porous materials with iron nanoparticles deposition and the process of obtaining them, Patent No. 138193/30.01.2026.
3. Iordache Mihaela, Spiridon Stefan Ionut, **Marinoiu Adriana**, Modular battery assembly with ceramic membranes for electrochemical conversion of CO₂, A/00547/21.11.2025.
4. **A. Marinoiu**, M. Iordache, E. Marin, C.-I. Capris, Process of obtaining graphical materials functionalized with nickel, CBI nr. A/00292/10.07.2025.
5. A. Oubraham, E. Marin, A. Tiliakos, F. Vasut, **T. A. Marinoiu**, Graphene materials in the form of platinum-functioning graphene oxide nanocomposites in the microwave field and the process of obtaining them, patent no. 136028/30.05.2025
6. E. Marin, **T. A. Marinoiu**, E.S. Borța, E. Carcadea, Porous carbonic materials in the form of nickel nanofibres and their production process, Patent No. 137281/28.03.2025
7. M. Iordache, S.I. Sorlei, A. M.Chitu, A.Tiliakos, **T. A. Marinoiu**, NASICON-type ceramic membrane battery and its manufacturing process, Patent No. 137482/06.11.2024
8. A. Oubraham, E. Marin, A. Tiliakos, F. Vasut, **T. A. Marinoiu**, Functional graphical materials with platinum and process non-polluting of their obtaining, Patent No.137597/19.08.2024.
9. **T. A. Marinoiu**, M. Raceanu, E. Carcadea, Ternary catalyst of graphene type functionalized with platinum cobalt-cerium and the process of obtaining it, Patent No. 137820/19.08.2024.
10. A. Marinoiu, E. Carcadea, E. Marin, M. Varlam, Functionalized graphene materials with platinum - nitrogen and the process of obtaining them, Patent No. 137597/19.08.2024.
11. **A. Marinoiu**, I. Vagner, S. Baltoiu, Autonomous system of production and supply of hydrogen for power sources in open field, CBI A/00709/18.11.2024
12. M. Iordache, A. Oubraham, S. E. Borta, E. Marin, I. C. Capris, **T.A. Marinoiu**, Carbon fibers decorated with gold and the process of obtaining, CBI nr..A/00407/10.07.2024
13. **T. A. Marinoiu**, E. Marin, M. Raceanu, S. Baltoiu, M. Varlam, Process of obtaining functionalized graphs with platinum and iron, No. A/00247/14.05.2024
14. **T. A. Marinoiu**, M. Iordache, A. Oubraham, S. E. Borta, I. M. Vagner, Elena Carcadea, Carbon fibers decorated with cobalt, by electrofiling and the process of obtaining them No. A/00248/03.07.2024.
15. **T. A. Marinoiu**, E. Carcadea, I. C. Capris, M.Raceanu, M.Varlam, Process of obtaining functionalized graphene materials with iodine in the microwave field, Patent No. 134964/28.02.2023
16. M. Raceanu, **T. A. Marinoiu**, E. Carcadea, M.Varlam, Method of controlling the power of a fuel cell system of a hybrid electric vehicle, Patent No. 135821/29.11.2023
17. **A. Marinoiu**, E. Carcadea, E. Marin, I. C. Capris, M. Varlam, Process of obtaining functionalized iron graphene materials, No. A/00805/06.12.2023
18. **A. Marinoiu**, M. Răceanu, I. C. Capriș, E. Carcadea, S. F. Ion, M, Varlam, The process of obtaining a gold-doped graphene nanocomposite, Patent No. 133529/28.01.2022
19. M. Iordache, S. E. Borța, C. E.Șișu, A.Tiliakos, **T.A.Marinoiu**, Sodium-based solid electrolyte with improved ion conductivity and process of obtaining it, No. A/00222/02.05.2022
20. A. Tiliakos, R. V. Răbuga, **A. Marinoiu**, 3D supercapacitor devices based on fractal space filling architecture and method of obtaining them by additive manufacturing, No. A/00950/08.09.2022
21. E.Marin, **T.A. Marinoiu**, A., Oubraham S. E. Borța, V.C. Niculescu, E. Carcadea, Process of obtaining carbon fibers decorated with iron nanoparticles, No. A/00796/06.12.2022
22. **T. A. Marinoiu**, E. Carcadea, M. Răceanu, I, C, Capriș, M. Varlam, Preparation process nitrogen-doped graphene materials in the microwave field, Patent No. 134113/29.10.2021
23. **A. T.Marinoiu**, E.Carcadea, E. C. Șișu, R.D. Andrei, M. Răceanu, C. I. Capriș, M.Varlam, Carbonic materials with platinum nanoparticles deposition and the process of obtaining them, Patent No.134488/29.10.2021

24. **A. Marinoiu**, E. Carcadea, M. Raceanu, Capris Catalin, Varlam Mihai, Process of obtaining graphene materials doped with gold nanoparticles, No. A/00536/26.08.2020
25. **A. Marinoiu**, S. F. Ion, E. Carcadea, M. Răceanu, I. C. Capriș, M. Varlam, Functional graphene materials with azulene obtained in the microwave field, No. A/00508/26.08.2021
26. M. Răceanu, **A. Marinoiu**, E. Carcadea, M. Varlam, Control method and starting sequence of a hybrid electric vehicle with two fuel cells to increase energy efficiency, No. A/00762/09.12.2021
27. **A. Marinoiu**, E. Carcadea, M. Răceanu, C. Capriș, M. Varlam, Graphitic materials doped with cerium oxide and the process of obtaining them, Nr. A/00763/09.12.2021
28. **A. Marinoiu**, M. Lordache, A. Tiliakos, Preparation process NASICON ceramic membranes with high ionic conductivity, No. A/00764/09.12.2021
29. **A. Marinoiu**, M. Raceanu, S. Borta, D. Schitea, E. Carcadea, M. Varlam, Process of obtaining the carbon fibre gas diffusion layer for fuel cells, No. A/00569/11.09.2020
30. **T. A. Marinoiu**, Carcadea Elena, Capris Ioan Catalin, Raceanu Mircea, Varlam Mihai, Preparation process functionalized graphene materials with iodine in the microwave field, No. A/00804/03.12.2020
31. **T. A. Marinoiu**, Simona Nica, Elena Carcadea, Catalin Capris, Mihai Varlam, Functionalized covalent graphene with azulene and the process of obtaining them, No. A/00804/03.12.2020
32. Elena Carcadea, **A. Marinoiu**, A. Chitu, J. Arhip, M. Varlam, Method and system of hydrogen generation by hydrolysis of sodium borohydride, Patent No. 132339/30.07.2020
33. **A. Marinoiu** Carcadea E, Șișu C, Andrei R, Raceanu M, Capriș C, Varlam M, Process of obtaining nanocomposites - carbon fibers decorated with platinum nanoparticles by electrospinning, No. A/00856/04.12.2019
32. **A. Marinoiu**, Carcadea E., Raceanu M., Capriș C., Varlam M., Preparation process nitrogen-doped graphene materials in the microwave field, No. A/00855/04.12.2019
33. **A. Marinoiu**, Carcadea Elena, Raceanu Mircea, Patularu Laurentiu, Varlam Mihai, Grafene doped with iodine and the process of obtaining them, patent no. 132950/28.06.2019
34. L. Patularu, D. Schitea, M. Varlam, I. Stefanescu, **A. Marinoiu**, Process for fabrication of bipolar plates with liquid cooling system included for PEM fuel cell assemblies, Patent No 129408, 30/03/2018
35. **A. Marinoiu**, M. Raceanu, C. Capris, E. Carcadea, S.F. Ion, M. Varlam, Process for obtaining a nanoparticulate material based on graphene with metallic nanoparticles, Patent request no. A/01134/18.12.2017
36. **A. Marinoiu**, E. Carcadea, M. Raceanu, L. Patularu, M. Varlam, Iodine-doped graphene and process for their preparation, Patent request No. A/01133/18.12.2017.

Annex 6: International recognition

1. Diploma is awarded gold metal pentru inventia "Preparation process for producing nitrogen-doped graphene materials in microwave field", autori: **Teodora Adriana Marinoiu**, Elena Carcadea, Mircea Răceanu, Ioan-Catalin Capriș, Mihai Varlam TECHNOLOGY FORUM OLTENIA TECHFEST, Panel 1, INOVAREA ȘI TRANSFERUL TEHNOLOGIC ÎN ROMÂNIA: direcții strategice naționale și implementare la nivel regional, național și internațional, 06.11.-07.11.2025, Tg. Jiu.
2. Diploma is awarded gold metal pentru inventia "Process for preparing a nanocomposite material based on gold-doped graphene", autori: **Teodora Adriana Marinoiu**, Mircea Răceanu, Ioan-Catalin Capriș, Elena Carcadea, Simona Filofteia Ion, Mihai Varlam TECHNOLOGY FORUM OLTENIA TECHFEST, Panel 1, INOVAREA ȘI TRANSFERUL TEHNOLOGIC ÎN ROMÂNIA: direcții strategice naționale și implementare la nivel regional, național și internațional, 06.11.-07.11.2025, Tg. Jiu.
3. Certificat de Participare, Diploma si Medalia de Aur pentru inventia: "Carbon nanofibers decorated with nickel particles obtained by electrospinning", autori: Marin Elena, **Marinoiu Teodora Adriana**, Borta Elena Simona, Carcadea Elena, The 17th Edition of EUROINVENT – European Exhibition of Creativity and Innovation, 08-10.05.2025, Iasi
4. Certificat de Participare, Diploma si Medalia de Aur pentru inventia: "Process of obtaining carbon fibers decorated with Pd nanoparticles with application in fuel cells", autori: **Marinoiu Adriana**, Raceanu Mircea, Lordache Mihaela, Borta Simona, Oubraham Anisoara, Carcade Elena, The 17th Edition of EUROINVENT – European Exhibition of Creativity and Innovation, 08-10.05.2025, Iasi
5. Certificat de Participare, Diploma si Medalia de Argint pentru inventia: "Carbon fibers decorated with gold and the process of obtaining", autori: Lordache Mihaela, Oubraham Anisoara, Borta Simona Elena, Marin Elena, Capris-Ioan Catalin, **Marinoiu Teodora-Adriana**, The 17th Edition of EUROINVENT – European Exhibition of Creativity and Innovation, 08-10.05.2025, Iasi
6. Certificat de Participare, Diploma si Medalia de Bronz pentru inventia: "Process of obtaining functionalized iron graphene materials", autori: **Marinoiu Adriana**, Carcadea Elena, Marin Elena, Capris Ioan-Catalin, Varlam Mihai, The 17th Edition of EUROINVENT – European Exhibition of Creativity and Innovation, 08-10.05.2025, Iasi
7. Diploma de Onoare si Medalia de Aur pentru lucrarea "Ternary catalyst of graphene materials functionalized with platinum cobalt cerium and process for obtaining them", autori: **Marinoiu Adriana**, Carcadea Elena, Raceanu Mircea, la Salonul International de inventica INVENTICA2025, 25-27.06.2025, Iasi, Romania
8. Diploma de Excelenta si Medalia de Argint pentru lucrarea "Process for obtaining graphene functionalized with platinum and iron", autori: **Adriana Marinoiu**, Elena Marin, Mircea Racenu, Sebastian Baltou, Mihai Varlam, la Salonul International de inventica INVENTICA2025, 25-27.06.2025, Iasi, Romania.

9. Diploma si Premiul Special din partea Forumului Inventatorilor Romani pentru doamna dr. **Adriana Marinoiu**, in semn de apreciere pentru rezultatele obtinute in activitatea de cercetare si inovare, care contribuie in mod remarcabil la progresul stiintei si tehnologiei, la Salonul International de inventica INVENTICA2025, 25-27.06.2025, Iasi, Romania.
10. Diploma si Premiul Special din partea Corneliu Group pentru doamna dr. **Adriana Marinoiu**, pentru buna contributie stiintifica in cadrul Salonului International de Inventica INVENTICA 2025, la Salonul International de inventica INVENTICA2025, 25-27.06.2025, Iasi, Romania.
11. Certificat de Excelenta pentru doamna dr. **Adriana Marinoiu** pentru contributia in lumea inovarii., acordat din partea Corneliu Group, la Salonul International de inventica INVENTICA2025, 25-27.06.2025, Iasi, Romania.
12. Certificat de Excelenta acordat de catre Universitatea Politehnica din Timisoara pentru "Process for obtaining graphene functionalized with platinum and iron", autori: **Adriana Marinoiu**, Elena Marin, Mircea Racenu, Sebastian Baltou, Mihai Varlam, la Salonul International de inventica INVENTICA2025, 25-27.06.2025, Iasi, Romania.
13. Certificat de Excelenta acordat de catre Universitatea Politehnica din Timisoara pentru "Ternary catalyst of graphene materials functionalized with platinum cobalt cerium and process for obtaining them", autori: **Marinoiu Adriana**, Carcadea Elena, Răceanu Mircea, la Salonul International de inventica INVENTICA2025, 25-27.06.2025, Iasi, Romania.
14. Premiul Special acordat de catre Universitatea Politehnica din Timisoara pentru "Ternary catalyst of graphene materials functionalized with platinum cobalt cerium and process for obtaining them", autori: **Marinoiu Adriana**, Carcadea Elena, Răceanu Mircea, la Salonul International de inventica INVENTICA2025, 25-27.06.2025, Iasi, Romania.
15. Diplomă și Medalie de Aur pentru invenția Procedeu de obținere fibre de carbon decorate cu nanoparticule de Pd, cu aplicație în pilele de combustibil (CBI nr. A/00803/06.12.2023), autori: **Marinoiu Adriana**, Răceanu Mircea, Iordache Mihaela, Borta Simona, Oubraham Anisoara, Carcadea Elena, obținută la Salonul Internațional de inventică EUROINVENT 2025, 08-10.05.2025, Iași, Romania
16. Diplomă și Medalie de Aur pentru invenția Nanofibre de carbon decorate cu particule de nichel obținute prin electrofilare (CBI nr. A/00695/31.10.2022), autori: Marin Elena, **Marinoiu Teodora Adriana**, Borta Elena Simona, Carcadea Elena, obținută la Salonul Internațional de inventică EUROINVENT 2025, 08-10.05.2025, Iași, Romania
17. Diplomă și Medalie de Argint pentru invenția Fibre de carbon decorate cu aur și procedeu de obținere (CBI nr. A/00407/10.07.2024), autori: Iordache Mihaela, Oubraham Anisoara, Borta Simona Elena, Marin Elena, Capris Ioan-Cătălin, **Marinoiu Teodora-Adriana**, obținută la Salonul Internațional de inventică EUROINVENT 2025, 08-10.05.2025, Iași, Romania
18. Diplomă și Medalie de Argint pentru invenția Procedeu de obținere materiale grafenice funcționalizate cu fier (CBI nr. A/00805/06.12.2023), autori: **Marinoiu Adriana**, Carcadea Elena, Marin Elena, Capris Ioan Catalin, Varlam Mihai, obținută la Salonul Internațional de inventică EUROINVENT 2025, 08-10.05.2025, Iași, Romania
19. Diploma si Medalia de Aur pentru: "Ternary catalyst of graphene materials functionalized with platinum – cobalt – cerium and method of obtaining them", autori: **Adriana Marinoiu**, Mircea Răceanu, Elena Carcadea, A 16-a ediție a EUROINVENT 2024, 6-8 iunie 2024, Iași
20. Diplomă de Onoare și Medalie de Aur pentru: – "Process for preparing graphene materials functionalized with iodine in the microwave field", autori: **Marinoiu Teodora Adriana**, Carcadea Elena, Capriș Ioan-Cătălin, Răceanu Mircea, Varlam Mihai, Salonul Internațional de Inventică INVENTICA 2024, 3-5 iulie 2024, Iași, România
21. Diplomă de Onoare și Medalie de Aur pentru: Carbon nanofibers decorated with nikel particles obtained by electrospinning/Nanofibre de carbon decorate cu particule de nichel obtinute prin electrofilare, autori: Marin Elena, **Marinoiu Teodora Adriana**, Borța Elena Simona, Carcadea Elena, Salonul Internațional de Inventică INVENTICA 2024, 3-5 iulie 2024, Iași, România
22. Diplomă de Onoare și Medalie de Aur pentru "Graphene materials functionalized with platinum and a non-polluting process for obtaining them", autori: Oubraham Anisoara, Marin Elena, Tiliakos Athanasios, Văsuț Felicia, **Marinoiu Teodora Adriana**, Salonul Internațional de Inventică INVENTICA 2024, 3-5 iulie 2024, Iași, România
23. Diplomă de Excelență și Medalie de Argint pentru: "Carbon nanofibers decorated with nikel particles obtained by electrospinning/Nanofibre de carbon decorate cu particule de nichel obtinute prin electrofilare", autori: Marin Elena, **Marinoiu Teodora Adriana**, Borța Elena Simona, Carcadea Elena, Salonul Internațional de Inventică INVENTICA 2024, 3-5 iulie 2024, Iași, România
24. Diplomă de Excelență și Medalie de Argint pentru: "Graphene materials functionalized with platinum and a non-polluting process for obtaining them", autori: Oubraham Anisoara, Marin Elena, Tiliakos Athanasios, Văsuț Felicia, **Marinoiu Teodora Adriana**, Salonul Internațional de Inventică INVENTICA 2024, 3-5 iulie 2024, Iași, România
25. Premiul de Excelență și Medalie de Aur, acordat de către ICECHIM București pentru invenția "Process for preparing graphene materials functionalized with iodine in the microwave field", autori: **Marinoiu Teodora Adriana**, Caraceda Elena, Capriș Ioan-Cătălin, Răceanu Mircea, Varlam Mihai, Salonul Internațional de Inventică INVENTICA 2024, 3-5 iulie 2024, Iași, România
26. Premiul de Excelență acordat de către ICECHIM București pentru invenția "Carbon nanofibers decorated with nikel particles obtained by electrospinning/Nanofibre de carbon decorate cu particule de nichel obtinute prin electrofilare", autori: Marin Elena, **Marinoiu Teodora Adriana**, Borța Elena Simona, Carcadea Elena, Salonul Internațional de Inventică INVENTICA 2024, 3-5 iulie 2024, Iași, România
27. Certificat de Excelență acordat de către Corneliu Group Association următoarelor persoane: **Marinoiu Teodora Adriana**, Carcadea Elena, Capriș Ioan-Cătălin, Răceanu Mircea și Varlam Mihai, cu recunoștință și considerație pentru contribuții în lumea inovației, Salonul Internațional de Inventică INVENTICA 2024, 3-5 iulie 2024, Iași, România
28. Certificat de Excelență acordat de către Corneliu Group Association următoarelor persoane: Oubraham Anisoara, Marin Elena, Tiliakos Athanasios, Văsuț Felicia și **Marinoiu Teodora Adriana**, Salonul Internațional de Inventică INVENTICA 2024, 3-5 iulie 2024, Iași, România
29. Diploma Specială acordată dnei **Marinoiu Teodora Adriana**, de către Corneliu Group, pentru invenția: "Process for preparing graphene materials functionalized with iodine in the microwave field", Salonul Internațional de Inventică INVENTICA 2024, 3-5 iulie 2024, Iași, România
30. Certificat de Excelență acordat de către Healthy Vibe Holistic Treatment pentru: "Process for preparing graphene materials functionalized with iodine in the microwave field", autori: **Marinoiu Teodora Adriana**, Caraea Elena, Capriș Ioan-Cătălin, Răceanu Mircea, Varlam Mihai, Salonul Internațional de Inventică INVENTICA 2024, 3-5 iulie 2024, Iași, România

31. Certificat de Excelență și Premiul Special acordat dnei **Marinoiu Teodora Adriana**, de către Universitatea Politehnică din Timișoara, pentru invenția: "Process for preparing graphene materials functionalized with iodine in the microwave field", Salonul Internațional de Inventică INVENTICA 2024, 3-5 iulie 2024, Iași, România
32. Diploma și Medalia de Aur pentru: "Ternary catalyst of graphene materials functionalized with platinum – cobalt – cerium and method of obtaining them", autori: **Adriana Marinoiu**, Mircea Răceanu, Elena Carcadea, A 16-a ediție a EUROINVENT 2024, 6-8 iunie 2024, Iași
33. Diploma de Excelență și Medalia de Aur pentru invenția cu titlul: "Procedeu de obținere a stratului de difuzie a gazelor, pe baza de fibre de carbon, pentru pile de combustibil", autori: **Marinoiu Teodora Adriana**, Răceanu Mircea, Borta Simona, Schitea Dorin, Carcadea Elena, Varlam Mihai, Salonul Internațional al Cercetării Științifice, Inovării și Inventicii PRO INVENT 2023, 25-27.10.2023 Cluj Napoca, Romania
34. Diploma de Excelență și Medalia de Aur pentru invenția cu titlul: "Procedeu de obținere fibre de carbon decorate cu nanoparticule de fier", autori: Marin Elena, **Marinoiu Teodora-Adriana**, Oubraham Anisoara, Borta Elena Simona, Niculescu Violeta-Carolina, Carcadea Elena, Salonul Internațional al Cercetării Științifice, Inovării și Inventicii PRO INVENT 2023, 25-27.10.2023 Cluj Napoca, Romania
35. Premiul special oferit de ICECHIM pentru: „Graphene Materials doped with Cerium Oxide their Production Process”, autori: **Marinoiu Teodora Adriana**, Carcadea Elena, Răceanu Mircea, Capriș Ioan Cătălin, Varlam Mihai pentru participarea la INVENTICA 2023, A 27-a ediție a Salonului Internațional de Inventii, INVENTICA 2023, 21-23.06.2023, Iasi, Romania
36. Medalie de aur și Diplomă de onoare pentru: „Graphene Materials doped with Cerium Oxide their Production Process”, autori: **Marinoiu Teodora Adriana**, Carcadea Elena, Răceanu Mircea, Capriș Ioan Cătălin, Varlam Mihai, A 27-a ediție a Salonului Internațional de Inventii, INVENTICA 2023, 21-23.06.2023, Iasi, Romania
37. Medalie de argint și Diplomă de Excelență pentru: Control Method and Start-up Sequence of a Two-Fuel Cell Hybrid Electric Vehicle to Increase Energy Efficiency, autori: Răceanu Mircea, **Marinoiu Teodora Adriana**, Carcadea Elena, Varlam Mihai, A 27-a ediție a Salonului Internațional de Inventii, INVENTICA 2023, 21-23.06.2023, Iasi, Romania
38. Medalia de argint și Diplomă pentru: "Process for obtaining the gas diffusion layer, based on carbon fibers, for fuel cells", autori: **Marinoiu Adriana**, Răceanu Mircea, Borta Simona, Schitea Dorin, Carcadea Elena, Varlam Mihai, European Exhibition of Creativity and Innovation - Euroinvent 2023, 13.05.2023, Iași, Romania
39. Medalia de bronz și Diplomă pentru: "Control Method and Start-up Sequence of a Two-Fuel Cell Hybrid Electric Vehicle to Increase Energy Efficiency", autori: Răceanu Mircea, **Marinoiu Teodora Adriana**, Carcadea Elena, Varlam Mihai, European Exhibition of Creativity and Innovation - Euroinvent 2023, 11-13.05.2023, Iași, Romania
40. Medalie de aur și Diplomă de excelență oferita de ICECHIM oferita d-nei **Marinoiu Teodora Adriana**, European Exhibition of Creativity and Innovation - Euroinvent 2023, 11-13.05.2023, Iași, Romania
41. Medalie de argint, pentru brevetul Grafene covalent funcționalizate cu azulene și procedeu de obținere a acestora - autori: **Adriana Marinoiu**, Simona Nica, Elena Carcadea, Catalin Capris, Mihai Varlam, Salonul Internațional de Inventica "EUROINVENT – 2022", 26-28 mai 2022, Iasi
42. Diplomă de Excelență și Medalia de Aur pentru invenția cu titlu "Grafene covalent funcționalizate cu azulene și procedeu de obținere a acestora" (CBI nr. A/00804/03.12.2020; BOPI nr. 5/2021), autori **A.T. Marinoiu**, S. Nica, E. Carcadea, C. Capris, M. Varlam, Salonul Internațional al Cercetării Științifice, Inovării și Inventicii PRO INVENT, 26-28 octombrie 2022, Cluj Napoca
43. Diplomă de Excelență și Medalia de Aur pentru invenția cu titlu "Metodă de control și secvență de pornire a unui vehicul electric hibrid cu două pile de combustibil pentru creșterea eficienței energetice" (CBI nr. A/00762/09.12.2021; BOPI nr. 5/2022), autori M. Răceanu, **A.T. Marinoiu**, E. Carcadea, M. Varlam, Salonul Internațional al Cercetării Științifice, Inovării și Inventicii PRO INVENT, 26-28 octombrie 2022, Cluj Napoca
44. Diploma de Excelență și Medalia de Aur pentru invenția "Metoda și sistem de generare a hidrogenului prin hidroliza catalitică a borohidruului de sodiu", autori: Elena Carcadea, **Adriana Marinoiu**, Alin Chitu, Jenel Arhip, Mihai Varlam, Salonul Internațional al Cercetării Științifice, Inovării și Inventicii PRO INVENT 2018, 21-23 Martie 2018, Cluj Napoca
45. Diploma și medalie de aur pentru "Method and System for Hydrogen Generation Through Catalytic Hydrolysis of Sodium Borohydride, autori: Elena Carcadea, **Adriana Marinoiu**, Alin Chitu, Jenel Arhip, Mihai Varlam, INVENTICA 2018, 27-29.06.2018, Iasi, Romania
46. Diploma și Medalia de Aur pentru invenția "Procedeu de realizare a placilor bipolare cu sistem de racire de tip lichid inclus pentru ansamblurile de pile de combustibil PEM", autori: Patularu Laurentiu Gabriel, Schitea Dorin Marius, Varlam Mihai, Stefanescu Ioan, **Marinoiu Teodora Adriana**, Cea de-a VIII-a editie EUROINVENT – European Exhibition of Creativity and Innovation, 20-21.05.2016, Iasi
47. Medalia de Aur pentru invenția "Process for bipolar plates production with liquid cooling system type included for PEM fuel cell stack", autori: Patularu Laurentiu, Schitea Dorin, Varlam Mihai, Stefanescu Ioan, **Marinoiu Teodora**, Targul Internațional de Inventii și Idei Practice INVEST-INVENT, 12-15.11.2014, Iasi, Romania
48. Diploma și Medalia de Argint pentru invenția "Procedeu de realizare a placilor bipolare cu sistem de racire de tip lichid inclus pentru ansamblurile de pile de combustibil PEM", autori: Laurentiu Patularu, Dorin Schitea, Mihai Varlam, Ioan Stefanescu, **Teodora Marinoiu**, Salonul Cercetării Romanesti, 15-18.10.2014, Bucuresti
49. Medalie bronz, pentru invenția "Effect of Temperature and Time on Drying Process of the Carrot (Daucus Carota) and Parsnip (Pastinaca sativa)", pag 603-610, autori: Claudia Cobzaru, Genoveva Bordeianu, Corina Cernătescu, **Adriana Marinoiu**, EUROINVENT, 6th edition, 22.24.05.2014, Iasi
50. Diploma de Excelență și Medalia de Aur pentru invenția "Procedeu de realizare a placilor bipolare cu sistem de racire de tip lichid inclus pentru ansamblurile de pile de combustibil PEM", titular INC-DTCl-ICSI Rm. Valcea, autori: Patularu Laurentiu,

Schitea Dorin, Varlam Mihai, Ioan Stefanescu, **Marinoiu Teodora**, Salonul International de Inventica PRO INVENT 2014, 19-21.03.2014, Cluj-Napoca

51. Medalia De aur pentru inventia "Procedeu de realizare a placilor bipolare cu sistem de racire de tip lichid inclus pentru ansamblurile de pile de combustibil PEM", autori: Patularu Laurentiu, Schitea Dorin, Varlam Mihai, Stefanescu Ioan, **Marinoiu Adriana**, Al XVII-lea Salon International al Cercetarii, Inovarii si Transferului Tehnologic, 19-21.06.2013, Iasi.