Curriculum Vitae

Personal Information

First name(s) / **Surname**(s)	Magdi / **El Fergani, (*El. Fergani, M.*)**
Address	Bd. Regina Elisabeta nr.4-12, 030018 Bucharest,
Telephone(s)	+40729516151
E-mail	magdi.belkassim@chimie.unibuc.ro magdi.belkassim@yahoo.com magdi.belkassim@gmail.com
BrainMap ID	U-1900-061H-8489
ResearcherID	*Web of Science:* F-7538-2018
ORCID	0000-0002-8300-2559
Scopus ID	57200221773
Nationality	Libyan
Date of birth	13.05.1989
Gender	male

Work experience

Dates	12. 2024 - Present
Occupation or position held	**Postdoctoral researcher**
Main activities and responsibilities	Research activities in the field of organic chemistry
Name and address of employer	University of Bucharest, Faculty of Chemistry, Romania
Type of business or sector	Academic research
Dates	04. 2022 - 11. 2024
Occupation or position held	**Postdoctoral researcher**
Main activities and responsibilities	Research activities in the field of catalysis
Name and address of employer	University of Bucharest, Faculty of Chemistry, Romania
Type of business or sector	Academic research
Dates	12. 2017 - 04. 2022
Occupation or position held	**Research Assistant**
Main activities and responsibilities	Research activities in the field of catalysis
Name and address of employer	University of Bucharest, Faculty of Chemistry, Romania
Type of business or sector	Academic research

Education and training

Dates	10. 2017 – 07. 2021
Title of qualification awarded	**Doctoral degree – Chemistry**
Principal subjects/occupational skills covered	Title of the thesis: "*ACID-BASE MATERIALS FOR GREEN AND SUSTAINABLE CHEMICAL PROCESSES*", Supervisor: Prof. Univ. Dr. Vasile I. Parvulescu
Name and type of organisation providing education and training	University of Bucharest, Romania
Dates	10. 2015 – 06. 2017
Title of qualification awarded	**Master degree**
Principal subjects/occupational skills covered	Chemistry- Chemistry of advanced materials Title of the thesis" Nb-based molecular sieves: preparation, characterization and catalytic performances",
Name and type of organisation providing education and training	University of Bucharest, Romania
Dates	03.2008 – 01.2013
Title of qualification awarded	**Bachelor's degree**
Principal subjects/occupational skills covered	Chemistry
Name and type of organisation providing education and training	University of Benghazi, Libya
Research stages	**15.03-20.06, 2019, ERASMUS fellowship:** Host institution: University of

Lille, faculty of Sciences and Technologies, Lille, 42, rue Paul Duez 59000 Lille – France. The fellowship was won by selecting the student files through the Faculty of Chemistry, University of Bucharest.
15.10-21.10, 2023, ERASMUS+ (STAFF MOBILITY FOR TRAINING MOBILITY AGREEMENT): Host institution: University of Lille, faculty of Sciences and Technologies, Lille, 42, rue Paul Duez 59000 Lille – France. Sending Institution: University of Bucharest, Șoseaua Panduri, nr. 90, Sector 5, 050663, București – Romania.

Mother tongue(s) **Arabic**

Other language(s)

Self-assessment European level (*)	Understanding		Speaking		Writing
	Listening	Reading	Spoken interaction	Spoken production	
English	B2	B2	B2	B2	B2
Romanian	A2	A2	A2	A2	A2

B2: Upper-Intermediate; A2: Elementary

Social skills and competences
Member of Romanian Catalysis Society (RCS): (***01.2022- Present***)
Member of the research project teams:
5 Projects: PN-III-P4-ID-PCE-2016-0533, Nr. 116/2017; PN-III-P1.2-PCCDI-2017-0541, Nr. 32PCCDI/2018; PN-III-P4-ID-PCCF-2016-0088; PN-III-P1-1.1-TE-2019-1933 (GLUCAD);PN-III-P4-ID-PCE-2020-1532 (MXeneCAT).
Versatile, efficient and considerate, either as a team member or on independent assignments, Desire to learn more, Good communication skill, Good adaptability

Digital skills
Zoom | Google Drive | Skype | Social Media | LinkedIn | Internet user | Chemsketch | OriginPro.

Technical skills and competencies
a) Teaching using multimedia tools
b) Other practical skills in fields like: computers, mechanical equipment, thermo-mechanical processes, materials, science:
· Chemical synthesis.
· Heterogeneous catalysis.
· Fine chemicals synthesis,
. Biomass Valorization.
· Analytical methods: TLC, GC, GC-MS, HPLC and ICP.
· Determination of surface and bulk properties of the solid materials: BET, RAMAN, XRD, SS-NMR, UV-Visible spectroscopy, CO_2 / NH_3 TPD, H_2-TPR and FTIR.
C) Familiar use of Reaxys

External editor
Guest editor, special issue **"*Development Of Catalytic Systems For Green Chemistry*",** Applied sciences (MDPI), **(12.2024 – 01.2026)**.
https://www.mdpi.com/journal/applsci/special_issues/ZE3M94H486

External reviewer
Scientific Journal reviewer*:*
Catalysts:
Review Board Member **(2021- Present)**,
https://www.mdpi.com/journal/catalysts/submission_reviewers
Frontiers in Energy Research (Section; Bioenergy and Biofuels):
Review Editor **(2023- Present)**,
https://www.frontiersin.org/journals/energy-research/sections/bioenergy-and-biofuels/editors
Other journals: Catalysis today, Molecular Catalysis, Biomass & Bioenergy, Arabian Journal of Chemistry, Toxins, Toxics, Processes, Renewable Energy, Research on Chemical Intermediates, Polymers and Chemistry.

Publications
- 11 ISI papers
- Hirsch index (SCOPUS) = 7

Conferences
Participated in 30 national and international conferences

Annex
ISI papers, lectures, conferences and summer schools

M. El Fergani. December, 01, 2025

Annex

List of publications, invited lectures, conferences and participating summer schools

A) ISI papers

1. D. Stan, A.-C. Mirica, S. Mocanu, D. Stan, I. Podolean, N. Candu, **M. E. Fergani**, L. M. Stefan, A,-M, S, -Grama, L. Aricov, O. Brincoveanu, C. Moldovan, L. -A. B. -Mateescu, and S. M. Coman (**2025**). Hybrid Hydrogel Supplemented with Algal Polysaccharide for Potential Use in Biomedical Applications, ***Gels.*** 11(1), 17, (**I.F. = 5.0, Q1**).

2. I. Podolean[#], **M. E. Fergani**[#], N. Candu, S. M. Coman, V. I. Parvulescu (**2023**): Selective oxidation of glucose over transitional metal oxides based magnetic core-shell nanoparticles, ***Catal. Today,*** 423**,** 113886**,** (**IF= 5.3, Q1**), [#]- The authors has equal contribution.

3. C. Rizescu, **M. E. Fergani**, D. I. Eftemie, B. Cojocaru, D. G. Popescu, M. Andruh, V. I. Parvulescu (**2023**). Liquid phase oxidation of alkenes and glycerol with molecular oxygen over mixed-ligand copper(II) complexes grafted on GO as catalysts, ***Appl.Catal.A-Gen.*** 663, 119302, (**IF= 5.5, Q2**).

4. **M. E. Fergani**, N. Candu, I. Podolean, B. Cojocaru, A. Nicolaev, C. M Teodorescu, M. Tudorache, V. I. Parvulescu, S. M. Coman (**2022**): Catalytic hydrodeoxigenation of humins over bifunctional Pd-based zeolite catalysts, ***Catalysts,*** 12(10), 1202, (**IF= 3.9, Q2**).

5. **M. E. Fergani**, N. Candu, P. Granger, S. M. Coman, V. I. Parvulescu (**2022**): Hierarchically MOx@Nb-zeolites for the Selective Oxidation of HMF to HMFCA, ***Catal. Today,*** 405-406, 267-276, (**IF= 5.3, Q1**).

6. **M. E. Fergani**, N. Candu, M. Tudorache, C. Bucur, P. Granger, S. M. Coman (**2021**): From useless humin by-product to Nb@humin catalysts highly efficient in HMF synthesis, ***Appl.Catal.A-Gen.*** 618, 118130, (**IF= 5.5, Q2**).

7. **M. E. Fergani**, N. Candu, M. Tudorache, P. Granger, V. I. Parvulescu, S. M. Coman (**2020**): Optimized Nb-Based zeolites as catalysts for the synthesis of succinic acid and FDCA, ***Molecules,*** 25(21), 4885, (**IF= 4.6, Q2**).

8. A. Tirsoaga, , **M. E. Fergani**, N. Nuns, , P. Simon, , P. Granger, , V. I. Parvulescu, , S. M. Coman (**2020**): Multifunctional nanocomposites with non-precious metals and magnetic core for 5-HMF oxidation to FDCA, ***Appl. Catal. B: Environ.,*** 278, 119309, (**IF = 22.1, Q1**).

9. N. Candu, **M. E. Fergani**, M. Verziu, B. Cojocaru, B, Jurca, N. Apostol, C. Teodoresu, V. I. Parvulescu, S. M. Coman (**2019**): Efficient glucose dehydration to HMF onto Nb-BEA catalysts, ***Catal. Today,*** 325, 109-116, (**IF= 5.3, Q1**).

10. A. Tirsoaga*, **M. E. Fergani***, V. I. Parvulescu, S. M. Coman (**2018**): Upgrade of 5-Hydroxymethylfurfural to dicarboxylic acids onto multifunctional based Fe_3O_4@SiO_2 magnetic catalysts, ***ACS Sustainable Chemistry & Engineering*** (SI: Catalytic Byproduct Valorization in Future Biorefineries), 6(11), 14292-14301, (**IF= 8.4, Q1**), *- The authors has equal contribution.

11. **M. E. Fergani,** N. Candu, S. M. Coman, V. I. Parvulescu (**2017**): Nb-based zeolites: efficient bi-functional catalysts for the one-pot synthesis of succinic acid from glucose, ***Molecules,*** 22(12), 2218, (**IF= 4.6, Q2**).

B) Invited lectures

1. From Benghazi to Europe: A Scientific Journey in Chemistry. **M. El Fergani,** "APEX Chemistry 2025 (Academic Program of Excellence in Chemistry) ", Bucharest, Romania, 27 July **2025** (Invited Lecture).

2. Novel nanostructured catalysts for HMF production. **M. El Fergani,** "Monthly webinars given by two young researchers from CIVIS alliance universities", CIVIS - NANOTalks webminar - Small is the new big, 13 February **2024** (Invited Lecture).

C) Conferences

1. **M. E. Fergani**, B.-C. Enache, M.-A. Molența, A. Hanganu, C. C. Popescu, A. Salic, M. Matache. Design and synthesis of novel fluorophores. Conferința Anuală de Comunicare a Rezultatelor Cercetării la Universitatea din București Ediția a IV-a. November 25-28 **2025**, Bucharest, Romania. (POSTER).

2. **M. E. Fergani**, N. Candu, M. Tudorache, P. Granger, V. I. Parvulescu, S. M. Coman. Nb@graphite-like carbon catalysts from humins for HMF production. Smart Diaspora 2025 (***Workshop 29*** - Materiale inteligente - o abordare interdisciplinară /Intelligent Materials - An Interdisciplinary Approach). November 04-07, **2025**, Cluj-Napoca, Romania. (ORAL PRESENTATION).

3. **M. E. Fergani**, N. Candu, I. Podolean, S. M. Coman. Biphasic system for Ulvan conversion to HMF and rhamnose biochemicals. 2nd Conference on Water Research for Young Scientists. September 22-23, **2025**, Bucharest, Romania. (ORAL PRESENTATION).

4. **M. E. Fergani**, N. Candu, I. Podolean, S. M. Coman. Catalytic upgrading of ulvan to biochemicals using Nb@Zeolites. The 14th International Symposium of the Romanian Catalysis Society (ROMCAT2025), July 09-11 **2025**, Cluj-Napoca, Romania. (Oral presentation).

5. N. Candu, I. Podolean, **M. E. Fergani**, S. M. Coman. From marine sulfated polysaccharide ulvan to 2,5-furandicarboxylic acid (FDCA): a catalytic approach toward bio-polymers production. The 32nd Symposium 'Deltas and Wetlands', May 12 - 17, **2025**, Tulcea, Romania. (Oral presentation) as co-author.

6. **M. E. Fergani**, N. Candu, I. Podolean, S. M. Coman. Catalytic valorization of Ulvan polysaccharide toward biochemicals in the presence of Nb@zeolite catalysts. 2nd Forum of Young Researchers on Heterogeneous Catalysis (YOURHETCAT 2024). November 14-16, **2024**, Szeged, Hungary. (ORAL PRESENTATION).
7. **M. E. Fergani**, N. Candu, I. Podolean, F. MAXIM, S. M. Coman. ULVA LACTUCA – A FEEDSTOCK FOR BIOCHEMICALS AND MATERIALS. MISIUNEA 3 – Restaurarea Oceanelor și Apelor Noastre – între cercetare și implementare. October 3-4, **2024**, Timișoara, Romania. (ORAL PRESENTATION).
8. **M. E. Fergani**, N. Candu, M. Tudorache, P. Granger, V. I. Parvulescu, S. M. Coman. From humins wastes to highly efficient Nb@graphite-like carbon catalysts: An exemplification of the circular economy concept. The 9th Tokyo Conference on Advanced Catalytic Science and Technology (TOCAT9). July 24-29, **2022**, Fukuoka, Japan. (ORAL PRESENTATION).
9. **M. E. Fergani**, I. Podolean, S. M. Coman, V. I. Parvulescu, N. Candu. Selective oxidation of glucose over transitional metal oxides based magnetic core-shell nanoparticles. The 13th International Symposium of the Romanian Catalysis Society (ROMCAT2022), June 22-24, **2022**, Baile Govora, Romania. (ORAL PRESENTATION).
10. **M. E. Fergani**, I. Podolean, N. Guzo, S. M. Coman, M. Tudorache, V. I. Parvulescu, N. Candu. Magnetic core-multi-shell nanocomposites for green oxidation process of glucose. Contemporary Solutions for Advanced Catalytic Materials with a High Impact on Society (CoSolMat2021) October 11-15, **2021**, Romania (Virtual Conference), (ORAL PRESENTATION)
11. **M. E. Fergani**, N. Candu, M. Tudorache, P. Granger, V. I. Parvulescu, S. M. Coman. Environmental friendly solid catalytic systems for HMF production. Contemporary Solutions for Advanced Catalytic Materials with a High Impact on Society (CoSolMat2021) October 11-15, **2021**, Romania (Virtual Conference), (ORAL PRESENTATION)
12. N. C. Guzo, **M .E. Fergani**, B. Cojocaru, J. Gościańska, V. I. Parvulescu, S. M. Coman. From humins wastes to carbon quantum dots (CQDs) based photocatalytic nanocomposites. Contemporary Solutions for Advanced Catalytic Materials with a High Impact on Society (CoSolMat2021) October 11-15, **2021**, Romania (Virtual Conference), (ORAL PRESENTATION) as coauthor
13. **M. E. Fergani**, I. Podolean, S. M. Coman, V. I. Parvulescu, N. Candu. Non-precious metal-based magnetic catalysts using for the production of Diacids. 5th EuChemS Conference on Green and Sustainable Chemistry (5thEuGSC) September 26-29, **2021**, Greece (Virtual Conference), (ORAL PRESENTATION)
14. **M. E. Fergani**, N. Candu, M. Tudorache, P. Granger, V. I. Parvulescu, S. M. Coman. Nb@graphite-like carbon catalysts synthesis: a new way of humins valorization. 5th EuChemS Conference on Green and Sustainable Chemistry (5thEuGSC) September 26-29, **2021**, Greece (Virtual Conference), (ORAL PRESENTATION)
15. N. Candu, I. Podolean, S. Marinică, **M. E. Fergani**, V. I. Parvulescu, S. M. Coman. Ru-based magnetic Catalysts for selective oxidation and reductive amination of biomass. 5th EuChemS Conference on Green and Sustainable Chemistry (5thEuGSC) September 26-29, **2021**, Greece (Virtual Conference), (POSTER) as co-author
16. **M. E. Fergani**, N. Candu, P. Granger, V. I. Parvulescu, S. M. Coman. Tuning Nb-zeolite based catalysts for the oxidation of glucose and 5-hydroxymethylfurfural. The 8th Conference of the Federation of European Zeolite Associations (FEZA 2021) July 5-9, **2021**, (Virtual Conference), (Poster). **Awarded the FEZA Student grants.**
17. G. Stoian, **M. E. Fergani**, B. Cojocaru, P. Oancea, V. I. Parvulescu, S. M. Coman, Optimized hydrothermal synthesis of fluorescent carbon quantum dots from humins wastes. June 4-5, **2021**, Cluj-Napoca, Romania, (ORAL PRESENTATION) as co-author.
18. **M. E. Fergani**, A. Tirsoaga, N. Nuns, P. Simon, P. Granger, V. I. Parvulescu, S. M. Coman. Multifunctional magnetic nanocomposites for the valorification of HMF to dicarboxylic acids, A III-a ediție a Conferinței națională a doctoranzilor (Online), December 12, **2020**, Bucharest, Romania. (ORAL PRESENTATION).
19. **M. E. Fergani**, N. Candu, P. Granger, V. I. Parvulescu, S. M. Coman. Highly efficient oxidation of glucose to FDCA based on base metal-containing zeolite catalysts. The 17th International Congress on Catalysis (17th ICC) June 14-19, **2020**, San Diego, California, USA, (POSTER) as co-author
20. **M. E. Fergani**, A. Tirsoaga, V. I. Parvulescu, S. M. Coman. Catalytic oxidation of 5-hydroxymethylfurfural (HMF) to valuable dicarboxylic acids, The 14th European Congress on catalysis (EuropaCat 2019), August 18-23, **2019**, Aachen, Germany. (POSTER) as co-author.
21. **M. E. Fergani**, N. Candu, V. I Parvulescu, S. M. Coman. Efficient Nb-based zeolites nanocomposite for the one-pot synthesis of succinic acid from glucose, The 12th International Symposium of the Romanian Catalysis Society (ROMCAT 2019), June 5-7, **2019**, Bucharest, Romania. (POSTER) as co-author.
22. N. Candu, **M. E. Fergani**, A. Tirsoaga, V. I. Parvulescu, S. M. Coman. 5-Hydroxymethylfurfural (HMF) oxidation to dicarboxylic acids in the presence of (Mn, Co)-based Fe3O4@SiO2 catalysts, The 12th International Symposium of the Romanian Catalysis Society (ROMCAT 2019), June 5-7, **2019**, Bucharest, Romania. (ORAL PRESENTATION) as co-author.
23. N. Candu, **M. E. Fergani**, A. Tirsoaga, V. I. Parvulescu, S. M. Coman. The direct catalytic synthesis of dicarboxylic acids from glucose, The 8th Asia Pacific Congress on Catalysis (APCAT-8), August 4-7, **2019**, Bangkok, Thailand (ORAL PRESENTATION) as co-author.

24. **M. E. Fergani**, N. Candu, V. I. Parvulescu, S. M. Coman. Recent advances in production of succinic acid from glucose using Nb-based zeolites nanocomposite, The 4th International Symposium on Green Chemistry (ISCG 2019), May 13-17, **2019**, La Rochelle, France, (ORAL PRESENTATION) as co-autor.
25. S. M. Coman, **M. E. Fergani**, N. Candu, V. I. Parvulescu. Nb-Beta zeolite catalysts for the efficient transformation of glucose to multiple platform molecules, The 8th Tokyo Conference on Advanced Catalytic Science and Technology (TOCAT), August 5-10, **2018**, Yokohama, Japan, (ORAL PRESENTATION) as co-author.
26. N. Candu, **M. E. Fergani**, S. M. Coman, V. I. Parvulescu. One-pot synthesis of succinic acid from glucose using Nb-based zeolites, EFCATS school on catalysis, June 25-29, **2018**, Liblice Castle, Czech Republic, (ORAL PRESENTATION) as co-author.
27. **M. E. Fergani**, S. M. Coman, V. I. Parvulescu. Recent advances in production of succinic acid from glucose using Nb-based zeolites nanocomposite, Young Researchers' International Conference on Chemistry and Chemical Engineering (YRICCCE II) May 3 - 5, **2018**, Budapest, Hungary, (ORAL PRESENTATION) Received the "**Oral Lecture Prize**", awarded by RSC as "**Best Presentation**".
28. **M. E. Fergani**, M. Verziu, V. I. Parvulescu, S. M. Coman. Nb-based zeolites nanocomposite for glucose dehydration to HMF. The International Symposium on Green Chemistry (ISGC) May 16-19, **2017**, La Rochelle, France. (ORAL PRESENTATION) as coauthor
29. **M. E. Fergani**, N. Candu, V. I. Parvulescu, S. M. Coman. Synthesis of Nb-based molecular sieves: catalytic properties-catalytic performances correlation. Sesiunea de Comunicari Stiintifice Studentesti, Editia a XIII-a May 26, **2017**, Bucharest, Romania. (ORAL PRESENTATION) received an award (**3rd place**).
30. **M. E. Fergani**, V. I. Parvulescu, S. M. Coman. The synthesis of HMF in the presence of Nb-based zeolites nanocomposite, International Conference "Students for Students" 14th edition April, 25-30, **2017**, Cluj-Napoca, Romania, (Poster) received an award (**Best poster**).

D) SUMMER SCHOOLS

1. Catalysis for promising future, 20-21 June **2022**, Baile Govora, Romania.