

## PERSONAL INFORMATION

**Mihaela FLOREA**

Date of birth: 21/10/1974

National Institute of Materials Physics (NIMP), 405 A Atomistilor Street, 077125 Magurele, Romania

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## • EDUCATION

**1999–2003** PhD in Chemistry (PhD supervisor: Prof. Paul Grange); Thesis Title: „*Relationship between structure and activity of vanadium aluminium oxynitrides in propane ammoxidation*”- awarded with “***La plus grande distinction***”– **published results: 9 ISI articles and one European patent**

Université Catholique de Louvain (UCL)/Louvain-la-Neuve/Belgium

**1997–1999** Master of Science in Catalysis; Thesis Title: „*Ru-MCM-41 catalysts for stereocontrolled hydrogenation of prostaglandin intermediates*” – **published results: 2 ISI articles**

Faculty of Chemistry/University of Bucharest (UB)/Romania

**2005–2007** Master of Science – Project manager; Academy of the Economics Studies/Bucharest/Romania.

## • CURRENT POSITION

**April 2018–present** - Researcher I<sup>st</sup> degree – NIMP/Magurele/Romania;

**2007–present** – Researcher – UB/Bucharest/Romania.

## • PREVIOUS POSITIONS

**Feb 2017–March 2018** – Senior researcher III<sup>rd</sup> degree – NIMP/Magurele/Romania;

**Feb 2007–Jan 2017** – Lecturer – Faculty of Chemistry/UB/Romania

**Feb 2004–Jan 2007**–Assistant Professor – Faculty of Chemistry/UB/Romania

## • FELLOWSHIPS

**2006** Institut de Recherches sur la Catalyse et l’Environnement de Lyon (IRCELYON)/Lyon/France – invited researcher, CORDIS Project- short visit (6 weeks)

**2004/2005** UCL/Louvain-la-Neuve/Belgium –invited researcher –short visits

**2003** University of Gent, Belgium and ESFR Grenoble/France – Scientific collaboration during PhD thesis, “EXAFS and TAP experiments”

**2002** University of Gent/Belgium – Scientific collaboration during PhD thesis, TAP experiments

**2001** Université de Caen, Laboratory Catalysis and Spectrochemistry/France – Summer school, “Infrared spectroscopy”

**1999–2003** UCL /Louvain-la-Neuve /Belgium – doctoral fellowship.

## • SUPERVISION OF GRADUATE STUDENTS (2004-2020)

3 PhD students – monitoring committee according to the Romanian rules for doctoral studies

11 MSc; 8 BSc, **May–Aug 2019** – *1 PhD student* from Morocco – 3 months fellowship at NIMP

**Apr–Jul 2018** – *2 PhD students* from Morocco and Tunis– 3 months fellowship at NIMP

## • TEACHING ACTIVITIES

**2007–2017** Lecturer–Taught courses and labs: Catalysts Preparation, Catalysts Characterization, Nanomaterials

**2004–2007** Assistant professor – Taught courses and labs: Green Chemistry, Heterogeneous Catalysis Principles, Pharmaceutical Chemistry.

## • ORGANISATION OF SCIENTIFIC MEETINGS

**2015-present** – Involved in several scientific events, which promote at national level the chemistry in schools and high-schools

**2016** – The 11<sup>th</sup> International Symposium of the Romanian Catalysis Society –Organizing Committee

**2014** – The 150<sup>th</sup> Anniversary of the Faculty of Chemistry/UB –Organising Committee

**2013** – The 10<sup>th</sup> International Symposium of the Romanian Catalysis Society –Organizing Committee

**2012** –“Chemistry and target identification of natural product”– workshop within Cost Action CM0804/Bucharest/Romania- Organizing Committee

**2007** – The 8<sup>th</sup> International Symposium of the Romanian Catalysis Society –Organizing Committee

**2007**– “Past and Present in DeNOx Catalysis: From Molecular Modelling to Chemical Engineering”- /COST workshop/ Uzlina, Romania- Organizing Committee

## • INSTITUTIONAL RESPONSIBILITIES

**2020- present** Member of National Council for Scientific Research/ President of the Chemistry Commission

**2018-present** Member of the Scientific Council of National Institute of Materials Physics

**2004–2008 and 2015–2017** Member of the Faculty of Chemistry Council/UB/Romania

**2012–2014** Vice-dean of the Faculty of Chemistry/UB/Romania

**2004–2008** Member of the Romanian Catalysis Society Committee – Scientific secretary and treasurer

## • REVIEWING ACTIVITIES

**July 2020** – Member of the jury for “Journal of Materials Chemistry Lectureship”

**2020-present** Advisory Board member for Journal of Materials Chemistry A (IF=11.301)

**2019-present** Guest Editor Special Issue, “*Sustainable Catalytic Materials for Selective Oxidation and Energy Applications*”, Materials, MDPI

**2015–present** Editorial Board, Current Catalysis, Bentham Science

**2011–present** External expert, Romanian National Agency (UEFISCDI)/Romania

**2012–2016** Member of the management committee of the COST programme, COST CM1104

**2006–2009** Member of the management committee of the COST programme, COST D41

**2005–present** Reviewer for different international journals (Appl. Catal. A and B, Catal. Today, Catal. Commun., Int. J. Hydrogen Energy, etc.)

## • MEMBERSHIPS OF SCIENTIFIC SOCIETIES

**2019-present** Member of the American Ceramic Society

**2013–present** Member of the Romanian Chemical Society

**2004–2016** Member of the Romanian Catalysis Society

## • MAJOR COLLABORATIONS

✓ Prof. Vasile I. Parvulescu – University of Bucharest/Bucharest/Romania

✓ Prof. Fabrizio Cavani – Università di Bologna/Bologna/Italy

✓ PhD Jean Marc Millet – Directeur de recherche at IRCE Lyon/France

✓ PhD. Carmen Tiseanu – National Institute for Laser, Plasma and Radiation Physics/Magurele/Romania

✓ PhD. Patrick Gelin – Directeur de recherche at Université Lyon/Lyon/France

✓ PhD. Simona Somacescu – “Ilie Murgulescu” Institute of Physical Chemistry/Romanian Academy

✓ Prof. Michael Barsoum – College of Engineering/Drexel University/USA

✓ PhD. Andras Tompos – Director of Institute of Materials & Environmental Chemistry/Budapest/Hungary

✓ Prof. Jeroen van Bokhoven - ETH Zürich; Dep. of Chemistry and Applied Biosc.

- **SCIENTIFIC CONTRIBUTIONS: 190**

- 1 European patent; 2 national patent, 1 book chapter;

- 96 ISI publications in peer-reviewed international journals, including:

Nat. Commun. (1)	Appl. Catal. B (5)	ChemSusChem (2)	Sci. Rep. (1)	J. Catal. (5)
Green Chem. (1)	Appl. Catal. A (9)	ACS Catalysis (2)		Catal. Today (10)

- No. of citations > 1500

- h-index = 23

- 85 studies in the proceedings of international conferences (51 oral communications and 34 posters);

- 5 invited lectures.

- **FUNDING ID**

**Principal investigator for 13 projects: 9 national grants and 3 international grants; 1 international mobility grant (Romania-France) – with total budget > 1.3 million Euros**

**Participant in national and international projects – over 20 projects**

- **PROFESSIONAL SKILLS**

- **Teaching experience – 12 years** in catalysis, catalytic processes, solids surface characterization, analytical chemistry and green chemistry. Between 2004–2016, as Assistant Professor and Lecturer at Faculty of Chemistry, I was in charge of bachelor and master courses being also the *promoter of new bachelor and master classes as well as the advisor of BSc and MSc (~2-3 students/year)*. I created an effective learning environment through the use of a variety of instructional methods, I supervised practical courses and I developed educational laboratory experiments.

- **Practical experience - 20 years** in preparation of inorganic nanomaterials; chemical synthesis, work under inert atmosphere; Heterogeneous catalysis; Green energy production; Biomass valorisation; oxidation reactions, isomerization reactions; analytical methods: HPLC, GC/GC-MS, TLC, TAP; Determination of surface and bulk properties: XPS, BET, RAMAN, XRD, FTIR, UV-Vis, SEM, etc.

- **Language proficiency:** English – C2; French – C2, Spanish- B2



