

CURRICULUM VITAE

Name: MARCU

First name: IOAN-CEZAR

Title: *Dr. Habil.*

Place of birth:

Date of birth:

Actual position: **Professor of Chemical Technology & Catalysis, Head of Department**

Affiliation: Lab of Chemical Technology & Catalysis, *Dept. of Inorganic & Organic Chemistry, Biochemistry & Catalysis, **Faculty of Chemistry, University of Bucharest***
90, Panduri Street, Sector 5, 050663, Bucharest
E-mail: ioancezar.marcu@chimie.unibuc.ro; ioancezar_marcu@yahoo.com

STUDIES & ACADEMIC QUALIFICATIONS

- July 2013 **Habilitation** in Chemistry at the University of Bucharest with the dissertation “Catalysis by oxides: conversion of light organic molecules” (the committee report [here](#))
- 1996-2002 **Doctorate** jointly supervised at the University of Bucharest and, since 1999, the University “Claude Bernard” Lyon 1, France (mention “Très Honorable avec Félicitations”)
Supervisors: Prof. Ioan Săndulescu & Dr. Jean-Marc M. Millet
Field of Specialization: ***Catalysis and Physical-Chemistry of Interfaces***
- 1995-1996 **M. Sc.** at the Faculty of Chemistry, University of Bucharest
Field of Specialization: ***Catalysis and Heterogeneous Catalytic Processes***
- 1990*-1995 **B. Sc.** at the Faculty of Chemistry, University of Bucharest
Field of Specialization: ***Chemistry and Physics***
- 1985-1989 “Mihai Eminescu” Industrial High School of Botoșani, Romania
Profile: ***Industrial Chemistry***

PROFESSIONAL EXPERIENCE

- 2020-present **Full Professor** at the Department of Inorganic & Organic Chemistry, Biochemistry & Catalysis, Faculty of Chemistry, University of Bucharest
- 2014-present **PhD supervisor** in the field of **Chemistry – Heterogeneous Catalysis** at the Doctoral School in Chemistry, University of Bucharest
- 2007-present **Senior Researcher** at the Research Center for Catalysts & Catalytic Processes, University of Bucharest
- 2005-2020 **Associate Professor** at the Dept. of Chemical Technology & Catalysis / Dept. of Organic Chemistry, Biochemistry & Catalysis, Faculty of Chemistry, University of Bucharest
- 2002-2005 **Lecturer** at the Department of Chemical Technology & Catalysis, Faculty of Chemistry, University of Bucharest
- 1998-2002 **Tenured Assistant** at the Department of Chemical Technology & Catalysis, Faculty of Chemistry, University of Bucharest
- 1995-1998 **Temporary Teaching Assistant** at the Department of Chemical Technology & Catalysis, Faculty of Chemistry, University of Bucharest

* 1989-1990: Mandatory military service.

RESEARCH TRAININGS ABROAD

- **Post-Doc position** (CNRS) at *Institut Charles Gerhardt, Laboratoire des Matériaux Avancés pour la Catalyse et la Santé*, Montpellier, France, from the 1st of October **2006** to the 30th of September **2007** (Advisor: Dr. François Fajula).
- **PhD research positions** (MIRA scholarships) at *Institut de Recherches sur la Catalyse – CNRS* associated to *Université “Claude Bernard” Lyon I*, Villeurbanne, France, from February the 1st to July the 31st **2002**, **2001** and **2000** (Supervisor: Dr. Jean-Marc M. Millet).

DOMAINS OF COMPETENCE

- Metal oxide-based catalysts: preparation, characterization and catalytic applications.
- *In situ* electrical conductivity measurements of semi-conducting oxide catalysts.
- Layered double hydroxides (LDH) and ex-LDH mixed oxides catalytic materials.
- Catalytic activation and functionalization of light alkanes: selective oxidation, total oxidation.
- Catalytic organic transformations: hydrodeoxygenation, condensation, oxidation, esterification.
- Flue gas desulfurization by selective adsorption of sulfur dioxide.

AWARDS

- **The Prize of the Senate of the University of Bucharest** for “*The most prestigious publication*” in the field of Exact Sciences and Engineering, the book chapter “Recent Innovative Developments of Layered Double Hydroxide-Based Hybrids and Nanocomposite Catalysts” (co-authored with Mayra G. Álvarez and Didier Tichit), Bucharest, **2022**.
- **The Grand Prize “Dissertation of the year”** awarded by the Senate of the University of Bucharest for supervising the work „Study of cobaltite-based catalytic materials for methane combustion” authored by Marius-Alexandru MIHAI, Bucharest, **2020**.
- **The Prize of the Senate of the University of Bucharest** for “*The best master dissertation*” supervised in the field of Exact Sciences and Engineering (author Marius-Alexandru MIHAI), Bucharest, **2020**.
- **Honorary Diploma** awarded by the Romanian Chemical Society “for outstanding contribution in promoting chemistry”, Bucharest, **2019**.
- **Peer Review Award 2018** “for placing in the top 1 % of reviewers in Cross-Field on Publons’ global reviewer database”.
- **The Prize of the Senate of the University of Bucharest** for “*The best bachelor thesis*” supervised in the field of Exact Sciences and Engineering (author Ștefan-Bogdan IVAN), Bucharest, **2017**.
- **Researcher of the Year - 3rd Prize**, Gala of Prizes in Education, Bucharest, **2010**.
- The **Young Scientist Prize** of *International Association of Catalysis Societies* in recognition of the contribution “Reaction mechanism of n-butane oxidative dehydrogenation over tetravalent pyrophosphates catalysts” presented at the 13th International Congress on Catalysis, Paris, July 16th, **2004**.

OTHER DIPLOMAS

- **Advanced French Language Diploma (Diplôme Approfondi de Langue Française – DALF)**, Institut Français de Bucarest, **2005**.

TEACHING EXPERIENCE

GIVEN COURSES

Master’s level

- *Catalytic Materials* (in Romanian and, starting from 2011, in English) – 2008 - to present
- *Methods of Preparation and Characterization of Catalysts* – 2002 - 2007

Bachelor’s level

- *Elements of Catalysis and Biocatalysis* – 2025 - to present
- *Chemical Technology* – 2008 - to present

- *Micro- and Mesoporous Materials for Catalysis* – 2008 - 2022
- *Chemistry and Technology of Materials* (in Romanian and in French) – 1999 - 2007
- *Principles of Heterogeneous Catalysis* (in Romanian and in French) – 2002 - 2007

DIPLOMA WORKS SUPERVISED

Master's level: 9

Bachelor's level: 29 (of which **20 Erasmus students** from *Institut Universitaire de Technologie – Université Paul Sabatier Toulouse III*)

PhD THESES SUPERVISED

Defended theses: 5

- “Transition-metal-containing LDH-based catalysts for benzyl alcohol hydrodeoxygenation” by Claudiu Eduard RIZESCU, defended on December 12, **2025**.
- “Perovskite-based materials for photocatalytic applications” by Florin ANDREI, defended on November 14, **2025**.
- “Cobalt-containing ex-LDH mixed oxide systems as catalysts for the total oxidation of methane” by Marius-Constantin STOIAN, defended on July 18, **2025**. The thesis is available at the URL: <https://theses.hal.science/tel-05171331>
- “Layered double hydroxide-based catalysts for fine organic synthesis” by Alexandra-Elisabeta STAMATE, defended on December 16, **2022**. The thesis is available at the URL: <https://theses.hal.science/tel-03906532>
- “Transition-metal-containing LDH-derived mixed oxides as catalysts for methane combustion” by Hussein Mahdi S. AL-AANI, defended on September 16, **2020**. The thesis is available at the URL: <https://theses.hal.science/tel-02946422>

Submitted theses: 1

- “NiO-based catalysts for ethane oxydehydrogenation” by Ștefan-Bogdan IVAN, started in October 2019. Unique code: CO-4987; publication code: F-CO-4981/23.09.2025.

RESEARCH GRANTS

- As a grant director: **3**
- As a project coordinator: **3**
- As a member of the research team: **7**

PUBLICATIONS & SCIENTIFIC COMMUNICATIONS

- University textbooks: **6**, of which **4** course notes and **2** laboratory manuals.
- Book contributions: **7**, of which **3** chapters and **4** encyclopedias' articles.
- Didactic contributions: **9**.
- Editorials: **3**.
- Research papers: **98**, of which:
 - **83** in journals indexed in Scopus and Web of Science (67 as a main author),
 - **13** in journals indexed in other international databases (8 as a main author),
 - **2** in proceedings (as a main author).
- **Scientific communications** (published in book of abstracts): **77** (of which **46** oral presentations).
- **Invited lectures** at national and international conferences: **13**.
- **Invited seminars** abroad: **18**.

PROFESSIONAL RECOGNITION

- **Guest Editor for international journals:**

- *Catalysts* (MDPI), Topical Collection *Layered Double Hydroxides and Related Materials for Advanced Heterogeneous Catalytic Processes*, in progress [here](#).
- *Materials* (MDPI), Special issue *Advanced Catalytic and Adsorbent Materials for a Greener World*, in progress [here](#).
- *Catalysts* (MDPI), Special issue *Layered Double Hydroxide-Based Catalysts for Advanced Chemical Technologies*, [here](#).
- *Applied Surface Science Advances* (Elsevier), Special issue *Sorbent Materials and State-of-the-Art Sorption Processes: from synthesis to functionalization and applications*, [here](#).
- *Applied Catalysis A: General* (Elsevier), Invitation-based thematic special issue *Oxide-based materials for sustainable catalytic processes*, [here](#).
- *Catalysts* (MDPI), Special issue *Layered Double Hydroxide-Based Catalytic Materials for Sustainable Processes*, [here](#).

□ **Member of the Editorial Board of international journals:**

- *Hybrid Advances* (Elsevier) – 2022 - to present
- *Materials* (MDPI) – 2022 - to present
- *Recent Innovations in Chemical Engineering* (Bentham Science) – 2016 - to present
- *Current Catalysis* (Bentham Science) – 2015 - to present

□ **Invited Professor:**

- Université Claude Bernard Lyon 1 – Institut de Recherches sur la Catalyse et l'Environnement (IRCELYON), Lyon, France, November 4th – December 7th, **2024**.
- Department of Chemical Engineering, Aristotle University of Thessaloniki, Greece, May 14-16, **2018** (Erasmus Teaching Mobility)
- Centre de Recherche Scientifique et Technique en Analyses Physico-Chimiques, Algiers, Algeria, June 14-22, **2015**.
- Institute Charles Gerhardt – Balard Pole of Chemistry, Montpellier, France, October 15th – November 15th, **2014**.
- Laboratoire de Génie Chimique, Université Paul Sabatier Toulouse III, Toulouse, France, June 3-7, **2013** (Erasmus Teaching Mobility).

□ **Invited Lecturer:**

- “Ilie Murgulescu” Institute of Physical-Chemistry, Bucharest (June 4th, **2025**)
- Institut de Recherches sur la Catalyse et l'Environnement (IRCELYON), Lyon, France (November 26th, **2024** and February **2011**).
- International Summer School on Nanosciences & Nanotechnologies for master and PhD students (#NANOSUM2023), 18-23 June **2023**, Marseille, France.
- Centre for Research & Technology Hellas, Thessaloniki, Greece (May **2018**).
- Centre de Recherche Scientifique et Technique en Analyses Physico-Chimiques, Algiers, Algeria (June **2015**).
- Institute Charles Gerhardt, Laboratory of Advanced Materials for Catalysis and Health, Montpellier, France (October and November **2014**, July **2011**, and February and September **2007**).
- Université Pierre et Marie Curie, Chimie de la Matière Condensée, Paris, France (November **2014**).
- Université Montpellier II, Ecole Doctorale Sciences Chimiques Balard, Montpellier, France (October **2014**).
- Teesside University, School of Science and Engineering, Middlesbrough, United Kingdom (May **2014**).

- *Université Paul Sabatier Toulouse III, Laboratoire de Génie Chimique*, Toulouse, France (June **2013**).
- *University of Science & Technology Houari Boumediene, Faculty of Chemistry*, Algiers, Algeria (October **2011**).

RESEARCH METRICS

- **Citations** (without self-citations): > **1750** (according to Scopus - January 2026).
- **H-index**: Scopus – **27**; Web of Science Core Collection – **27**; Web of Science All Databases – **27**; ResearchGate – **28**; Google Scholar – **30**.
- **Cumulative Impact Factor**: > **250** (Impact factors in the year of publication).

PUBLIC RESEARCHER PROFILES

- **Scopus Author ID**: <https://www.scopus.com/authid/detail.uri?authorId=6603854041>
- **ORCID**: <https://orcid.org/0000-0002-8381-2076>
- **Researcher ID**: <https://www.webofscience.com/wos/author/rid/B-1509-2008>
- **Google Scholar**: <https://scholar.google.ro/citations?user=8JjLuQ0AAAAJ&hl=en>

2026-I-29