CURRICULUM VITAE

Name: MARCU

First name: IOAN-CEZAR

Title: Dr. Habil.

Place of birth: Cluj-Napoca, Romania the 27th of June 1971

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

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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 Botoşani, 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

Temporary Teaching Assistant at the Department of Chemical Technology & Catalysis

1995-1998 *Temporary Teaching Assistant* at the Department of Chemical Technology & Catalysis, Faculty of Chemistry, University of Bucharest

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^{* 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 Ştefan-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

- ➤ 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: 2

- ➤ "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: 2 (available at the URL: https://rei.gov.ro/)

Ongoing doctoral research projects: 2

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: 8.
- Editorials: 2.
- Research papers: 97, of which:
 - 82 in journals indexed in Scopus and Web of Science (66 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): 75 (of which 44 oral presentations).
- > Invited lectures at national and international conferences: 12.
- > Invited seminars abroad: 17.

RESEARCH METRICS

- > Citations (without self-citations): > 1600 (according to Scopus June 2025).
- ➤ *H-index:* Scopus 26; Web of Science Core Collection 26; Web of Science All Databases 27; ResearchGate 27; Google Scholar 29.
- > 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: <u>https://orcid.org/0000-0002-8381-2076</u>
- Researcher ID: https://www.webofscience.com/wos/author/rid/B-1509-2008
- ➤ Google Scholar: https://scholar.google.ro/citations?user=8JjLuQ0AAAAJ&hl=en

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