

## Curriculum Vitae

### Personal information

Surname(s) / First name(s) **MORARU Luminița**  
E-mail luminita.moraru@ugal.ro  
Nationality Romanian

**Expertise** Medical Engineering, Signal & Medical imaging processing, Diagnostic tools, Algorithms and Artificial Neural Networks Simulation and Modelling tools  
Acoustical engineering  
Management of European programs and policies

### Work experience

10.2017 – present Head of the **Doctoral School of Mechanical and Industrial Engineering**  
08.2007 – present **PhD advisor**  
University Dunarea de Jos of Galati, 47 Domneasca St, 800008 Galati  
Scientific coordination of PhD students, editing scientific papers, assessing PhD theses  
10.2007 – present PhD theses completed: 16; PhD students in stage: 3  
04.2005 – present **Senior expert of National and International Research Agencies**  
10.1997 **Professor**  
**PhD in Engineering Sciences, Technical Acoustics**

### Project proposals evaluation experience

2009-2010- external reviewer for Katholieke Universiteit Leuven  
2011, 2016, 2017 external reviewer for Irish Research Council for Science, Engineering and Technology IRCSET Postdoctoral Fellowship Schemes  
2014 External Review of the cluster of the educational programmes PHYSICS, Federal State Autonomous Educational Institute of Higher Professional Education “North Caucasus Federal University”, Russia  
2016 - present ESF **European Science Foundation**, expert (20 October 2016 to 19 October 2019)- [www.esf.org](http://www.esf.org)

### Project proposals evaluation experience

2016 UEFISCDI Executive Agency for Higher Education, Research, Development and Innovation Funding, Programmes: PNCDI III - Programme 2, Sub-programme 2.1. Competitiveness by research, development and innovation Experimental - Demonstration Project  
2016 External Review of the cluster of the educational programmes EDUCATION SCIENCES, National Agency for Quality Assurance in Professional Education, Republic of Moldova – 8 universities, 13 study programmes  
2016 - present **Competition within the Core Program/ Health** (financed by Ministry of Research and Innovation)  
2017 selected as external evaluator by the Central Coordination Unit under the administration of the Council of Ministers of the Republic of Bulgaria

2017 – present External Reviewer for **Research projects to stimulate young independent teams** – (financed by Ministry of Research and Innovation – UEFISCDI)

2017 - present External Reviewer for **Postdoctoral research projects** – (financed by Ministry of Research and Innovation – UEFISCDI)

2017 External Reviewer for **Complex projects completed in consortia CDI (FPRD)** – (financed by Ministry of Research and Innovation – UEFISCDI)

2017, 2018, 2019, 2021 **Competition within the Core Program/ Eco-Nanotechnologies and Advanced Materials** (financed by Ministry of Research and Innovation)

2018, 2022 External Reviewer for **Organization and cluster development - Innovative Cluster (CLS)** (financed by Ministry of Research and Innovation – UEFISCDI)

2021, 2022, 2023 ESF-Science Connect: **A\*MIDEX International Call** –

2019 – 2022 External Reviewer for **The National Plan for Research and Development and Innovation 2015-2020, Subprogram 2.1: Research, development and innovation** / Experimental demonstration project

2019 -2022 External Reviewer for **The National Plan for Research and Development and Innovation 2015-2020, Subprogram 2.1: Research, development and innovation** / Transfer to the operator

2019, 2022 External Reviewer for **The National Plan for Research and Development and Innovation 2015-2020, Subprogram 1.2: Institutional performance/Institutional Development Projects** - Projects funding excellence in R&D

2020-2023 Peer Reviewers of the Science Fund of the Republic of Serbia - Consultancy Services for Project Peer Review

2019 – present, Review Panel expert in the COST Action Proposal Submission, Evaluation, Selection and Approval Procedure

2022-2023 Member of the Board of Studies (BoS) of Computer Science and Engineering (Artificial Intelligence) - CSE (AI) Vishwakarma Institute of Information Technology, Pune – 48(An Autonomous Institute affiliated to Savitribai Phule Pune University)

2018-2020 **Visiting Professor** at College of Information and Engineering, Wenzhou Medical University, PR of China

2005 onwards

Professor

University "Dunărea de Jos" of Galați, 47 Domnească St, 800008 Galati Romania

*Teaching activity* (courses) for bachelor and master students; coordinating master / bachelor theses

*Field of interest:* Medical engineering; Medical laboratory technology; Signal & Medical imaging processing; Diagnostic tools; Applied Physics and Acoustics.

	<p><i>Research activities</i> on the basis of grants awarded through competition, <a href="https://www.smlab.ro/">https://www.smlab.ro/</a></p>
1999 - 2005	<p>Associate Professor University "Dunărea de Jos" of Galați, 47 Domnească St, 800008 Galati Romania</p> <p><i>Teaching activity</i> (courses) for bachelor and master students; coordinating master / bachelor theses</p> <p>Research activity</p>
1993 - 1999	<p>Lecturer University "Dunărea de Jos" of Galați, 47 Domnească St, 800008 Galati Romania</p> <p>Teaching in the field of Physics, Physics of materials (courses, seminars, tutorials and projects).</p> <p>Research activity</p>
1990 - 1993	<p>Assistant Professor University "Dunărea de Jos" of Galați, 47 Domnească St, 800008 Galati Romania</p> <p>Teaching activity (laboratory seminar papers / projects) for bachelor level ; coordinating bachelor theses</p> <p>Fundamental research activity</p>
<b>Public professional activities</b>	<p><b>Editing activities</b></p> <p>Member of the Editorial Board of <b>International Journal of Radiology</b> <a href="http://www.ghrnet.org/index.php/ijr">http://www.ghrnet.org/index.php/ijr</a></p> <p>Member of the Editorial Board of <b>International Journal of Ambient Computing and Intelligence (IJACI)</b>, <a href="http://www.igi-global.com/journal/international-journal-ambient-computing-intelligence/1110">http://www.igi-global.com/journal/international-journal-ambient-computing-intelligence/1110</a></p> <p>Member of the Editorial Board of <b>Journal of Imaging</b>, <a href="https://www.mdpi.com/journal/jimaging/editors">https://www.mdpi.com/journal/jimaging/editors</a> (WoS)</p> <p>Guest editor of a special issue "<b>Entropy Based Image Registration</b>", <a href="https://www.mdpi.com/journal/entropy/special_issues/entropy_image">https://www.mdpi.com/journal/entropy/special_issues/entropy_image</a> (WoS, IF = 2,419)</p> <p><b>Ad-hoc reviewer</b> of manuscripts for international journals such as: Biomedical Signal Processing and Control, Annals of Biomedical Engineering, Current Medical Imaging, Magnetic Resonance Imaging, Journal of Advanced Research, Journal of Medical Systems, Multimedia Tools and Applications, Current Medical Imaging Reviews, Journal of Ambient Intelligence and Humanized Computing, Journal of Systems Architecture, IET Image Processing, Chaos, Solitons and Fractals, Science of the Total Environment</p> <p><b>External examiner to adjudicate on the international PhD thesis:</b> more than 35 PhD dissertations in Romania and abroad.</p> <p><b>Internal PhD examiner</b> for more than 25 PhD dissertations at the University Dunarea de Jos of Galati and other national institutions.</p>
<b>Education and training</b> 2007-2008	<p>MSc - European Programmes and Policy-making and Coordination University "Dunărea de Jos" of Galați, 47 Domnească St, 800008 Galati Romania</p>

2005 - 2007 MSc - Management and environmental monitoring  
University "Dunărea de Jos" of Galați, 47 Domnească St, 800008 Galați  
Romania

1992-1997 PhD in Technical Physics  
*The influence of ultrasound on physical properties of aluminium and AlSi12% alloy in liquid phase and in solidification processes*, in Technical  
Physics  
University "Dunărea de Jos" of Galați, 47 Domnească St, 800008 Galați  
Romania

1981 - 1986 Bachelor of Physics  
Technical Physics; Research methods  
University Bucharest, Physics Faculty, Bucharest, Romania

**Membership of professional bodies:**

Member of consultative body 'National Council of Scientific Research' which supports the Ministry of Research and Innovation in coordinating, financing, monitoring and evaluating scientific activities in Romania (e.g. establishes quality criteria for RDI in the research units, audits scientific research activities, etc.)  
National Council of Scientific Research for Higher Education CNCSIS, evaluator expert (2007-2012)  
National Centre for Programme Management CNMP, evaluator expert (2007)  
Evaluator expert for government research grants, registered in the *National File of Experts (Registrul Național al Experților - RNE) in Academic and Research* (2007).  
Romanian Agency for Quality Assurance in Higher Education ARACIS evaluator expert (2008-2018)  
Member of the European Technology Platform "Networked and Electronic Media" - Romanian Mirror Group  
Member of the European Technology Platform ARTEMIS „Intelligent Embedded Systems”, Romanian Mirror Group  
Scientific committee- member of scientific board for international/national conferences

**Personal skills and competences**

Sound basis on knowledge on EC funded projects and grant scheme management; Knowledge of tendering and procurement procedures under national projects; Working with national consultancy agencies.  
Human resources development- Training needs analysis; Delivery of training programmes (mainly for teachers) at local level; Training of trainers; Educational Management.

Native language

**Romanian**

Self-assessment

*European level (\*)*

**English**

**French**

Understanding				Speaking				Writing	
Listening		Reading		Spoken interaction		Spoken production			
B2	Advanced user	B2	Advanced user	B1	Independent user	B2	Independent user	B2	Advanced user
A2	Intermediate user	A2	Intermediate user	A2	Intermediate user	A2	Intermediate user	A2	Intermediate user

Social skills and competences	<p>Team work: I have worked in various research teams;</p> <p>Training and experience in management, international perspective, maturity and good networking skills;</p> <p>Proactive self-starter, very good with generating ideas and implementing them;</p> <p>Very good oral and written communication and interpersonal skills;</p> <p>High commitment to team working on both national and international level, in multicultural environments;</p> <p>Presentation skills in executive level settings.</p>
Organisational skills and competences	<p>Project management, including supervision</p> <p>Experienced in project planning and administration, in team management</p>
Technical skills and competences	<p>In depth knowledge of AI with ML and DL, computational methods in medical imaging, medical image processing, segmentation and reconstruction, computer aided detection/diagnosis, infrasound/ultrasound systems, in predicting spatiotemporal environmental data</p> <p>Human resources development- Training needs analysis; Delivery of training programs (mainly for teachers) at local level; Training of trainers; Educational Management</p> <p>Very good skills in: measurement equipment; computational data processing and analysis; air pollution measurement.</p>
Computer skills and competences	<p>Experienced with MS Windows, MS Office (Excel, Word, and PowerPoint), Photoshop Paint, ORIGIN, XLSTAT</p> <p>Adobe Acrobat Reader 6.0, Designer.</p> <p>Experienced in: computer data acquisition, data processing, Matlab, ImageJ</p> <p>Experienced in Internet use, search techniques and managing email.</p>
Other skills and competences	<p>Sport, gardening</p>
<b>Additional information</b>	<p>Publications:</p> <p>- more than 230 published articles and papers in Natural Sciences, Medical Engineering and Image processing, Acoustic, Physics of Materials and Environmental Acoustic.</p> <p><a href="http://www.researcherid.com/rid/A-8532-2012">http://www.researcherid.com/rid/A-8532-2012</a></p> <p><a href="http://scholar.google.com/citations?user=h3vqhwAAAAJ">http://scholar.google.com/citations?user=h3vqhwAAAAJ</a></p> <p><a href="https://orcid.org/0000-0002-9121-5714">https://orcid.org/0000-0002-9121-5714</a></p> <p><b>h-index 26</b></p>

## Research Projects

### **Horizon Europe, 2022-2025,**

Project number: **101073899**

Project name: Mechanical Impedance and Multiphysics Concealed and Hidden Objects Interrogation Project acronym: MELCHIOR

Call: HORIZON-CL3-2021-BM-01 (border Management)

Topic: HORIZON-CL3-2021-BM-01-05

Type of action: HORIZON-IA (Horizon Europe Framework Programme - Innovation Actions)

Service: REA/C/02, partner coordinator

### **Horizon 2020, 2016-2019**

Project number: **700399,**

Project Title: Multi-Energy High Resolution Modular Scan System for Internal and External Concealed Commodities, Project acronym: MESMERISE

Call: H2020-BES-2015, Topic: BES-08-2015, Type of action: **RIA**, partner coordinator

### **European Science Foundation, 2009-2013**

Eurocores Programme European Collaborative Research

Project number: **FP-003**

Project title: **The Academic Profession in Europe: Responses to Societal Challenges (EUROAC)**, Principal Investigator

**European Program: STAR-NET** – Stimulate the participation of organizations from Member States and candidate countries in information technology in the Framework Programme FP 6 **EUROPEAN IST**, no 015742; 2005-2006, grant holder

**EU – Grant - Evaluation of Sustainability**, 5-14 Sept 2007 Krakow, Poland, Financed by the European Union Marie Curie Conferences and Training Courses, EASY-ECO 2005-2007, contract no. MSCF-CT-2004-516613, grant holder  
Grant **NEXUS** „Cooperation in industry-oriented research in an enlarged Europe”, March 2007, The Nexus Association Switzerland, grant holder

**TEMPUS** EQADE „Embedding Quality Assurance in Doctoral Education” (516891-TEMPUS-1-2011-DE-TEMPUS-SMGR), 2011-2014, partner coordinator

**EUROPEAN COMMISSION- RESEARCH DIRECTORATE-GENERAL** project **MORE-II** N°-RTD-2010-S236-359211 Support for continued data collection and analysis concerning mobility patterns and career paths of researchers, 2012-2013, Principal Investigator