



## Europass Curriculum Vitae



### Personal information

**First name, Surname** Cristina PUPĂZĂ  
**Occupational field** Academic - Professor Habil.  
**Position** Doctoral Thesis Supervisor

### Work experience

#### Dates

Occupation or position held  
2016 - present - **Professor Habil.**  
2014 - 2016 - **Professor**  
1997 - 2014 - **Associate Professor**  
1992 - 1997 - **Lecturer**  
1985 - 1997 - **Assistant**

#### Main activities and responsibilities

Teaching and research activities, CAE responsible at Robots and Manufacturing Systems Department, Quality Assurance Responsible at RMS Department

Courses: a) Undergraduate: Machine Tool Vibration, Structural behavior improvement, Database, Robots for special environments, Simulation software, Computer Aided Design, Computer Aided Engineering. b) Postgraduate: CAD-FEM Integration, Database - Design administration and modeling using IBM-DB2, Reverse engineering, Matériaux - modélisation des comportements et applications, Advanced modeling and simulation techniques, Advanced Computer Aided Engineering in Robotics

#### Name and address of employer

University Politehnica of Bucharest, Faculty of Industrial Engineering and Robotics, Department of Robots and Manufacturing Systems, 313, Splaiul Independentei Avenue, Bucharest 6, RO-060032, Romania

#### Type of business or sector

Higher Education

#### Dates

1984 - 1985

#### Occupation or position held

**Design engineer**

#### Main activities and responsibilities

Design engineer and group coordinator in projects regarding mechanical equipments: • *Device for oxygen blowing*, • *Robot for fire-proof bricks manipulation*, • *Ceramic Materials Mixer*, • *Oxygen for furnace feeding system*, • *Flame cutting systems*.

#### Name and address of employer

IPROMET – Engineering & Designing Institute for the Iron and Steel Industry, Machinery Department, 20A Constructorilor Boulevard, Bucharest 6, Romania, RO - 060512

#### Type of business or sector

Design & Research

<b>Dates</b>	1983 - 1984
Occupation or position held	<b>Production Engineer</b>
Main activities and responsibilities	Machine tool installation and maintenance for: ● Wire machining systems and ● External grinding machines
Name and address of employer	Enterprise for Special Steel, 9 - 11 Gaesti Avenue, Targoviste, Romania, RO - 130087
Type of business or sector	Manufacturing

### Education and training

<b>Dates</b>	1978 - 1983
Title of qualification awarded	<b>Dipl. Engineer</b>
Occupational skills covered	<b>Mechanical Engineering</b>
Name and type of organization providing education and training	University <i>Politehnica</i> of Bucharest, Faculty of Management and Engineering of Technological Systems, 313, Splaiul Independentei Avenue, Bucharest 6, RO-060032, Romania
Level in national or international classification	Dipl. Engineer
<b>Dates</b>	1996
Title of qualification awarded	<b>Dr.-Ing.</b>
Principal subject	Doctoral Thesis: The Influence of the Elastic Deformation of the Machine Tool Structural Elements on the Cutting Accuracy
Name and type of organization providing education and training	University <i>Politehnica</i> of Bucharest, Romania

### Scholarships and training courses

- Oct. 1986 – June 1987 - Finite Elements Method and Applications in Steel Structures Computation at University of Civil Engineering, Bucharest, Romania
- 1987 - Personal Computers at National Institute for Computational Technologies, Bucharest, Romania
- May 1995 - Practical Design Calculations at Mech. Eng. Depart., Strathclyde University, Glasgow, U.K.
- Oct. 1955 - Simulation Course - Witness - at University Politehnica of Bucharest, Romania
- July 2002 - WebCT – Complete Software Solution for Long Distance Learning at CYBERNETICS, Romania
- May 2003 - Quality Management in Higher Education at Politehnica University of Bucharest
- Aug. 2003 - External Auditing Staff for Quality Management Systems at Romanian Society for Quality Assurance, Sinaia, Romania
- June 2005 - DB2. Fundamentals and Administration, IBM, Romania
- Nov. 2005 - DB2. Content Management. IBM, Romania
- June 2006 - Rational Unified Processes. Fundamentals, IBM, Romania
- Sept 2006 - Rational Unified Processes - Applications, IBM, Romania
- Nov. 2007 & Mars 2008 – Numerical Controlled Machine Tools, Titan Automatization, Romania
- Dec. 2008 - Introduction to ABAQUS-SIMULIA, Dassault Systèmes, SIMULIA Europe
- Feb. 2009 – Contact technology in ABAQUS – SIMULIA, Dassault Systèmes, SIMULIA Europe

**Grants and participation  
in European projects**

- March - June 1995: **EU Programme – TEMPUS – PhD. Mobility Grant**. Subject: Computer Aided Engineering – at Mechanical Engineering Department, Strathclyde University, Glasgow, U.K.
- April - Oct. 1997: **Postdoctoral Research Grant – French Research Project** – Région: RHONE – Alpes: PROMOTEUR. Subject: Simulation du Comportement Dynamique des Pieces Minces at “Laboratoire de Conception et Analyse des Systemes Mecaniques”, Institut National des Sciences Appliquées de Lyon, France.
- Nov. 2002 - Jan. 2003: **NATO Science Fellowship. Postdoctoral research grant** - Research Project, CAD/CAE Integration for Structural Analysis, at Machine Elements & Machine Design Laboratory, Aristotle University of Thessaloniki, Greece
- Oct. 2003 - July 2004: HELENIC STATE SCHOLARSHIP FOUNDATION (I.K.Y.) - **Post Doctoral Research Project**, Subject: CAD - CAE Integration, at Machine Elements & Machine Design Laboratory, Aristotle University of Thessaloniki, Greece
- March 2006 - June 2006: **Greek – Romanian Research Project**, Subject: New Modeling Techniques, at Machine Elements & Machine Design Laboratory, Aristotle University of Thessaloniki, Greece

**International awards**

Best Presentation & Best Poster at International Symposium in Intelligent Manufacturing & Automation, Vienna Austria, 2009

**Personal skills and competences**

CAD - CAE, Modeling, Structural Analysis, Simulation, Optimization, Data Base

**Robotics**

Mother tongue

**Romanian**

Other languages

Self-assessment

*European level*

**English**

**French\***

Understanding				Speaking				Writing	
Listening		Reading		Spoken interaction		Spoken production			
C1	Proficient user	C1	Proficient user	C1	Proficient user	C1	Proficient user	C1	Proficient user
B1*	Independent user	B1*	Independent user	B1*	Independent user	B1*	Independent user	B1*	Independent user

\* DELF B1 – Session 2007-02-T, ATTESTATION DE RÉUSSITE no. 040001-007697.

**Social skills and competences**

- **team spirit:** I participated at **33 research & design projects** in Romania and abroad.
- good ability to adapt and work in multicultural environments gained throughout my work experience abroad: U.K., France, Greece

**Organizational skills and competences**

**Project coordinator and team management:** at University Politehnica of Bucharest I was **Project Coordinator** in **8** Research Projects, working in teams with more than 20 participants

**Technical skills and competences**

- My field of expertise is CAD/CAE, vibration, metal matrix composites, CFD, optimization, explicit and implicit procedures. I have a good command of database fundamentals and applications. In 2003-2004 I took part in the team for implementing Total Quality System at Politehnica University of Bucharest. This experience was acquired during training and voluntary activities.
- Virtual reality, IoT, Machine Learning
- Robotics

**Computer skills and competences**

- Experienced with the following software:
- **CAE:** ANSYS and APDL ANSYS, Nastran, ABAQUS
  - **Pre and Post Processing Systems:** ANSA, EPILYSIS, META-Post
  - **CAD:** AutoCAD and AutoLISP, SolidWorks, CATIA, ProEngineer
  - **Database:** DB2, SQL
  - **Computational Methods:** Matlab and SIMULINK
  - **E-Learning:** WebCT

<b>Educational projects</b>	<ul style="list-style-type: none"> <li>- 2007-2021 Coordinator of <b>ERASMUS LLP</b> agreements with Machine Elements &amp; Machine Design Laboratory, Aristotle University of Thessaloniki, Greece</li> <li>- 2005-2007 Participant in <b>IBM - Country Project Romania</b> - Promoting DB2 Information Management Software in Romanian Technical Universities, at Faculty of Automatic Control and Computer Science, University Politehnica of Bucharest, Linux Center</li> </ul>
<b>Publications</b>	<b>9</b> books at Romanian Publishing houses; <b>5</b> scientific papers in periodicals (IF); <b>44</b> scientific papers ISI & Int. DB; <b>32</b> presentations at Conferences, <b>12</b> papers at national and international workshops & seminars, <b>1</b> patent.
<b>Professional organization Membership</b>	<ul style="list-style-type: none"> <li>- IEEE Romania</li> <li>- ICMAS</li> <li>- AGIR – General Association of Engineers in Romania</li> <li>- ARTEN - Romanian Association for Unconventional Technologies</li> <li>- CERTIP – Romanian National Org. for the Certification of Personnel in Higher Education</li> <li>- ONCERSIS – Romanian National Org. for the Certification of Management Systems in Higher Education</li> </ul>
<b>Scientific Reviewer for Doctoral Theses</b>	2011, 2012, 2016, 2017, 2019 at University Politehnica of Bucharest 2016, 2017 at Military Technical Academy, Romania
<b>Additional information</b>	<ul style="list-style-type: none"> <li>- since 2021 – Member of the Ethics Commission at Industrial Engineering and Robotics Doctoral School</li> <li>- since 2020 – Member of the Ethics Commission at University Politehnica</li> <li>- since 2014 – Member of the Industrial Engineering and Robotics Faculty Council</li> <li>- since 2014 – Member of the Industrial Engineering and Robotics Faculty Quality Management Commission</li> <li>- since 2014 – Member of the Robots and Manufacturing Systems Department Council</li> <li>- 2018, 2019 – <b>Reviewer</b> - IEEE Internet of Things Journal - IF</li> <li>- since 2018 – <b>Reviewer</b> – University Politehnica of Bucharest Scientific Bulletin, Series D, Mechanical Engineering</li> <li>- since 2019 – <b>Evaluator Expert</b> at UEFISCDI – Romanian Executive Agency for Higher Education, Research, Development and Innovation Funding</li> <li>- since 2017 – <b>Member in the Editorial Board</b> of Proceedings in Manufacturing Systems Journal</li> <li>- 2017 – <b>Member in the Scientific Committee</b> MIT Conference and workshop, Sinaia 2017</li> <li>- 2016 – <b>Project Evaluator</b> at University Politehnica of Bucharest – Excellence in research grants</li> <li>- since 2016 <b>Reviewer</b> - Journal Proceedings in Manufacturing Systems, Int.DB</li> <li>- 2014 – <b>Reviewer</b> and <b>Member of the Scientific Committee</b>: International Conference of Technology for Polymeric and Composites Products, POLCOM 2014, Applied Mechanics and Materials, Vol. 760, ISSN 1662-7482, DOI: 10.4028/www.scientific.net/AMM.760.557</li> <li>- 2012 - <b>Reviewer</b> and <b>Member of the Scientific Committee</b>: International Conference on Power Transmissions, 20-23 June 2012, organized by the Balkan Association for Power Transmissions, Springer Netherlands, ISBN 978-94-007-6558-0, ISSN 2211-0984, BDI: Springer Link, Google Scholar, DOI: 10.1007/978-94-007-6558-0_38</li> <li>- 2010 - <b>Reviewer</b> and <b>Member of the Scientific Committee</b> „Optimization of the Robots and Manipulators”, OPTIROB 2010, ISBN: 978-981-08-5840-7, Design, CRC &amp; Printed by ITEK CMS Web Solutions, Singapore, Editor Adrian Olaru</li> <li>- 2009 - <b>Reviewer</b> and <b>Member of the Scientific Committee</b>: International Conference on Power Transmissions, October, 2009, organized by the Balkan Association for Power Transmissions in Kallithea, Greece</li> <li>- 2000, 2001, 2002 - <b>Evaluator Expert</b> in RELANSIN Romanian Research Programme</li> <li>- <b>Scientific Reviewer</b> - Ghionea, I - Proiectare asistată în CATIA v5. Elemente teoretice și aplicații, Editura BREN</li> </ul>

December 2021