

**Cristina PUPĂZĂ****OCCUPATIONAL FIELD** Professor Dr.-Ing. Habil - Higher education**WORK EXPERIENCE**

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**2016-present Professor**

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, [www.upb.ro](http://www.upb.ro)

**Business or sector:** Higher education & Research

**1997-2016 Associate Professor**

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, [www.upb.ro](http://www.upb.ro)

**Business or sector:** Higher education & Research

**1992-1997 Lecturer**

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, [www.upb.ro](http://www.upb.ro)

**Business or sector:** Higher education & Research

**1985-1992 Assistant**

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, [www.upb.ro](http://www.upb.ro)

**Business or sector:** Higher education & Research

**1984-1985 Design Engineer**

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

**Business or sector:** Design & Research

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

## **1983-1984 Production Engineer**

Enterprise for Special Steel, 9 - 11 Gaesti Avenue, Targoviste, Romania,  
RO – 130087

**Business or sector:** Production

Machine tool commissioning and maintenance for: • Wire machining  
systems and • External grinding machines

## **EDUCATION AND TRAINING**

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- 2016** [Habilitation Thesis: Advanced Computer Aided Technics in Industrial Engineering](#)  
Industrial Engineering and Management field,  
[OM No. 5343/29.09.2016](#)  
Faculty of Industrial Engineering and Robotics Doctoral school  
University POLITEHNICA of Bucharest  
313, Splaiul Independentei Avenue, Bucharest 6, RO-060032, Romania
- 2009** [Certificate of training course: Contact technology in ABAQUS – SIMULIA](#)  
SIMULIA ABAQUS Europe BV,  
Gaetano Martinolaan 95, P.O. Box 1637, 66201 BP Maastricht, The  
Netherlands at CYBERNETICS International SRL  
44A Ficusului Boulevard, Body B, Ground Floor, Bucharest 1, RO 013975,  
Romania
- 2008** [Certificate of training course: SIMULIA ABAQUS](#)  
SIMULIA ABAQUS Europe BV,  
[MM-MM-08.137](#)  
Gaetano Martinolaan 95, P.O. Box 1637, 66201 BP Maastricht, The  
Netherlands at CYBERNETICS International SRL  
44A Ficusului Boulevard, Body B, Ground Floor, Bucharest 1, RO 013975,  
Romania
- 2008** [Certificate of training course: Numerically Controlled Machine Tools](#)  
Titan Automatization  
250 Basarabia Boulevard, Bucharest 3, RO-030352, Romania
- 2007** [Certificate of training course: Catia V5 including NC Manufacturing Infrastructure & 3 Axis Surface Machining](#)  
CYBERNETICS International SRL  
44A Ficusului Boulevard, Body B, Ground Floor, Bucharest 1, RO 013975,  
Romania
- 2006** [Certificate of training course: Integrating Rational Software Development Tools in University Curriculum](#)  
IBM – Romania  
Faculty of Automatic Control and Computers  
University POLITEHNICA of Bucharest  
313, Splaiul Independentei Avenue, Bucharest 6, RO-060032, Romania
- 2005** [Certificate of training course: Programming & Administration DB2-UDB](#)  
IBM – Romania  
Faculty of Automatic Control and Computers  
University POLITEHNICA of Bucharest  
313, Splaiul Independentei Avenue, Bucharest 6, RO-060032, Romania

- 2005** [Certificate of training course: IBM Content Manager API Programming](#)  
IBM - Romania  
University POLITEHNICA of Bucharest  
313, Splaiul Independentei Avenue, Bucharest 6, RO-060032, Romania
- 2003** [Certificate of training course: Quality Management in Higher Education](#)  
University POLITEHNICA of Bucharest  
313, Splaiul Independentei Avenue, Bucharest 6, RO-060032, Romania
- 2003** [Certificate of training course: External Auditing Staff for Quality Management Systems](#)  
[No. 2637/22.08.2003](#)  
Romanian Society for Quality Assurance  
Sinaia, Romania
- 2002** [Certificate of training course: WebCT – Complete Software Solution for Long Distance Learning](#)  
CYBERNETICS International SRL  
44A Ficusului Boulevard, Body B, Ground Floor, Bucharest 1, RO 013975, Romania
- 1996** [Doctoral Thesis: The Influence of the Elastic Deformation of the Machine Tool Structural Elements on the Cutting Accuracy](#)  
University POLITEHNICA of Bucharest, Romania  
[OM P 0000755, No.145/21.10.1996](#)  
313, Splaiul Independentei Avenue, Bucharest 6, RO-060032, Romania
- 1995** [Certificate of training course: Pressure Vessels Design. Practical Design Calculations](#)  
Mechanical Engineering Department  
University of Strathclyde  
16 Richmond Street, Glasgow G11XQ, U.K.
- 1995** [Certificate of training course: Simulation Course - Witness](#)  
Faculty of Machine Building Technology  
University POLITEHNICA of Bucharest  
313, Splaiul Independentei Avenue, Bucharest 6, RO-060032, Romania
- 1987** [Certificate of training course: Personal Computers](#)  
National Institute for Research & Development in Informatics - ICI  
Bucharest  
8-10 Maresal Averescu Avenue, Bucharest 1, RO-011455, Romania
- 1986-1987** [Certificate of training course: Finite Elements Method and Applications in Steel Structures Computation](#)  
Technical University of Civil Engineering  
122-124 Lacul Tei Blv., Bucharest 2, RO-020396, Romania
- 1978-1983** [Diploma in Engineering](#)  
Mechanical engineering, Machine Tools field  
Faculty of Machine Building Technology  
University POLITEHNICA of Bucharest  
313, Splaiul Independentei Avenue, Bucharest 6, RO-060032, Romania

## SCHOLARSHIPS & PostDoc

**March - June 1995** [EU Programme – TEMPUS grant for: Computer Aided Engineering](#)  
Mechanical Engineering Department  
University of Strathclyde  
16 Richmond Street, Glasgow G11XQ, U.K.

**April - Oct. 1997** [PostDoc: PROMOTEUR Research Project, Région RHONE – Alpes](#)  
Subject: Simulation du Comportement Dynamique des Pieces Minces  
Laboratoire de Conception et Analyse des Systemes Mecaniques  
Institut National des Sciences Appliquées de Lyon – INSA Lyon  
France.

**Nov. 2002 - Jan. 2003** [PostDoc: NATO Science. Research Project](#)  
Subject: CAD/CAE Integration for Structural Analysis  
Machine Elements & Machine Design Laboratory  
Faculty of Engineering  
Aristotle University of Thessaloniki  
Egnatia Street, Building D, Thessaloniki 54124 Greece

**Oct. 2003 - July 2004** [PostDoc: Hellenic State Scholarship Foundation \(I.K.Y.\)](#)  
Research Project, Subject: CAD - CAE Integration  
Machine Elements & Machine Design Laboratory  
Faculty of Engineering  
Aristotle University of Thessaloniki  
Egnatia Street, Building D, Thessaloniki 54124 Greece

**Mar. 2006 - June 2006** [Greek – Romanian Research Project](#)  
Subject: New Modeling Techniques  
Machine Elements & Machine Design Laboratory  
Faculty of Engineering  
Aristotle University of Thessaloniki  
Egnatia Street, Building D, Thessaloniki 54124 Greece

**2008- 2027** [ERASMUS LLP Coordinator](#)  
Subject: Design Techniques  
Machine Elements & Machine Design Laboratory  
Faculty of Engineering  
Aristotle University of Thessaloniki  
Egnatia Street, Building D, Thessaloniki 54124 Greece

**Communication skills** • good communication skills gained from experience working abroad in multicultural environments in the UK, France and Greece, in projects with industrial and academic partners, and in teaching and research activities with students

**Mother tongue** Romanian

**Other languages**

UNDERSTANDING		SPEAKING		WRITING
Listening	Reading	Spoken interaction	Spoken production	
English	C1	C1	C1	C1

French\*

B1

B1

B1

B1

B1

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

**Social skills and competences**

- team spirit: I participated at 35 research & design projects in Romania and abroad.
- good ability to adapt and work in multicultural environments gained through my work experience abroad: U.K., France, Greece

**Organisational skills and competences**

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

**Technical skills and competences**

- CAD - CAE, Structural Analysis, Simulation, Optimization, vibration, metal matrix composites, CFD, optimization procedures, explicit and implicit procedures
- Data Base fundamentals and programming
- Quality Management. In 2003-2004 I took part in the team for implementing Total Quality System at Politehnica University of Bucharest. I am Quality responsible at Robots and Manufacturing Systems Department. This experience was acquired during training and voluntary activities.
- Robotics
- IoT, AI tools and data analytics

**Computer skills and competences**

- 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

**Educational projects**

- 2007-2021 Coordinator of ERASMUS LLP agreements with Machine Elements & Machine Design Laboratory, Aristotle University of Thessaloniki, Greece
- 2005-2007 Participant in IBM - Country Project Romania - Promoting DB2 Information Management Software in Romanian Technical Universities, at Faculty of Automatic Control and Computer Science, University Politehnica of Bucharest, Linux Center

**Publications**

- 9 books
- 9 scientific papers in periodicals (IF)
- 65 scientific papers ISI & Int. DB
- 36 presentations at Conferences
- 12 papers at national and international workshops & seminars
- 2 Patent letters.

**Affiliations**

- IEEE Romania
- ICMAS
- AGIR – General Association of Engineers in Romania
- ARTEN - Romanian Association for Unconventional Technologies
- CERTIP – Romanian National Org. for the Certification of Personnel in Higher Education
- ONCERSIS – Romanian Nat. Org. for the Certification of Man. Systems in Higher Education

Doctoral Theses Supervisor &  
PHD Scientific Reviewer

- 2021, 2023 two theses, 2024 - Doctoral Thesis Supervisor
- 2016, 2017 at Military Technical Academy, Romania - Scientific Reviewer
- 2011, 2012, 2016, 2017, 2019, 2022, 2023, 2024 at University Politehnica of Bucharest – Doctoral Thesis Scientific Reviewer

Reviewer

- IEEE Internet of Things Journal – Q1
- International Journal of Computer Integrated Manufacturing – Q2
- Scientific Bulletin of University Politehnica of Bucharest, Series D, Mech. Engineering, Scopus
- Journal Proceedings in Manufacturing Systems, Copernicus

Additional information

- since February 2023 - Evaluator expert – registered member of the National Expert Team for the certification of research and development activities, based on the [Ministerial Order no. 20242/13.02.2023](#), in the Field of Advanced Manufacturing.
- 2021 - 2024 – Member of the Ethics Commission at Industrial Engineering and Robotics Doctoral School
- 2020 - 2024 – Member of the Ethics Commission at University Politehnica
- 2014 – 2024 – Member of the Industrial Engineering and Robotics Faculty Council
- 2014 – 2024 – Member of the Industrial Engineering and Robotics Faculty Quality Management Commission
- 2014 – 2024 – Member of the Robots and Manufacturing Systems Department Council
- since 2019 – Evaluator expert at UEFISCDI – Romanian Executive Agency for Higher Education, Research, Development and Innovation with E.U. funding
- since 2017 – Member in the Editorial Board of Proceedings in Manufacturing Systems Journal, Copernicus
- 2017 – Member in the Scientific Committee MIT Conference and Workshop, Sinaia 2017
- 2016 – Project Evaluator at University Politehnica of Bucharest – Excellence in research grants GEX
- 2014 – Reviewer and Member of the Scientific Committee: 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
- 2012 - Reviewer and Member of the Scientific Committee: 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
- 2010 - Reviewer and Member of the Scientific Committee „Optimization of the Robots and Manipulators”, OPTIROB 2010, ISBN: 978-981-08-5840-7, Design, CRC & Printed by ITEK CMS Web Solutions, Singapore, Editor Adrian Olaru
- 2009 - Reviewer and Member of the Scientific Committee: International Conference on Power Transmissions, October, 2009, organized by the Balkan Association for Power Transmissions in Kallithea, Greece
- 2000, 2001, 2002 - Evaluator Expert in RELANSIN Romanian Research Programme
- since 2007 - Scientific Reviewer at BREN Publishing House and Politehnica Publishing House.

December 2025

*Cristina Pupăză*