



Cristina PUPĂZĂ

OCCUPATIONAL FIELD **Professor - Higher education**

POSITION PhD Supervisor

WORK EXPERIENCE

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

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

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

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

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

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](#)
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

& Postdocs

- Mar. - June 1995 [EU Programme – TEMPUS research 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
- 2010 - 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 the experience of working abroad in the UK, France and Greece, in projects with industrial and academic partners, presentations at international conferences, 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	C1
French*	B1	B1	B1	B1	B1

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

- Social skills**
- Team spirit: I participated at 33 research & design projects in Romania and abroad.
 - good ability to adapt and work in multicultural environments

- Organizational 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 aquired during training and voluntary activities.
 - Robotics
 - Virtual reality, IoT, Machine Learning

- 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**
- 2010-2027 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 at Romanian Publishing houses;
 - 7 scientific papers in periodicals (IF);
 - 54 scientific papers ISI & Int. DB;
 - 32 presentations at Conferences,
 - 12 papers at national and international workshops & seminars,
 - 1 Patent.

- 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 National Org. for the Certification of Management Systems in Higher Education

- Scientific Reviewer for Doctoral Theses**
- 2021 – Doctoral Thesis Coordinator
 - 2016, 2017 Scientific reviewer at Military Technical Academy, Romania
 - 2011, 2012, 2016, 2017, 2019 at University Politehnica of Bucharest

- Additional information**
- since 2021 – Member of the Ethics Commission at Industrial Engineering and Robotics Doctoral School
 - since 2020 – Member of the Ethics Commission at University Politehnica
 - since 2014 – Member of the Industrial Engineering and Robotics Faculty Council
 - since 2014 – Member of the Industrial Engineering and Robotics Faculty Quality Management Commission
 - since 2014 – Member of the Robots and Manufacturing Systems Department Council
 - 2018, 2019 – Reviewer - IEEE Internet of Things Journal - IF
 - since 2018 – Reviewer – University Politehnica of Bucharest Scientific Bulletin, Series D, Mechanical Engineering
 - since 2019 – Evaluator Expert at UEFISCDI – Romanian Executive Agency for Higher Education, Research, Development and Innovation Funding
 - since 2017 – Member in the Editorial Board of Proceedings in Manufacturing Systems Journal
 - 2017 – Member in the Scientific Committee MIT Conference and workshop, Sinaia 2017

- Additional information**
- 2016 – Project Evaluator at University Politehnica of Bucharest – Excellence in research grants
 - since 2016 Reviewer for Journal Proceedings in Manufacturing Systems, Int. DB
 - 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
 - Scientific Reviewer - Ghionea, I - Proiectare asistată în CATIA v5. Elemente teoretice și aplicații, Editura BREN

February 2023

Cristina Pupăză