

Gabriela TONȚ

PROFESSIONAL EXPERIENCE

- 2017 – pres. **Professor**
Department of Control Systems Engineering and Management Department,
Faculty of Electrical Engineering and Information Technology, University of
Oradea, Universității st., no. 1, zip code 410087, Oradea
- 2011 – 2017 **Associate Professor**
Department of Control Systems Engineering and Management Department,
Faculty of Electrical Engineering and Information Technology, University of
Oradea, Universității st., no. 1, zip code 410087, Oradea
- 2006 – 2011 **Associate Professor** in Department of Electrical Engineering, Measurements
and Electric Power Use, Faculty of Electrical Engineering and Information
Technology, University of Oradea
- 2002 – 2006 **Lecturer**
Lecturer in Department of Electrical Engineering, Measurements and Electric
Power Use, Faculty of Electrical Engineering and Information Technology,
University of Oradea
- 1997 – 2002 **Engineer I A**
University of Oradea, Geothermal Research Centre

EDUCATION AND TRAINING

- 2016, Apr **Habilitation in Engineering and Management with thesis:** *Systems Reliability
Investigations Enhancing Risk Management Decisions Making in Dynamic
Environments*, University “Lucian Blaga” Sibiu, Romania
- 2012 – 2014 **Master in Economics and International Business,**
SME’s Internal and International Business Administration of the SMEs; University
of Oradea, Faculty of Economics
- 2000 – 2005 **PhD. Eng.**, Diploma of Ministry of Education and Research, no. 0008710, serial
no.185/27.07.2005, Technical University Cluj Napoca
- 2003 – 2004 **Master in Pedagogical Sciences**
Diploma of Ministry of Education and Research, no.0009002, serial A,
no.392/04.05.2006, Department of Pedagogical Training, University of
Oradea

- 2000 – 2002 **Master in Informatics**
Diploma in Informatics Proficiency
Diploma of Ministry of Education and Research, no.0033267, serial E,
no.4/31.10.2003, [University of Oradea](#)
- 1978 – 1983 **Engineer**
University “Politehnica” Bucharest, Faculty of Technological Chemistry
- 1974 – 1978 **Highschool graduate in Mathematics and Physics**
Mihai Viteazu High School Slobozia, Ialomița

RELEVANT WORK EXPERIENCE

- 2008 – pres. **Registered Auditor** for Romanian Agency for Quality Assurance in Higher Education (ARACIS), Ministry of National Education, Bucharest, Romania.
- 2010 – pres **Registered expert reviewer** for Romanian Executive Agency for Higher Education Research Development and Innovation Founding (UEFISCDI), Ministry of National Education, Bucharest, Romania. Evaluating research complex proposals in the National Plan for Research and Development and Innovation, PNCDI III, PNCDI II.
- 2010 – pres **Monitoring research projects** funded by Romanian Executive Agency for Higher Education Research Development Innovation Founding (UEFISCDI), Ministry of National Education, Bucharest, Romania.

ACQUIRED COMPETENCIES

- 2007 **Extern Qualitätsmanagementauditorin**
Technische Überwachungs Vereine Akademie
Diploma Of External Quality Auditor TÜV Rheinland for German Speaking Countries, Due To The Graduation Course "External Auditor for Quality Management Systems ISO 9001:2000 / ISO 19011:2002, Organized In Accordance with Requirements No. TÜV Rheinland Akademie V14, In Agreement With The Directive Of The Department Of Personnel Certification B19 Of TÜV Rheinland Akademie In Cologne, No. TRA/07/21793 Registration Certificate, TUV Rheinland Romania, Bucharest, 2006.
- 2006 **External Quality Auditor Certified TÜV Rheinland**
Diploma of External Quality Auditor TÜV Rheinland Romania, Due to the Graduation Course "External Auditor for Quality Management Systems ISO 9001:2000 / ISO 19011:2002, Organized in Accordance with Requirements No. TÜV Rheinland Akademie V14, In Agreement with the Directive Of The Department Of Personnel Certification B19 Of TÜV Rheinland Akademie In Cologne, No. TRA/07/21793 Registration Certificate, TUV Rheinland Romania, Bucharest, 2006
- 2006 **Management Representative for Quality Certified TÜV Rheinland**
Diploma of Management Representative for Quality, Due the Course Graduation "Management Representative for Quality, Organized In Accordance With Requirements No. V12 TÜV Rheinland Akademie, Department of Personnel Certification of TUV Rheinland Akademie in Cologne, No. TRA/06/21533 Registration Certificate, TUV Rheinland Romania, Bucharest 2006

- 2006 **Quality Management Systems Specialist** certified TÜV Rheinland
 Specialist in Quality Management Systems Through Graduation Course "Quality Management Systems Specialist, Organized In Accordance With Requirements No. TÜV Rheinland Akademia V 10, the Department Personnel Certification of TUV Rheinland Akademie in Cologne, No. TRA/06/20830 Registration Certificate, TUV Rheinland Romania, Bucharest 2006
- 2007 **Management Specialist in HACCP and ISO 22000**, Specialist certified TÜV Rheinland
 Specialist in HACCP and ISO 22000, Due to the Graduation Course, HACCP and ISO 22000, Organized in Accordance with Requirements No. TÜV Rheinland Akademia V14, B19 According to the Directive of the Department of Personnel Certification of TUV Akademie Rheinland, Cologne, No. TRRO Registration Certificate AK – 118 – 2007, TUV Rheinland Romania, Bucharest, 2007

Mother tongue: Romanian

Other language(s)	UNDERSTANDING		SPEAKING		WRITING
	Listening	Reading	Spoken interaction	Spoken production	
English	Proficient user	Proficient user	Proficient user	Proficient user	Proficient use
French	Proficient user	Proficient user	Proficient user	Proficient user	Proficient user
German	Independent user	Independent user	Independent user	Independent user	Independent user

- Communication skills**
- Communication skills acquired through teaching and papers presentation on national and international scientific meetings;
 - Relationships based on active listening skills and empathy;
 - Adapting to new situations, selecting ways and methods of adequacy;
 - Negotiation skills and identification of agreement points;
 - Improving teamwork atmosphere by developing cohesion and autonomy of the team.

Organisational / managerial skills

- Organizational skills acquired and improved through coordination and cooperation in project teams;
- Able to work in partnership with research target organisations; demonstrating initiative, flexibility and have high attention to detail.
- Strategic and analytic thinking focused on compliance with project requirements;
- Ability to manage competing priorities and cope with work to deadlines;
- Ability to analyse information for optimal decisions and communicate effectively.

Job – related skills

- Statistical management of the processes;
- Performing complex electrical systems reliability analyzes: identification of typical structures of power systems and establish adequate methods for analysis, design, evaluation models, algorithms and computer programs to analyze reliability;
- Develop strategies to control reliability and preventive and corrective maintenance for electrical systems;
- Analysis of the reliability and improved performance robotic systems;
- Multi sensor systems integrating for navigation of autonomous robot;
- Dynamic allocation of tasks assignments for walking robots;
- Reliability Analysis of socio – technical systems.

Computer skills

- Specialized in applied informatics;
- Good user of STATISTICA and reliability analysis softs: Weibull++, BlockSim, RENO.
- Modeling and simulation Matlab/Simulink, LabView, platforms

Other skills

Driving license B

TEACHING AND SCIENTIFIC ACTIVITY OVERVIEW

- 2000 - pres: More than 140 published works, as single author (24), first author (32):
- 12 Books
- 8 Course Notebooks
- 7 Lab Workbooks
- 1 PhD Thesis
- 1 Habilitation Thesis
- 58 Indexed Conference Papers and 19 Papers in Proceedings national / international conferences unindexed
- More than 260 citations in scientific papers indexed in Web of Science and BDI;
- Five plenary presentations of invited international scientific meetings;
- Reviewer for journals and scientific conferences;

- co-author of four patents national patents, and one international patent, (EPO);
- Member of nine journals and scientific committees of scientific events;
- 2019 4th International Conference on Intelligent Information Processing (ICIIP 2019) Nanyang Institute of Technology (NYIST), Program Committee member
<http://www.iciip.hk/conference-Organizers.html>
- The 20th International Conference “Scientific Research and Education in the Air Force”, AFASES “Henri Coanda” Air Force Academy Brasov, 2018, International Scientific Committee member
<http://www.afahc.ro/ro/afases/2018/SecondCall-AFASES2018.pdf>
- 4th International Conference on Mathematical Models for Engineering Science (MMES '13), MMES Session: Numerical Analysis and MMES Session: Swing-By Trajectories and Maneuvers
- 16th International Conference on Automatic Control, Modelling & Simulation (ACMOS '14) 7th International Conference on Manufacturing Engineering,
- Quality and Production ACMOS Session: Systems Theory and Automatic Control
- 12th International Conference on Environment, Ecosystems and Development (EED '14)
- 5th International Conference on Mathematical Models for Engineering Science (MMES '14) Session: Mathematical Models for Engineering Science
- 16th International Conference on Automatic Control, Modelling & Simulation (ACMOS '14) OS Session: Systems Theory and Automatic Control
- 7-th International Conference on Applied Economics and Business, (AEBD '15), Budapest, 2015.
- 8-th European Computing Conference, TOTAL '15: Applications of Image Processing, Budapest, 2015.
- 7-th International Conference on Sensors and signals, SENSIG '15: Applications of Sensors in Engineering
- Reviewer doctoral committees;
- Director and member of seven international and national research projects;
- Listed in Who's Who in the World, 26th Silver Anniversary Edition 2010;
- Expert ARACIS;
- Expert UEFISCDI
- 14 international and national awards.
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Awards and Prices

- **Diploma for Performance in Research, University of Oradea, 2017.**
- **The Belgian International Trade Fair for Technological Innovation, EUREKA**, Gold Medal with mention in Bruxelles for the Invention *Method and Device for Driving Mobil Inertial Robot* Brussels, 2009.
- **Medal and Diploma of International Warsaw Inventions Show IWIS 2009**, Association of Polish Inventors and Rationalizers, for the Invention *Method and Device Walking Robot Dinamic Control* Warsaw, 2009.
- **Diplôme du Salon international des Inventions Genève**, pour *Procédé et contrôle dynamique de la marche de robots*, Genève 2010.

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- **Diplôme du Salon international des Inventions Genève**, pour Methode et dispositif de fonctionnement et de contrôle de robots Genève 2010.
- Special Prize for the Innovative Invention *Method and Device for Driving Mobil Inertial Robot*, Isfahan University of Technology, Robotic Center, Republic of Iran, 2010.

- **The Belgian International Trade Fair for Technological Innovation, EUREKA**, Gold Medal with mention in Bruxelles for the Innovation *Method and Device of Propulsion without Any Source of Self-Energy Mobile Systems*, 2010.

- **Gold Medal and Diploma of International Warsaw Inventions Show IWIS** 2010, Association of Polish Inventors and Rationalizers, for the Invention *Method and Device of Dynamic Control of a Walking Robot* Invention Warsaw, 2010.

- **Gold Medal with Mention and Diploma of International Warsaw Inventions Show IWIS** 2010, Association of Polish Inventors and Rationalizers, for the Invention *Method and Device for Driving Mobil Inertial Robot* Warsaw, 2010.

- **Diplôme du Salon international des Inventions Genève**, pour l'invention: Methode et dispositif de fonctionnement et de contrôle de robots mobiles d'inertie, 2011.

- **Outstanding Invention Award, Hong Kong Polytechnic University**, Diploma for *Propulsion Without Any Source of Self-Energy Mobile Systems* for the Innovation Method and device of propulsion without any source of self-energy for mobile systems, 2011.

- **Gold Medal of the 9th International Exhibition of Inventions - ARCA 2011**, Zagreb, CROAȚIA, 13-15 October 2011, for the patent: Method and device of propulsion without any source of self-energy for mobile systems, 2011.

- **International Salon of Innovations and Investments**, September 2010, Moscow, Russia, for the patent: Method and Device for Walking Robot Dynamic Control.

- **Gold Medal for Inventions at 5-th IWIS Exhibition**, 3-5 November 2011, for the patent: *Method and Device for Walking Robot Dynamic Control*, Warsaw, Poland 2011.