

PERSONAL INFORMATION Tudor DEACONESCU

✉ tdeacon@unitbv.ro

POSITION
IOSUD UTBV
Transilvania University of Braşov
PhD coordinator – Field: Industrial Engineering
Since : 2008

EXPERTISE FIELD AND RESEARCH INTEREST AREAS
Pneumatic and hydraulic drives; Pneumatic muscles; Soft robotics; Medical rehabilitation equipment

WORK EXPERIENCE

- 2000 – present **Tenured university professor**
Transilvania University of Braşov, Bd. Eroilor nr. 29, 500036 Braşov, www.unitbv.ro
▪ Teaching and research activity
- 1997 – 2000 **Associate university professor**
Transilvania University of Braşov, Bd. Eroilor nr. 29, 500036 Braşov, www.unitbv.ro
▪ Teaching and research activity
- 1993 – 1997 **University lecturer**
Transilvania University of Braşov, Bd. Eroilor nr. 29, 500036 Braşov, www.unitbv.ro
▪ Teaching and research activity
- 1989 – 1993 **University teaching assistant**
Transilvania University of Braşov, Bd. Eroilor nr. 29, 500036 Braşov, www.unitbv.ro
▪ Teaching and research activity
- 1988 – 1989 **Engineer – design of industrial machinery**
Întreprinderea de Autocamioane Braşov (Motor truck company of Braşov)
- 1985 - 1988 **Engineer – design of industrial machinery**
Întreprinderea de Maşini Agregat şi Subansambluri Auto Sf. Gheorghe (Aggregate machines and automotive subassemblies company of Sf. Gheorghe)

EDUCATION AND TRAINING

- 1992 – 1997 **PhD research in Engineering**
1997 **Award of PhD degree**
Transilvania University of Braşov, Bd. Eroilor nr. 29, 500036 Braşov
▪ Hydraulic drives
- 1980 - 1985 **Engineer**
Transilvania University of Braşov, Bd. Eroilor nr. 29, 500036 Braşov
▪ Machine Tools

PERSONAL SKILLS

Mother tongue(s)	Romanian				
Other language(s)	UNDERSTANDING		SPEAKING		WRITING
	Listening	Reading	Conversation	Listening	Reading
English	B1	B1	B1	B1	B1
French	B1	B1	B1	B1	B1

Communication skills
▪ good communication skills

- Organisational / managerial skills**
- Vice-Dean of the Faculty of Technological Engineering and Industrial Management 2004 – 2012
 - Director of the Festo National Training Centre for Fluidic Drives and Automation within Transilvania University of Braşov (2006 – present)
- Digital skills**
- Proficient in the utilisation of the entire Microsoft Office™ package , Visual Basic.NET, PTC Mathcad

ADDITIONAL INFORMATION

- Projects**
- Development of new Light Mechatronic SYStems based on dynamics and control optimisation (LIMESYS). Contract MTKD-CT-2004-014249, FP6, Marie Curie Actions. Position: project director. Research concerning the performance of pneumatic muscles used for driving the grippers of non-anthropomorphic robots. CNCSIS contract, type A no. 4GR/28.05.2007, code 1054/2007, topic 8. Position: contract director.
- Study of a non-anthropomorphic pneumatic muscle actuated gripper. CNCSIS contract, type: Human Resources (MC), PN-II-RU-MC-2008-2, code: 9. Position: contract director.
- Pneumatic muscle actuated iso-kinetic equipment for the recovery of patients with post-traumatic affections of the bearing joints. CNCSIS contract, type IDEI, PN-II-ID-PCE-2008-2, ID_764 (2009-2011). Position: contract director.
- Pneumatic drive and control of manufacturing systems. Contract with a third party (Festo SRL of Bucharest) no. 7790/2012. Position: contract director.
- Hydraulic drive and control of manufacturing systems. Contract with a third party (Hutchinson SRL of Cristian, Braşov) no. 5995/2013. Position: contract director.
- Patents**
- Equipment for the mobilisation and rehabilitation of the inferior limb bearing joints by means of continuous passive motion (Invention patent no. 126094/2017).
- Memberships**
- Member of the Romanian Association of Tribology
Member of the Romanian Association of Non-Conventional Technologies
Member of the Association of Economic Engineers and Managers of Romania (AMIER)
Member of the International Association of Engineers Hong Kong (IAENG)
Senior member of the International Association of Computer Science and Information Technology Singapore (IACSIT)
Senior Member of the Science and Engineering Institute (SCIEI)
Senior Member of the International Economics Development Research Center (IEDRC)
Member of the Hong Kong Society of Mechanical Engineering (HKSME)
- Awards**
- 2005 Award for EU-funded FP6 Projects – Ministerul Educaţiei și Cercetării din România
- H indexes**
- ISI: 3, Scopus: 3, Google: 7

ANNEXES

LIST OF RELEVANT PUBLICATIONS /RESEARCH (selection)

1. Applied Pneumatics. Published by Lux Libris, 2018, ISBN 978-973-131-409-9
2. Hydraulic Drives. Editura Universităţii Transilvania din Braşov (Transilvania University Publishing House), 2007, ISBN 978-973-598-121-1
3. Intelligent Automation and Systems Engineering, Series: Lecture Notes in Electrical Engineering, Vol. 103; Chapter 3: Bio-Inspired Pneumatic Muscle Actuated Robotic System, published by Springer 2011, 430 p., Editors: Sio-long Ao, Harvard University, Cambridge, MA, USA, Burghard Rieger, Trier University, Mahyar Amouzegar, College of Engineering, California State University Pomona USA, pp. 27-40, ISBN 978-1-4614-0372-2
4. Deaconescu, T., Deaconescu A., Developing an Analytical Model and Computing Tool for Optimizing Lapping Operations of Flat Objects Made of Alloyed Steels. *Materials* 2020, 13 (6), 1343; Published by MDPI AG, <https://doi.org/10.3390/ma13061343>, ISSN 1996-1944, ISI Impact Factor: 2.972; SRI: 1,567 (Q2).
5. Deaconescu, A., Deaconescu T. Tribological Behavior of Hydraulic Cylinder Coaxial Sealing Systems Made from PTFE and PTFE Compounds. *Polymers* 2020, 12, 155. ISI Impact Factor: 3,164; SRI: 1,451 (Q1).
6. Sârbu, F., Deaconescu, A., Deaconescu T. Adjustable compliance soft gripper system. *International Journal of Advanced Robotic Systems*, July-August 2019, pag 1-10, <https://doi.org/10.1177/1729881419866580>, ISSN 1729-8814, ISI Impact Factor: 1,223; SRI: 0,450
7. Deaconescu, T., Deaconescu, A., Sârbu F. Contact mechanics and friction in PTFE coaxial sealing systems. *International Journal of Mechanics and Materials in Design*, December 2018, Volume 14, Issue 4, pp 635–646, ISSN 1569-1713, DOI <https://doi.org/10.1007/s10999-017-9394-1>, ISI Impact Factor: 3,143; SRI: 1,356 (Q1).
8. Petre, I., Deaconescu, A., Sârbu, F., Deaconescu, T. Pneumatic Muscle Actuated Wrist Rehabilitation Equipment Based on the Fin Ray Principle. *Strojniški vestnik - Journal of Mechanical Engineering* 64(2018)6, 383-392 © 2018 Journal of Mechanical Engineering. ISSN: 0039-2480, DOI: <http://dx.doi.org/10.5545/sv-jme.2017.5123> ISI Impact Factor: 1,182; SRI: 0,503.
9. Deaconescu, T., Deaconescu, A. Pneumatic Muscle-Actuated Adjustable Compliant Gripper System for Assembly Operations, *Strojniški vestnik - Journal of Mechanical Engineering* 63(2017)4, 225-234 © 2017 Journal of Mechanical Engineering. ISSN: 0039-2480, DOI:10.5545/sv-jme.2016.4239 ISI Impact Factor: 0.914 ; SRI: 0,515.
10. Deaconescu, A., Deaconescu T. Low Friction Materials Used in the Construction of Hydraulic Sealing Systems in the Case of Small Velocities. *Journal of the Balkan Tribological Association*, Vol. 22, No 1, 454–463 (2016), ISSN 1310-4772, ISI Impact Factor: 0.737 ; SRI: 0,061.
11. Deaconescu, A., Deaconescu T. Experimental and Statistical Parametric Optimisation of Surface Roughness and Machining Productivity by Lapping. *Transactions of FAMENA*, Vol.39, No.4/2015, pag. 65 – 78, ISSN 1333-1124 (Print), ISSN 1849-1391 (Online), ISI Impact Factor: 0.476; SRI = 0,187.
12. Deaconescu T., Deaconescu A. Film Thickness in Coaxial Sealing Systems of Hydraulic Cylinder Rods. *Journal of the Balkan Tribological Association*, Vol. 20, No 3, 447–462 (2014), ISSN 1310-4772, ISI Impact Factor: 0.321.
13. Petre I., Deaconescu A., Rogozea L., Deaconescu T. Orthopaedic Rehabilitation Device Actuated with Pneumatic Muscles, *International Journal of Advanced Robotic Systems*, Volume 11, 2014 (105), Print ISSN 1729-8806, Online ISSN 1729-8814, DOI: 10.5772/58693, ISI Impact Factor: 0.497; SRI = 0,301.