

Autorul tezei de abilitare: **prof.dr.ing. Mihaela Ioana BARITZ**

Titlul tezei de abilitare: **Dezvoltarea conceptuală și aplicativă a analizelor bio-comportamentului uman în confort occupațional și ambiental**

Domeniul: **Inginerie Mecanică, Mecatronică și Robotică**

## LISTA DE LUCRĂRI

### LUCRĂRI RELEVANTE

<b>Baritz, M.I.</b> , Cotoros, D. and Balcu, I., <i>Evaluation of Comfort Degree for Pushing/Pulling Motions under the Influence of Controlled Induced Vibrations in the Fingers-Hand-Arm Assembly</i> . <i>Applied Mechanics and Materials</i> , 658, pp.413-416, <b>2014</b> .
<b>Baritz M.I.</b> , Correlated and interconnected analyses for human walking and standing biomechanical behavior revista: Book Series: Mathematics and Computers in Science and Engineering Pages: 236-243, ISBN:978-960-474-157-1, 2010, ISI web of science
<b>Baritz M.I.</b> , Cotoros D., Balcu I., Tools For Correlative Techniques Development Between Postural And Sensorial Components In Behavioral Analysis “Management Of Technological Changes”, Pages: 461-464, ISBN:978-960-99486-2-3, 2011,
<b>Baritz M.I.</b> , Cotoros D., Modeling and simulation of human locomotion system structure and behavior by dedicated software – LifeMode, E-Health And Bioengineering Conference (EHB), ISBN:978-1-4577-0292-1, 2011
<b>Baritz M.I.</b> , Cristea L., Cotoros D., Rogozea L., Assessment Of Human Bio-Behavior During Gait Process Using Lifemode Software, “BRAIN. Broad Research in Artificial Intelligence and Neuroscience”, ISSN 2067-3957, 2010,
<b>Baritz M.I.</b> , Braun B., Cotoros D., Digital Microscope Images Processing Used To Measure Bearings Surface Characteristics, Conference: 14th International Conference on Modern Technologies, Quality and Innovation MODTECH 2010: New Face Of TMCR, Proceedings Book Series: Proceedings of the International Conference ModTech Pages: 103-106 Published: 2010 bdi: ISI
<b>Baritz M.I.</b> , Analysis Of Human Bio-Behavior And Eye Movements Correlated With Induced Positive / Negative Emotional Level, The 12th International Scientific Conference eLearning and Software for Education Bucharest, April 21-22, <b>2016</b> ,
<b>Baritz M.I.</b> , Cotoros D. et al. Cognitive Virtual Learning Used for Improving the Long Term Handling Skills revista:Book Series: Recent Advances in Computer Engineering Pages: 107-110, ISBN:978-960-474-186-1 ISSN: 1790-5109, 2010, ISI web of science
<b>Baritz M.I.</b> , Singer C.,Cotoros D., Thermographic Analysis of Hand Structure when Subjected to Controlled Effort, “4th IEEE International Conference on E-Health and Bioengineering (EHB)”, ISBN:978-1-4799-2372-4, 2013,
<b>Baritz M.I.</b> , Cotoros D., Computing Technics For Studying Human Behavior In Ergonomic Working Places, NEW FACE OF TMCR, Proceedings of the International Conference ModTech Pages: 95-98, ISSN: 2066-3919, 2010
<b>Baritz M.I.</b> , Cotoros D., Analyses By Image Processing Of Surface Quality Of Mobile Skeletal Dental Prostheses, NEW FACE OF TMCR, Proceedings of the International Conference ModTech Pages: 99-102 ISSN: 2066-3919, 2010
<b>Baritz M.I.</b> , Cristea L., Rogozea L., et al., Analysis of Human Body Bipedal Stability for Neuromotor Disabilities revista:SYSTEMS Book Series: AIP Conference Proceedings Volume: 1117 Pages: 217-224, ISBN:978-973-7794-77-2, 2008, bdi:ISI web of science
<b>Baritz M.I.</b> , Cotoros D., Moraru O., Virtual and augmented reality for mechanism motion modeling in technical applications revista: Proceedings Of The 7th Wseas International Conference On Signal Processing, Computational Geometry And Artificial Vision (Iscgav-07) Book Series: Electrical And Computer Engineering Pages: 50-53, ISBN:978-960-8457-97-3, 2007, bdi:ISI web of science,
<b>Baritz M.I.</b> , Cotoros D., Correlative Measurements of Bipedal Behavior for Subjects with or without Morpho-functional Deviations of Plantar Surfaces revista:World Academy of Science, Engineering and Technology 59 2011 issn:x AnAparitie:2011 nrAutori:2 bdi:google scholar
<b>Baritz M.I.</b> , Cotoros D., Cristea L., Analysis of dental implants behavior in mobilizing prosthesis,

Proceeding MACMESE10 Proceedings of the 12th WSEAS international conference on Mathematical and computational methods in science and engineering issn:978-960-474-243-1, 2010 bdi:google scholar
<b>Baritz M.I.</b> , Cotoros D., Barbu D., <i>Analysis and Simulation of Gait Types with Blocked Joints</i> revista: Applied Mechanics and Materials vol 658, pag.407-412, 2014 bdi:google scholar
<b>Baritz M.I.</b> , Stanciu AE, Braun BC, <i>Structural Modeling Ophthalmic Lenses Subjected To Controlled Physic-Chemical Aggressions</i> , Bulletin of the Transilvania University of Brasov. Engineering Sciences. Series I Vol.8., Issue 2, Pages 49-56, <b>2015</b>
<b>Baritz M.I.</b> , Mosoi A., Cotoros D., <i>High Heel Shoes Effect Analysis on Comfort and Bipodal Balance by Evaluating Thermal Gradient at the Plantar Surface Level</i> , EHB <b>2015</b> , Iasi,

## TEZA DE DOCTORAT

### Perfecționarea sistemelor holografice pentru studiul profilelor speciale –

Conducător științific prof.dr.ing. Sergiu T. Chiriacescu

prof.dr.ing. Virgil Olariu

prof.dr.ing. Dumitru Tudor

Anul obținerii titlului de doctor - 1997

## BREVETE

Patent Number(s): RO130877-A0, <i>Experimental Method For Evaluating Ocular Motility - Semo - For Investigating Simulated Behaviour</i> – autori: Repanovici A., Gabor D, <b>Baritz M.I.</b> , Aron I, Cletea G., Patent Assignee Name(s) and Code(s): UNIV BRASOV TRANSILVANIA (UYBR-Non-standard), 2016
---

## CĂRȚI / CAPITOLE DE CĂRȚI

<b>Baritz M.I.</b> , Conte M., Rosca I., <i>Surface deformations analysis by double exposure holography using guided waves and image processing</i> , ISBN:3-540-67943-X 2000, editura:Springer
Conte M., Rosca I., <b>Baritz M.I.</b> , <i>Study of a contact in the gearing of a tooth with its wheel by optical shadow method</i> , ISBN:3-540-67943-X, 2000, editura:Springer
<b>Baritz M.I.</b> , <i>Studiul profilelor special prin metode complementare</i> editura: Infomarket ISBN:973-8204-26-7 An Aparitie:2002
<b>Baritz M.I.</b> , <i>Optica fizioligica</i> , editura: Infomarket, ISBN:973-8204-27-5 An Aparitie:2002
Olaru V., Rosca I., <b>Baritz M.I.</b> , Barbu D., Radu N. Gh. <i>Biomecanica</i> , Editura Macarie, Târgoviște, Colectia Universitaria, ISBN: 973-9372-01-5 An Aparitie:1998
<b>Baritz M.I.</b> , <i>Optometrie functională scolară</i> , format electronic, Editura INFOMARKET Brasov, ISBN:973-8204-62-3, An Aparitie:2004;
Rosca I., Play D., <b>Baritz M.I.</b> , et al., <i>Promoteur. Contributions en CMVAO mécanique</i> , Editura Universitatii Transilvania din Brasov ISBN:973-98512-0-7 An Aparitie:1998;
<b>Baritz M.I.</b> , Cotoros D., Balcu I., Barbu D., <i>Analysis Of The Mobility And Manipulation Degree After Exposure To Controlled Vibrations In The Human Body</i> , Ed. Universitatii Transilvania Brasov, ISBN: 978-606-19-0390-0, AnAparitie:2014,
<b>Baritz M.I.</b> , Cotoros D., <i>Advanced Technologies In Biomechanics Investigations For The Analysis Of Human Behaviour In Working Activities</i> editura: SCIYOIntech Austria, ISBN:978-953-307-141-1, An Aparitie:2010
<b>Baritz M.I.</b> , Cotoros D., <i>Methodology Of Correlative Evaluation And Rehabilitation Of Patients With Stroke (Cerebral-Vascular Accident-CVA)</i> , Ed. Universitatii Transilvania ISBN:978-606-19-0389-4 An Aparitie:2014
Cotoros D., <b>Baritz M.I.</b> , <i>Combined correlated methods applied to the analysis of dental prostheses materials</i> , editura: SCIYOIntech Austria ISBN 978-953-51-0480-3, An Aparitie:2012
<b>Baritz M.I.</b> , <i>Vedere slabă și prescripție de ochelari</i> , Indrumar de lucrări de laborator, Ed. Universitatii Transilvania Brasov, ISBN 978-606-19-0641-3, an aparitie 2015

## ARTICOLE ÎN REVISTE

<b>Baritz M.I.</b> , <i>Structural Analysis by Image Processing of the Multilayer Ophthalmic Polycarbonate Lenses Behavior During Mechanical Factors Aggression</i> , Journal METALURGIA INTERNATIONAL Vol. 15 nr. 7 <b>2010</b> , Pag. 121-126, ISSN 1582-2214,
--

<b>Baritz M.I.</b> , Braun B., <i>Modelling synergistic eye movements in the visual field</i> , Journal of Industrial Design and Engineering Graphics (JIDEG), ISSN 1843-3766, vol.10, fascicle 3, pag.1-4, <b>2015</b> ,
Opran C., <b>Baritz M.I.</b> , Cotoros D., <i>The effects of some liquids of general use upon the shape and structure of the monthly worn contact lenses used for visual comfort</i> , Journal of Optoelectronics and Advanced Materials-Rapid Communications, Vol.4, Issue: 7, pp. 1052-1059, Jul. <b>2010</b> ,
Serban I., Rosca I.C., <b>Baritz M.I.</b> , <i>Influence Of Sound Frequency On Human Body Stability</i> , Environmental Engineering & Management Journal (EEMJ), Feb. <b>2016</b> , Vol. 15 Issue 2, p375-380;
<b>Baritz M.I.</b> , Balcu I., <i>The Study of Thermal Gradient Developed in the Upper Limbs in Case of Inducing Controlled Effort</i> , Revista Sinteze de Mecanică teoretică și aplicată, nr.2., <b>2016</b>
<b>Baritz M.I.</b> , Balcu I., <i>Posture Study In Bipodal Equilibrium Developed In Technological Actions Type Pull/Push</i> , Revista Sinteze de Mecanică teoretică și aplicată, nr.1., <b>2015</b>
<b>Baritz, M.</b> , Cristea, L., Cotoros, D., Danaila, C., Rogozea, L., <i>Eyeball Retinal Image and Oculo-Motor Equilibrium Analyze by Human Body Stability Recordings</i> , Mecatronica, <b>2007</b> , Issue 1, pp.22-26
<b>Baritz M.I.</b> , Cotoros D., <i>Correlative Analysis Of The Influence On Human Behavior And Working Comfort Due To Repetitive Technological Processes</i> , International Journal of Modern Manufacturing Technologies Vol. IV, No. 1 / 2012, ISSN 2067-3604, <b>2012</b> bdi:google scholar
<b>Baritz M.I.</b> , Braun B., Cotoros D., <i>Surfaces Characteristics Analyses Of Bearings Component Parts By Data And Images Processing</i> revista:International Journal of Modern Manufacturing Technologies Vol. II, No. 2 / 2010 issn:ISSN 2067-3604, AnAparitie: <b>2010</b> nrAutori:3 bdi:google scholar
<b>Baritz M.I.</b> , Balcu I., <i>Corelarea stabilității posturale cu poziția de utilizare a dispozitivelor și uneltelor vibratorii</i> revista: Sinteze de Mecanica Teoretica si Aplicata, ISSN 2068-6331 nr.1., 2014 bdi:google scholar

**ARTICOLE PUBLICATE IN VOLUME ALE CONFERINȚELOR INTERNATIONALE**

<b>Baritz M.I.</b> , Cotoros D., <i>Learning And Assessment Strategies For Visual Rehabilitation</i> <b>2014/7/1</b> The International Scientific Conference eLearning and Software for Education, Volume 3, Pages 37,
<b>Baritz M.I.</b> , Cotoros D. <i>Action Active It Environments For Education E-Learning Platforms</i> . In The International Scientific Conference eLearning and Software for Education <b>2014</b> Oct 1 (Vol. 4, p. 41).
<b>Baritz M.I.</b> , Cotoros D. <i>Evaluation of Postural Stability Associated to Lifting/Lowering Motions</i> . Applied Mechanics and Materials. <b>2014</b> ; 555:646-51.
<b>Baritz M.I.</b> , Cotoros D., Singer C., <i>Study of pupil reflex under chromatic light radiation incidence</i> , “4th IEEE International Conference on E-Health and Bioengineering (EHB)”, ISBN:978-1-4799-2372-4, 2013, ISI web of science
<b>Baritz M.I.</b> , Cotoros D., <i>Oscillatory Movements Analysis at Knee Level</i> ,Applied Mechanics and Materials Volume: 436 Pages: 271-276 ISSN: 1660-9336 An:2013, ISI web of science
<b>Baritz M.I.</b> , Cotoros D., <i>Simulation And Modeling Methods Used In Optometric Field For Assessing Visual Functions Behavior</i> , “eLearning and Software for Education”, Pages: 543-548, ISSN: 2066 - 026X, 2013,
<b>Baritz M.I.</b> , Cotoros D., <i>Playful Methods For Evaluation, Correction And Rehabilitation Of Visual Function</i> , “eLearning and Software for Education”, Pages: 127-132 ISSN: 2066-026X, 2013, ISI web of science
<b>Baritz M.I.</b> , Cotoros D., Braun B., <i>Eye Tracking Used to Evaluate the Human Behavior</i> , “Applied Mechanics and Materials” Volume:186 Pages: 260-265, ISBN:978-3-03785-444-0 ISSN: 1660-9336, 2012
<b>Baritz M.I.</b> , Cotoros D., Cristea L., Braun B., <i>Analysis of Stability Asymmetries and of Gait Cycle Used to Determine the Recovery Degree for Subjects with Traumatic Locomotion Disorder</i> , “Applied Mechanics and Materials”Volume: 332 Pages: 534-539 ISSN: 1660-9336, 2014,
<b>Baritz M.I.</b> , Cotoros D., <i>Analysis of plantar pressures developed during gait for hollow foot and flat foot shapes with bio-behavioral implications</i> , E-Health And Bioengineering Conference (EHB), 2011, ISBN:978-1-4577-0292-1,

**ALTE LUCRĂRI / REALIZARI RELEVANTE**

<b>Baritz M.I.</b> , <i>Improvement of audio-video techniques and the virtual environment used for investigation methods and assisting people with disabilities</i> revista: Cyberpsychology & Behavior Vol.: 8 Issue: 4 Pages: 304-305, ISSN: 1094-9313, 2005, bdi:ISI web of science
--

<b>Baritz M.I.</b> , Munteanu Gh., <i>The eye lens elastic and optic behaviour analysis by average time holography using guided waves and image processing</i> COMBIO'96 - Summer Workshop On Computational Modelling, Imaging And Visualization In Biosciences Book Series: KFKI PREPRINT/REPORT SERIES Volume: 1996 Issue: 6 Pages: 80-84, 1996, bdi:ISI web of science
<b>Baritz M.I.</b> , Cristea L., Cotoros D., Stanciu A., <i>Retinal image and oculo-motor equilibrium analyze using recordings of human body stability-posture</i> , "ISPRA 09: Proceedings Of The 9th Wseas International Conference On Signal Processing, Robotics And Automation" Book Series: Mathematics and Computers in Science and Engineering Pages: 258-263, ISBN:978-960-474-157-1, 2010;
<b>Baritz M.I.</b> , Cotoros D., et al., <i>Human Body Posture Evaluation In Working Activities</i> , Conference: 20th International Danube-Adria-Association-for-Automation-and-Manufacturing Symposium Location: Vienna, AUSTRIA Date: NOV 25-28, 2009, ANNALS OF DAAAM FOR 2009 & Proceedings Of The 20th International Daaam Symposium, Volume: 20 Pages: 865-866
<b>Baritz M.I.</b> , Cristea L., Cotoros D., et al., <i>Human Body Behavior By Thermovision Analyses In Standing And Gait Processes</i> ANNALS OF DAAAM FOR 2009 & Proceedings Of The 20th International DAAAM Symposium Volume: 20 Pages: 867-868, ISBN:978-3-901509-70-4 ISSN: 1726-9679, 2009
<b>Baritz M.I.</b> , Cristea L., Cotoros D., Rogozea L., <i>Statistical screening for the analysis of adult and elderly people optometry visual behaviour</i> revista:Book Series:Artificial Intelligence Series-WSEAS Pp. 527-530 ISBN:978-960-474-051-2, 2009
<b>Baritz M.I.</b> , Cristea L., Cotoros D., <i>Measuring of human body stability - part of bio - behavioral studies</i> revista:Book Series:Electrical and Computer Engineering Series Pages: 124-127, ISBN:978-960-474-076-5, 2009
<b>Baritz M.I.</b> , Cristea L., Cotoros D., Balcu I., <i>Analyses of noise effects on standing human body stability</i> revista:Book Series: Recent Advances in Computer Engineering Pages: 168-173, ISBN:978-960-474-114-4 ISSN: 1790-5109, 2009
<b>Baritz M.I.</b> , Cristea L., <i>Tracking Capture In Video Motion</i> revista:Book Series: Annals of DAAAM and Proceedings Pages: 77-78, ISBN:978-3-901509-68-1 ISSN: 1726-9679, 2008, bdi:ISI web of science
<b>Baritz M.I.</b> , Cristea L., Rogozea L., et al., <i>Complex Systems for Human Body Biomechanical Behavior Modeling</i> revista:Book Series: AIP Conference Proceedings Volume: 1117 Pages: 209-216, ISBN:978-973-7794-77-2, 2008, bdi:ISI web of science
<b>Baritz M.I.</b> , Cristea L., <i>Evaluation of the human stability in bipedal position for person with neuromotor disabilities</i> revista: ANNALS OF DAAAM FOR 2007 & Proceedings Of The 18th International DAAAM Symposium: Intelligent Manufacturing & Automation: Focus On Creativity, Responsibility, And Ethics Of Engineers Pages: 59-60 ISBN:978-3-90150-958-2, 2007, bdi:ISI web of science
<b>Baritz M.I.</b> , Cristea L., Cotoros D., et al. <i>Thermal human body behavior analyze during cycling movements</i> revista: Proceedings Of The 6th Iasme/Wseas International Conference On Heat Transfer, Thermal Engineering And Environment (HTE08), Book Series: WSEAS Mechanical Engineering Series Pages: 338-341, ISBN:978-960-6766-97-8, 2008, bdi:ISI web of science,

Data 1.08.2016

Prof.dr.ing. Mihaela Ioana BARITZ