

Jerzy MAŁACHOWSKI Ph.D.
Assistant professor

CONTACT

- Military University of Technology
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EDUCATION

- Training "Use and application of the Traveller-plus Data Acquisition System" ESA Messtechnik GmbH, Warsaw, 2002
- Ph.D.- Applied Mechanics. Military University of Technology, Warsaw, 2001
- Training for MSC.Marc/Mentat code users MSC.Software Corporation, Warsaw, 2000
- Course of "Nonlinear mechanics in computer application" Military University of Technology, Warsaw, 1997-1998
- Course of "Modern numerical methods in strength analysis of engineering structures". Military University of Technology, Warsaw, 1997-1998
- Training for MSC/Nastran, MSC/Patran code users MacNeal-Schwendler Corporation, Warsaw, 1997
- M.S. - Structural Mechanics. Military University of Technology, Warsaw, 1993
- B.S. - Civil Engineering. Military University of Technology, Warsaw, 1993

PROFESSIONAL EXPERIENCE

- Post Doctoral Research Associate (12 months). Florida State University, College of Engineering, Tallahassee, USA, 2003-2004
- Visiting professor (1 month). Indiana State University, Terre Haute, USA, 2002.
- Assistant Professor. Department of General Mechanics, Military University of Technology, since 2002
- Teaching assistant - head of Laboratory of Computer Methods in Mechanics Department of General Mechanics, Military University of Technology, 1997-2002
- Six-month training. Airforce Institute of Technology, Warsaw, 1997
- Engineer in Laboratory of Computer Methods in Mechanics. Department of General Mechanics, Military University of Technology, 1993-1997

HONORS, MEMBERSHIPS & AFFILIATIONS

- Lecture at the Engineering Structures Research ESR – Airbus UK (UK, March 2007)
- Lecture at the University of Hassan-II Ain Chock in Casablanca (Marocco, December 2006)
- Lecture at the Xi'an University of Architecture & Technology (China, June 2006)
- Session chairman at the Computational Methods in Engineering and Science (EPMESC X), August 21-25 2006, Sanya, Hainan, China
- Session chairman at the First South-East European Conference on Computational Mechanics, June 28-30 2006, Kragujevac, Serbia
- Member of the Polish Society of Theoretical and Applied Mechanics (PTMTS), since January 2006
- Affiliate of the Center for Industrial Pipelines Diagnosis, since 2005
- Representative of MUT at the Center of Excellence - Production Processes Wroclaw University of Technology, since 2005
- Member of the European Structural Integrity Society, since 2005
- Session chairman at the 12th International Conference on Composites/Nano Engineering (ICCE-12), August 1-6 2005, Tenerife
- Session chairman at the International Congress on Computational Mechanics and Simulation, 9-12.12.2004 Kanpur, India

- V-ce chairman and secretary of the Organizing Committee at the Conference "FEM Programs in computer aiding of analysis, design and production", 1999, 2000 and 2003
- Affiliate of the Polish Association for Dissemination of Computer Engineering Systems, since 2003
- Affiliate of the Institute of Materials London (Great Britain), June 1999/2000
- Member of the Polish Group on Fracture Mechanics Kielce (Poland), since 1999

TECHNICAL PAPER REVIEWER

Journal Manuscripts Reviewed

- Materials Science & Engineering, Elsevier
- Journal of Bridge Engineering – American Society of Civil Engineering (ASCE)
- Journal of Pressure Vessel Technology, ASME International
- International Journal "Advances in Transportation Studies" (Italy)

Conference Manuscripts Reviewed

- 14th International Conference on the Strength of Materials, 4-9 June 2006 Xi'an, China
- European Conference on Modelling and Simulation (ECMS 2007) June 4th-6th 2007, Prague, Czech Republic

FIELD OF SPECIALIZATION

- Applied mechanics
- Computational methods in mechanics
- FE applications
- Numerical simulations

RECENT CHOSEN JOURNAL PUBLICATIONS (total number of all publications over 130)

- J. Łazowski, J. Małachowski, T. Niezgoda: Preliminary concept of numerical modeling of combustion process for gunpowder using Ls-Dyna code. Journal of KONES Powertrain and Transport, Vol. 14, No. 1, pp. 255-260, 2007
- L. Śniezek, J. Małachowski: Analysis of stress and strain concentrations in notched members made of alloys D16 and 1460. Technical Science, No. 9/2006, pp. 95-110
- J. Małachowski, B. Pondel, P. Szurgott: Numerical testing of a tire. Mechanical Engineering, No 11/2006 (in polish)
- J. Małachowski, P. Szurgott: Numerical an experimental testing of pipe elements. Engineering modeling, ISSN 1896-771X, Vol. 1, Nr 32, 2006, pp. 375-380 (in polish)
- L. Kwaśniewski, H. Li, J. Wekezer, J. Małachowski: Finite element analysis of vehicle bridge interaction. Elsevier Journal Finite Elements in Analysis and Design, 42 (2006) pp. 950-959
- J. Małachowski, M. Wesołowski, W. Krasoń: Computational study of transport aircraft landing gear during touchdown, Journal of KONES Powertrain and Transport, Vol. 13, No. 3/2006, pp. 187-195
- T. Niezgoda, J. Małachowski, W. Szymczyk: Numerical modelling of ceramic microstructure, book issued 2005, 253 pages, ISBN 83-204-3144-1 (in polish)
- M. Gzik, J. Małachowski: Consequences of motorcycle and car accidents on human cervical spine. Advances in Transportation Studies an International Journal, Issue VII/ 2005, pp. 41-50
- T. Niezgoda, W. Szymczyk, J. Małachowski, B. Blyukher: Computer simulation of pipeline deformations on the basis of data from an intelligent caliper inspection tool. Computer Technology and Applications, ASME 2003, PVP-Vol. 458, pp. 309-312
- T. Niezgoda, W. Szymczyk, J. Małachowski: Numerical testing of vascular stent. Review of Mechanical Engineering, No 12/2002, pp. 7-13 (in polish)
- T. Niezgoda, J. Małachowski, W. Kowalski: Numerical simulation of landing gear dynamics. Mecanica Computacional, Argentina, Vol. XXI/2002, pp. 2579-2586

RECENT CHOSEN CONFERENCE PUBLICATIONS

- J. Małachowski, Cz. Goss, L. Śniezek: Investigation into fatigue life of welded chemical pipelines. Proceedings of 16th European Conference of Fracture, 3-7 July 2006, Alexandroupolis, Greece (6 pages on CD)
- J. Małachowski: Computational study of steel pipe subjected to blast wave. Proceedings of 14th International Conference on the Strength of Materials (Abstract 408), 4-9 June 2006 Xi'an, China, pp 318
- J. Małachowski, P. Szurgott: Experimental and numerical study of three-point bending case for pipe with large deformed areas. Proceedings of the First South-East European Conference on Computational Mechanics, 28-30 June 2006, Kragujevac, Serbia, pp. 523-528
- B. Blyukher, T. Niezgoda, J. Małachowski, W. Szymczyk: Numerical and experimental research of pipelines safety including aspect of protection from terrorist threat or warfare conditions. ASME 2005 Pressure Vessels and Piping Conference, July 17-21 2005, Denver, Colorado, USA, PVP 2005-71759
- H. Li, L. Kwaśniewski, J. Małachowski, J. W. Wekezer and J. Ducher: Evaluation of dynamic impact factor for a Florida highway bridge by experiment and Finite Element Method. Proceedings of 82-nd Transportation Research Board Annual Meeting, Washington DC., January 2005, Paper # 05-0871
- J. Małachowski, Z. Smalko, M. Woropay, J. Żurek: Testing and multibody analysis of transport aircraft's landing gear. Proceedings of the Second International Conference on Structural Engineering, Mechanics and Computation, 5-7 July 2004, Cape Town, South Africa, pp. 985-990
- J. Małachowski, A. Leski, R. Baraniecki: Numerical simulation to study the influence of the thickness of canopy at a bird strike. Proceedings of the DESIGN 2002 7th International Design Conference, Dubrovnik, Croatia, 14-17.05.2002, pp. 667-672

HOBBIES

- Tourist trips
- Sport (skiing, basketball and tennis)