1 Publications Professor Dr.-Ing. Andreas Öchsner, D.Sc.

Summary:

Total:	412
Books:	
- author	14
- monographs (ed.)	13
- proceedings (ed.)	12
- chapters	20
Journals:	
- international:	193
- national:	19
- guest editor:	63
Conference Proceedings:	77
Others:	1

(Google Scholar: h-index: 22; 2186 citations.
Google Scholar Profile:
`https://scholar.google.com/citations?user=-jQHnjUAAAAJ&hl=en`)

1.1 Books, author

2003

(1) A. Öchsner: Experimentelle und numerische Untersuchung des elasto-plastischen Verhaltens zellularer Modellwerkstoffe [Experimental and Numerical Investigations of the Elastic-Plastic Properties of Model Cellular Materials] (140 pages). Düsseldorf: VDI Verlag 2003.

2010

(2) M. Merkel, A. Öchsner: Eindimensionale Finite Elemente – Ein Einstieg in die Methode [One-Dimensional Finite Elements: An Introduction into the Method] (422 pages). Berlin: Springer Verlag 2010.

2011

(3) M. Gromada, G. Mishuris, A. Öchsner: Correction Formulae for the Stress Distribution in Round Tensile Specimens at Neck Presence (89 pages). SpringerBriefs in Applied Sciences and Technology (Computational Mechanics). Berlin: Springer Verlag 2011.

2013

(4) A. Öchsner, M. Merkel: One-Dimensional Finite Elements – An Introduction to the FE Method (398 pages). Berlin: Springer Verlag 2013.

(5) A. Öchsner: Introduction to Scientific Publishing – Backgrounds, Concepts, Strategies (96 pages). SpringerBriefs in Applied Sciences and Technology. Heidelberg: Springer Verlag 2013.

2014

(6) A. Öchsner: Elasto-Plasticity of Frame Structure Elements – Modeling and Simulation of Rods and Beams (596 pages). Berlin: Springer Verlag 2014.

2015

(7) S.I. Yengejeh, S.A. Kazemi, A. Öchsner: A Primer on the Geometry of Carbon Nanotubes and their Modifications (70 pages). Cham: Springer Verlag 2015.

(8) H.R. Rezaie, L. Bakhtiari, A. Öchsner: Biomaterials and Their Applications (49 pages). Cham: Springer Verlag 2015.

(9) M. Merkel, A. Öchsner: Eindimensionale Finite Elemente – Ein Einstieg in die Methode [One-Dimensional Finite Elements: An Introduction into the Method], 2nd edition (428 pages). Berlin: Springer Vieweg Verlag 2015.

(10) M. Öchsner, A. Öchsner: Das Textverarbeitungssystem LaTeX: Eine praktische Einführung in die Erstellung wissenschaftlicher Dokumente [The text processing system LaTeX: A practical introduction into the preparation of scientific documents]. Wiesbaden: Springer Vieweg 2015.

2016

(11) F.A. Nasruddin, M.N. Harun, A. Syahrom, M.R.A. Kadir, A.H. Omar, A. Öchsner: Finite Element Analysis on Badminton Racket Design Parameters (47 pages). SpringerBriefs in Applied Sciences and Technology (Computational Mechanics). Cham: Springer 2016.

(12) A. Öchsner: Continuum Damage and Fracture Mechanics (163 pages). Singapore: Springer 2016.

(13) A. Öchsner: Computational Statics and Dynamics – An Introduction Based on the Finite Element Method (485 pages). Singapore: Springer 2016.

(14) A. Öchsner, M. Öchsner: The Finite Element Analysis Program MSC Marc/Mentat (136 pages). Singapore: Springer 2016.

1.2 Books, monographs (ed.)

2008

(1) A. Öchsner, G.E. Murch, M.J.S. de Lemos (Eds.): Cellular and Porous Materials - Thermal Properties Simulation and Prediction (422 pages). Weinheim, Germany: Wiley-VCH 2008.

(2) W. Ahmed, N. Ali, A. Öchsner (Eds.): Biomaterials and Biomedical Engineering (555 pages). Stafa-Zurich, Switzerland: Trans Tech Publications Ltd, 2008.

(3) L.F.M. da Silva, A. Öchsner (Eds.): Modeling of Adhesively Bonded Joints (335 pages). Berlin, Germany: Springer 2008.

2009

(4) A. Öchsner, W. Ahmed and N. Ali (Eds.): Nanocomposite Coatings and Nanocomposite Materials (402 pages). Stafa-Zurich, Switzerland: Trans Tech Publications Ltd, 2009.

(5) A. Öchsner, C. Augustin (Eds.): Multifunctional Metallic Hollow Sphere Structures (258 pages). Berlin, Germany: Springer 2009.

2010

(6) N. Ali, A. Öchsner, W. Ahmed (Eds.): Carbon Based Nanomaterials (322 pages). Stafa-Zurich, Switzerland: Trans Tech Publications Ltd, 2010.

(7) H. Altenbach, A. Öchsner (Eds.): Cellular and Porous Materials in Structures and Processes, CISM Courses and Lectures Vol. 521 (334 pages). Wien, Austria: Springer 2010.

(8) A. Öchsner, W. Ahmed (Eds.): Biomechanics of Hard Tissues (306 pages). Weinheim, Germany: Wiley-VCH 2010.

2011

(9) L.F.M. da Silva, A. Pirondi, A. Öchsner (Eds.): Hybrid Adhesive Joints (309 pages). Berlin, Germany: Springer 2011.

(10) L.F.M. da Silva, A. Öchsner, R.D. Adams (Eds.): Handbook of Adhesion Technology (1548 pages in two volumes). Berlin, Germany: Springer 2011.

(11) A. Öchsner, G.E. Murch (Eds.): Heat Transfer in Multi-Phase Materials (460 pages). Berlin, Germany: Springer 2011.

2013

(12) A. Öchsner, A. Shokuhfar (Eds.): New Frontiers of Nanoparticles and Nanocomposite Materials (371 pages). Berlin, Germany: Springer 2013.

2014

(13) H. Altenbach, A.Öchsner (Eds.): Plasticity of Pressure-Sensitive Materials (376 pages). Berlin, Germany: Springer 2014.

1.3 Books, proceedings (ed.)

2005

(1) A. Öchsner, J. Grácio, F. Barlat (Eds.): Proceedings of the First International Conference on Diffusion in Solids and Liquids, 6-8.7.2005, (Volume I/II, 850 pages). Aveiro: Centre for Mechanical Technology and Automation and Department of Mechanical Engineering 2005.

2010

(2) A. Öchsner, L.F.M. da Silva, H. Altenbach (Eds.): Materials with Complex Behaviour: Modelling, Simulation, Testing, and Applications (372 pages). Berlin: Springer Verlag 2010.

2012

(3) A. Öchsner, L.F.M. da Silva, H. Altenbach (Eds.): Analysis and Design of Biological Materials and Structures (221 pages). Berlin: Springer Verlag 2012.

(4) A. Öchsner, L.F.M. da Silva, H. Altenbach (Eds.): Materials with Complex Behaviour II: Properties, Non-Classical Materials and New Technologies (727 pages). Berlin: Springer Verlag 2012.

(5) A. Öchsner, L.F.M. da Silva, H. Altenbach (Eds.): Mechanics and Properties of Composed Materials and Structures (197 pages). Berlin: Springer Verlag 2012.

2013

(6) A. Öchsner, L.F.M. da Silva, H. Altenbach (Eds.): Design and Analysis of Materials and Engineering Structures (178 pages). Berlin: Springer Verlag 2013.

(7) A. Öchsner, L.F.M. da Silva, H. Altenbach (Eds.): Characterization and Development of Biosystems and Biomaterials (253 pages). Berlin: Springer Verlag 2013.

(8) A. Öchsner, H. Altenbach (Eds.): Advances in Bio-Mechanical Systems and Materials (146 pages). Berlin: Springer Verlag 2013.

(9) A. Öchsner, H. Altenbach (Eds.): Experimental and Numerical Investigation of Advanced Materials and Structures (270 pages). Berlin: Springer Verlag 2013.

2014

(10) A. Öchsner, H. Altenbach (Eds.): Design and Computation of Modern Engineering Materials (438 pages). Berlin: Springer Verlag 2014.

2015

(11) A. Öchsner, H. Altenbach (Eds.): Applications of Computational Tools in Biosciences and Medical Engineering (215 pages). Cham: Springer Verlag 2015.

(12) A. Öchsner, H. Altenbach (Eds.): Mechanical and Materials Engineering of Modern Structure and Component Design (451 pages). Cham: Springer Verlag 2015.

1.4 Books, chapters

2008

(1) A. Öchsner, T. Fiedler: Effective Thermal Properties of Hollow-Sphere Structures: A Finite Element Approach. In: A. Öchsner, G.E. Murch, M.J.S. de Lemos (Eds.): Cellular and Porous Materials - Thermal Properties Simulation and Prediction. Weinheim, Germany: Wiley-VCH, pp. 31-71, 2008.

(2) A. Öchsner, L.F.M. da Silva, R.D. Adams: Complex Joint Geometry. In: L.F.M. da Silva, A. Öchsner (Eds.): Modeling of Adhesively Bonded Joints. Berlin, Germany: Springer, pp. 131-154, 2008.

2009

(3) A. Öchsner, T. Fiedler: Geometrical Properties of Hollow Sphere Structures. In: A. Öchsner, C. Augustin (Eds.): Multifunctional Metallic Hollow Sphere Structures. Berlin, Germany: Springer, pp. 31-46, 2009.

(4) T. Fiedler, A. Öchsner: Elastic-Plastic Properties: Simulation and Experiment. In: A. Öchsner, C. Augustin (Eds.): Multifunctional Metallic Hollow Sphere Structures. Berlin, Germany: Springer, pp. 47-70, 2009.

(5) M. Vesenjak, T. Fiedler, Z. Ren, A. Öchsner: Dynamic Behaviour of Metallic Hollow Sphere Structures. In: A. Öchsner, C. Augustin (Eds.): Multifunctional Metallic Hollow Sphere Structures. Berlin, Germany: Springer, pp. 137-158, 2009.

2010

(6) A. Öchsner: Plasticity of Three- Dimensional Foams. In: H. Altenbach, A. Öchsner (Eds.): Cellular and Porous Materials in Structures and Processes, CISM Courses and Lectures Vol. 521. Wien, Austria: Springer, pp. 107-166, 2010.

(7) T. Fiedler, I.V. Belova, A. Öchsner and G.E. Murch: Review on Thermal Lattice Monte Carlo Analysis. In: J.M.P.Q. Delgado (Ed.): Current Trends in Chemical Engineering. Houston, USA: Studium Press LLC, pp. 105-130, 2010.

(8) S.M.H. Hosseini, A. Öchsner, M. Merkel and T. Fiedler: Predicting the Effective Thermal Conductivity of Perforated Hollow Sphere Structures (PHSS). In: J.M.P.Q. Delgado (Ed.): Current Trends in Chemical Engineering. Houston, USA: Studium Press LLC, pp. 131-151, 2010.

(9) A. Öchsner, S.M.H. Hosseini: Constitutive Modeling of the Mechanical Behavior of Trabecular Bone – Continuum Mechanical Approaches. In: A. Öchsner, W. Ahmed (Eds.): Biomechanics of Hard Tissues. Weinheim, Germany: Wiley-VCH, pp. 159-191, 2010.

(10) T. Fiedler, I.V. Belova, G.E. Murch, A. Öchsner: Recent Advances in the Prediction of the Thermal Properties of Metallic Hollow Sphere Structures. In: M. Vaz, E.A. Souza Neto, A. Munoz-Rojas (Eds.): Advanced Computational Materials Modeling: From Classical to Multi-Scale Techniques. Weinheim, Germany, Wiley-VCH, pp. 73-110, 2010.

2011

(11) A. Öchsner: Special Numerical Techniques to Joint Design. In: L.F.M. da Silva, A. Öchsner, R.D. Adams (Eds.): Handbook of Adhesion Technology. Berlin, Germany: Springer, pp. 661–688, 2011.

(12) T. Fiedler, I.V. Belova, A. Öchsner, G.E. Murch: Lattice Monte Carlo Analysis of Thermal Diffusion in Multi-Phase Materials. In: A. Öchsner, G.E. Murch (Eds.): Heat Transfer in Multi-Phase Materials. Berlin, Germany: Springer, pp. 275–300, 2011.

(13) Pablo A. Munoz-Rojas, Thiago A. Carniel, Emilio C.N. Silva, Andreas Öchsner: Optimization of a Unit Periodic Cell in Lattice Block Materials Aimed at Thermo-Mechanical Applications. In: A. Öchsner, G.E. Murch (Eds.): Heat Transfer in Multi-Phase Materials. Berlin, Germany: Springer, pp. 301–345, 2011.

2014

(14) G. Mishuris, W. Miszuris, A. Öchsner, A. Piccolroaz: Transmission Conditions for Thin Elasto-Plastic Pressure-Dependent Intephases. In: A. Öchsner, H. Altenbach (Eds.): Plasticity of Pressure-Sensitive Materials. Berlin: Springer Verlag, pp. 205–251, 2014.

(15) A. Ghavamian, A. Öchsner: Influence of Atomic Defects on the Mechanical Properties of Carbon Nanotubes. In: M. Aliofkhazraei (Ed.): Handbook of Functional Nanomaterials. Volume 2. Nova Science Publishers, pp. 415–431, 2014.

2015

(16) S.I. Yengejeh, S.A. Kazemi, A. Öchsner: On the Buckling Behavior of Curved Carbon Nanotubes. In: A. Öchsner, H. Altenbach (Eds.): Mechanical and Materials Engineering of Modern Structure and Component Design. Cham: Springer Verlag, pp. 401–412, 2015.

(17) N. Nawafleh, F. Mack, A. Öchsner: Masticatory Loading and Oral Environment Simulation in Testing Lithium Disilicate Restorations: A Structured Review. In: A. Öchsner, H. Altenbach (Eds.): Applications of Computational Tools in Biosciences and Medical Engineering. Cham: Springer Verlag, pp. 189–215, 2015.

(18) G. Hughes, A. Öchsner: Design, Manufacture and Testing of Three-Dimensional Scaffolds. In: A. Öchsner, H. Altenbach (Eds.): Applications of Computational Tools in Biosciences and Medical Engineering. Cham: Springer Verlag, pp. 133–179, 2015.

2016

(19) A. Ghavamian, M. Rahmandoust, A. Öchsner: Numerical Nanomechanics of Perfect and Defective Hetero-junction CNTs. In: N. Silvestre (Ed.): Advanced Computational Nanomechanics. Chichester: John Wiley & Sons, pp. 147–173, 2016.

(20) M. Rahmandoust, A. Öchsner: Defects: Defects in Carbon Nanotubes. In: B.I. Kharisov, O.V. Kharissova, U. Ortiz-Mendez (Eds.): CRC Concise Encyclopedia of Nanotechnology. Boca Raton: CRC Press, pp. 158–165, 2016.

1.5 Journals, international

2000

(1) A. Öchsner, W. Winter, G. Kuhn: Damage and Fracture of Perforated Aluminum Alloys. Adv. Eng. Mater., 2, 7, pp. 423-426, 2000.

(2) J. Gegner, A. Öchsner, W. Winter, G. Kuhn: Metallographical Investigations of Ductile Damage in Aluminium Alloys. Prakt. Metallogr.-Pr. M., 37, 10, pp. 563-579, 2000.

2001

(3) A. Öchsner, W. Winter, G. Kuhn: Elastic-plastic Behaviour of Perforated Aluminium under Tension and Compression. Technische Mechanik, 21, 2, pp. 101-108, 2001.

(4) A. Öchsner, J. Gegner, W. Winter, G. Kuhn: Experimental and Numerical Investigations of Ductile Damage in Aluminium Alloys. Mat. Sci. Eng., A318, 1-2, pp. 328-333, 2001.

(5) J. Gegner, A. Öchsner: A New Powerful Tool for Testing Adhesives In Situ. Journal of Testing and Evaluation (ASTM) JTEVA, 29, 2, pp. 155-160, 2001.

(6) A. Öchsner, J. Gegner: Application of the Finite Element Method in the Tensile-Shear Test of Adhesive Technology. International Journal of Adhesion and Adhesives, 21, 4, pp. 349-353, 2001.

(7) J. Gegner, A. Öchsner: Digital Image Analysis in Quantitative Metallography. Prakt. Metallogr.-Pr. M., 38, 9, pp. 499-513, 2001.

2003

(8) A. Öchsner, K. Lamprecht: On the Uniaxial Compression Behavior of Regular Shaped Cellular Metals. Mech. Res. Commun., 30, 6, pp. 573-579, 2003.

(9) A. Öchsner, W. Winter, G. Kuhn: On an Elastic-Plastic Transition Zone in Cellular Metals. Arch. Appl. Mech., 73, 3-4, pp. 261-269, 2003.

(10) J. Gegner, A. Öchsner, C. Henninger: 2D and 3D Modelling of Discontinuous Dual-Phase Structures and Equivalent Microstructures from Microscope-Made Image Series. Prakt. Metallogr.-Pr. M., 40, 11, pp. 564-581, 2003.

2004

(11) A. Öchsner, J. Gegner: Critical Analysis of the Substrate Deformation Correction in the Thick-Adherend Tensile Shear Test. International Journal of Adhesion and Adhesives, 24, 1, pp. 37-41, 2004.

(12) J. Gegner, A. Öchsner: Through Thick and Thin – Performing Lap Shear Tests of Adhesives. Adhesives & Sealants Industry, 11, 2, pp. 18-22, 2004.

(13) A. Öchsner, J. Gegner: Destructive Testing of Adhesively Bonded Joints Under Static Tensile Loading (Invited Paper). Adhesion and Interface, 5, 2, pp. 22-30, 2004.

(14) A. Öchsner, J. Gegner, J. Grácio: Analytic Adherend Deformation Correction in the New ISO 11003-2 Standard: Should it Really be Applied? (Invited Paper). Adhesion and Interface, 5, 2, pp. 14-21, 2004.

(15) A. Öchsner, J. Gegner, G. Mishuris: Effect of Diffusivity as a Function of the Method of Computation of Carbon Concentration Profiles in Steel. Metal Science and Heat Treatment, 46, 3-4 , pp. 148-151, 2004.

2005

(16) T. Fiedler, A. Öchsner, J. Grácio, G. Kuhn: Structural Modeling of the Mechanical Behavior of Periodic Cellular Solids: Open-Cell Structures. Mechanics of Composite Materials, 41, 3, pp. 277-290, 2005.

(17) A. Öchsner, G. Kuhn, J. Grácio: Investigations of Cellular Solids Under Biaxial Stress States. Exp. Mech., 45, 4, pp. 325-330, 2005.

(18) A. Öchsner, J. Grácio: On the macroscopic thermal properties of syntactic metal foams. Multidiscipline Modeling in Mat. and Str., 1, 2, pp. 171-181, 2005.

(19) T. Fiedler, E. Pesetskaya, A. Öchsner, J. Grácio: Numerical and Analytical Calculation of the Orthotropic Heat Transfer Properties of Fibre Reinforced Materials. Materialwiss. Werkst. 36, 10, pp. 602-607, 2005.

(20) M. Vesenjak, Z. Žunič, A. Öchsner, M. Hriberšek, Z. Ren: Heat Conduction in Closed-Cell Cellular Metals. Materialwiss. Werkst. 36, 10, pp. 608-612, 2005.

(21) A. Öchsner, G. Mishuris, J. Grácio: A Strategy for the Simulation of Adhesive Layers (Invited Paper). Adhesion and Interface, 6, 1, pp. 1-6, 2005.

(22) G. Mishuris, A. Öchsner, G. Kuhn: FEM-analysis of nonclassical transmission conditions between elastic structures. Part 1: Soft imperfect interface. CMC-Computers Materials & Continua, 2, 4, pp. 227-238, 2005.

(23) G. Mishuris, A. Öchsner: Edge Effects Connected with Thin Interphases in Composite Materials. Composite Structures, 68, pp. 409-417, 2005.

(24) G. Mishuris, A. Öchsner: Transmission conditions for a soft elasto-plastic interphase between two elastic materials. Plane strain state. Arch. Mech., 57, 2-3, pp. 157-169, 2005.

(25) W. Miszuris, A. Öchsner: Refinement in the Mathematical and Numerical Treatment of the Internal Oxidation of Alloys. Defect Diffus. Forum, 237-240, pp. 1157-1162, 2005.

(26) A. Öchsner, J. Gegner, J. Grácio: Quantitative Determination of Microstructural Inhomogeneity for Directional Particle Distribution. Prakt. Metallogr.-Pr. M., 42, 3, pp. 116-125, 2005.

(27) T. Fiedler, E. Pesetskaya, A. Öchsner, J. Grácio: Calculation of the Thermal Conductivity of Porous Materials. Mater. Sci. Forum 514-516, pp. 754-758, 2006.

2006

(28) T. Fiedler, A. Öchsner, J. Grácio: The uniaxial strain test – a simple method for the characterization of porous materials. Struct. Eng. Mech. 22, 1, pp. 17-32, 2006.

(29) A. Öchsner, M. Tane, H. Nakajima: Prediction of the thermal properties of lotus-type and quasi-isotropic porous metals: Numerical and analytical methods. Mater. Lett. 60 (21-22), pp. 2690-2694 , 2006.

(30) A. Öchsner, T. Fiedler, J. Gracio, G. Kuhn: Experimental Techniques for the Investigation of the Elasto-Plastic Transition Zone of Foamed Materials. Adv. Eng. Mater. 8, 9, pp. 884-889, 2006.

(31) A. Öchsner, J. Grácio: On the Thick-Adherend Tensile Shear Test of Adhesive Technology: Limitations and Correction Methods. Journal of Testing and Evaluation (ASTM) JTEVA, 34, 1, pp. 53–59, 2006.

(32) G. Mishuris, A. Öchsner, G. Kuhn: FEM-analysis of nonclassical transmission conditions between elastic structures. Part 2: Stiff imperfect interface. CMC-Computers Materials & Continua, 4, 3, pp. 137-152, 2006.

(33) M. Stasiek, A. Öchsner, J. Grácio: Ad- and Desorption of Oxygen at Metal-Oxide Interfaces: Numerical Approach for Non-Homogeneous Oxide Distribution. Defect Diffus. Forum, 249, pp. 35-40, 2006.

(34) A. Öchsner, M. Stasiek, J. Grácio: Ad- and Desorption of Oxygen at Metal-Oxide Interfaces: Two-Dimensional Modelling Approaches. J. Phase Equilib. Diff., 27, 6, pp. 644-650, 2006.

(35) M. Stasiek, A. Öchsner: Ad- and Desorption of Oxygen at Metal-Oxide Interfaces: Numerical Approach for Concentration-Dependent Diffusion Coefficient. Defect and Diffusion Forum, 258-260, pp. 360-365, 2006.

(36) M. Stasiek, A. Öchsner: Numerical Simulation of Carburization and Decarburization Profiles in Steels. Defect and Diffusion Forum, 258-260, pp. 366-371, 2006.

(37) T. Fiedler, B. Sturm, A. Öchsner, J. Gracio, G. Kuhn: Modelling the Mechanical Behaviour of Adhesively Bonded and Sintered Hollow-Sphere Structures. Mechanics of Composite Materials, 42, 6, pp. 559-570, 2006.

2007

(38) T. Fiedler, A. Öchsner, J. Grácio: Uniaxial Elasto-Plastic Behaviour of Adhesively Bonded Hollow Sphere Structures (HSS): Numerical Simulations and Experiments. Materials Science Forum 539-543, pp. 1874–1879, 2007.

(39) M. Vesenjak, A. Öchsner, M. Hribersek, Z. Ren: Behaviour of Cellular Structures with Fluid Fillers under Impact Conditions. International Journal of Multiphysics, 1, 1, pp. 101-122, 2007.

(40) T. Fiedler, A. Öchsner, N. Muthubandara, I.V. Belova, G.E. Murch: Calculation of the Effective Thermal Conductivity in Composites Using Finite Element and Monte Carlo Methods. Materials Science Forum, 553, pp. 51-56, 2007.

(41) E. Pesetskaya, A. Öchsner, S. Rogosin: The effective conductivity of 2D porous materials with temperature dependent material properties. Materials Science Forum, 553, pp. 112-117, 2007.

(42) E. Pesetskaya, T. Fiedler, A. Öchsner: Two different approaches for the effective conductivity investigation of 2D porous materials with temperature dependent material properties. Materials Science Forum, 553, pp. 118-123, 2007.

(43) T. Fiedler, A. Öchsner: Influence of the morphology of joining on the heat transfer properties of periodic metal hollow-sphere-structures. Materials Science Forum, 553, pp. 45-50, 2007.

(44) T. Fiedler, A. Öchsner: On the thermal conductivity of adhesively bonded and sintered hollow sphere structures (HSS). Materials Science Forum, 553, pp. 39-44, 2007.

(45) M. Vesenjak, A. Öchsner, Z. Ren: Thermal post-impact behavior of closed-cell cellular structures with fillers – Part I. Materials Science Forum, 553, pp. 196-201, 2007.

(46) M. Vesenjak, Z. Žunič, A. Öchsner, Z. Ren: Thermal post-impact behavior of closed-cell cellular structures with fillers – Part II. Materials Science Forum, 553, pp. 202-207, 2007.

(47) M. Vesenjak, A. Öchsner, Z. Ren: Evaluation of Thermal and Mechanical Filler Gas Influence on Honeycomb Structures Behavior. Materials Science Forum, 553, pp. 190-195, 2007.

(48) T. Fiedler, A. Öchsner: Finite element analysis of the temperature dependent conductivity of metallic hollow sphere structures. International Journal of Multiphysics, 1, 3, pp. 283-289, 2007.

(49) M. Gromada, G. Mishuris, A. Öchsner: Necking in the tensile test. Correction formulae and related error estimation. Arch. Metall. Mater. 52, 2, pp. 231-238, 2007.

(50) M. Gromada, G. Mishuris, A. Öchsner: An attempt to improve the evaluation of mechanical material properties from the axisymmetric tensile test. Isr. J. Chem., 47, 3-4, pp. 329-335, 2007.

(51) A. Öchsner, J. Grácio: An evaluation of the elastic properties of an adhesive layer using the tensile-butt joint test: procedures and error estimates. International Journal of Adhesion and Adhesives, 27, 2, pp. 129–135, 2007.

(52) A. Öchsner, M. Stasiek, G. Mishuris, J. Grácio: A new evaluation procedure for the butt-joint test of adhesive technology: determination of the complete set of linear elastic constants. International Journal of Adhesion and Adhesives, 27, 8, pp. 703–711, 2007.

(53) G. Mishuris, W. Miszuris, A. Öchsner: Evaluation of Transmission Conditions for a Thin Heat- Resistant Inhomogeneous Interphase in Dissimilar Material. Materials Science Forum, 553, pp. 87-92, 2007.

(54) G. Mishuris, W. Miszuris, A. Öchsner: Finite Element Verification of Transmission Conditions for 2D Heat Conduction Problems. Materials Science Forum, 553, pp. 93-99, 2007.

(55) G. Mishuris, A. Öchsner: 2D modelling of a thin elasto-plastic interphase between two different materials: Plane strain case. Composite Structures, 80, 3, pp. 361-372, 2007.

(56) I.V. Belova, G.E. Murch, N. Muthubandara, A. Öchsner: Analysis of Oxygen Segregation at Metal-Oxide Interfaces Using a New Lattice Monte Carlo Method. Solid State Phenomena, 129, pp. 111-117, 2007.

(57) I.V. Belova, A. Öchsner, N. Muthubandara, G.E. Murch: Modelling of Oxygen Diffusion and Segregation at Interfaces in Ag-MgO Composites. Defect and Diffusion Forum, 266, pp. 29-38, 2007.

(58) I.V. Belova, G.E. Murch, T. Fiedler, A. Öchsner: The Lattice Monte Carlo Method for Solving Phenomenological Mass and Heat Transport Problems. Diffusion Fundamentals, 4, pp. 15.1-15.23, 2007.

2008

(59) T. Fiedler, E. Solórzano, A. Öchsner: Numerical and experimental analysis of the thermal conductivity of metallic hollow sphere structures. Materials Letters, 62, 8-9, pp. 1204-1207, 2008.

(60) T. Fiedler, A. Öchsner, I.V. Belova, G.E. Murch: Thermal Conductivity Enhancement of Compact Heat Sinks Using Cellular Metals. Defect and Diffusion Forum, 273-276, pp. 222-226, 2008.

(61) T. Fiedler, A. Öchsner, I.V. Belova, G.E. Murch: Calculations of the Effective Thermal Conductivity in a Model of Syntactic Metallic Hollow Sphere Structures Using a Lattice Monte Carlo method. Defect and Diffusion Forum, 273-276, pp. 216-221, 2008.

(62) M. Vesenjak, Z. Žunič, Z. Ren, A. Öchsner: Computational Study of Heat Transfer in Honeycomb Structures Accounting for Gaseous Pore Filler. Defect and Diffusion Forum, 273-276, pp. 699-706, 2008.

(63) Z. Ren, M. Vesenjak, A. Öchsner: Behaviour of Cellular Structures Under Impact Loading A Computational Study. Materials Science Forum, 566, pp. 53-60, 2008.

(64) T. Fiedler, A. Öchsner: On the Anisotropy of Adhesively Bonded Metallic Hollow Sphere Structures. Scripta Materialia, 58, 8, pp. 695-698, 2008.

(65) B.F. Oliveira, L.A.B. Cunda, A. Öchsner, G.J. Creus: Comparison between RVE and full mesh approaches for the simulation of compression tests on cellular metals. Materialwiss. Werkst., 39, 2, pp. 133-138, 2008.

(66) T. Fiedler, A. Öchsner: Experimental analysis of the flexural properties of sandwich panels with cellular core materials. Materialwiss. Werkst., 39, 2, pp. 121-124, 2008.

(67) M. Vesenjak, Z. Ren, A. Öchsner: Behaviour of cellular materials under impact loading. Materialwiss. Werkst., 39, 2, pp. 125-132, , 2008.

(68) R. Winkler, M. Merkel, A. Öchsner, W. Günter: On the vibration analysis of adhesively bonded hollow sphere structures. Materialwiss. Werkst., 39, 2, pp. 139-142, 2008.

(69) M. Vesenjak, T. Fielder, Z. Ren, A. Öchsner: Behaviour of Syntactic and Partial Hollow Sphere Structures under Dynamic Loading. Adv. Eng. Mater., 10, 3, pp. 185-191, 2008.

(70) T. Fiedler, A. Öchsner, I. V. Belova, G. E. Murch: Recent Advances in the Prediction of the Thermal Properties of Syntactic Metallic Hollow Sphere Structures. Advanced Engineering Materials, 10, 4, pp. 361-365, 2008.

(71) M. Vesenjak, A. Öchsner, Z. Ren: Characterization of open-cell cellular material structures with pore fillers. Materials Letters, 62, pp. 3250-3253, 2008.

(72) C. Veyhl, R. Winkler, M. Merkel, A. Öchsner: Mechanical Testing of Diffusion Bonded Metallic Hollow Sphere Structure (MHSS), Defect and Diffusion Forum, 280-281, pp. 85-96, 2008.

(73) C. Veyhl, R. Winkler, M. Merkel, A. Öchsner: Structural Characterisation of Diffusion-Bonded Hollow Sphere Structures, Defect and Diffusion Forum, 280-281, pp. 105-112, 2008.

(74) A. Öchsner, G. Mishuris: A New Finite Element Formulation for Thin Non-Homogeneous Heat-Conducting Adhesive Layers. Journal of Adhesion Science and Technology, 22, pp. 1365–1378, 2008.

(75) G. Mishuris, W. Miszuris, A. Öchsner: Evaluation of Transmission Conditions for Thin Reactive Heat-Conducting Interphases. Defect and Diffusion Forum, 273-276, pp. 394-399, 2008.

(76) A. Öchsner, W. Miszuris: Finite Element Verification of Transmission Conditions for Thin Reactive Heat-Conducting Interphases. Defect and Diffusion Forum, 273-276, pp. 400-405, 2008.

(77) A. Öchsner, I.V. Belova, G.E. Murch: Finite Element Modelling of Oxygen Diffusion and Segregation at Interfaces in Ag-MgO Composites: Parametric Studies. Defect and Diffusion Forum, 273-276, pp. 461-466, 2008.

(78) I.V. Belova, G.E. Murch, T. Fiedler, A. Öchsner: The Lattice Monte Carlo Method for Solving Phenomenological Mass and Thermal Diffusion Problems. Defect Diffus. Forum, 279, pp. 13-22, 2008.

2009

(79) A. Öchsner, G. Mishuris: Modelling of the multiaxial elasto-plastic behaviour of porous metals with internal gas pressure. Finite Elem. Anal. Des., 45, pp. 104-112, 2009.

(80) I.V. Belova, G.E. Murch, T. Fiedler, A. Öchsner: Lattice-Based Walks and the Monte Carlo Method for Addressing Mass, Thermal and Elasticity Problems. Defect Diffus. Forum, 283-286, pp. 13-23, 2009.

(81) S.M.H. Hosseini, M. Merkel, C. Augustin, A. Öchsner: Numerical Prediction of the Effective Thermal Conductivity of Perforated Hollow Sphere Structures. Defect Diffus. Forum, 283-286, pp. 6-12, 2009.

(82) G. Mishuris, W. Miszuris, A. Öchsner: Transmission Conditions for Thin Reactive Heat-Conducting Interphases: General Case. Defect Diffus. Forum, 283-286, pp. 521-526, 2009.

(83) Y.S. Nechaev, A. Öchsner: Some Basic Results and Techniques of Studying Anomalous Diffusion and Segregation in Metals: Relevance to New Nanofabrication Applications. Defect Diffus. Forum, 283-286, pp. 545-551, 2009.

(84) A. Öchsner: On some Conceptual Considerations for the Finite Element Simulation of the Oxygen Out-Diffusion in Ag-MgO Composites. Defect Diffus. Forum, 283-286, pp. 1-5, 2009.

(85) T. Fiedler, I.V. Belova, A. Öchsner, G.E. Murch: Non-linear calculations of transient thermal conduction in composite materials. Comp. Mater. Sci., 45, pp. 434–438, 2009.

(86) S.M.H. Hosseini, M. Merkel, A. Öchsner: Finite element simulation of the thermal conductivity of perforated hollow sphere structures (PHSS): Parametric study. Materials Letters, 63, pp. 1135–1137, 2009.

(87) B.F. Oliveira, L.A.B. da Cunda, A. Öchsner, G. J. Creus: Hollow sphere structures: a study of mechanical behaviour using numerical simulation. Materialwiss. Werkst., 40, 3, pp. 144-153, 2009.

(88) R. Winkler, M. Merkel, A. Öchsner: Experimental and numerical analyses of diffusion bonded hollow sphere structures. Materialwiss. Werkst., 40, 3, pp. 133-138, 2009.

(89) T. Fiedler, E. Solórzano, F. Garcia-Moreno, A. Öchsner, I.V. Belova, G.E. Murch: Computed tomography based finite element analysis of the thermal properties of cellular aluminium. Materialwiss. Werkst., 40, 3, pp. 139-143, 2009.

(90) T. Fiedler, T. Bernthaler, R. Winkler, I.V. Belova, G.E. Murch, A. Öchsner: Numerical analyses of the thermal conductivity of random hollow sphere structures. Materials Letters, 63, pp. 1125–1127, 2009.

(91) Yu. S. Nechaev, O.K. Alexeeva, A. Öchsner: Analytical Review on the Hydrogen Multilayer Intercalation in Carbonaceous Nanostructures: Relevance for Development of Super-Adsorbents for Fuel-Cell-Powered Vehicles. J. Nanosci. Nanotechnol., 9, 6, pp. 3949–3958, 2009.

(92) Yu. S. Nechaev, A. Öchsner: Essay on Techniques & Physics of Some Diffusion-Controlled Processes in Materials: Relevance to Nanofabrication Applications. Defect Diffus. Forum, 289-292, pp. 679-686, 2009.

(93) A. Öchsner, S.M.H. Hosseini, M. Merkel: Numerical Simulation of Perforated Hollow Sphere Structures (PHSS) to Investigate Mechanical Properties. Mater. Sci. Forum, 620-622, pp. 275-278, 2009.

(94) M. Speich, W. Rimkus, M. Merkel, A. Öchsner: Large Deformation of Metallic Hollow Spheres. Mater. Sci. Forum,623, pp. 105-117, 2009.

(95) M. Rahmandoust, A. Öchsner: Influence of Structural Imperfections and Doping on the Mechanical Properties of Single-Walled Carbon Nanotubes. Journal of Nano Research, 6, pp. 185-196, 2009.

(96) S.M.H. Hosseini, A. Öchsner: A Comparative Numerical Study of the Stress States in Flat and Cylindrical Lap Joints. Journal of Adhesion Science and Technology, 23, pp. 1369–1382, 2009.

(97) M. Vesenjak, L. Krstulovic, Z. Ren, A. Öchsner, Z. Domazet: Experimental Study of Open-Cell Cellular Structures with Elastic Filler Material. Experimental Mechanics, 49, 4, pp. 501–509, 2009.

(98) T. Fiedler, E. Solórzano, F. Garcia-Moreno, A. Öchsner, I.V. Belova, G.E. Murch: Lattice Monte Carlo and Experimental Analyses of the Thermal Conductivity of Random-Shaped Cellular Aluminum. Advanced Engineering Materials, 11, 10, pp. 843–847, 2009.

(99) M. Vesenjak, Z. Ren, T. Fiedler, A. Öchsner: Impact Behavior of Composite Hollow Sphere Structures. Journal of Composite Materials, 43, 22, pp. 2491–2505, 2009.

(100) M. Vesenjak, Z. Ren, A. Öchsner: Dynamic behaviour of regular closed-cell porous metals – computational study. Int. J. Materials Engineering Innovation, 1, 2, 2009, pp. 175–196.

(101) T. Fiedler, S.M.H. Hosseini, I.V. Belova, G.E. Murch, A. Öchsner: A refined finite element analysis on the thermal conductivity of perforated hollow sphere structures. Computational Materials Science, 47, 2009, pp. 314-319.

(102) F. Ferrano, M. Speich, W. Rimkus, M. Merkel, A. Öchsner: Simulation of the Impact Behaviour of Diffusion-Bonded and Adhered Perforated Hollow Sphere Structures (PHSS). Defect Diffus. Forum, 294, 2009, pp. 27–38.

2010

(103) Yu. S. Nechaev, A. Öchsner: On Physical Nanoscale Aspects of Compatibility of Steels with Hydrogen and Natural Gas. J. Nanosci. Nanotechnol., 10, 2, pp. 1398–1413, 2010.

(104) S.M.H. Hosseini, A. Öchsner, T. Fielder: Numerical Prediction of the Effective Thermal Conductivity of Open- and Closed-Cell Foam Structures. Defect Diffus. Forum, 297-301, 2010, pp. 1210–1217.

(105) T. Fiedler, I.V. Belova, A. Öchsner, G.E. Murch: A Lattice Monte Carlo Analysis of Thermal Transport in Phase Change Materials. Defect Diffus. Forum, 297-301, 2010, pp. 154-161.

(106) C. Veyhl, I.V. Belova, G.E. Murch, A. Öchsner, T. Fiedler: On the mesh dependence of non-linear mechanical finite element analysis. Finite Elements in Analysis and Design, 46, 2010, pp. 371–378.

(107) M.R.A. Kadir, A. Syahrom, A. Öchsner: Finite element analysis of idealised unit cell cancellous structure based on morphological indices of cancellous bone. Med. Biol. Eng. Comput., 48, 2010, pp. 497–505.

(108) T. Fiedler, A. Öchsner, J. Grácio: Numerical Investigations on the Mechanical Properties of Adhesively Bonded Hollow Sphere Structures. Journal of Composite Materials, 44, 10, 2010, pp. 1165–1178.

(109) M. Gromada, G. Mishuris, A. Öchsner: On the Evaluation of Mechanical Properties from the Axisymmetric Tensile Test. Archives of Metallurgy and Material, 55, 1, 2010, pp. 325–330.

(110) T. Fiedler, H.S. Kim, I.V. Belova, S.W. Sloan, G.E. Murch, A. Öchsner: Elastic finite element analysis on cross-sections of random hollow sphere structures. Materialwissenschaft und Werkstofftechnik, 41, 5, 2010, pp. 250–256.

(111) M. Speich, M. Merkel, A. Öchsner: Large deformation of core materials for sandwich panels. Materialwissenschaft und Werkstofftechnik, 41, 5, 2010, pp. 270–275.

(112) J. Farnsworth, G.E. Murch, I.V. Belova, A. Öchsner, T. Fiedler: A lattice Monte Carlo analysis on thermal diffusion in syntactic hollow-sphere structures. Materialwissenschaft und Werkstofftechnik, 41, 5, 2010, pp. 283–286.

(113) A. Öchsner, S.M.H. Hosseini, M. Merkel: Numerical Simulation of the Mechanical Properties of Sintered and Bonded Perforated Hollow Sphere Structures (PHSS). Journal of Materials Science & Engineering Technology, 26, 8, 2010, pp. 730–736.

2011

(114) S. Mavalizadeh, M. Ramandoust, A. Öchsner: Numerical Investigation of the Overall Stiffness of Carbon Nanotube-Based Composite Materials. Journal of Nano Research, 13, 2011, pp. 47–59.

(115) S.M. Hossein Hosseini, A. Kharaghani, C. Kirsch, A. Öchsner: Numerical Investigation of the Thermal Properties of Irregular Foam Structures. Defect and Diffusion Forum, 312–315, 2011, pp. 941–946.

(116) S.M. Hossein Hosseini, A. Öchsner, T. Fiedler: Numerical Investigation of the Initial Yield Surface of Perforated Hollow Sphere Structures (PHSS) in a Primitive Cubic Pattern. Finite Elements in Analysis and Design, 47, 2011, pp. 804–811.

(117) R. Winkler, W. Pannert, M. Merkel, A. Öchsner: Structure borne sound in metallic hollow sphere structures. Materialwissenschaft und Werkstofftechnik, 42, 5, 2011, pp. 365–369.

(118) C.Veyhl, I.V. Belova, G. E. Murch, A. Öchsner, T. Fiedler: Thermal analysis of aluminium foam based on microcomputed tomography. Materialwissenschaft und Werkstofftechnik, 42, 5, 2011, pp. 350–355.

(119) M. Esmaeili, A. Öchsner: A one-dimensional implementation of a coupled elasto-plastic model for ductile damage. Materialwissenschaft und Werkstofftechnik, 42, 5, 2011, pp. 444–451.

(120) M. Hassanipour, A. Öchsner: Implementation of a Pressure Sensitive Yield Criterion for Adhesives into a Commercial Finite Element Code. The Journal of Adhesion, 87, 2011, pp. 1125–1147.

(121) A. Syahrom, M.R.A. Kadir, J. Abdullah, A. Öchsner: Mechanical and microarchitectural analyses of cancellous bone through experiment and computer simulation. Medical & Biological Engineering & Computing, 49, 2011, pp. 1393–1403.

(122) M. Rahmandoust, A. Öchsner: Buckling Behaviour and Natural Frequency of Zigzag and Armchair Single-Walled Carbon Nanotubes. Journal of Nano Research, 16, 2011, pp. 153–160.

2012

(123) I.E. Afrooz, A. Öchsner, M. Rahmandoust: Effects of the carbon nanotube distribution on the macroscopic stiffness of composite materials. Computational Materials Science, 51, 2012, 422–429.

(124) M.A. Sulong, A. Öchsner: Prediction of the elastic properties of syntactic perforated hollow sphere structures. Computational Materials Science, 53, 2012, 60–66.

(125) S.M. Hossein Hosseini, M. Merkel, A. Öchsner: Influence of the joint shape on the uniaxial mechanical properties of non-homogeneous bonded perforated hollow sphere structures. Computational Materials Science, 58, 2012, 183–187.

(126) T. Fiedler, C. Veyhl, I.V. Belova, M. Tane, H. Nakajima, T. Bernthaler, M. Merkel, A. Öchsner, G.E. Murch: On the anisotropy of lotus-type porous copper. Advanced Engineering Materials, 14, 3, 2012, 144–152.

(127) S.M.H. Hosseini, A. Kharaghani, C. Kirsch, A. Öchsner: Temperature Dependence of Elastic Properties of Aluminum Foam Structures. Defect and Diffusion Forum, 326-328, 2012, pp. 233–237.

(128) A.Q. Barbosa, L.F.M. da Silva, A. Öchsner, J. Abenojar, J.C. del Real: Influence of the Size and Amount of Cork Particles on the Impact Toughness of a Structural Adhesive. The Journal of Adhesion, 88, 4–6, 2012, 452–470.

(129) M.A. Sulong, A. Öchsner: Finite element simulation of the macroscopic heat conductivity of syntactic perforated hollow sphere structures. Materialwissenschaft und Werkstofftechnik, 43, 5, 2012, pp. 461–467.

(130) H. Riegel, M. Merkel, A. Öchsner: Laser beam cutting of metallic hollow sphere structures. Materialwissenschaft und Werkstofftechnik, 43, 5, 2012, pp. 441–446.

(131) T. Fiedler, I.V. Belova, A. Öchsner, G.E. Murch: A Lattice Monte Carlo Analysis on Chemical Reaction with Moving Boundary. Computational Thermal Sciences, 4, 2, 2012, pp. 131–135.

(132) C. Veyhl, T. Fiedler, T. Herzig, A. Öchsner, T. Bernthaler, I.V. Belova, G.E. Murch: Thermal Conductivity Computations of Sintered Hollow Sphere Structures. Metals, 2, 2012, pp. 113–121.

(133) A. Ghavamian, M. Rahmandoust, A. Öchsner: A numerical evaluation of the influence of defects on the elastic modulus of single and multi-walled carbon nanotubes. Computational Materials Science, 62, 2012, 110–116.

(134) M.N. Bajuri, M.R.A. Kadir, I.M. Amin, A Öchsner: Biomechanical analysis of rheumatoid arthritis of the wrist joint. Proceedings of the Institution of Mechanical Engineers, Part H: Journal of Engineering in Medicine, 226, 7, 2012, 510–520.

(135) A. Ghavamian, A. Öchsner: Numerical investigation on the influence of defects on the buckling behavior of single-and multi-walled carbon nanotubes. Physica E, 46, 2012, 241–249.

(136) M. Rahmandoust, A. Öchsner: On finite element modeling of single- and multi-walled carbon nanotubes. Journal of Nanoscience and Nanotechnology, 12, 2012, 8129–8136.

(137) Yu. S. Nechaev, A. Öchsner: On the hydrogen-graphene layers interactions, relevance to the onboard storage problem. Journal of Nanoscience and Nanotechnology, 12, 2012, 8169–8200.

2013

(138) A. Ghavamian, M. Rahmandoust, A. Öchsner: On the determination of the shear modulus of carbon nanotubes. Composites: Part B, 44, 2013, 52–59.

(139) T. Fiedler, H.S. Richards, I.V. Belova, A. Öchsner, G.E. Murch: Experimental analysis on the thermal anisotropy of syntactic hollow sphere structures. Experimental Thermal and Fluid Science, 44, 2013, 637–641.

(140) A. Ghavamian, A. Öchsner: Numerical modeling of the eigenmodes and eigenfrequencies of carbon nanotubes under the influence of defects. Journal of Nano Research, 21, 2013, 159–164.

(141) W. Miszuris, A. Öchsner: Universal transmission conditions for thin reactive heat-conducting interphases. Continuum Mechanics and Thermodynamics, 25, 2013, 1–21.

(142) M.M. Davoudi, A. Öchsner: Finite difference approximations of elasto-plastic bending problems: layered approach and error estimates. Key Engineering Materials, 553, 2013, 125–130.

(143) A. Ghavamian, A. Öchsner: Numerical modeling of eigenmodes and eigenfrequencies of single- and multi-walled carbon nanotubes under the influence of atomic defects. Computational Materials Science, 72, 2013, 42–48.

(144) M.M. Davoudi, A. Öchsner: Error estimates for the finite difference solution of the heat conduction equation: Consideration of boundary conditions and heat sources. Defect and Diffusion, 336, 2013, 195–207.

(145) M.A.F. Araújo, M. Merkel, A. Öchsner: Heat conductivity of metallic hollow sphere structures: Numerical simulation and experimental validation. Defect and Diffusion, 336, 2013, 209–223.

(146) M. Harnicárová, J. Valícek, A. Öchsner, R. Grznárik, M. Kusnerová, J. Neugebauer, D. Kozak: Predicting residual and flow stresses from surface topography created by laser cutting technology. Optics & Laser Technology, 52, 2013, 21–29.

(147) A. Syahroma, M.R.A. Kadir, J. Abdullah, A. Öchsner: Permeability studies of artificial and natural cancellous bone structures. Medical Engineering & Physics, 35, 2013, 792–799.

(148) M. Farsadi, A. Öchsner, M. Rahmandoust: Numerical investigation of composite materials reinforced with waved carbon nanotubes. Journal of Composite Materials, 47, 11, 2013, 1425–1434.

(149) R. Makvandi, A. Öchsner: A refined analysis of the influence of the carbon nanotube distribution on the macroscopic stiffness of composites. Computational Materials Science, 77, 2013, 189–193.

(150) M. Esmaeili, A. Öchsner: On the introduction of return mapping schemes in elasto-plastic finite element simulations for isotropic and kinematic hardening. i-manager's Journal on Mechanical Engineering, 2, 1, 2013, 17–29.

(151) M.M. Davoudi, A. Öchsner: On the accuracy of finite difference schemes for beam problems in the elastic range. Materialwissenschaft und Werkstofftechnik, 44, 5, 2013, 506–514.

(152) M. Araújo, M. Merkel, H. Riegel, A. Öchsner: On the numerical simulation of laser beam cutting of hollow sphere structures. Materialwissenschaft und Werkstofftechnik, 44, 5, 2013, 491–496.

(153) H. Riegel, M. Merkel, A. Öchsner, M. Araújo, R. Thiede, J. Fruhstuck: Laser beam welded sandwich structures with hollow sphere core. Materialwissenschaft und Werkstofftechnik, 44, 5, 2013, 481–490.

(154) A.Q. Barbosaa, L.F.M. da Silva, A. Öchsner, J. Abenojar, J. C. del Real: Utilization of microparticles of cork as reinforcing material for fragile structural adhesives. Ciência & Tecnologia dos Materiais, 25, 2013, 42–49.

2014

(155) S.I. Yengejeh, M.A. Zadeh, A. Öchsner: Numerical charaterization of the shear behavior of hetero-junction carbon nanotubes. Journal of Nano Research, 26, 2014, 143–151.

(156) T. Fiedler, M.A. Sulong, M. Vesenjak, Y. Higa, I.V. Belova, A. Öchsner, G.E. Murch: Determination of the thermal conductivity of periodic APM foam models. International Journal of Heat and Mass Transfer, 73, 2014, 826–833.

(157) G. Ghadyani, M. Akbarzade, A. Öchsner: On the Finite Element Modelling and Simulation of Carbon Nanotubes. Key Engineering Materials, 607, 2014, 55–61.

(158) R. Makvandi, A. Öchsner: On a numerical strategy to simulate nanotube-reinforced composite materials. Materialwissenschaft und Werkstofftechnik, 45, 5, 2014, 429–435.

(159) C. Janousch, R. Winkler, A. Wiegmann, W. Pannert, M. Merkel, A. Öchsner: Simulation and experimental validation of acoustic properties of hollow sphere structures. Materialwissenschaft und Werkstofftechnik, 45, 5, 2014, 413–422.

(160) H. Riegel, M. Merkel, A. Öchsner: Laser drilling of hollow sphere structures. Materialwissenschaft und Werkstofftechnik, 45, 5, 2014, 406–412.

(161) S.I. Yengejeh, J.M.P.Q. Delgado, A.G. Barbosa de Lima, A. Öchsner: Numerical simulation of the vibration behavior of curved carbon nanotubes. Advances in Materials Science and Engineering, 2014, Article ID 815340, 9 pages.

(162) S.I. Yengejeh, M.A. Zadeh, A. Öchsner: Numerical modeling of eigenmodes and eigenfrequencies of hetero-junction carbon nanotubes with pentagon-heptagon pair defects. Computational Materials Science, 92, 2014, 76–83.

(163) R. Makvandi, A. Öchsner: On a finite element approach to predict the thermal conductivity of carbon fiber reinforced composite materials. Defect and Diffusion Forum, 354, 2014, 215–225.

(164) A.Q. Barbosa, L.F.M. da Silva, A. Öchsner: Effect of the amount of cork particles on the strength and glass transition temperature of a structural adhesive. Proceedings of the Institution of Mechanical Engineers, Part L: Journal of Materials Design and Applications, 228, 4, 2014, 323–333.

(165) S.I. Yengejeh, M.A.Zadeh, A. Öchsner: On the buckling behavior of connected carbon nanotubes with parallel longitudinal axes. Applied Physics A, 115, 2014, 1335–1344.

(166) S.I. Yengejeh, S.A. Kazemi, A. Öchsner: On the influence of atomic modifications on the structural stability of carbon nanotube hybrids: numerical investigation. International Journal of Applied Mechanics, 6, 6, 2014, 1450077 (16 pages).

(167) S.I. Yengejeh, A. Öchsner: On the stiffness of carbon nanotubes with spiral distortion. Journal of Nano Research, 29, 2014, 85–92.

(168) S.I. Yengejeh, S.A. Kazemi, A. Öchsner: A numerical evaluation of the influence of atomic modifications on the elastic and shear behavior of connected carbon nanotubes with parallel longitudinal axes. Journal of Nano Research, 29, 2014, 93–104.

2015

(169) A. Syahrom, M.R.A. Kadir, M.N. Harun, A. Öchsner: Permeability study of cancellous bone and its idealised structures. Medical Engineering & Physics, 37, 2015, 77–86.

(170) I. Eslami, A. Öchsner: Effect of the carbon nanotube distribution on the thermal conductivity of composite materials. Journal of Heat Transfer - Transactions of the ASME, 137, 2015, 034501 (5 pages).

(171) S.I. Yengejeh, M.A. Zadeh, A. Öchsner: On the tensile behavior of hetero-junction carbon nanotubes. Composites Part B, 75, 2015, 274–280.

(172) A.Q. Barbosa, L.F.M. da Silva, J. Abenojar, J.C. del Real, R.M.M. Paiva, A. Öchsner: Kinetic analysis and characterization of an epoxy/cork adhesive. Thermochimica Acta, 604, 2015, 52–60.

(173) G. Ghadyani, A. Öchsner: On a thickness free expression for the stiffness of carbon nanotubes. Solid State Communications, 209–210, 2015, 38–44.

(174) S.I. Yengejeh, S.A. Kazemi, A. Öchsner: Influence of combined loading on the structural stability of carbon nanotubes. Materials Chemistry and Physics, 158, 2015, 96–106.

(175) S.I. Yengejeh, A. Öchsner: Influence of twisting and distortion on the mechanical properties of carbon nanotubes. Journal of Computational and Theoretical Nanoscience, 12, 2015, 443–448.

(176) S.I. Yengejeh, A. Öchsner: Influence of structural imperfections–twisting and distortion–on the vibrational behavior of carbon nanotubes. Proceedings of the Institution of Mechanical Engineers, Part N: Journal of Nanoengineering and Nanosystems, 2015, 1740349915579713 (9 pages)

(177) Y. Amani, A. Öchsner: Finite element simulation of arrays of hollow sphere structures. Materialwissenschaft und Werkstofftechnik, 46, 4/5, 2015, 462–476.

(178) R. Makvandi, A. Öchsner: Influence of interphase imperfections on the macroscopic stiffness of hollow-sphere reinforced composites. Mechanics of Advanced Materials and Structures, 22, 2015, 1007–1015.

(179) A.Q. Barbosa, L.F.M. da Silva, A. Öchsner: Hygrothermal aging of an adhesive reinforced with microparticles of cork. Journal of Adhesion Science and Technology, 29, 2015, 1714–1732.

(180) A. Ghavamian, A. Öchsner: A comprehensive numerical investigation on the mechanical properties of hetero-junction carbon nanotubes. Communications in Theoretical Physics, 64, 2015, 215–230.

(181) A.Q. Barbosa, L.F.M. da Silva, J. Abenojar, M. Figueiredo, A. Öchsner: Tensile strength of a brittle epoxy resin reinforced with micro cork particles: effect of size, amount and surface treatment. Microscopy and Microanalysis 21 (Supplement S5), 2015, 9–10.

(182) G. Ghadyani, A. Öchsner: Derivation of a universal estimate for the stiffness of carbon nanotubes. Physica E, 73, 2015, 116–125.

(183) A. Ghavamian, A. Andriyana, A.B. Chin, A. Öchsner: Numerical investigation on the influence of atomic defects on the tensile and torsional behavior of hetero-junction carbon nanotubes. Materials Chemistry and Physics, 164, 2015, 122–137.

(184) S.J. Fatihhi, M.N. Harun, M.R.A. Kadir, J. Abdullah, T. Kamarul, A. Öchsner, A. Syahrom: Uniaxial and multiaxial fatigue life prediction of the trabecular bone based on physiological loading: a comparative study. Annals of Biomedical Engineering, 43, 2015, 2487–2502.

(185) M. Rahmandoust, A. Öchsner: Young's modulus variation of carbon nanotubes due to defects associated with atomic reconstruction of random vacancies. Journal of Computational and Theoretical Nanoscience, 12, 2015, 2281–2286.

(186) J. Valícek, M. Harnicárová, A. Öchsner, Z. Hutyrová, M. Kusnerová, H. Tozan, V. Michenka, V. Łepelák, D. Mital, J. Zajac: Quantifying the Mechanical Properties of Materials and the Process of Elastic-Plastic Deformation under External Stress on Material. Materials, 8, 2015, 7401–7422.

(187) H. Li, A. Öchsner, D. Wei, Guowei Ni, Zhengyi Jiang: Crystal plasticity finite element modelling of the effect of friction on surface asperity flattening in cold uniaxial planar compression. Applied Surface Science, 359, 2015, 236–244

2016

(188) S.I. Yengejeh, S.A. Kazemi, A. Öchsner: Advances in mechanical analysis of structurally and atomically modified carbon nanotubes and degenerated nanostructures: A review. Composites Part B, 86, 2016, 95–107.

(189) G. Ghadyani, L. Soufeiani, A. Öchsner: On the characterization of the elastic properties of asymmetric single-walled carbon nanotubes. Journal of Physics and Chemistry of Solids, 89, 2016, 62–68.

(190) S.A. Kazemi, S.I. Yengejeh, A. Öchsner: On the modeling of eigenmodes and eigenfrequencies of carbon graphene sheets under the influence of vacancy defects. Journal of Nano Research, 38, 2016, 101–106.

(191) S.I. Yengejeh, S.A. Kazemi, O. Ivasenko, A. Öchsner: A refined finite element analysis on the vibrational properties of ideal and degenerated carbon nanostructures. Solid State Communications, 231–232, 2016, 36–42.

(192) A.Q. Barbosa, L.F.M. da Silva, M.D. Banea, A. Öchsner: Methods to increase the toughness of structural adhesives with micro particles: an overview with focus on cork particles. Materialwissenschaft und Werkstofftechnik, 47, 4, 2016, 307–325.

(193) S.I. Yengejeh, S.A. Kazemi, A. Öchsner: On the buckling and vibrational response of carbon nanotubes with spiral deformation. Journal of Theoretical and Applied Mechanics, 54, 2, 2016, 613–619.

1.6 Journals, national

1999

(1) A. Öchsner, W. Winter, G. Kuhn: Verformungs- und Dehnungsfeldermittlung an zellularen Werkstoffen mittels Rasterverfahren [Deformation and strain field measurements of cellular materials based on the grating method]. Technisches Messen, 66, 10, pp. 386-389, 1999.

2000

(2) A. Öchsner, W. Winter, G. Kuhn: Perforierte Aluminium-Legierungen als Modell für Schädigung und Bruch in zellularen Metallen [Perforated Aluminum Alloys as Model for Damage and Cracks in Cellular Metals]. Materialwiss. Werkst., 31, 6, pp. 567-570, 2000.

(3) J. Gegner, A. Öchsner: Verbesserte Methode der Kennwertbestimmung [Improved Method for the Identification of Characteristic Values]. Adhäsion-kleben und dichten, 44, 4, pp. 18-23, 2000.

(4) J. Gegner, A. Öchsner, K. Busl: Vereinfachte Bestimmung der elastischen Konstanten [Simplified Identification of the Elastic Constants]. Adhäsion-kleben und dichten, 44, 9, pp. 36-39, 2000.

(5) J. Gegner, A. Öchsner, K. Busl: Neue Mess- und Auswerteverfahren im simulationsgestützten Zugscherversuch der Klebetechnik [New Measuring and Analysis Methods for the Simulation-Aided Tensile Shear Test of Adhesives]. Technisches Messen, 67, 9, pp. 381-386, 2000.

2001

(6) J. Gegner, A. Öchsner: Klebschichtkennwerte aus Experiment und Simulation [Adhesive Bonding Layer Properties - Calculated and Experimentally Determined]. Materialprüfung, 43, 3, pp. 64-71, 2001.

2002

(7) M. Heyder, A. Öchsner, S. Ströhla: Bewertung von Spannungszuständen bei der experimentellen Bestimmung des Schubmoduls an zellularen Metallen [Evaluation of Stress States for the Experimental Determination of the Shear Modulus of Cellular Materials]. Materialwiss. Werkst., 33, 2, pp. 85-89, 2002.

(8) A. Öchsner, J. Gegner, W. Winter, G. Kuhn: Experimentelle und numerische Untersuchungen zum mechanischen Verhalten perforierter Aluminium-Legierungen unter zyklischer Belastung [Experimental and Numerical Investigation of the Mechanical Behaviour of Perforated Aluminium Alloys under Cyclic Loading]. Materialwiss. Werkst., 33, 11, pp. 637-642, 2002.

2003

(9) J. Gegner, A. Öchsner: Numerik contra Analytik – Konkurrierende Methoden der mathematischen Fügeteilkorrektur [Numerics Contra Analytics – Competing Methods in the Mathematical Adherend Deformation Correction]. Adhäsion-kleben und dichten, 47, 11, pp. 41-44, 2003.

(10) J. Gegner, W. Nierlich, P. Wilbrandt, R. Kirchheim, A. Öchsner: Charakterisierung von Randentkohlungsvorgängen bei der Austenitisierung des Wälzlagerstahls 100Cr6, Teil 1: Korrelation zwischen Randschichteigenschaften und Kohlenstoff-Tiefenverlauf [Characterization of Decarburisation Processes During Austenitising of the Rolling Bearing Steel 100Cr6 Part 1: Correlation between RimZone Properties and Carbon Concentration Profile]. Materialwiss. Werkst., 34, 8, pp. 701-710, 2003.

(11) J. Gegner, A. Öchsner, P. Wilbrandt, R. Kirchheim, W. Nierlich: Charakterisierung von Randentkohlungsvorgängen bei der Austenitisierung des Wälzlagerstahls 100Cr6, Teil 2: Modellierung des Kohlenstoff-Tiefenverlaufs mit Hilfe der Methode der Finiten Elemente [Characterization of Decarburisation Processes During Austenitising of the Rolling Bearing Steel 100Cr6 Part 2: Modelling of the Carbon Concentration Profile by Means of the Finite Element Method]. Materialwiss. Werkst., 34, 8, pp. 711-720, 2003.

(12) J. Gegner, A. Öchsner, P. Wilbrandt, R. Kirchheim, W. Nierlich: Ein neues Simulationswerkzeug zur Berechnung von Kohlenstoff-Tiefenverläufen - Vorhersage und Analyse von Aufkohlungs- und Randentkohlungsprofilen [A New Simulation Tool for the Calculation of Carbon Penetration Curves – Prediction and Analysis of Carburization and Decarburization Profiles]. Härtereitechnische Mitteilungen, 58, 1, pp. 5-12, 2003.

(13) A. Öchsner, C. Henninger, J. Gegner: Modellierung mikroskopischer Objektverteilungen mittels eines stochastischen Suchverfahrens [Modelling of Microscopic Object Arrangements by Means of a Stochastic Search Method]. Austrian Journal of Statistics, 32, 4, pp. 297-304, 2003.

2004

(14) J. Gegner, C. Henninger, A. Öchsner: Stereologische Analyse und Modellierung von Objektverteilungen aus Schnittbildern [Stereologic Analysis and Modelling of Object Distributions from Sectional Micrographs]. Materialwiss. Werkst., 35, 1, pp. 36-44, 2004.

(15) A. Öchsner, G. Kuhn: Zweiachsiges Testen moderner Leichtbauwerkstoffe [Biaxial Testing of Modern Lightweight Materials]. Technik in Bayern, 2, 8, pp. 43, 2004.

(16) A. Öchsner, G. Kuhn: Biaxial-Prüfeinrichtung für zellulare Metalle [Biaxial Testing Machine for Cellular Metals]. Konstruktion, 11/12, pp. 85-89, 2004.

(17) A. Öchsner, J. Gegner, G. Mishuris: Effect of Discordant Diffusivity Expressions on Calculated Carburizing Penetration Curves (in Russian). Metallovedenie i Termicheskaya Obrabotka Metallov, 4, pp. 13-16, 2004.

2007

(18) T. Fiedler, G. Bingel, A. Öchsner, G. Kuhn: Numerische Analyse des Leichtbaupotenzials von metallischen Hohlkugelstrukturen (Numerical Analysis of the Lightweight Potential of Metallic Hollow Sphere Structures). Konstruktion, 1/2, pp. 67-71, 2007.

2009

(19) A. Öchsner, M. Merkel: Materialdesign: Zellulare Metalle (Materials Design: Cellular Metalls). CAD-CAM Report, 5, 58-61, 2009.

1.7 Journal, guest editor

2005

(1) A. Öchsner (Ed.): Journal of Phase Equilibria and Diffusion, 26, 5, 2005.

(2) A. Öchsner, J. Grácio, F. Barlat (Edts.): Materialwiss. Werkst. 36, 10, 2005.

2006

(3) A. Öchsner, J. Grácio (Eds.): Defect and Diffusion Forum, 258-260, 2006.

2007

(4) A. Öchsner, J. Grácio (Eds.): Materials Science Forum, 553, 2007.

2008

(5) A. Öchsner (Edt.): Materialwiss. Werkst., 39, 2, 2008.

(6) A. Öchsner, G.E. Murch (Eds.): Defect and Diffusion Forum, 273-276, 2008.

(7) A. Öchsner (Edt.): Advanced Engineering Materials, 10, 4, 2008.

(8) A. Öchsner, N. Ali (Eds.): International Journal of Nanomanufacturing: Special issue on "Theoretical and Experimental Developments in Nanoscale Heat and Mass Transfer in Nanostructures and Nanocomposites", 2, 3, 2008.

(9) L.F.M. da Silva, A. Öchsner (Eds.): Special Topic Issue on Structural Adhesive Joints. International Journal of Adhesion and Adhesives, 28, 8, 2008.

(10) L.F.M. da Silva, A. Öchsner (Eds.): Special Issue Journal of Adhesion Science and Technology, 22, 13, 2008.

2009

(11) A. Öchsner, G.E. Murch, A. Shokuhfar (Eds.): Defect and Diffusion Forum, 283-286, 2009.

(12) A. Öchsner (Ed.): Special Section on Hollow Sphere Structures. Materials Letters, 63, 2009.

(13) A. Öchsner, L.F.M. da Silva (Edts.): Materialwiss. Werkst., 40, 3, 2009.

(14) L.F.M. da Silva, A. Öchsner (Eds.): Special Issue on Durability of Adhesive Joints. International Journal of Adhesion and Adhesives, 29, 6, 2009.

(15) L.F.M. da Silva, A. Öchsner (Eds.): Special Topic Issue on Adhesive Properties, Adhesion and Surface Preparation. The Journal of Adhesion, 84, 4 & 5 (Part 1) and 6 (Part 2), 2009.

(16) I.V. Belova, G.E. Murch, A. Öchsner: Topical volume Diffusion in Nanomaterials. The Journal of Nano Research, 7, 2009.

(17) L.F.M. da Silva, A. Öchsner (Eds.): Special Issue on Joint Mechanics. Journal of Adhesion Science and Technology, 23, 10-11, 2009.

(18) E. Solórzano, A. Öchsner (Eds.): Special Topical: Heat Transfer in Cellular and Composite Materials: Gas and Fluid Flow, Conduction and Radiation. Advanced Engineering Materials, 11, 10, 2009.

2010

(19) A. Öchsner, L.F.M. da Silva (Eds.): Special Issue on Experimental Engineering and Applications. Experimental Mechanics, 50, 5, 2010.

(20) L.F.M. da Silva, A. Öchsner (Eds.): Special Issue on Joint Design. International Journal of Adhesion and Adhesives, 30, 5, 2010.

(21) A. Öchsner, I.V. Belova, G.E. Murch: Topical volume Diffusion in Nanomaterials. The Journal of Nano Research, 11, 2010.

(22) L.F.M. da Silva, A. Öchsner (Eds.): Special Issue. The Journal of Adhesion, 86, 5, 2010.

(23) A. Öchsner, G.E. Murch, A. Shokuhfar, J.M.P.Q. Delgado (Eds.): Defect and Diffusion Forum, 297-301, 2010.

(24) A. Öchsner, L.F.M. da Silva (Edts.): Materialwiss. Werkst., 41, 5, 2010.

2011

(25) A. Öchsner, I.V. Belova, G.E. Murch: Special Issue. The Journal of Nano Research, 13, 2011.

(26) A. Öchsner, L.F.M. da Silva, H. Altenbach: Special Issue on Advanced Computational Engineering and Experimenting. Key Engineering Materials, 478, 2011.

(27) A. Öchsner, L.F.M. da Silva (Edts.): Materialwiss. Werkst., 42, 5, 2011.

(28) A. Öchsner, I.V. Belova, G.E. Murch: A Special Section on New Developments of Nanostructured Particles and Materials. Journal of Biomedical Nanotechnology, 7, 3, 2011.

(29) L.F.M. da Silva, A. Öchsner (Eds.): Special Issue on Joint Design. International Journal of Adhesion and Adhesives, 31, 5, 2011.

(30) A. Öchsner, G.E. Murch, J.M.P.Q. Delgado (Eds.): Defect and Diffusion Forum, 312-315, 2011.

(31) L.F.M. da Silva, A. Öchsner (Eds.): Special Issue. The Journal of Adhesion, 87, 7–8, 2011.

(32) A. Öchsner, I.V. Belova, G.E. Murch: Special Issue. The Journal of Nano Research, 16, 2011.

2012

(33) A. Öchsner, G.E. Murch: Special Issue on Recent Advances in Mass Transport in Materials. Defect and Diffusion Forum, 322, 2012.

(34) L.F.M. da Silva, A. Öchsner, R.D. Adams (Eds.): Special Issue. The Journal of Adhesion, 88, 4–6, 2012.

(35) A.F. Miguel, A. Öchsner (Eds.): Special Issue. International Journal of Fluid Mechanics Research, 39, 2, 2012.

(36) A. Öchsner, L.F.M. da Silva, H. Altenbach (Eds.): Materialwiss. Werkst., 43, 5, 2012.

(37) P.M.S.T. de Castro, P.M.G.P. Moreira, A. Öchsner: Special Issue on Fracture, Fatigue and Damage. International Journal of Structural Integrity, 3, 2, 2012.

(38) A. Öchsner, G.E. Murch, A. Shokuhfar, J.M.P.Q. Delgado (Eds.): Defect and Diffusion Forum, 326-328, 2012.

(39) L.F.M. da Silva, A. Öchsner, R.D. Adams (Eds.): Special Issue on Joint Design 3. International Journal of Adhesion and Adhesives, 37, 2012.

(40) A.F. Miguel, A. Öchsner (Eds.): Special Issue on Fluid Flow: Analysis and Numerics. Computational Thermal Sciences, 4, 2, 2012.

2013

(41) A. Öchsner, I. Belova, G.E. Murch (Eds.): Special Issue on Recent Advances in Mass Transport in Engineering Materials. Defect and Diffusion Forum, 333, 2013.

(42) A. Öchsner, I. Belova, G.E. Murch (Eds.): Special Issue. The Journal of Nano Research, 21, 2013.

(43) A. Öchsner, I. Belova, G.E. Murch (Eds.): Special Issue. Defect and Diffusion Forum, 334-335, 2013.

(44) A. Öchsner, H. Altenbach: Special Issue on Advanced Computational Engineering and Experimenting II. Key Engineering Materials, 553, 2013.

(45) A. Öchsner, I. Belova, G.E. Murch (Eds.): Special Issue on Heat Transfer Processes in Engineering Materials. Defect and Diffusion Forum, 336, 2013.

(46) A. Öchsner, H. Altenbach (Eds.): Materialwiss. Werkst., 44, 5, 2013.

2014

(47) A. Öchsner, H. Altenbach (Eds.): Materialwiss. Werkst., 45, 4, 2014.

(48) A. Öchsner, H. Altenbach (Eds.): Materialwiss. Werkst., 45, 5, 2014.

(49) J.M.P.Q. Delgado, Andreas Öchsner, A.G. Barbosa de Lima (Eds.): Special Issue on Nanotechnology for Energy and Environment. Advances in Materials Science and Engineering, Article ID 459108, 2014.

(50) A.F. Miguel, L. Rocha, A. Öchsner (Eds.): Special Issue on Fluid Flow, Energy Transfer and Design. Defect and Diffusion Forum, 348, 2014.

(51) A. Öchsner, G.E. Murch, A. Shokuhfar, J.M.P.Q. Delgado (Eds.): Defect and Diffusion Forum, 353, 2014.

(52) A. Öchsner, I. Belova, G.E. Murch (Eds.): Special Issue on Advanced Diffusion Processes and Phenomena. Defect and Diffusion Forum, 354, 2014.

(53) G.E. Murch, A. Öchsner, I. Belova (Eds.): Special Issue on Diffusion in Advanced Materials. Diffusion Foundations, 1, 2014.

(54) A. Öchsner, I. Belova, G.E. Murch (Eds.): Special Issue. The Journal of Nano Research, 29, 2014.

2015

(55) A.F. Miguel, L. Rocha, A. Öchsner (Eds.): Special Issue on Fluid Flow, Energy Transfer and Design II. Defect and Diffusion Forum, 362, 2015.

(56) A. Öchsner, I. Belova, G.E. Murch (Eds.): Special Issue on Recent Developments of Diffusion Processes and their Applications: Fluid, Heat and Mass. Defect and Diffusion Forum, 364, 2015.

(57) A. Öchsner, H. Altenbach (Eds.): Materialwiss. Werkst., 46, 4/5, 2015.

(58) I. Belova, G.E. Murch, A. Öchsner, (Eds.): Special Issue on Diffusion Phenomena in Engineering Materials. Diffusion Foundations, 4, 2015.

(59) A. Öchsner, G.E. Murch, A. Shokuhfar, J.M.P.Q. Delgado (Eds.): Defect and Diffusion Forum, 365, 2015.

(60) A.F. Miguel, L. Rocha, A. Öchsner (Eds.): Topical Issue on Engineering Flow and Design. Open Engineering, 5, 2015.

2016

(61) A.F. Miguel, L. Rocha, A. Öchsner (Eds.): Topical Issue on Flow Phenomena: Fluids, Heat and Mass. Defect and Diffusion Forum, 366, 2016.

(62) A. Öchsner, I. Belova, G.E. Murch (Eds.): Special Issue Diffusion Phenomena: Aspects of Characterization and Experiments. Defect and Diffusion Forum, 367, 2016.

(63) A. Öchsner, I. Belova, G.E. Murch (Eds.): Special Issue. The Journal of Nano Research, 38, 2016.

1.8 Conference Proceedings

2000

(1) A. Öchsner, W. Winter, G. Kuhn: Modified Voigt-Reuss Mixing Rules for Cellular Materials (Abstract). In: Junior EUROMAT 2000, Lausanne, Switzerland, p. 193, 28.08.-01.09.2000.

2001

(2) A. Öchsner, W. Winter, G. Kuhn: Perforated Aluminum-Alloys as a Model for the Nonlinear Behavior of Cellular Metals. In: Conference Proceedings EUROMAT 2001, Rimini, Italy, 10.-14.07.2001.

(3) J. Gegner, A. Öchsner: The Simulation-Aided Tensile-Shear Test - a Simple Key to Component Layout in Adhesive Technology (Abstract). In: Proceedings of the 15. International Symposium Swiss Technical Conference 'Bonding', Rapperswil, Switzerland, 15.-17.05.2001.

2002

(4) F. Hitzegrad, A. Öchsner, G. Berger, U. Ploska: Comparison of Static and Dynamic Material Properties of Spongiosa-Like Bioceramics (Abstract). In: Proceedings of the 8th International Conference on Ceramic Processing Science, Hamburg, Germany, 02.-05.09.2002.

2003

(5) A. Öchsner, M. Heyder, J. Gegner: Fracture Mechanics Analysis of Rim Zone Tensile Residual Stress States. In: MATERIALS WEEK 2002 – Proceedings, Ed. Werkstoffwoche-Partnerschaft GbR, Publisher: Werkstoff-Informationsgesellschaft mbH, Frankfurt, 2003.

(6) A. Öchsner, W. Winter, G. Kuhn: Simulation of the Elastic-Plastic Transition Region of Cellular Metals. In: MATERIALS WEEK 2002 – Proceedings, Ed. Werkstoffwoche-Partnerschaft GbR, Publisher: Werkstoff-Informationsgesellschaft mbH, Frankfurt, 2003.

(7) A. Öchsner, W. Winter, G. Kuhn: FE-Simulation of the Elastic-Plastic Transition Zone of Cellular Metals under Complex Loading Conditions. In: Proceedings of the 15th International Conference on Computer Methods in Mechanics CMM-2003, Wisla, Poland, 03-06.06.2003.

(8) A. Öchsner: On the Determination of the Elastic-Plastic Transition Zone of Cellular Metals. In: Proceedings of the 1. Workshop on Advanced Computational Mechanics, Maribor, Slovenia, pp. 111-120, 09-11.10.2003.

(9) F. Hitzegrad, G. Berger, U. Ploska, A. Öchsner: Comparison of Static and Dynamical Analysis of Material Properties of Open-Cell ZrO_2 Foams. In: MATERIALS WEEK 2002 – Proceedings, Ed. Werkstoffwoche-Partnerschaft GbR, Publisher: Werkstoff-Informationsgesellschaft mbH, Frankfurt, 2003.

(10) A. Öchsner, F. Hitzegrad, G. Berger, U. Ploska, J. Gegner: Materials Properties of Open-Cell Al_2O_3 Foams - Comparison of Static and Dynamic Analyses and Rheological Modelling. In: Proceedings of the 2nd International Conference on Material Testing (Test 2003), Nuremberg, Germany, pp. 193-198, 13.-15.05.2003.

(11) J. Gegner, A. Öchsner: Theoretical Expressions for the Porosity Dependence of Ceramics Characteristics and Comparison with Experiment. In: Proceedings of the 2nd International Conference on Material Testing (Test 2003), Nuremberg, Germany, pp. 221-226, 13.-15.05.2003.

(12) A. Öchsner, J. Gegner: Improvement of Substrate Deformation Correction in the ISO Adhesive Tensile-Shear Test. In: Proceedings of the 2nd International Conference on Material Testing (Test 2003), Nuremberg, Germany, pp. 231-235, 13.-15.05.2003.

(13) G. Mishuris, A. Öchsner, G. Kuhn: Imperfect Interfaces in Dissimilar Elastic Body: FEM Analysis. In: Proceedings of the 1. Workshop on Advanced Computational Mechanics, Maribor, Slovenia, pp. 101-110, 09-11.10.2003.

(14) A. Öchsner, J. Gegner: A New Versatile Simulation Tool for Thermochemical Reactions. In: MATERIALS WEEK 2002 – Proceedings, Ed. Werkstoffwoche-Partnerschaft GbR, Publisher: Werkstoff-Informationsgesellschaft mbH, Frankfurt, 2003.

(15) A. Öchsner, J. Gegner: Automatized Evaluation of Decarburization Profiles for the Determination of Carbon Diffusivities in Steels. In: Proceedings of the 2nd International Conference on Material Testing (Test 2003), Nuremberg, Germany, pp. 243-248, 13.-15.05.2003.

(16) J. Gegner, A. Öchsner: Finite Element Simulation of Carburization and Decarburization Processes (Abstract). Verhandlungen der Deutschen Physikalischen Gesellschaft (Reihe VI), 38, 5, pp. 369, 2003.

(17) J. Gegner, C. Henninger, A. Öchsner: Stochastic Modelling of Particle Distributions (Abstract). Verhandlungen der Deutschen Physikalischen Gesellschaft (Reihe VI), 38, 5, pp. 369, 2003.

2004

(18) A. Öchsner, J. Grácio: Effective Thermal Conductivity of Syntactic Metal foams. In: Proceedings of the International Conference on Applications of Porous Media ICAPM 2004, Évora, Portugal, 24-27.05.2004, pp. 409-416, 2004.

(19) A. Öchsner, G. Mishuris, J. Grácio: Macroscopic Behaviour of Porous Metals with Internal Gas Pressure under Multiaxial Loading Conditions (Invited Lecture). In: Proceedings of the Third International Conference on Mathematical Modeling and Computer Simulation of Materials Technology (MMT-2004), Ariel, Israel, 06-10.09.2004, pp. 3-68–3-77, 2004.

(20) M. Gromada, G. Mishuris, A. Öchsner: Critical Analysis of the Evaluation of Plastic Material Properties Obtained from Standard Round Tensile Specimens. In: Proceedings of the Third International Conference on Mathematical Modeling and Computer Simulation of Materials Technology (MMT-2004), Ariel, Israel, 06-10.09.2004, pp. 3-78–3-87, 2004.

(21) A. Öchsner, J. Gegner, J. Grácio: Analytic Adherend Deformation in the New ISO 11003-2 Standard: Should it Really be Applied ? (Invited Lecture) In: Proceedings of the 18. International Congress HSR Rapperswil 'Swiss Bonding 04', Rapperswil, Switzerland, 17.-19.05.2004, pp. 260-266, 2004.

(22) A. Öchsner, A.B. Pereira, A.B. de Morais: Strength of Adhesively Bonded Steel Joints (Abstract). In: Proceedings of the 18. International Congress HSR Rapperswil 'Swiss Bonding 04', Rapperswil, Switzerland, 17.-19.05.2004, pp. 378, 2004.

(23) J. Gegner, A. Öchsner: Destructive Testing of Adhesively Bonded Joints Under Static Tensile Loading (Invited Lecture). In: Proceedings of the 18. International Congress HSR Rapperswil 'Swiss Bonding 04', Rapperswil, Switzerland, 17.-19.05.2004, pp. 250-257, 2004.

(24) A. Öchsner, G. Mishuris, J. Grácio: Imperfect Transmission Conditions for Thin Glue Layers and Edge Effects in Adhesively Bonded Joints. In: Proceedings of the 2004 Beijing International Bonding Technology Symposium (China Swiss Bonding '04), Beijing, China, 16.-18.10.2004, pp. O42/1-O42/10, 2004.

(25) G. Mishuris, A. Öchsner: Numerical Estimate of Error Connected with the Application of Imperfect Transmission Conditions in Composite Materials. In: Proceedings of the Third International Conference on Mathematical Modeling and Computer Simulation of Materials Technology (MMT-2004), Ariel, Israel, 06-10.09.2004, pp. 3-58–3-67, 2004.

(26) A. Öchsner, W. Miszuris , J. Grácio: Finite Difference Scheme for the Simulation of the Internal Oxidation of Metal Alloys. In: Proceedings of the Third International Conference on Mathematical Modeling and Computer Simulation of Materials Technology (MMT-2004), Ariel, Israel, 06-10.09.2004, pp. 1-46–1-53, 2004.

2005

(27) M. Vesenjak, Z. Ren, A. Öchsner: Simulating Filler Effects in Cellular Structures. In: Sustainability for Humanity & Environment in the Extended Connection Field Science – Economy – Policy. Timisoara, Romania, 24-25.02.2005, pp. 159-162, 2005.

(28) A. Öchsner, G. Kuhn, J. Grácio: Determination of the Plastic Material Properties of Cellular and Porous Media due to Biaxial Stress States. In: Proceedings of the 3rd International Conference on Materials Testing (Test 2005), Nuremberg, Germany, pp. 105-110, 10.-12.05.2005.

(29) A. Öchsner, M. Vesenjak, G. Mishuris, Z. Ren, J. Grácio: Numerical investigation of cellular metals under consideration of internal pore pressure: small and large displacement approaches. In: Proceedings of the 16th International Conference on Computer Methods in Mechanics CMM-2005, Czestochowa, Poland, published on CD-ROM, 21-24.06.2005.

(30) A. Öchsner, M. Vesenjak, G. Mishuris, Z. Ren, J. Grácio: On the Influence of the Internal Pore Pressure on the Elasto-Plastic Behaviour of Cellular and Porous Materials. In: Proceedings of the 2. Workshop on Advanced Computational Mechanics, Erlangen, Germany, pp. 177-186, 30.6-2.7.2005.

(31) M. Vesenjak, A. Öchsner, Z. Ren: Behaviour of Closed-Cell Foams under Impact. In: Proceedings of the 2. Workshop on Advanced Computational Mechanics, Erlangen, Germany, pp. 195-204, 30.6-2.7.2005.

(32) T. Fiedler, E. Pesetskaya, A. Öchsner, J. Grácio: On the determination of the effective thermal conductivity of composite materials. In: Proceedings of the 2. Workshop on Advanced Computational Mechanics, Erlangen, Germany, pp. 187-194, 30.6-2.7.2005.

(33) M. Gromada, G. Mishuris, A. Öchsner: On the axisymmetric tensile test: are there improvements of the Bridgman and Davidenkov-Spiridonova formulae possible? In: Proceedings of the 2. Workshop on Advanced Computational Mechanics, Erlangen, Germany, pp. 53-62, 30.6-2.7.2005.

(34) T. Fiedler, E. Pesetskaya, A. Öchsner, J. Grácio: Numerical and Analytical Calculation of the Orthotropic Heat Transfer Properties of Fibre Reinforced Materials. In: Proceedings of the First International Conference on Diffusion in Solids and Liquids, Aveiro, Portugal, pp. 235-240, 6-8.7.2005.

(35) E. Pesetskaya, T. Fiedler, A. Öchsner, J. Grácio: Analytical Investigation of Thermal Characteristics of Composites with Different Topology: Effect of Perturbations. In: Proceedings of the First International Conference on Diffusion in Solids and Liquids, Aveiro, Portugal, pp. 545-550, 6-8.7.2005.

(36) M. Vesenjak, Z. Žunič, A. Öchsner, M. Hriberšek, Z. Ren: Parametric Analysis of Heat Transfer in Closed-Cell Cellular Metals. In: Proceedings of the First International Conference on Diffusion in Solids and Liquids, Aveiro, Portugal, pp. 793-798, 6-8.7.2005.

(37) M. Gromada, G. Miszuris, A. Öchsner: Possible improvements in the analytical evaluation of necking phenomena in the axisymmetric tensile test. In Mechanika Nr. 304/2005 z. 82, 10th Conference on Fracture Mechanics Vol. 1, Opole-Wisla, Poland, pp. 91-98, 11-14.9.2005.

(38) A. Öchsner, T. Fiedler, J. Grácio: On the experimental realisation of multi-axial stress states for cellular and porous materials: determination of elasto-plastic properties. In:

Procedings of COBEM 2005, 18th International Congress of Mechanical Engineering, Ouro Preto, MG, Brazil, published on CD-ROM, 6-11.11.2005.

(39) L.A.B. da Cunda, A. Öchsner, G.J. Creus: Damage in metallic foams. In: Proceedings of the XXVI Iberian Latin-American Congress on Computational Methods in Engineering – CILAMCE 2005, Guarapari, Espírito Santo, Brazil, published on CD-ROM, 19-21.10.2005.

(40) M. Vesenjak, Z. Ren, A. Öchsner: Influence of closed cell pressure on the macroscopic properties of the cellular material (in Slovenian). In: Proceedings of Kuhelj's days 2005. Organised by: The Slovenian Society for Mechanics. Podčetrtek, Slovenia, pp. 311-318, 22-23.09.2005.

(41) M. Vesenjak, A. Öchsner, Z. Ren: Influence of Pore Gas in Closed-Cell Cellular Structures under Dynamic Loading. 4th German LS-DYNA Forum. Bamberg, Germany, published online (http://www.dynamore.de/download/af05/papers/J-I-15.pdf), 20-21.10.2005.

(42) A. Öchsner, J. Grácio: Errors Connected with the Evaluation of the Tensile Butt-Joint Test of Adhesive Technology. In: Proceedings of the 3rd International Conference on Materials Testing (Test 2005), Nuremberg, Germany, pp. 123-128, 10.-12.05.2005.

(43) A. Öchsner, J. Grácio: Refinement of the Evaluation of Standard ISO/DIN Test Procedures of Adhesive Technology: an Overview (Abstract). In: Proceedings of the 19. International Congress 'Swiss Bonding 05', HSR Rapperswil, Switzerland, 23.-25.05.2005.

(44) M. Gromada, G. Mishuris, A. Öchsner: Evaluation of Material Properties from Axisymmetric Tensile Samples: Remarks on Error Estimate. In: Proceedings of the 3rd International Conference on Materials Testing (Test 2005), Nuremberg, Germany, pp. 129-134, 10.-12.05.2005.

(45) G. Mishuris, A. Öchsner: Influence of material parameters on the deformed edge shape of thin elastic interphases. In: Proceedings of the 16th International Conference on Computer Methods in Mechanics CMM-2005, Czestochowa, Poland, published on CD-ROM, 21-24.06.2005.

(46) G. Mishuris, W. Miszuris, A. Öchsner: Evaluation of Transmission Conditions for Thin Elasto-Plastic Interfaces. In: Proceedings of the 2. Workshop on Advanced Computational Mechanics, Erlangen, Germany, pp. 43-52, 30.6-2.7.2005.

(47) A. Öchsner, M. Stasiek, J. Grácio: Numerical Simulation of the Segregation of Oxygen at Metal/Oxide-Interfaces. In: Progress in Computational Heat and Mass Transfer (Proceedings ICHMT), Paris, France, 17-20.05.2005, pp. 1032-1034, 2005.

(48) M. Stasiek, A. Öchsner, J. Grácio: Segregation of Oxygen at Metal/Oxide-Interfaces: Effect of Kinetics and Precipitate Distribution. In: Proceedings of the First International Conference on Diffusion in Solids and Liquids, Aveiro, Portugal, pp. 723-726, 6-8.7.2005.

(49) A. Öchsner, M. Stasiek, J. Grácio: Numerical simulation of carburization and decarburization profiles in steels. In: Proceedings of the International Conference on Surfaces, Coatings and Nanostructured Materials - nanoSMat2005, Aveiro, Portugal, pp. O-60-O-62, 7-9.9.2005.

2006

(50) A. Öchsner, T. Fiedler, J. Grácio, G. Kuhn: Experimental Techniques for Investigation of the Elasto-Plastic Transition Zone of Porous Materials. In: Proceedings of the 4th Int. Conf. on Porous Metals and Metal Foaming Technology – MetFoam 2005 (21-23.9.2005, Kyoto, Japan). Japan Institute of Metals. Sendai, Japan, pp. 457-462, 2006.

(51) T. Fiedler, A. Öchsner, J. Grácio: Influence of the Morphology of Adhesive Joining on the Mechanical Properties of Periodic Metal Hollow-Sphere-Structures. In: Proceedings of the III European Conference on Computational Mechanics – Solids, Structures and Coupled Problems in Engineering. C.A. Mota Soares et al. (eds.), Lisbon, Portugal, published on CD-ROM, 5-8.6.2006.

(52) T. Fiedler, L.A.B. Cunda, A. Öchsner, G.J. Creus, J. Grácio: Numerical and Experimental Studies of Damage in Porous Materials. In: Proceedings of the III European Conference on Computational Mechanics – Solids, Structures and Coupled Problems in Engineering. C.A. Mota Soares et al. (eds.), Lisbon, Portugal, published on CD-ROM, 5-8.6.2006.

(53) M. Gromada, G. Mishuris, A. Öchsner: An Attempt to Improve the Evaluation of Mechanical Material Properties from the Axisymmetric Tensile Test. In: Proceedings of the Fourth International Conference on Mathematical Modeling and Computer Simulation of Materials Technology (MMT-2006), Ariel, Israel, 11-15.09.2006, pp. 2-21–2-30, 2006.

(54) E. Pesetskaya, A. Öchsner, J. Grácio: The Effective Conducting Properties of 2D Cellular Multiphase Materials. In: Proceedings of the Fourth International Conference on Mathematical Modeling and Computer Simulation of Materials Technology (MMT-2006), Ariel, Israel, 11-15.09.2006, pp. 1-96–1-102, 2006.

(55) A. Öchsner, M. Stasiek, G. Mishuris, J. Grácio: A new procedure for the determination of the complete set of linear elastic constants of thin adhesive layers. In: Proceedings of the 20th International Symposium 'Swiss Bonding 06', HSR Rapperswil, Switzerland, 16.-18.05.2006, pp. 25–33, 2006.

(56) A. Öchsner, M. Stasiek, G. Mishuris, J. Grácio: A New Evaluation of the Butt-Joint Test of Adhesive Technology to Determine the Complete Set of Adhesive Elastic Constants. In: Proceedings of the 3rd World Congress on Adhesion and Related Phenomena - WCARP-III, Beijing, China, 15.-18.10.2006, pp. 160–164, 2006.

(57) G. Mishuris, W. Miszuris, A. Öchsner: Transmission Conditions for Thin Elasto-Plastic Interphases. In: Proceedings of the Fourth International Conference on Mathematical Modeling and Computer Simulation of Materials Technology (MMT-2006), Ariel, Israel, 11-15.09.2006, pp. 1-37–1-47, 2006.

2007

(58) P.A. Muñoz-Rojas, T. Fiedler, L.A.B. da Cunda, A. Öchsner, G.J. Creus: Parameter Identification to Simulate a Tensile Test Applying Gurson Damage Model. Proceedings of the CMNE 2007 - Congress on Numerical Methods in Engineering / XXVIII CILAMCE - Iberian Latin American Congress on Computational Methods in Engineering, Porto, Portugal, published on CD-ROM, 13-15.06.2007.

(59) B.F. de Oliveira, L.A.B. da Cunda, A. Öchsner, G.J. Creus: Finite Element Simulation of Compression Tests on Cellular Materials. Proceedings of the CMNE 2007 - Congress on Numerical Methods in Engineering / XXVIII CILAMCE - Iberian Latin American Congress on Computational Methods in Engineering, Porto, Portugal, published on CD-ROM, 13-15.06.2007.

(60) W. Rimkus, A. Öchsner, M. Merkel: Simulation of the Drop Impact Behaviour of Metallic Hollow Sphere Structures. Proceedings of the 6th German LS-Dyna Forum 2007, Frankenthal, Germany, published on CD-ROM, 11-12.10.2007.

2008

(61) A. Öchsner, T. Fiedler, C. Augustin: Metallic Hollow Sphere Structures – Multifunctional Materials for Lightweight Applications: Types, Properties and Case Studies. In: Proceedings of the Fifth International Conference on Mathematical Modeling and Computer Simulation of Materials Technology (MMT-2008), Ariel, Israel, 08-12.09.2006, pp. 1-80–1-89, 2008.

(62) A. Öchsner, G. Mishuris: Non-Homogeneous Heat-Conducting Adhesive Layers: Analytical Approximation and Finite Element Modelling. In: Proceedings of the First Indo-Swiss Bonding International Symposium on Bonding and Adhesion, Chennai, India, 14.-16.02.2008, pp. 48–56, 2008.

(63) T. Fiedler, I.V. Belova, A. Öchsner, G.E. Murch: A Lattice Monte Carlo Approach for the Analysis of Transient Heat Transfer in Phase Change Materials. Proceedings of the 4th WSEAS International Conference on APPLIED and THEORETICAL MECHANICS (MECHANICS'08), Cairo, Egypt, 29-31.12.2008, pp. 20-25, 2008.

2009

(64) M. Vesenjak, A. Öchsner, Z. Ren: Computational Modelling of Closed- and Open-Cell Cellular Structures with Fillers. In: Proceedings of the IUTAM Symposium on Mechanical Properties of Cellular Materials (Eds.: H. Zhao and N.A. Fleck), held September 17-20, 2007, LMT- Cachan, Cachan, France. Springer-Verlag, The Netherlands, pp. 197-209, 2009.

(65) A. Öchsner, S.M.H. Hosseini, M. Merkel: Numerical Simulation of Sintered Perforated Hollow Sphere Structures (PHSS) to Investigate Thermal Conductivity. In: Proceedings of the International MultiConference of Engineers and Computer Scientists 2009 (IMECS 2009), Hong Kong, 18-20.03.2009, pp. 2159–2164, 2009.

(66) A. Öchsner: Parameter Identification of Elasto-Plastic Constitutive Models. In: Proceedings of the 4th International Conference on Tube Hydroforming (Eds. Y.-M. Hwang and C.-H. Lin), held September 6-9, 2009, Kaohsiung, Taiwan, pp. 194-199.

(67) A. Öchsner, S.M.H. Hosseini, M. Merkel: Numerical Simulation of Thermal and Mechanical Properties of Sintered Perforated Hollow Sphere Structures (PHSS). In: IAENG Transactions on Engineering Technologies Volume 3. Special Edition of the International MultiConference of Engineers and Computer Scientists 2009, Hong Kong, China, 18–20 March 2009. American Institute of Physics, Melville, USA, pp. 16–30, 2009.

2010

(68) B.F. Oliveira, L.A.B. da Cunda, A. Öchsner, G.J. Creus: Computational Analysis of LoadingŰUnloading and Non-homogeneity Effects in Metallic Hollow Sphere Structures. In: Materials with Complex Behaviour: Modelling, Simulation, Testing, and Applications (Eds.: A. Öchsner, L.F.M. da Silva, H. Altenbach). Springer-Verlag, Berlin, pp. 83–97, 2010.

(69) R. Winkler, J. Schulz, M. Merkel, A. Öchsner: Finite Element Vibration Analysis of MHSS Based on 3D Tomography Image Processing. In: Materials with Complex Behaviour: Modelling, Simulation, Testing, and Applications (Eds.: A. Öchsner, L.F.M. da Silva, H. Altenbach). Springer-Verlag, Berlin, pp. 243–256, 2010.

2011

(70) S. Sadir, M.R.A. Kadir, A. Öchsner , M.N. Harun: Modeling of Bio Scaffolds: Structural and Fluid Transport Characterization. World Academy of Science, Engineering and Technology, 74, pp. 621–626, 2011.

(71) S. Sadir, A. Öchsner, M.R.A. Kadir, M.N. Harun: Modeling of Bio Scaffolds: Structural and Fluid Transport Characterization. International Journal of Biological and Life Sciences, 9, 1, pp. 1–6, 2013.

(72) S. Sadir, A. Öchsner, M.R.A. Kadir, M.N. Harun: Simulation of Direct Perfusion through 3D Cellular Scaffolds with Different Porosity. In: Proceedings of the International Conference on Bioscience, Biochemistry and Bioinformatics (ICBBB 2011), Singapore, 26–28 February 2011, pp. 123–125, 2011.

(73) R. Nadlene, A. Öchsner, M.A.M. Irwan, W. Azizah: Determination of the Flow Curve of Necking Tensile Specimen for Non-Linear Hardening. In: Proceedings of the Fourth International Conference on Modelling and Simulation (ICMS2011), Volume 2, Phuket Thailand, 25–27.04.2011, pp. 79–85, 2011

2012

(74) M.A. Sulong, N.H. Ahmad, A. Öchsner: Numerical Simulation of the Mechanical Properties of Syntactic Perforated Hollow Sphere Structures. In: Proceedings of the 7th International Conference on Porous Metals and Metallic Foams (MetFoam 2011), Busan, Korea, 18–21.09.2011, pp. 507–512, 2012.

(75) W. Pannert, M. Merkel, A. Öchsner: Acoustical Properties of Cellular Materials. In: Mechanics and Properties of Composed Materials and Structures (Eds.: A. Öchsner, L.F.M. da Silva, H. Altenbach). Springer-Verlag, Berlin, pp. 83–101, 2012.

2013

(76) H. Riegel, J. Fruhstuck, M. Merkel, R. Winkler, A. Öchsner: On the Laser Beam Cutting of Metallic Hollow Sphere Structures. In: High-Power Laser Materials Processing: Lasers, Beam Delivery, Diagnostics, and Applications II (Ed.: F. Dorsch), Proc. of SPIE (International Society for Optics and Photonics) Vol. 8603, 86030V, published on CD-ROM, 2013.

2014

(77) H. Riegel, M. Merkel, A. Öchsner: Laser Beam Drilling of Metal-Based Composites. In: High-Power Laser Materials Processing: Lasers, Beam Delivery, Diagnostics, and Applications III (Ed.: F. Dorsch), Proc. of SPIE (International Society for Optics and Photonics) Vol. 8963, published on CD-ROM, 2014.

1.9 Others

(1) A. Öchsner, J. Gegner: MSC.Marc Moves into Modern Heat Treatment Technology. MSC. News, 2, pp. 18-19, 2002.

2 Presentations

(1) A. Öchsner: Anwendung des Rasterverfahrens bei der Ermittlung mechanischer Kennwerte von Leichtbauwerkstoffen (Al-Legierungen, Schaumstoffe). Workshop Optische Verformungsmessung: Rasterverfahren, ESPI, neue Verfahren, Braunschweig, Germany, 16.06.1998.

(2) A. Öchsner: Entwicklung einer Biaxial-Prüfeinrichtung. Mechanik Seminar, Erlangen, Germany, 06.07.1998.

(3) A. Öchsner: Damage and Fracture of Perforated Aluminum Alloys (Poster), EUROMAT 1999, Munich, Germany, 27.-30.09.1999.

(4) A. Öchsner: Perforierte Aluminium-Legierungen als Modell für Schädigung und Bruch in zellularen Metallen (Poster). DGM Symposium Metallschäume, Wien, Österreich, 28.-29.02.2000.

(5) A. Öchsner: Modified Voigt-Reuss Mixing Rules for Cellular Materials (Poster). Junior EUROMAT 2000, Lausanne, Switzerland, 28.08.-01.09.2000.

(6) A. Öchsner: Inelastische Stoffgesetze - Experiment und Implementierung. Ferien-Akademie Universität Erlangen-Nürnberg - Technische Universität München, Sarntal/Südtirol, Italy, 17.-29.09.2000.

(7) J. Gegner with A. Öchsner: The Simulation-Aided Tensile-Shear Test - a Simple Key to Component Layout in Adhesive Technology (Poster). 15. International Symposium Swiss Technical Conference 'Bonding', Rapperswil, Switzerland, 15.-17.05.2001.

(8) A. Öchsner: Perforated Aluminum-Alloys as a Model for the Nonlinear Behavior of Cellular Metals. EUROMAT 2001, Rimini, Italy, 10.-14.06.2001.

(9) J. Gegner with A. Öchsner: Randentkohlung und Aufkohlung niedriglegierter Stähle und Modellierung der Kohlenstoff-Tiefenverläufe. Materialphysik-Seminar, Göttingen, Germany, 18.06.2002.

(10) F. Hitzegrad, A. Öchsner, G. Berger, U. Ploska: Comparison of Static and Dynamic Material Properties of Spongiosa-Like Bioceramics (Poster), 8th International Conference on Ceramic Processing Science, Hamburg, Germany, 02.-05.09.2002.

(11) A. Öchsner, W. Winter, G. Kuhn: Simulation of the Elastic-Plastic Transition Region of Cellular Metals (Poster), Materials Week 2002, Munich, Germany, 30.09.-02.10.2002.

(12) A. Öchsner, J. Gegner: A New Versatile Simulation Tool for Thermochemical Reactions (Poster), Materials Week 2002, Munich, Germany, 30.09.-02.10.2002.

(13) A. Öchsner, M. Heyder, J. Gegner: Fracture Mechanics Analysis of Rim Zone Tensile Residual Stress States (Poster), Materials Week 2002, Munich, Germany, 30.09.-02.10.2002.

(14) F. Hitzegrad, G. Berger, U. Ploska, A. Öchsner: Comparison of Static and Dynamical Analysis of Material Properties of Open-Cell ZrO_2 Foams (Poster), Materials Week 2002, Munich, Germany, 30.09.-02.10.2002.

(15) A. Öchsner: Experimentelle und numerische Untersuchung des elasto-plastischen Verhaltens zellularer Modellwerkstoffe. Kolloquium Bundesanstalt für Materialforschung und -prüfung (BAM), Berlin, Germany, 22.01.2003.

(16) J. Gegner, A. Öchsner: Finite Element Simulation of Carburization and Decarburization Processes (Poster). Frühjahrstagung des Arbeitskreises Festkörperphysik (AKF) der Deutschen Physikalischen Gesellschaft e. V. (DPG), Dresden, Germany, 24.-28.03.2003.

(17) J. Gegner, C. Henninger, A. Öchsner: Stochastic Modelling of Particle Distributions (Poster). Frühjahrstagung des Arbeitskreises Festkörperphysik (AKF) der Deutschen Physikalischen Gesellschaft e. V. (DPG), Dresden, Germany, 24.-28.03.2003.

(18) A. Öchsner: Experimentelle und numerische Untersuchung des elasto-plastischen Verhaltens zellularer Modellwerkstoffe. Dissertationsvortrag, Erlangen, Germany, 04.04.2003.

(19) A. Öchsner: Kontinuumsmechanische Grundlagen des elasto-plastischen Verhaltens zellularer Materialien. Internes Seminar des SFB 396, Erlangen, Germany, 09.05.2003.

(20) A. Öchsner, F. Hitzegrad, G. Berger, U. Ploska, J. Gegner: Materials Properties of Open-Cell Al_2O_3 Foams - Comparison of Static and Dynamic Analyses and Rheological Modelling (Poster). 2nd International Conference on Material Testing (Test 2003), Nuremberg, Germany, 14.05.2003.

(21) J. Gegner, A. Öchsner: Theoretical Expressions for the Porosity Dependence of Ceramics Characteristics and Comparison with Experiment (Poster). 2nd International Conference on Material Testing (Test 2003), Nuremberg, Germany, 14.05.2003.

(22) A. Öchsner, J. Gegner: Improvement of Substrate Deformation Correction in the ISO Adhesive Tensile-Shear Test (Poster). 2nd International Conference on Material Testing (Test 2003), Nuremberg, Germany, 14.05.2003.

(23) A. Öchsner, J. Gegner: Automatized Evaluation of Decarburization Profiles for the Determination of Carbon Diffusivities in Steels (Poster). 2nd International Conference on Material Testing (Test 2003), Nuremberg, Germany, 14.05.2003.

(24) A. Öchsner: FE-Simulation of the Elastic-Plastic Transition Zone of Cellular Metals under Complex Loading Conditions. 15th International Conference on Computer Methods in Mechanics CMM-2003, Wisla, Poland, 03-06.06.2003.

(25) A. Öchsner: FE-Simulation of the Elastic-Plastic Behaviour Zone of Cellular Metals under Complex Loading Conditions. Rzeszow Univesity of Technology, Rzeszow, Poland, 23.06.2003.

(26) A. Öchsner: Numerical Simulation of the Mechanical Behavior of Cellular Materials. International Mini-Symposium on Computational Mechanics, Aveiro, Portugal, 14.07.2003.

(27) A. Öchsner: Experimentelle und numerische Untersuchung des elasto-plastischen Verhaltens zellularer Modellwerkstoffe. TUW-MATERIALS Kolloquium, Vienna, Austria, 04.09.2003.

(28) A. Öchsner: Numerical Simulation of the Mechanical Behavior of Cellular Materials. International Mini-Symposium on Mechanics of Cellular and Composite Materials, Aveiro, Portugal, 05.11.2003.

(29) A. Öchsner: Numerical Simulation of the Mechanical Behavior of Cellular Materials. Mechanical Engineering Colloquium, University of Maribor, Maribor, Slovenia, 22.04.2004.

(30) A. Öchsner, J. Gegner, J. Grácio: Analytic Adherend Deformation in the New ISO 11003-2 Standard: Should it Really be Applied ? (Invited Lecture) 18. International Congress HSR Rapperswil 'Swiss Bonding 04', Rapperswil, Switzerland, 19.05.2004.

(31) J. Gegner, A. Öchsner: Destructive Testing of Adhesively Bonded Joints Under Static Tensile Loading (Invited Lecture). 18. International Congress HSR Rapperswil 'Swiss Bonding 04', Rapperswil, Switzerland, 19.05.2004.

(32) A. Öchsner, A.B. Pereira, A.B. de Morais: Strength of Adhesively Bonded Steel Joints (Poster). 18. International Congress HSR Rapperswil 'Swiss Bonding 04', Rapperswil, Switzerland, 17.05.2004.

(33) A. Öchsner, J. Grácio: Effective Thermal Conductivity of Syntactic Metal foams. International Conference on Applications of Porous Media ICAPM 2004, Évora, Portugal, 26.05.2004.

(34) W. Miszuris, A. Öchsner: Refinement in the Mathematical and Numerical Treatment of the Internal Oxidation of Alloys. Sixth International Conference on Diffusion in Materials (DIMAT 2004), Krakow, Poland, 23.07.2004.

(35) A. Öchsner, G. Mishuris, J. Grácio: Porous Metals with Internal Gas Pressure – Macroscopic Tensile and Compression Behaviour (Poster). International Symposium on Developments in Plasticity and Fracture – Centenary of M.T. Huber Criterion, Cracow, Poland, 13.08.2004.

(36) G. Mishuris, A. Öchsner: Thin Elasto-Plastic Imperfect Interphase between Different Elastic Materials under Plane Strain Conditions (Poster). International Symposium on Developments in Plasticity and Fracture – Centenary of M.T. Huber Criterion, Cracow, Poland, 13.08.2004.

(37) A. Öchsner, G. Mishuris, J. Grácio: Macroscopic Behaviour of Porous Metals with Internal Gas Pressure under Multiaxial Loading Conditions (Invited Lecture). Third International Conference on Mathematical Modeling and Computer Simulation of Materials Technology (MMT-2004), Ariel, Israel, 08.09.2004, 2004.

(38) M. Gromada, G. Mishuris, A. Öchsner: Critical Analysis of the Evaluation of Plastic Material Properties Obtained from Standard Round Tensile Specimens. Third International Conference on Mathematical Modeling and Computer Simulation of Materials Technology (MMT-2004), Ariel, Israel, 08.09.2004, 2004.

(39) G. Mishuris, A. Öchsner: Numerical Estimate of Error Connected with the Application of Imperfect Transmission Conditions in Composite Materials. Third International Conference on Mathematical Modeling and Computer Simulation of Materials Technology (MMT-2004), Ariel, Israel, 08.09.2004, 2004.

(40) A. Öchsner, W. Miszuris , J. Grácio: Finite Difference Scheme for the Simulation of the Internal Oxidation of Metal Alloys. Third International Conference on Mathematical Modeling and Computer Simulation of Materials Technology (MMT-2004), Ariel, Israel, 07.09.2004, 2004.

(41) A. Öchsner, G. Mishuris, J. Grácio: Imperfect Transmission Conditions for Thin Glue Layers and Edge Effects in Adhesively Bonded Joints (Invited Lecture). 2004 Beijing International Bonding Technology Symposium (China Swiss Bonding '04), Beijing, China, 18.10.2004, 2004.

(42) A. Öchsner: On the experimental realisation of multi-axial stress states for cellular and porous materials: determination of elasto-plastic properties. Scientific seminar at the Osaka University, Osaka, Japan, 08.03.2005.

(43) M. Gromada, G. Mishuris, A. Öchsner: Evaluation of Material Properties from Axisymmetric Tensile Samples: Remarks on Error Estimate (Poster). 3rd International Conference on Materials Testing (Test 2005), Nuremberg, Germany, 10.05.2005.

(44) A. Öchsner, J. Grácio: Errors Connected with the Evaluation of the Tensile Butt-Joint Test of Adhesive Technology (Poster). 3rd International Conference on Materials Testing (Test 2005), Nuremberg, Germany, 10.05.2005.

(45) A. Öchsner, G. Kuhn, J. Grácio: Determination of the Plastic Material Properties of Cellular and Porous Media due to Biaxial 3rd International Conference on Materials Testing (Test 2005), Nuremberg, Germany 11.05.2005.

(46) A. Öchsner, J. Grácio: Refinement of the Evaluation of Standard ISO/DIN Test Procedures of Adhesive Technology: an Overview (Invited Poster). 19. International Congress HSR Rapperswil 'Swiss Bonding 05', Rapperswil, Switzerland, 23.05.2005.

(47) A. Öchsner, M. Stasiek, J. Grácio: Numerical Simulation of the Segregation of Oxygen at Metal/Oxide-Interfaces (Poster). Progress in Computational Heat and Mass Transfer (4th International Conference on Computational Heat and Mass Transfer ICHMT), Paris, France, 18.05.2005.

(48) A. Öchsner, M. Stasiek, J. Grácio: Ad- and desorption of oxygen at metal-oxide interfaces: numerical approach for non-homogeneous oxide distribution. Diffusion in solids: Past, present and future DiSo-05, Moscow, Russia, 27.05.2005.

(49) A. Öchsner, M. Vesenjak, G. Mishuris, Z. Ren, J. Grácio: Numerical investigation of cellular metals under consideration of internal pore pressure: small and large displacement approaches. 16th International Conference on Computer Methods in Mechanics CMM-2005, Czestochowa, Poland, 22.06.2005.

(50) G. Mishuris, A. Öchsner: Influence of material parameters on the deformed edge shape of thin elastic interphases. 16th International Conference on Computer Methods in Mechanics CMM-2005, Czestochowa, Poland, 21-24.06.2005.

(51) A. Öchsner, M. Vesenjak, G. Mishuris, Z. Ren, J. Grácio: On the Influence of the Internal Pore Pressure on the Elasto-Plastic Behaviour of Cellular and Porous Materials (Invited Lecture). 2. Workshop on Advanced Computational Mechanics, Erlangen, Germany, 2.7.2005.

(52) T. Fiedler, E. Pesetskaya, A. Öchsner, J. Grácio: Numerical and Analytical Calculation of the Orthotropic Heat Transfer Properties of Fibre Reinforced Materials (Poster). First International Conference on Diffusion in Solids and Liquids, Aveiro, Portugal, 6-8.7.2005.

(53) E. Pesetskaya, T. Fiedler, A. Öchsner, J. Grácio: Analytical Investigation of Thermal Characteristics of Composites with Different Topology: Effect of Perturbations (Poster). First International Conference on Diffusion in Solids and Liquids, Aveiro, Portugal, 6-8.7.2005.

(54) M. Vesenjak, Z. Žunič, A. Öchsner, M. Hriberšek, Z. Ren: Parametric Analysis of Heat Transfer in Closed-Cell Cellular Metals (Poster). First International Conference on Diffusion in Solids and Liquids, Aveiro, Portugal, 6-8.7.2005.

(55) M. Stasiek, A. Öchsner, J. Grácio: Segregation of Oxygen at Metal/Oxide-Interfaces: Effect of Kinetics and Precipitate Distribution (Poster). First International Conference on Diffusion in Solids and Liquids, Aveiro, Portugal, 6-8.7.2005.

(56) A. Öchsner, M. Stasiek, J. Grácio: Numerical simulation of carburization and decarburization profiles in steels. International Conference on Surfaces, Coatings and Nanostructured Materials - nanoSMat2005, Aveiro, Portugal, 8.9.2005.

(57) A. Öchsner, T. Fiedler, J. Grácio: On the experimental realisation of multi-axial stress states for cellular and porous materials: determination of elasto-plastic properties. COBEM 2005, 18th International Congress of Mechanical Engineering, Ouro Preto, MG, Brazil, 10.11.2005.

(58) A. Öchsner: Cellular metals – promising lightweight materials: types, applications and elasto-plastic properties. Department of Mechanical Engineering, State University of Santa Catarina, Joinville, Brazil, 02.12.2005.

(59) A. Öchsner: Cellular metals – promising lightweight materials: types, applications and elasto-plastic properties. Department of Mechanical Engineering, Federal University of Rio Grande do Sul, Porto Alegre, Brazil, 05.12.2005.

(60) A. Öchsner, M. Stasiek, J. Grácio: Ad- and Desorption of Oxygen at Metal-Oxide Interfaces: Two-Dimensional Modelling Approaches (Invited Lecture). 135th Annual Meeting & Exhibition - TMS 2006, San Antonio, USA, 15.3.2006.

(61) A. Öchsner: A new procedure for the determination of the complete set of linear elastic constants of thin adhesive layers (Invited Lecture). 20th International Symposium 'Swiss Bonding 06', HSR Rapperswil, Switzerland, 16.05.2006.

(62) A. Öchsner: Cellular metals – promising lightweight materials: types, applications and elasto-plastic properties. Institute of Applied Mechanics, Otto-von-Guericke-University of Magdeburg, Magdeburg, Germany, 20.6.2006.

(63) A. Öchsner: Numerical and Experimental Investigations of Hollow Sphere Structures. Workshop of the Graduate School "Micro-Macro Interaction in Structured Media and Particle Systems" of the Otto-von-Guericke-University of Magdeburg, Caputh, Germany, 24.6.2006.

(64) A. Öchsner: Uniaxial Elasto-Plastic Behaviour of Adhesively Bonded Hollow Sphere Structures (HSS): Numerical Simulations and Experiments. International Conference on Processing & Manufacturing of Advanced Materials - THERMEC'2006, Vancouver, Canada, 04.07.2006.

(65) A. Öchsner: The Effective Conducting Properties of 2D Cellular Multiphase Materials. Fourth International Conference on Mathematical Modeling and Computer Simulation of Materials Technology (MMT-2006), Ariel, Israel, 13.09.2006.

(66) A. Öchsner, M. Stasiek, G. Mishuris, J. Grácio: A New Evaluation of the Butt-Joint Test of Adhesive Technology to Determine the Complete Set of Adhesive Elastic Constants.

3rd World Congress on Adhesion and Related Phenomena - WCARP-III, Beijing, China, 17.10.2006.

(67) A. Öchsner: Overview of Current Research in Advanced Materials. Faculty of Mechanical Engineering, Technical University of Malaysia, Malaysia, 10.01.2007.

(68) A. Öchsner: Determination of the Elasto-Plastic Transition Zone of Porous Materials. Faculty of Mechanical Engineering, Technical University of Malaysia, Malaysia, 28.02.2007.

(69) A. Öchsner: Modelling and Testing of Cellular Materials. Department of Mechanical Engineering and Industrial Management, Faculty of Engineering, University of Porto, Portugal, 18.07.2007.

(70) A. Öchsner: A New Finite Element Formulation for Thin Nonlinear Adhesive Layers. International Conference on Advanced Computational Engineering and Experimenting - ACE-X 2007, Algarve, Portugal, 12.07.2007.

(71) A. Öchsner: On the Prediction of the Thermal Conductivity of Hollow Sphere Structures: an Overview. Third International Conference on Diffusion in Solids and Liquids - DSL-2007, Algarve, Portugal, 05.07.2007.

(72) A. Öchsner: Non-Homogeneous Heat-Conducting Adhesive Layers: Analytical Approximation and Finite Element Modelling. First Indo-Swiss Bonding International Symposium on Bonding and Adhesion, Chennai, India, 14.02.2008.

3 Supervised Theses

3.1 Bachelor / Pre-Diploma Theses

(1) Martin Weih: Bestimmung von Dehnungsfeldern mit einem adaptiven, flächenorientierten Ganzfeldverfahren. Lehrstuhl für Technische Mechanik, Erlangen, 01.09.1997-19.12.1997.

(2) Michael Heyder: Experimentelle Untersuchung orthotroper Modellwerkstoffe. Lehrstuhl für Technische Mechanik, Erlangen, 01.02.1999-18.08.1999.

(3) Carsten Ohr: Numerische Simulation orthotroper Modellwerkstoffe. Lehrstuhl für Technische Mechanik, Erlangen, 21.06.1999-16.12.1999.

(4) Alexander Putz: Numerische Simulation orthotroper Modellwerkstoffe. Lehrstuhl für Technische Mechanik, Erlangen, 02.08.1999-14.12.1999.

(5) Thilo Bauer: Implementierung von Stoffgesetzen in das Finite-Elemente-Programm MARC/ MENTAT. Lehrstuhl für Technische Mechanik, Erlangen, 10.03.2000-09.06.2000.

(6) Christoph Henninger: Implementierung des Return-Mapping-Algorithmus 'Closest-Point-Projection' in das FE-System MSC.Marc. Lehrstuhl für Technische Mechanik, Erlangen, 25.06.2001-17.12.2001.

(7) Olaf Treter: Numerische und experimentelle Untersuchungen an Modellwerkstoffen. Lehrstuhl für Technische Mechanik, Erlangen, 01.09.2001-25.02.2002.

(8) Stephan Tremmel: Herleitung eines Algorithmus zur Berechnung elasto-plastischer Stoffgesetze und Implementierung in das FE-System MSC.Marc. Lehrstuhl für Technische Mechanik, Erlangen, 18.03.2002-09.07.2002.

(9) Florian Fleißner: Implementierung des Return-Mapping-Algorithmus CPP für allgemeine Verfestigung in das FE-System MSC.Marc. Lehrstuhl für Technische Mechanik, Erlangen, 11.02.2002-02.08.2002.

(10) Florian Weichert: Experimentelle Untersuchung zellularer Werkstoffe aus Aluminium, Kunststoff und Keramik. Lehrstuhl für Technische Mechanik, Erlangen, 30.02.2002-30.08.2002.

(11) Thomas Fiedler: Experimentelle Untersuchung zellularer Werkstoffe unter biaxialen Spannungszuständen. Lehrstuhl für Technische Mechanik, Erlangen, 14.10.2002-24.01.2003.

(12) Christoph Henninger: Modellierung räumlicher Objektverteilungen mittels stochastischer Optimierung. Lehrstuhl für Systemsimulation, Erlangen, 15.11.2002-30.04.2003.

(13) Christian Stengel: Simulation des mechanischen Verhaltens syntaktischer Metallschäume unter einachsiger Beanspruchung [Simulation of the Mechanical Behaviour of Syntactic Metal Foams under Uniaxial Load]. Lehrstuhl für Technische Mechanik, Erlangen, 11.03.2003-11.09.2003.

(14) Bernhard Sturm: Numerische Untersuchung von Hohlkugelstrukturen mit homogenen und heterogenen Materialeigenschaften [Numerical Investigation of Hollow Sphere Structures with Homogeneous and Heterogeneous Material Properties]. Department of Mechanical Engineering, Aveiro, 01.09.2006-08.02.2006.

(15) Titus Haenschke: Experimentelle Untersuchung von Sandwichstrukturen mit zellularem Kernmaterial [Experimental Investigation of Sandwich Structures with Cellular Core Material]. Department of Mechanical Engineering, Aveiro, 30.11.2006-30.03.2007.

(16) Wan Arif Bin Wan Abhar: Finite Element Implementation of a Stress Update Algorithm for One-dimensional Plasticity. Department of Applied Mechanics, Skudai, Malaysia, 29.12.08-30.11.09

(17) Michael Miltz: Thermische Analyse von gesinterten und geklebten Hohlkörperstrukturen mit Hilfe von GeoDict [Thermal Analysis of Sintered and Bonded Hollow Sphere Structures due to GeoDict]. Department of Applied Mechanics, Skudai, Malaysia / Department of Mechanical Engineering, Aalen, Germany, 01.06.10-31.12.10.

(18) Ang Eng Hee: Development of Finite Element Formulations for Beams with Elastic Foundations: Linear and Non-Linear Cases. Department of Applied Mechanics, Skudai, Malaysia, 01.09.11-15.06.12.

(19) Nur Azmira Binti Abdullah: Simulation of Cancellous Bone Remodelling Process. Faculty of Biosciences and Medical Engineering, Skudai, Malaysia, 09.07.12-10.06.13.

(20) Nur Anati Binti Abdul Rani: Modelling and Biomechanical Analyses of the Human Spine. Faculty of Biosciences and Medical Engineering, Skudai, Malaysia, 18.07.12-19.06.13.

21 Tay Yii Cheng: Numerical Simulation of the Influence of the Chirality on the Mechanical Properties of the Single-Walled Carbon Nanotube. Faculty of Biosciences and Medical Engineering, Skudai, Malaysia, 12.05.13-11.06.14.

3.2 Master / Diploma Theses

(1) Stefan Erlbacher: Konstruktion einer Biaxial-Prüfeinrichtung für Aluminiumproben. Lehrstuhl für Technische Mechanik, Erlangen, 13.01.1998-15.06.1998.

(2) Martin Weih: Konzeption einer Versuchseinrichtung für Biaxial-Versuche an Verbundmaterialien. Lehrstuhl für Technische Mechanik, Erlangen, 20.02.1998-06.08.1998.

(3) Martin Stief: Numerische Analyse eines Motorblocks aus AlSi-Legierungen. Lehrstuhl für Technische Mechanik, Erlangen / Audi AG, Ingolstadt, 01.06.1999-30.11.1999.

(4) Thilo Bauer: Anwendung der Finite-Elemente-Methode auf Diffusionsprobleme [Application of the Finite Element Method to Diffusion Problems]. Lehrstuhl für Technische Mechanik, Erlangen / SKF GmbH, Schweinfurt, 07.05.2001-06.11.2001.

(5) Klaus Lamprecht: Numerische Simulation zellularer Modellwerkstoffe [Numerical Simulation of Cellular Model Materials]. Lehrstuhl für Technische Mechanik, Erlangen, Germany, 05.11.2001-03.05.2002.

(6) Thomas Fiedler: Numerische Simulation zellularer Metalle [Numerical Simulation of Cellular Metals]. Department of Mechanical Engineering, Aveiro, Portugal, 26.04.2004-18.10.2004.

(7) Tom Süßenbach: Numerische Untersuchung des mechanischen Verhaltens dünner Schichten [Numerical Investigation of the Mechanical Behaviour of Thin Layers]. Department of Mechanical Engineering, Aveiro, Portugal, 15.10.2005-18.04.2006.

(8) Steffen Enssle: Determination of the Structural-Mechanical Properties of Cellular Metals. Department of Applied Mechanics, Skudai, Malaysia / Department of Mechanical Engineering, Aalen, Germany, 12.03.07-12.09.07.

(9) Patrick Wolf: Investigation of the Mechanical Behaviour of Perforated Hollow Sphere Structures by Means of the Finite Element Method. Department of Applied Mechanics, Skudai, Malaysia / Department of Mechanical Engineering, Aalen, Germany, 11.09.07-10.03.08.

(10) Christoph Veyhl: Mechanical and Structural Analysis of Diffusion Bonded Metallic Hollow Sphere Structures (MHSS). Department of Applied Mechanics, Skudai, Malaysia / Department of Mechanical Engineering, Aalen, Germany, 14.03.08-14.09.08.

(11) Seyed Mohammad Hossein Hossaini: Numerical Characterization of Perforated Metallic Hollow Sphere Structures. Department of Applied Mechanics, Skudai, Malaysia, 26.12.07-23.04.09

(12) Thinesh Kumar a/l Sharmugham: Refined Numerical Simulation of the Mechanical Behaviour of Hollow Sphere Structures. Department of Applied Mechanics, Skudai, Malaysia, 07.08.08-05.05.09

(13) Nadlene Bt. Razali: Determination of the Flow Curve of Necking Tensile Specimen. Department of Applied Mechanics, Skudai, Malaysia, 01.07.09-01.04.10

(14) Sahba Sadir: Investigation of fluid flow through cellular structures. Department of Applied Mechanics, Skudai, Malaysia, 01.07.09-01.05.10

(15) Nurul Huda Binti Ahmad: Finite element simulation of perforated hollow sphere composite. Department of Applied Mechanics, Skudai, Malaysia, 01.01.10-10.11.10

(16) Pouria Shahani: Implementation of composite bar and beam element into a commercial finite element code. Department of Applied Mechanics, Skudai, Malaysia, 01.02.10-23.11.10

(17) Iman Eslami Afrooz: Numerical investigation of composite materials with short fibres made of carbon nanotubes. Department of Applied Mechanics, Skudai, Malaysia, 01.07.10-24.11.10

(18) Morteza Farsadi: Numerical investigation of composite materials reinforced with carbon nanotubes waviness. Department of Applied Mechanics, Skudai, Malaysia, 01.02.10-06.12.10

(19) Moosa Esmaeili: Return mapping schemes in elasto-plastic finite element simulations for different type of hardening and ductile damage. Department of Applied Mechanics, Skudai, Malaysia, 01.07.10-01.05.11

(20) Seyedmehdi Mavalizadeh: Finite element simulation of composite materials based on carbon nanotubes. Department of Applied Mechanics, Skudai, Malaysia, 26.06.10-18.05.11

(21) Ali Ghavamian: Influence of structural imperfections and doping on the mechanical properties of single and multi-walled carbon nanotubes. Department of Applied Mechanics, Skudai, Malaysia, 20.06.10-26.05.11

(22) Azliana Yahya: Finite difference modeling of beams in the elastic and plastic range. Department of Applied Mechanics, Skudai, Malaysia, 21.07.10-22.08.11

(23) Mohd Ayub Bin Sulong: Numerical characterisation of hollow sphere composites based on perforated inclusions. Department of Solid Mechanics and Design, Skudai, Malaysia, 08.12.09-11.11.11

(24) Hooman Hooshyarfard: Failure analysis of notched composite plates with bushings. Department of Solid Mechanics and Design, Skudai, Malaysia, 17.02.12-16.01.13

(25) Siamak Fereidooni Naghani: A One-Dimensional Implementation of a Coupled Elasto-Plastic Model for Ductile Damage Based on the Gurson Approach. Department of Solid Mechanics and Design, Skudai, Malaysia, 22.02.12-21.01.13

(26) Mohammad Mahdi Davoudi: Elastic and Plastic Bending of Beams Simulated by the Finite Difference Method. Department of Solid Mechanics and Design, Skudai, Malaysia, 26.01.12-25.01.13

(27) Resam Makvandi: Numerical Simulation of Composite Materials Reinforced with Carbon Nanotubes. Department of Solid Mechanics and Design, Skudai, Malaysia, 14.07.12-13.06.13

(28) Seyed Nima Borghei: Determination of the Influence of Interface Delamination on the Elastic Properties of Fiber Reinforced Composite Materials. Department of Solid Mechanics and Design, Skudai, Malaysia, 16.07.12-15.06.13

(29) Mohammad Mahdi Dehghan Pir: Investigation of the Mechanical Properties of Carbon Nanotubes, under the Influence of Imperfections. Department of Solid Mechanics and Design, Skudai, Malaysia, 21.07.13-20.01.14

3.3 PhD Theses

(1) Thomas Fiedler: Application of Advanced Sandwich Panels with Porous Core Materials. Department of Mechanical Engineering, University of Aveiro, Aveiro, Portugal, 2004–2007.

(2) Moones Rahmandoust: Computational Mechanics Medelling of Carbon Nanotube-Based Nanocomposites. Faculty of Mechanical Engineering, University Technology Malaysia - UTM, Skudai, Malaysia, 2009–2012.

(3) Mohd Ayub Sulong: Characterisation of Advanced Porous Materials. The University of Newcastle, Callaghan, Australia, 2012–2015.