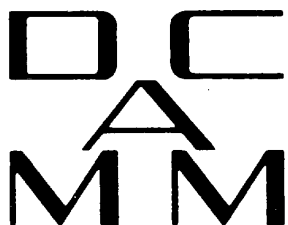


DANISH CENTER FOR APPLIED MATHEMATICS AND MECHANICS

**ANNUAL REPORT
2012**



**TECHNICAL UNIVERSITY OF DENMARK
AALBORG UNIVERSITY AND AARHUS UNIVERSITY**

DANISH CENTER FOR APPLIED MATHEMATICS AND MECHANICS

Scientific Council as of January 2013

Morten Brøns	DTU Compute
Allan P. Engsig-Karup	DTU Compute
Anton Evgrafov	DTU Compute
Jesper Henri Hattel	Dept. of Mechanical Engineering, DTU
Jan Høgsberg	Dept. of Mechanical Engineering, DTU
Henrik Myhre Jensen	Dept. of Engineering, AU
Martin Heide Jørgensen	Dept. of Mechanical Engineering, AAU
Erik Lund	Dept. of Mechanical Engineering, AAU
Lars Pilgaard Mikkelsen	DTU Wind Energy
Søren R.K. Nielsen	Dept. of Civil Engineering, AAU
Christian Niordson	Dept. of Mechanical Engineering, DTU
Pauli Pedersen	Dept. of Mechanical Engineering, DTU
Jens Starke	DTU Compute
Mathias Stolpe	DTU Wind Energy
Jens Nørkær Sørensen	DTU Wind Energy
Jens H. Walther	DTU Mechanical Engineering

Chairman

Christian F. Niordson, Associate Professor

Department of Mechanical Engineering, Solid Mechanics.

Nils Koppels Allé, Building 404

Technical University of Denmark

2800 Kgs. Lyngby, Denmark

cn@mek.dtu.dk

FOREWORD

This 2012 annual report contains information on publications, seminars and guests. The report mainly serves as a reference and documentation for accomplished activities. Detailed information is available on our homepage www.dcammm.dk and on the homepages of the cooperating departments.

The Annual Speaker Seminar was given by Professor Nigel Peake from University of Cambridge under the title "Sound Generation by Aircraft, and by Owls". A total of 9 DCAMM seminars were held in 2012.

PhD courses are now sponsored directly by the member institutions. DCAMM facilitates the organizational structure and participated in the organization of 12 PhD courses in 2012.

From August 19-24, 2012 the 23rd International Congress of Theoretical and Applied Mechanics (ICTAM2012) was held in Beijing with 1561 participants. Denmark was very well represented and all 27 submitted Danish contributions were accepted for presentation, indicating Denmark's strong international position in the research field. At the general assembly Viggo Tvergaard was elected president of IUTAM (International Union of Theoretical and Applied Mechanics) for a 4 year period.

As of 1 January 2013, the departments cooperating in DCAMM are:

from the **Technical University of Denmark:**

DTU Compute

DTU Mechanical Engineering (Solid Mechanics, Fluid Mechanics, Coastal and Maritime Engineering, Engineering Design and Product Development, Manufacturing Engineering, Materials and Surface Engineering, Maritime Engineering and Thermal Energy)

DTU Wind Energy

from **Aalborg University:**

Department of Civil Engineering

Department of Mechanical and Manufacturing Engineering

from **Aarhus University**

Department of Engineering

I thank our international contacts for their support and inspiration.

Christian Niordson

CONTENTS

	page
1. Members 2012	3
2. Foreign members	3
3. Guests for extended periods in 2012	5
4. Publications	6
4a. International journals with peer review 2012	6
4b. Books	33
5. List of DCAMM S-reports (from no. S85)	34
6. Other Theses	39
7. DCAMM seminars given in 2012	42
 Appendix: List of members	 43

1. MEMBERS 2012

53 professors
161 scientific members at the six cooperating departments at the Center
192 PhD students

30 elected members
8 foreign members

(A complete list of names is given in the Appendix).

2. FOREIGN MEMBERS

Professor G.I. Barenblatt
Department of Mathematics
University of California, Berkeley
970 Evens Hall # 3840
Berkeley, CA 94720-3840
USA

Professor John W. Hutchinson
Division of Applied Sciences
Harvard University, 315 Pierce Hall
29 Oxford St.
Cambridge, MA 02138
USA

Professor Joseph B. Keller
Department of Mathematics and Mechanical Engineering
Stanford University, Stanford, California
USA

Professor Michael S. Longuet-Higgins
Department of Applied Mathematics and Theoretical Physics
University of Cambridge
UK

Professor Ole Secher Madsen
Ralph M. Parsons Laboratory
Massachusetts Institute of Technology
Cambridge, MA 02139
USA

Professor Alan Needleman
Department of Materials Science & Engng.
University of North Texas
1155 Union Circle
305310 Denton, TX 76203-5017
USA

Professor S. Nemat-Nasser
The UCSD Jacobs School of Engineering
Center of Excellence for Advanced Materials
4209 Engineering Building I
9500 Gilman Drive
La Jolla, CA 92093
USA

Professor Bertil Storåkers
Kungliga Tekniska Högskolan
S-100 44 Stockholm 9500
Sweden

3. GUESTS FOR EXTENDED PERIODS IN 2012 (more than a fortnight)

Guest professors & post docs:

Budzik, Michael, University of Bordeaux, France, 1.9.12 – 1.9.13

Fernandes, Frederico A.P., University San Carlos, Brazil, 1.5.12 – 31.12.13

Shimizu, Mazaru, BABCOCK – HITACHI, Japan, 1.7.12 – 31.12.12

Thompson, Mary Kathryn, KAIST, 1.3.12 – 31.8.12

Wadman, Bo, SWEREA, Göteborg, Sweden, Several periods 2012

PhD students

Al Naimi, Ihsan, University of Bagdadh, Iraque, 1.1.12 – 31.3.12

Becker, Sarah, Frankfurt Institute for Advanced Studies, Germany, 1.9.12 – 1.12.12

Clausen, Peter, FE Design, Germany, 1.11.12 – 9.12.12

Ghazi, Nastaran, Columbia University, USA, 15.4.12 – 19.5.12

Gheorghian, Adina, “Politehnica” Univ. of Bucharest, Romania, 4.9.12 – 22.12.12

Jansen, Miche, Leuven University, Belgium, 13.8.12 – 31.10.12

Yang, Zhiven, Dalian University of Technology, Sept. 2011 – Dec. 2012

4 . PUBLICATIONS IN 2012

4A. INTERNATIONAL JOURNALS WITH PEER REVIEW

Afshar, FN; Ambat, R.; Kwakernaak, C; de Wit, JHW; Mol, JMC; Terryn, H.
Electrochemical depth profiling of multilayer metallic structures: An aluminum brazing sheet. *Electrochimica Acta*, (2012) 77, 285-293.

Andersen, I.M.V

Wind loads on post-panamax containership.
Ocean Engineering, (2012) 58, 115-134.

Andersen, Lars Vabbersgaard; Vahdatirad, Mohammadjavad; Sichani, Mahdi Teimouri; Sørensen, John Dalsgaard

Natural Frequencies of Wind Turbines on Monopile Foundations in Clayey Soils : a probabilistic approach. *Computers and Geotechnics*, (2012) 43, 1-11.

Andersen, M.S.; Damsgaard, M.; Rasmussen, J.; Ramsey, D.K.; Benoit, D.L.
A Linear Soft Tissue Artefact Model for Human Movement Analysis: Proof of Concept using Vivo Data. *Gait & Posture*, (2012), 35(4), 606-611.

Ali, N.; Andersen, M.S.; Rasmussen, J.; Robertson, G.; Rouhi, G.
The Application of Musculoskeletal Modelling to investigate Gender bias in non-contact ACL injury rate during Single-leg Landings. *Computer Methods in Biomechanics and Biomedical Engineering*, (2012).

Eriksen, T.A.; Wieland, M.R.; Andersen, M.S.; Simonsen, E.B.; Rasmussen, J.
Computational modeling of a forward lunge: Towards a better understanding of the function of the cruciate ligaments. *Journal of Anatomy*, (2012), 221(6), 590-597.

Andersen, S.B.; Santos, I.

Evolution strategies and multi-objective optimization of permanent magnet motor. *Applied Soft Computing*, (2012), 12(2), 778-792.

Andersen, S.B.; Santos, IF; Fuerst, A.

Investigation of Model Simplification and Its Influence on the Accuracy in FEM Magnetic Calculations of Gearless Drives. *I E E Transactions on Magnetics*, (2012), 48(7), 2166-2177.

Joncquez, SA; Andersen, P.; Bingham, H.B.

A Comparison of Methods for Computing the Added Resistance. *Journal of Ship Research*, (2012), 56(2), 106-119.

Andkjær, J.A.; Mortensen, N.A.; Sigmund, O.

Towards all-dielectric, polarization-independent optical cloaks' *Applied Physics Letters*, (2012), 100(10), Paper 101106.

Otomori, M.; Yamada, T.; Izui, K.; Nishiwaki, S.; Andkjær, J.

A topology optimization method based on the level set method for the design of negative permeability dielectric metamaterials. *Computer Methods in Applied Mechanics and Engineering*, (2012), 237-240,192-211.

Andreasen, C.S.; Sigmund, O.

Multiscale modeling and topology optimization of poroelastic actuators' *Smart Materials and Structures*, (2012), 21(6), Paper 065005.

Andreasen, J.; Olesen, C.G.; Rasmussen, J.; Nielsen, S.K.; Nguyen, L.; Larsen, P.

Is a computer based measurement method superior to a recommended manual method by the ROHO® Group to assess pressure in the sitting position. *Australian Occupational Therapy Journal*, (2012).

Østergaard, N.H.; Lyckegaard, A.; Andreasen, J.H.

Imperfection analysis of flexible pipe armor wires in compression and bending. *Applied Ocean Research*, (2012), 38, 40-47.

Østergaard, N.H.; Lyckegaard, A.; Andreasen, J.H.

On modeling of lateral buckling failure in flexible pipe tensile armour layers. *Marine Structures*, (2012), 27(1), 64-81.

Azizi, R.

Micromechanical modeling of damage in periodic composites using strain gradient plasticity' *Engineering Fracture Mechanics*, (2012), 92, 101-113.

Bai, S.; Angeles, J.

A Robust Solution of the Spatial Burmester Problem. *Journal of Mechanisms and Robotics*, (2012), 4(3). Article no. 031003.1-1010.

Baran, I.; Tutum, C.C.; Hattel, J.H.

Optimization of the Thermosetting Pultrusion Process by Using Hybrid and Mixed Integer Genetic Algorithms. *Applied Composite Materials* (2012).

Baran, I.; Tutum, C.C.; Hattel, J.H.

Reliability Estimation of the Pultrusion Process Using the First-Order Reliability Method (FORM)' *Applied Composite Materials* (2012).

Eriksen, RS; Arentoft, M.; Grønbæk, J.; Bay, N.

Manufacture of functional surfaces through combined application of tool manufacturing processes and Robot Assisted Polishing. *C I R P Annals*, (2012), 61(1), 563-566.

Beelen, Peter; Leander, Gregor

A New Construction of Highly Nonlinear S-boxes. *Cryptography and Communications*, (2012), 4(1), 65-77.

Beelen, Peter; Ghorpade, S. R.; Hoholdt, T.

Duals of Affine Grassmann Codes and Their Relatives. *IEEE Transactions on Information Theory*, (2012), 58(6), 3843-3855.

Aref, H.; Beelen, Peter ; Brøns, Morten

Bilinear Relative Equilibria of Identical Point Vortices. *Journal of Nonlinear Science*, (2012), 22 (5), 849-885.

Bassa, Alp; Beelen, Peter

A Closed Form Expression for the Drinfeld Modular Polynomial $\Phi T(X, Y)$. *Archiv der Mathematik*, (2012), 99 (3), 237-245.

Moslemian, R.; Quispitupa, A.; Berggreen, C.; Hayman, B.

Failure of uniformly compression loaded debond damaged sandwich panels — An experimental and numerical study. *Journal of Sandwich Structures & Materials*, (2012), 14(3), 297-324.

Bihlet, U.; Dahl, K.V.; Somers, M.A.J.

Design and characterization of novel precipitation hardenable high Cr Ni-based superalloys' Risoe International Symposium on Materials Science. *Proceedings*, (2012), 33, 201-207.

Ducrozet, G.; Bingham, H.B.; Engsig-Karup, A.P; Bonnefoy, F.; Ferrant, P.

A comparative study of two fast nonlinear free-surface water wave models. *International Journal for Numerical Methods in Fluids*, (2012), 69, 1818-1834.

Delaney, K.D.; Bissacco, G.; Kennedy, D.

A Structured Review and Classification of Demolding Issues and Proven Solutions. *International Polymer Processing*, (2012), 27(1), 77-90.

Andreeva, Elena; Bogdanov, Andrey; Mennink, Bart; Preneel, Bart; Rechberger, Christian

On Security Arguments of The Second Round SHA-3 Candidates. *International Journal of Information Security*, (2012), 11(2), 103–120.

Brohus, Henrik; Frier, Christian; Heiselberg, Per; Haghightat, F.

Quantification of Uncertainty in Predicting Building Energy Consumption : a stochastic approach. *Energy and Buildings*, (2012), 55, 127–140.

Bruun, H.P.L; Mortensen, N.H.

Visual product architecture modelling for structuring data in a PLM system. *IFIP AICT - Advances in Information and Communication technology*, (2012), 388, 598-611.

Braestrup, M.W.

Eurocodes Applied to The Øresund Link between Denmark and Sweden. *Structural Engineering International*, (2012), 22 (2), 246-249.

Bøgh, S.; Hvilshøj, M.; Kristiansen, M.; Madsen, O.

Identifying and evaluating suitable tasks for autonomous industrial mobile manipulators (AIMM). *International Journal of Advanced Manufacturing Technology*, (2012), 61(5-8), 713-726.

Calaon, M.; Islam, A.; Hansen, H.N.; Ravn, C.

Experimental investigation of new manufacturing process chains to create micro-metal structures on polymer substrates for lab-on-chip sensors' International Journal of Advanced Manufacturing Technology, (2012), 59 (1-4), 101-109.

Eriksen, R.S.; Calaon, M.; Arentoft, M.; Bay, N.

Benchmarking of direct and indirect friction tests in micro forming. Key Engineering Materials, (2012), 504-506, 581-586.

Cerda, A.; Santos, I.

Stability Analysis of an Industrial Gas Compressor Supported by Tilting-Pad Bearings Under Different Lubrication Regimes' Journal of Engineering for Gas Turbines and Power, (2012), 134(2), 022504.

Christensen, Ole; M. Powell, Alexander; Chun Xiao, Xiang

A Note on Finite Dual Frame Pairs. American Mathematical Society. Proceedings, (2012), 140(11), 3921.

Christensen, Ole; Massopust, Peter.

Exponential B-splines and the Partition of Unity Property. Advances in Computational Mathematics, (2012), 37(3), 301-318.

Christensen, Ole; Kim, Hong Oh; Kim, Rae Young

Gabor Windows Supported on $(-1, 1)$ and Dual Windows with Small Support. Advances in Computational Mathematics, (2012), 36(4), 525-545.

Christensen, Ole; Goh, Say Song

Pairs of Dual Periodic Frames. Applied and Computational Harmonic Analysis, (2012), 33(3), 315-329.

Bownik, Marcin; Christensen, Ole; Huang, Xinli; Yu, Baiyun

Extension of Shift-Invariant Systems in $L_2(\mathbb{R})$ to Frames. Numerical Functional Analysis and Optimization, (2012), 33(7-9), 833-846.

Emarat, N.; Forehand, DIM; Christensen, E.D.; Greated, C.A.

Experimental and numerical investigation of the internal kinetics of a surf-zone plunging breaker. European Journal of Mechanics B - Fluids, (2012), 32, 1-16.

Vingaard, M.; Christiansen, J.C.

Sealing of polymer micro-structures by over-moulding. International journal of Advanced Manufacturing Technology, (2012), 61(1-4), 161-170.

Dubar, L.; Hubert, C.; Christiansen, P.; Bay, N.; Dubois, A.

Analysis of fluid lubrication mechanisms in metal forming at mesoscopic scale. C I R P Annals, (2012), 61(1), 271-274.

Krabbenhøft, Sven; Clausen, Johan; Damkilde, Lars

The Bearing Capacity of Circular Footings in Sand : Comparison between Model Tests and Numerical Simulations Based on a Nonlinear Mohr Failure Envelope. Advances in Civil Engineering, (2012), 2012.

Krabbenhøft, Sven; Damkilde, Lars; Krabbenhøft, Kristian
Lower-Bound Calculations of the Bearing Capacity of Eccentrically Loaded Footings in Cohesionless Soil. *Canadian Geotechnical Journal*, (2012), 49(3), 298-310.

Danielsen, H.K.; Hald, J.

Atomic resolution investigations of phase transformation from TaN to CrTaN in a steel matrix. *Materials Science Forum*, (2012), 706-709, 823-828.

Danielsen, H.K.; Hald, J.; Somers, M.A.J.

Atomic resolution imaging of precipitate transformation from cubic TaN to tetragonal CrTaN *Scripta Materialia*, (2012), 66(5), 261-264.

Darula, R.; Sorokin, S.

On non-linear dynamics of a coupled electro-mechanical system. *Nonlinear Dynamics*, (2012), 27(1), 979-998.

Søe-Knudsen, A.; Darula, R.; Sorokin, S.

Theoretical and experimental analysis of the stop-band behavior of elastic springs with periodically discontinuous of curvature. *Acoustical Society of America. Journal*, (2012), 132(3), 1378-1383.

Arámbula, K.; Siller, H.R.; De Chiffre, L.; Rodríguez, CA; Cantatore, A.

Evaluation of metrology technologies for free form surfaces' *International Journal of Metrology and Quality Engineering*, (2012), 3(1), 55.

Pilny, L.; De Chiffre, L.; Piska, M.; Villumsen, M.F.

Hole quality and burr reduction in drilling aluminium sheets. *C I R P - Journal of Manufacturing Science and Technology*, (2012), 5, 102-107.

Dolomanova, V.; Kumar, V.; Pyrz, R.; Madaleno, L.A.O.; Jensen, L.R.; Rauhe, J.C.M.

Fabrication of microcellular PP-MMT nanoceomposite foams in a subcritical CO₂ process. *Cellular Polymers*, (2012), 31(3), 125-144.

Drozdov, A.; Christiansen, J.C.; Sanporean, C-G.

Constitutive modeling of the viscoelastic and viscoplastic responses of metallocene catalyzed polypropylene. *Multidisciplinary Modelling in Materials and Structures*, (2012), 8(3), 380-402.

Drozdov, A.; Christiansen, J.C.

Cyclic viscoelastoplasticity of polypropylene/nanoclay composites. *Mechanics of Time Dependent Materials*, (2012), 16(4), 397-425.

Drozdov, A.; Christiansen, J.C.

Cyclic viscoelastoplasticity of polypropylene/nanoclay composites. *Computational Materials Science*, (2012), 53(1), 396-408.

Stribeck, N.; Zeinolebadi, A.; Ganjaee Sari, M.; Botta, S.; Jankova, K.; Hvilsted, S.; Drozdov, A.; Klitkou, R.; Potarniche, C-G.; Christiansen, J.C.

Properties and Semicrystalline Structure Evolution of Polypropylene/Montmorillonite Nanocomposites under Mechanical Load. *Macromolecules*, (2012), 45(2), 962-973.

Elesin, Y.; Lazarov, B.S.; Jensen, J.S.; Sigmund, O.

Design of robust and efficient photonic switches using topology optimization. *Photonics and Nanostructures*, (2012), 10(1), 153-165.

Evgrafov, Anton; Marhadi, Kun Saptohartyadi

Control in the Coefficients with Variational Crimes: Application to Topology Optimization of Kirchhoff Plates. *Computer Methods in Applied Mechanics and Engineering*, (2012), 237-240, 27-38.

Nguyen, D. M.; Evgrafov, Anton; Gravesen, Jens

Isogeometric Shape Optimization for Electromagnetic Scattering Problems. *Progress in Electromagnetics Research B*, (2012), 45, 117-146.

Kærgaard, K.H.; Fredsøe, J.; Knudsen, SB.

Coastline undulations on the West Coast of Denmark: Offshore extent, relation to breaker bars and transported sediment volume. *Coastal Engineering*, (2012), 60, 109-122.

Friis, K.S.; Sigmund, O.

Robust topology design of periodic grating surfaces. *Optical Society of America. Journal B: Optical Physics*, (2012), 29(10), 2935-2943.

Jacobsen, N.G.; Fuhrman, D.R.; Fredsøe, J.

A wave generation toolbox for the open-source CFD library: OpenFoam. *International Journal for Numerical Methods in Fluids*, (2012), 70 (9), 1073-1088.

Willatzen, M.; Pors, A.; Gravesen, Jens

Strong Curvature Effects in Neumann Wave Problems. *Journal of Mathematical Physics*, (2012), 53 (8), 083507.

Scappin, F.; Stefansson, S.H.; Haglund, F.; Andreassen, A.; Larsen, U.

Validation of a zero-dimensional model for prediction of NOx and engine performance for electronically controlled marine two-stroke diesel engines. *Applied Thermal Engineering*, (2012), 37, 344-352.

Aubry, Yves; Haloui, Safia; Lachaud, Gilles.

Sur le nombre de points rationnels des variétés abéliennes et des Jacobiennes sur les corps finis. *Academie des Sciences, Comptes Rendus, Mathematique*, (2012), 350 (19-20), 907-910.

Hansen, J.Z.; Poulsen, S.H.; Bagger, A.; Stang, H.; Olesen, J.F.

Embedded adhesive connection for laminated glass plates. *International Journal of Adhesion and Adhesives*, (2012), 34, 68-79

Hansen, J.Z.; Larsen, J.B.; Østergaard, RC; Brøndsted, P.

Methodology for characterisation of glass fibre composite architecture. *Plastics, Rubber & Composites*, (2012), 41(4/5), 187-193

Nwaogu, U.C.; Hansen, K.S.; Tiedje, N.S.
Design and production of a novel sand materials strength testing machine for foundry applications. *International Foundry Research*, (2012), 64 (2).

Politis, E.S.; Prospathopoulos, J.; Cabezon, D.; Hansen, K.S.; Chaviaropoulos, P.K.; Barthelmie, R.J.
Modeling wake effects in large wind farms in complex terrain: the problem, the methods and the issues. *Wind Energy*, (2012), 15(1), 161-182.

Aagaard Madsen, H.; Riziotis, V.; Zahle, F.; Hansen, M.O.L.; Snel, H.; Grasso, F.; Larsen, T.J.; Politis, E.; Rasmussen, F.
Blade element momentum modeling of inflow with shear in comparison with advanced model results. *Wind Energy*, (2012), 15(1), 63-81.

Hattel, J.H.; Nielsen, K.L.; Tutum, C.C.
The effect of post-welding conditions in friction stir welds: From weld simulation to Ductile Failure. *European Journal of Mechanics A - Solids*, (2012), 33, 67-74.

Schmidt Paulsen, U.; Vita, L., Aagaard Madsen , H.; Hattel, J.H.; Ritchie, E.; Leban, K.M.; Berthelsen, P.A.; Carstensen, S.
1st DeepWind 5 MW Baseline design. *Energy Procedia*, (2012), 24, 27-35.

Hauksdóttir, D.; Mortensen, N.H.; Nielsen, P.E.
Identification of a Reusable Requirement Structure for Embedded Products in a Dynamic Market Environment. *Computers in Industry* (2012).

Boyd, Suzanne Hruska; Henriksen, Christian
The Medusa Algorithm for Polynomial Matings. *Conformal Geometry and Dynamics*, (2012), 16, 161-183.

Cybulski, Hubert; Fernandez, Berta; Henriksen, Christian; Felker, Peter M.
Ab Initio Ground State Phenylacetylene-argon Intermolecular Potential Energy Surface and Rovibrational Spectrum. *Journal of Chemical Physics*, (2012), 137(7).

Hiller, J.; Maisl, M.; Reindl, L.M.
Physical characterization and performance evaluation of an x-ray micro-computed tomography system for dimensional metrology applications. *Measurement Science and Technology*, (2012), 23(8), 085404.

Hiller, J.; Reindl, L.M.
A computer simulation platform for the estimation of measurement uncertainties in dimensional X-ray computed tomography. *Measurement* (2012), 2166-2182.

Corradi, Olivier; Hjorth, Poul G.; Starke, Jens
Equation-Free Detection and Continuation of a Hopf Bifurcation Point in a Particle Model of Pedestrian Flow. *S I A M Journal on Applied Dynamical Systems*, (2012), 11(3), 1007-1032.

Carotenuto, G.; De Nicola, S.; Palomba, M.; Pullini, D.; Horsewell, A.; Hansen, T.W.; Nicolais, L. Mechanical properties of low-density polyethylene filled by graphite nanoplatelets. *Nanotechnology*, (2012), 23(48), 485705.

Horn, A.F.; Nielsen, N.S.; Jensen, L.H.S.; Horsewell, A.; Jacobsen, C. The choice of homogenisation equipment affects lipid oxidation in emulsions. *Food Chemistry*, (2012), 134(2), 803-810.

Horn, A.F.; Green-Petersen, D.; Nielsen, N.S.; Andersen, U.; Hyldig, G.; Jensen, L.H.S.; Horsewell, A.; Jacobsen, C. Addition of Fish Oil to Cream Cheese Affects Lipid Oxidation, Sensory Stability and Microstructure. *Agriculture*, (2012), (2), 359-375.

Hosseinzadeh, E.; Taherian, H. An Experimental and Analytical Study of a Radiative Cooling System with Unglazed Flat Plate Collectors. *International Journal of Green Energy*, (2012), 9, 766-779.

Ball, A.; Darlington, M.; Howard, T.J.; McMahon, C.; Culley, S. Visualizing Research Data Records for their Better Management' *Journal of Digital Information*, (2012), 13(1).

Leong, M.K.; Hvejsel, C.F.; Thomsen, O.T.; Lund, E.; I.M. Daniel. Fatigue failure of sandwich beams with face sheet wrinkle defects. *Composites Science and Technology*, (2012), 72(13), 1539-1547.

Hvilshøj, M.; Bøgh, S.; Nielsen, O.S., Madsen, O. Autonomous Industrial Mobile Manipulation (AIMM): Past, present and future. *Industrial Robot*, (2012), 39(2), 120-135.

Hvilshøj, M.; Bøgh, S.; Nielsen, O.S., Madsen, O. Multiple part feeding: Real-world application for mobile manipulators. *Assembly Automation*, (2012), 32(1), 62-71.

Jørgensen, S.N.; Hvilshøj, M.; Madsen, O. Designing modular manufacturing systems using mass customisation theories and methods. *International Journal of Mass Customisation*, (2012), 4(3/4), 171-194.

Høgsberg, J.; Krenk, S. Balanced calibration of resonant shunt circuits for piezoelectric vibration control. *Journal of Intelligent Material Systems and Structures*, (2012), 23(17), 1937-1948.

Høholdt, Tom; Janwa, Heeralal. Eigenvalues and Expansion of Bipartite Graphs. *Designs, Codes and Cryptography*, (2012), 65(3), 259-273.

Hernando, Fernando; Høholdt, Tom; Ruano, Diego. List Decoding of Matrix-Product Codes from Nested Codes: An Application to Quasi-Cyclic Codes. *Advances of Mathematics in Communication*, (2012), 6/3, 259-272.

Ibsen, Lars Bo; Barari, Amin; Larsen, Kim André
Modified Vertical Bearing Capacity for Circular Foundations in Sand Using Reduced Friction Angle. *Ocean Engineering*, (2012), 47, 1-6.

Barari, Amin; Ibsen, Lars Bo
Undrained Response of Bucket Foundations to Moment Loading. *Applied Ocean Research*, (2012), 36, 12-21.

Barari, Amin; Rahimi, M; Hosseini, M.J; Ibsen, Lars Bo
Application of the DTM to Nonlinear Cases Arising in Fluid Flows with Variable Viscosity. *Acta Physica Polonica. Series A: General Physics, Physics of Condensed Matter, Optics and Quantum Electronics, Atomic and Molecular Physics, Applied Physics*, (2012), 122(1), 96-102.

Ganji, S.; Barari, Amin; Ibsen, Lars Bo; Domairry, G.
Differential Transform Method for Mathematical Modeling of Jamming Transition Problem in Traffic Congestion Flow. *Central European Journal of Operations Research*, (2012), 20(1), 87-100.

Karimpour, S; Ganji, S.S; Barari, Amin; Ibsen, Lars Bo; Domairry, G.
Nonlinear Vibration of an Elastically Restrained Tapered Beam. *Science China Physics, Mechanics & Astronomy*, (2012), 55(10), 1925-1930.

Islam, A.; Hansen, H.N.; Marhöfer, D.M.; Angel, J.A.B.; Dormann, B.; Bondo, M.
Two-component micro injection moulding for hearing aid applications' *International Journal of Advanced Manufacturing Technology*, (2012), 62(5-8), 605-615.

Jabbari, M.; Davami, P.; Varahram, N.
Numerical modeling and experimental validation of microstructure in gray cast iron. *International Journal of Minerals Metallurgy and Materials*, (2012), 19(10), 908-914.

Fardi Ilkhchy, A.; Jabbari, M.; Davami, P.
Effect of pressure on heat transfer coefficient at the metal/mold interface of A356 aluminum alloy. *International Communications in Heat and Mass Transfer*, (2012), 39(5), 705-712.

Friis, U.F.; Menné, T.; Jellesen, M.S.; Møller, P.; Verdingovas, V.; Jensen, TR; Thyssen, JP; Johansen, JD.
Allergic nickel dermatitis caused by playing the guitar: case report and assessment of nickel release from guitar strings. *Contact Dermatitis*, (2012), 67(2), 101-103.

Jensen, P.; Jellesen, M.S.; Møller, P.; Johansen, J.D.; Liden, C.; Menne, T.; Thyssen, J.P.
Nickel may be released from laptop computers. *Contact Dermatitis*, (2012), 67(6), 384-385.

Rathinavelu, U.; Jellesen, M.S.; Møller, P.; Ambat, R.
Effect of No-Clean Flux Residues on the Performance of Acrylic Conformal Coating in Aggressive Environments. *I E E E Transactions on Components, Packaging and Manufacturing Technology*, (2012), 2(4), 719-728.

- Thyssen, J.P.; Johansen, J.D.; Jellesen, M.S.; Menné, T.
Cobalt spot test used for diagnosis of occupationally-related exposure to cobalt-containing powder. *Contact Dermatitis*, (2012), 66(4), 228-229.
- Thyssen, J.P.; Menne, T.; Liden, C.; Julander, A.; Jensen, P.; Jakobsen, S.S.; Søballe, K.; Gotfredsen, K.; Jellesen, M.S.; Johansen, J.D.
Cobalt release from implants and consumer items and characteristics of cobalt sensitized patients with dermatitis. *Contact Dermatitis*, (2012), 66(3), 113-122.
- Kook, J.; Koo, K.; Hyun, J.; Jensen, J.S.; Wang, S
Acoustical topology optimization for Zwicker's loudness model - Application to noise barriers. *Computer Methods in Applied Mechanics and Engineering*, (2012), 237-240, 130-151.
- Yaya, A.; Ewels, C.P.; Wagner, P.; Suarez-Martinez, I.; Gebramariam Tekley, A.; Jensen, L.R.
Purification of single-walled carbon nanotubes. *European Physical Journal – Applied Physics*, (2012), 54(1).
- Kimiaefar, A.; Mahdavi, H.; Rabbani, A.; Domairry, D.
Application of Lagrange-HAM to find an Analytical solution for Nonlinear Problems in Dynamics. *Journal of Applied Mathematics and Mechanics* (2012)
- Kimiaefar, A.; Lund, E.; Thomsen, O.T.
Series solution for large deflections of a cantilever beam with variable flexural rigidity. *Meccanica*, (2012),47(7), 1787-1796.
- Kimiaefar, Amin; Toft, Henrik Stensgaard; Lund, Erik; Thomsen, Ole Thybo; Sørensen, John Dalsgaard
Reliability Analysis of Adhesive Bonded Scarf Joints. *Engineering Structures*, (2012), 35, 281-287.
- Ansari, A.; Rokni, E.; Kimiaefar, A.; Fouladi, M.
Approximate analytical solution for Boundary conditions with non-linear Winkler type foundation. *Journal of Theoretical and Applied Mechanics*. (2012).
- Barariejad, A.; Kimiaefar, A.; Nejad, M.G.; Motevalli, M.; Sfahani, G.
A Closed form Solution for Nonlinear Oscillators' Frequencies Using Amplitude-Frequency. Formulation. *Shock and Vibration*, (2012), 19(6), 1415-1426.
- Mahdavi, S.H.; Mansouri, S.H.; Kimiaefar, A.
Effects of using smart fluid in lubrication on skirt-liner friction. *Industrial Lubrication & Tribology*, (2012), 64(2), 90-97.
- Mehdipour, I. Barari, A.; Kimiaefar, A.; Domairry, G.
Vibrational Analysis of Curved Single-Walled Carbon Nanotube on a Pasternak Elastic Foundation, (2012), 48, 1-55.

Shadloo, M.S.; Kimiaefar, A.; Bagheri, D.
Series solution for heat transfer of continuous stretching sheet immersed in a micropolar fluid in the existence of radiation. International Journal of Numerical Methods for Heat and Fluid Flow, (2012).

Sohouli; A.R.; Kimiaefar, A.; Mohsenzadeh, A.; Mohebpour, S.R.
Large deformation analysis of Euler-Bernoulli beamshell under own weight based on HAM. Central European Journal of Engineering, (2012), 2(1), 146-153.

Thomsen, K.; Klit, P.
Geometrical design parameters for journal bearings with flexure pads and compliant liners Institution of Mechanical Engineers. Proceedings. Part J: Journal of Engineering Tribology, (2012), 226(4), 274-283.

Thomsen, K.; Klit, P.
Improvement of journal bearing operation at heavy misalignment using bearing flexibility and compliant liners. Institution of Mechanical Engineers. Proceedings. Part J: Journal of Engineering Tribology, (2012), 226(8), 651-660.

Klitkou, R.; Jensen, E.A.; Christiansen, J.C.
Effect of Multiple Extrusions on the Impact Properties of Polypropylene/Clay Nanocomposites. Journal of Applied Polymer Science (2012), 126(2), 620-630.

Zhang, Lai; Thygesen, Uffe Høgsbro; Knudsen, Kim; Andersen, Ken Haste
Trait Diversity Promotes Stability of Community Dynamics. Theoretical Ecology (2012).

Bagheri, Nasour; Gauravaram, Praveen; Knudsen, Lars R.; Zenner, Erik
The Suffix-Free-Prefix-Free Hash Function Construction and its Indifferentiability Security Analysis. International Journal of Information Security, (2012), 11(6), 419-434.

Gauravaram, Praveen; Knudsen, Lars Ramkilde
Security Analysis of Randomize-Hash-then-Sign Digital Signatures. Journal of Cryptology, (2012), 25 (4), 748-779.

Bellare, M.; Boldyreva, A.; Knudsen, Lars Ramkilde; Namprempre, C.
On-line Ciphers and the Hash-CBC Constructions. Journal of Cryptology, (2012), 25(4), 640-679.

Kotas, P.; Tutum, C.C.; Thorborg, J.; Hattel, J.H.
Elimination of Hot Tears in Steel Castings by Means of Solidification Pattern Optimization. Metallurgical and Materials Transactions B - Process Metallurgy and Materials Processing Science, (2012), 43(3), 609-626.

Kotas, P.; Hattel, J.H.
Modelling and simulation of A-segregates in steel castings using a thermal criterion function: Part I - Background and validation. Materials Science and Technology, (2012), 28(7), 872-878.

Krenk, S.

Dynamic Response to Pedestrian Loads with Statistical Frequency Distribution. *Journal of Engineering Mechanics*, (2012), 138, 1275-1281.

Krenk, S.; Svendsen, M.N.; Høgsberg, J.B.

Resonant vibration control of three-bladed wind turbine rotors. *A I A A Journal*, (2012), 50(1), 148-161.

Krenk, S.; Nielsen, M.B.

Hybrid state-space time integration of rotating beams. *Computer Methods in Applied Mechanics and Engineering*, (2012), 213-216, 243-254.

Kristensen, H.O.H.

Model for Environmental Assessment of Container Ship Transport. *Society of Naval Architects and Marine Engineers. Transactions*, (2012), 118, 122-139.

Kristensen, H.O.H.

Back to basics. *Naval Architect* (2012), 32-34.

Kristiansen, Kristian Uldall; Palmer, P. L.; Roberts, R. M.

Numerical Modelling of Elastic Space Tethers. *Celestial Mechanics and Dynamical Astronomy*, (2012), 113 (2), 235-254.

Kristiansen, Kristian Uldall; Palmer, P.; Robert, M.

The Persistence of a Slow Manifold with Bifurcation. *S I A M Journal on Applied Dynamical Systems*, (2012), 11(2), 661-683.

Kristiansen, Kristian Uldall; Vereshchagin, M.; Gózdziwski, K.; Palmer, P.L.; Roberts, R.M.

The Two-Body Problem of a Pseudo-Rigid Body and a Rigid Sphere. *Celestial Mechanics and Dynamical Astronomy*, (2012), 112, 169-190.

Lahriri, S.; Weber, H.I.; Santos, I.F.; Hartmann, H.

Rotor-stator contact dynamics using a non-ideal drive: Theoretical and experimental aspects. *Journal of Sound and Vibration*, (2012), 331(20), 4518-4536.

Lahriri, S.; Santos, I.F.; Weber, H.I.; Hartmann, H.

On the nonlinear dynamics of two types of backup bearings - Theoretical and experimental aspects. *Journal of Engineering for Gas Turbines and Power*, (2012), 134(11), Paper 112503.

Langer, T.H.; Iversen, T.K.; Andersen, N.K.; Mouritsen, O.Ø.; Hansen, M.R.

Reducing whole-body vibration exposure in backhoe loaders by education of operators. *International Journal of Industrial Ergonomics*, (2012), 42(3), 304-311.

Larsen, P.S.; Riisgård, HU.

Validation of the flow-through chamber (FTC) and steady-state (SS) methods for clearance rate measurements in bivalves. *Biology Open*, (2012), 1(1), 6-11.

Riisgard, H.U.; Lundgreen, K.; Larsen, P.S.
Field data and growth model for mussels *Mytilus edulis* in Danish waters' Marine Biology Research, (2012), 8(8), 683-700.

Lazarov, B.S.; Schevenels, M; Sigmund, O.
Topology optimization with geometric uncertainties by perturbation techniques. International Journal for Numerical Methods in Engineering, (2012), 90(11), 1321-1336.

Lazarov, B.S.; Schevenels, M; Sigmund, O.
Topology optimization considering material and geometric uncertainties using stochastic collocation methods. Structural and Multidisciplinary Optimization, (2012), 46(4), 597-612.

Bownik, Marcin; Lemvig, Jakob
Oversampling of Wavelet Frames for Real Dilations. London Mathematical Society. Journal, (2012), 85(3), 765-788.

Krahmer, Felix; Kutyniok, Gitta; Lemvig, Jakob
Sparsity and Spectral Properties of Dual Frames. Linear Algebra and its Applications, 2012.

Kutyniok, Gitta; Lim, Wang-Q.; Lemvig, Jakob
Optimally Sparse Approximations of 3D functions by Compactly Supported Shearlet Frames. S I A M Journal on Mathematical Analysis, (2012), 44(4), 2962-3017.

Lindgren, P.
Business Model Innovation Leadership: How do SME's Strategically Lead Business Model Innovation. International Journal of Business and Management, (2012), 7(14), 53-66.

Lindgren, P.; Jørgensen, R.
Towards a Multi Business Model Innovation Model. Journal of Multi Business Model Innovation and Technology, (2012), 1(1), 1-22.

Lindgren, P.; Rasmussen, O.H.
Business Model Innovation Leadership. Journal of Multi Business Model Innovation and Technology, (2012), 1(1), 53-69.

Lindgren, P.; Rasmussen, O.H.; Poulsen, H.; Li, M-S.; Hinchley, A.; Martin, A.; Juan Fernandez Garcia, J.; Korsbæk Andersen, T.; Vesterby, M.; Einterø, T; Lisby, K.
Open Business Model Innovation in Healthcare Sector. Journal of Multi Business Model Innovation and Technology, (2012), 1(1), 23-52.

Lomholt, T.C.; Adachi, Y.; Peterson, J.; Steel, R.; Pantleon, K.; Somers, M.A.J.
Microstructure characterization of Friction Stir Spot Welded TRIP steel. Advanced Materials Research, (2012), 409(275-280), 275-280.

Ma, J.; Iftekharul Haque, R.; Larsen, M.

Crystallization and mechanical properties of functionalized single-walled carbon nanotubes/polyvinylidene fluoride composites. *Journal of Reinforced Plastics & Composites*, (2012), 31(21), 1417-1425.

Madaleno, L.A.O.; Pyrz, R.; Jensen, L.R.; Pinto, J.J.C.; Lopez, A.B.; Dolomanova, V.; Schjødt-Thomsen, J.; Rauhe, J.C.M.

Synthesis and characterization of montmorillonite-carbon nanotubes hybrid fillers for nanocomposites. *Polymers and Polymer Composites*, (2012), 20(8), 593-700.

Madaleno, L.; Pyrz, R.; Jensen, L.R.; Pinto, J.J.C.; Lopez, A.B.; Dolomanova, V.; Schjødt-Thomsen, J.; Rauhe, J.C.M.

Synthesis of clay-carbon nanotube hybrids. Growth of carbon nanotubes in different types of iron modified montmorillonite. *Composites Science and Technology*, (2012), 72(3), 377-381.

Rask, M.; Madsen, B.; Sørensen, B.F.; Fife, J.L.; Martyniuk, K.; Lauridsen, E.M.

In situ observations of microscale damage evolution in unidirectional natural fibre composites. *Composites Part A: Applied Science and Manufacturing*, (2012), 43(10), 1639-1649.

Madsen, P.A.; Hansen, A.B.

Transient waves generated by a moving bottom obstacle: a new near-field solution. *Journal of Fluid Mechanics*, (2012), 697, 237-272.

Madsen, P.A.; Fuhrman, D.R.

Third-order theory for multi-directional irregular waves. *Journal of Fluid Mechanics*, (2012), 698, 304-334.

Manca, M.; Quispitupa, A.; Berggreen, C.; Carlsson, L.A.

Face/core debond fatigue crack growth characterization using the sandwich mixed mode bending specimen. *Composites Part A: Applied Science and Manufacturing*, (2012), 43 (11), 2120-2127.

Achiche, S.; Howard, T.J.; McAloone, T.C.; Baron, L.

Investigating features influence in fuzzy modelling of mass perception of non-functional 3D CAD forms. *International Journal of Product Development*, (2012), 16(2), 112-139.

Poulsen, S.B.; Jensen, L.F.; Schulz, C.; Deacon, M.; Meyer, K.E.; Jäger-Kleinicke, T.; Schwarten, H. & Svendsen, J.C.

Ontogenetic differentiation of swimming performance and behaviour in relation to habitat availability in the endangered North Sea houting (*Coregonus oxyrinchus*). *Aquatic Living Resources*, (2012), 25(3), 241-249.

Oddershede, J.; Camin, B.; Schmidt, S.; Mikkelsen, L.P.; Sørensen, H.O.; Lienert, U.; Poulsen, H.F.; Reimers, W.

Measuring the stress field around an evolving crack in tensile deformed Mg AZ31 using three-dimensional X-ray diffraction. *Acta Materialia*, (2012), 60, 3570-3580.

Mishnaevsky Jr, L.

Micromechanical analysis of nanocomposites using 3D voxel based material model. Composites Science & Technology, (2012), 72, 1167-1177.

Mishnaevsky Jr, L.

Micromechanics of hierarchical materials: a brief overview, Reviews on Advanced Materials Science, (2012), 30, 60-72.

Mishnaevsky Jr., L.; Brøndsted, P.; Nijssen, D.J. Lekou; Philippidis

Materials of large wind turbine blades: Recent results in testing and modeling. Wind Energy, (2012), 15(1), 83-97.

Peng, R.D.; Zhou, H.W.; Wang, H.W.; Mishnaevsky Jr, L.

Modeling of nano-reinforced polymer composites: Microstructure effect on the Young's modulus. Computational Materials Science, (2012), 60, 19-31.

Bundgaard, K.; Nielsen, K.B.; Sørensen, E.E.; Delmar, C.

The best way possible! A fieldwork study outlining patients' expectations and need for nursing care in an endoscopic facility for short-term stay. Journal of Advanced Practice Nursing, (2012).

Haug, A.; Hvam, L.; Mortensen, N.H.

Definition and evaluation of product configurator development strategies. Computers in Industry, (2012), 63 (5), 471-481.

Haastrup, M.; Hansen, M.R.; Ebbsen, M.K.; Mouritsen, O.Ø.

Modeling and Parameter Identification of Deflections in Planetary Stage of Wind Turbine Gearbox. Modeling, Identification and Control (Online Edition) , (2012), 33(1), 1-11.

Kabus, S.; Hansen, M.R.; Mouritsen, O.Ø.

A new Quasi Static Cylindrical Roller Bearing Model to Accurately Consider Non-hertzian Contact Pressure in Time Domain Simulations. Journal of Tribology, (2012), 132(4).

Sørensen, S.E., Hansen, M.R.; Ebbesen, M.K.; Mouritsen, O.Ø.

Enhanced chain dynamics in loop-sorting-systems by means of layout optimization and a kinematic model of the polygon action. Structural and Multidisciplinary Optimization, (2012), 45(6), 907-916.

Müller, P.; Genta, G.; Barbato, G.; De Chiffre, L.; Levi, R.

Reaming process improvement and control: An application of statistical engineering. C I R P - Journal of Manufacturing Science and Technology, (2012), 5(3), 196-201.

Müller, P.; Cantatore, A.; Andreasen, J.L.; Hiller, J.; De Chiffre, L.

Computed tomography as a tool for tolerance verification of industrial parts. Procedia Engineering.

Müller, P.; Hiller, J.; Cantatore, A.; De Chiffre, L.

A study on evaluation strategies in dimensional X-ray computed tomography by

estimation of measurement uncertainties. *International Journal of Metrology and Quality Engineering*, (2012), 3(2), 107-115.

Ashokkumar, S.; Adler-Nissen, J.; Møller, P.
Factors affecting the wettability of different surface materials with vegetable oil at high temperatures and its relation to cleanability. *Applied Surface Science*, (2012), 263, 86-94.

Jariyaboon, M.; Møller, P.; Ambat, R.
Effect of pressurized steam on AA1050 aluminium' *Anti-Corrosion Methods and Materials*, (2012), 59(3), 103-109.

Needleman, A.; Tvergaard, V.; Bouchaud, E.
Prediction of Ductile Fracture Surface Roughness Scaling. *Journal of Applied Mechanics*, (2012), 79(3), Paper 031015.

Nielsen, C.V.; Legarth, B.N.; Niordson, C.F.
Extended FEM modeling of crack paths near inclusions. *International Journal for Numerical Methods in Engineering*, (2012), 89, 786-804.

Bundgaard, K.; Nielsen, K.B.; Delmar, C.; Sørensen, E.E.
What to know and how to get to know? A fieldwork study outlining the understanding of knowing the patient in facilities for short-term stay. *Journal of Advanced Nursing*, (2012).

Nielsen, K.L.; Niordson, C.F.
Rate sensitivity of mixed mode interface toughness of dissimilar metallic materials: Studied at steady state. *International Journal of Solids and Structures*, (2012), 4(3-4), 576-583.

Nielsen, K.L.; Hutchinson, J.W.
Cohesive traction–separation laws for tearing of ductile metal plates. *International Journal of Impact Engineering*, (2012), 48, 15-23.

Nielsen, K.L.; Dahl, J.; Tvergaard, V.
Collapse and coalescence of spherical voids subject to intense shearing: studied in full 3D. *International Journal of Fracture*, (2012), 177(2), 97-108.

Nielsen, K.L.; Niordson, C.F.; Hutchinson, J.W.
Strain gradient effects on steady state crack growth in rate-sensitive materials. *Engineering Fracture Mechanics*, (2012), 96, 61-71.

Dahl, J.; Nielsen, K.L.; Tvergaard, V.
Effect of Contact Conditions on Void Coalescence at Low Stress Triaxiality Shearing. *Journal of Applied Mechanics*, (2012), 79(2), 021003.

Nielsen, M.B.; Krenk, S.
Conservative integration of rigid body motion by quaternion parameters with implicit constraints. *International Journal for Numerical Methods in Engineering*, (2012), 92(8), 734-752.

Nielsen, M.W.; Schmidt, J.W.; Hattel, J.H.; Løgstrup Andersen, T.; Markussen, C.M.
In situ measurement using FBGs of process-induced strains during curing of thick glass/epoxy laminate plate: experimental results and numerical modeling. *Wind Energy* (2012).

Staino, A.; Basu, B.; Nielsen, Søren R.K.
Actuator Control of Edgewise Vibrations in Wind Turbine Blades. *Journal of Sound and Vibration*, (2012), 331(6), 1233-1256.

Pedersen, Ronnie; Nielsen, Søren R.K.; Thoft-Christensen, Palle
Stochastic Analysis of the Influence of Tower Shadow on Fatigue Life of Wind Turbine Blade. *Structural Safety*, (2012), 35, 63-71.

Nielsen, U.D.; Stredulinsky, D.C.
Sea state estimation from an advancing ship – A comparative study using sea trial data. *Applied Ocean Research*, (2012), 34, 33-44.

Nielsen, U.D.; Lajic, Z.; Jensen, J.J.
Towards fault-tolerant decision support systems for ship operator guidance. *Reliability Engineering & System Safety*, (2012), 104, 1-14.

Okulov, V.L.; van Kuik, G.A.M.
The Betz–Joukowski limit: on the contribution to rotor aerodynamics by the British, German and Russian scientific schools. *Wind Energy*, (2012), 15(2), 335-344.

Naumov, I.V.; Rahmanov, V.V.; Okulov, V.; Velte, C.M.; Meyer, K.E.; Mikkelsen, R.F.
Flow diagnostics downstream of a tribladed rotor model. *Thermophysics and Aeromechanics*, (2012), 19(2), 171-181.

Olhoff, N.; Du, J.
Topological Design for Minimum Dynamic Compliance of Continuum Structures Subjected to Forced Vibration. *Structural and Multidisciplinary Optimization*, (2012).

Olhoff, N.; Niu, B.; Cheng, G.
Optimum design of band-gap beam structures. *International Journal of Solids and Structures*, (2012), 49(22), 3168-3169.

Omidvarnia, F.; Islam, A.; Hansen, H.N.; Olsen, S.I.
A comparative study on life cycle assessment of micro and macro components. *International Journal of Advanced Manufacturing Technology* (2012).

Ommen, T.; Elmegaard, B.
Numerical model for thermoeconomic diagnosis in commercial transcritical/subcritical booster refrigeration systems. *Energy Conversion and Management*, (2012), 60, Special issue, 161-169.

Oshkovr, S.A.; Taher, S.T.; A. Eshkoo, R.; Ariffin, A.K.; Azhari, C.H.
Energy absorption and failure response of silk/epoxy composite square tubes:
Experimental, Composites Part B: Engineering, 43(2), 542-548.

Pantleon, K.; Montgomery, M.
Phase Identification and Internal Stress Analysis of Steamside Oxides on Plant
Exposed Superheater Tubes. Metallurgical and Materials Transactions A - Physical
Metallurgy and Materials Science, (2012), 43A(5), 1477-1486.

Alimadadi, H, da Silva Fanta, A.B. & Pantleon, K.
High-resolution orientation imaging of nano-twins. Risoe International Symposium
on Materials Science. Proceedings, (2012), 33, 175-180.

Csiszár, G.; Pantleon, K.; Alimadadi, H.; Ribárik, G.; Ungár, T.
Dislocation density and Burgers vector population in fiber-textured Ni thin films
determined by high-resolution X-ray line profile analysis. Journal of Applied
Crystallography, (2012), 45(1), 61-70.

Villa, M.; Grumsen, F.B.; Pantleon, K.; Somers, M.A.J.
Martensitic transformation and stress partitioning in a high-carbon steel. Scripta
Materialia, (2012), 67(6), 621-624.

Pantleon, W.
Disorientations and work-hardening behaviour during severe plastic deformation.
Risoe International Symposium on Materials Science. Proceedings, (2012), 33, 331-
336.

Zhang, Z.; Mishin, O.; Pantleon, W.
Compression behavior of a ferritic-martensitic Cr-Mo steel. Risoe International
Symposium on Materials Science. Proceedings, (2012), 33, 423-430.

Ling, Zhi; Lin, Zhigui; Pedersen, Michael
Global Existence and Blowup for a Parabolic Equation with a Non-Local Source and
Absorption. Acta Applicandae Mathematicae (2012).

Pedersen, P.; Pedersen, N.L.
Interpolation/penalization applied for strength design of 3D thermoelastic structures.
Structural and Multidisciplinary Optimization, (2012), 45(6), 773-786.

Mansour, A.E.; Pedersen, P.T.; Paik, J.K.
Wave energy extraction using decommissioned ships. Ships and Offshore Structures
(2012), 1-13.

Potarniche, C-G.; Vuluga, Z.; Donescu, D.: Christiansen, J.C.; eugeniu, V.; Radovici,
C.; Serban, S.; Ghiurea, M.; Somoghe, R.; Beckmann, S.
Morphology study of layered silicate/chitosan nanohybrids. Surface and Interface
Analysis, (2012), 44(2), 200-207.

Pyrz, R.

Montmorillonite nanocomposites – revisited. *Composites Science and Technology*, (2012).

Rasmussen, H.K.; Hassager, O.

Reply to On the “viscosity overshoot” during the uniaxial extension of a low density polyethylene. *Journal of Non-Newtonian Fluid Mechanics*, (2012), 171-172, 106.

Bao, H.; Nielsen, K.; Rasmussen, H.K.; Jepsen, PU; Bang, O.

Fabrication and characterization of porous-core honeycomb bandgap THz fibers. *Optics Express*, (2012), 20(28), 29507-29517.

Hassager, O.; Mortensen, K.; Bach, A.; Almdal, K.; Rasmussen, H.K.; Pyckhout-Hintzen, W.

Stress and neutron scattering measurements on linear polymer melts undergoing steady elongational flow. *Rheologica Acta*, (2012), 51(5), 385-394.

Huang, Q.; Rasmussen, H.K.; , Skov, A.L.; Hassager, O.

Stress relaxation and reversed flow of low-density polyethylene melts following uniaxial extension. *Journal of Rheology*, (2012), 56(6), 1535-1554.

Stefani, A.; Yuan, W.; Markos, C.; Rasmussen, H.K.; Andresen, S.; Guastavino, R.; Nielsen, F.K.; Rose, B.; Jespersen, O.; Herholdt-Rasmussen, N.; Bang, O.

Temperature compensated, humidity insensitive, high-Tg TOPAS FBGs for accelerometers and microphones. *Proceedings of SPIE, the International Society for Optical Engineering*, (2012), 8421 (2012), 84210Y.

Stefani, A.; Nielsen, K.; Rasmussen, H.K.; Bang, O.

Cleaving of TOPAS and PMMA microstructured polymer optical fibers: Core-shift and statistical quality optimization. *Optics Communications*, (2012), 285(7), 1825-1833.

Yu, K.; Rasmussen, H.K.; Román Marín, JM; Hassager, O.

Mechanism of spontaneous hole formation in thin polymeric films. *Physical Review B (Condensed Matter and Materials Physics)*, (2012), 85, 024201.

Rasmussen, J.; Boocock, M.; Paul, G.

Advanced musculoskeletal simulation as an ergonomic design method. *Work* 41, SUPPL. 1 (2012), 6107-6111.

Rasmussen, J.; Holmberg, L.J.; Sørensen, K.; Kwan, M.M.S.; Andersen, M.S.; de Zee, M

Performance optimization by musculoskeletal simulation. *Science & Motricite*, (2012), 1(75), 73-83.

D'Souza, S.; Rasmussen, J.; Schwirtz, A.

Multiple linear regression to develop strength scaled equations for knee and elbow joints based on age, gender and segment mass. *International Journal of Human Factors Modelling and Simulation*, (2012), 3(1), 32-47.

Ribeiro, A.; Rasmussen, J.; Flores, P.; Silva, L.F.

Modeling of the condyle elements within a biomechanical knee model. *Multibody System Dynamics*, (2012), 28(1-2), 181-197.

Zhang, L.; Ferreira, J.M.F.; Olhero, S.; Courtois, L.; Zhang, T.; Maire, E.; Rauhe, J.C.M.M.

Modeling the mechanical properties of optimally processed cordierite-mullite-alumina ceramic foams by X-ray computed tomography and fine element analysis. *Acta Materialia*, (2012), 60(10), 4235-4246.

Rokni, M.

Thermodynamic Investigation of an Integrated Gasification Plant with Solid Oxide Fuel Cell and Steam Cycles. *Green*, (2012), 2, 71-86.

Estupinan, E.; Santos, I.

Controllable Lubrication for Main Engine Bearings Using Mechanical and Piezoelectric Actuators. *I E E E - A S M E Transactions on Mechatronics*, (2012), 17(2), 279-287.

Estupiñan, EA; Santos, I.

Radial oil injection applied to main engine bearings: evaluation of injection control rules. *Journal of Vibration and Control*, (2012), 18(5), 587-595.

Sarhadi, A.; Hattel, J.H.; Hansen, H.N.; Tutum, C.C.; Lorenzen, L.; Skovgaard, P.M.W.

Thermal modelling of the multi-stage heating system with variable boundary conditions in the wafer based precision glass moulding process. *Journal of Materials Processing Technology*, (2012), 212(8), 1771-1779.

Kamruzzaman, M.; Lutz, T.; Würz, W.; Shen, W.Z.; Zhu, W.J.; Hansen, M.O.L.; Bertagnolio, F.; Aagaard Madsen, H.

Validations and improvements of airfoil trailing-edge noise prediction models using detailed experimental data. *Wind Energy*, (2012), 15(1), 45-61.

Zhao, R.; Shen, W.; Knudsen, T.; Bak, T.

Fatigue distribution optimization for offshore wind farms using intelligent agent control. *Wind Energy*, (2012), 15(7), 927-944.

Sichani, Mahdi Teimouri; Nielsen, Søren R.K.; Naess, Arvid

Failure Probability Estimation of Wind Turbines by Enhanced Monte Carlo. *Journal of Engineering Mechanics*, (2012), 138(4), 379-389.

Sigmund, O.; Maute, K

Sensitivity filtering from a continuum mechanics perspective. *Structural and Multidisciplinary Optimization*, (2012), 46(4), 471-475.

Amir, O.; Sigmund O.; Lazarov, B.S.; Schevenels, M.
Efficient reanalysis techniques for robust topology optimization' Computer Methods in Applied. Mechanics and Engineering, (2012), 245-246, 217-231.

Dühring, M.B.; Mortensen, N.A.; Sigmund, O.
Plasmonic versus dielectric enhancement in thin-film solar cells. Applied Physics Letters, (2012), 100(21); 211914.

Sivebæk, I.M.; Samoilov, V.N.; Persson, B.N.J.
Effective viscosity of confined hydrocarbons. Physical Review Letters, (2012), 108(3), 036102.

Larsen, Anders; Stolpe, Mathias; Hattel, Jesper Henri
Estimating the Workpiece-Backingplate Heat Transfer Coefficient in Friction Stirwelding. Engineering Computations, (2012), 29(1), 65-82.

Oddershede, J.; Christiansen, T.L.; Somers, M.A.J.; Ståhl, K.
Extended x-ray absorption fine structure investigation of annealed carbon expanded austenite. Steel Research International, (2012), 83(2), 162-168.

Persson, ÅH; Mikkelsen, L.; Hendriksen, PV; Somers, M.A.J.
Interaction mechanisms between slurry coatings and solid oxide fuel cell interconnect alloys during high temperature oxidation' Journal of Alloys and Compounds, (2012), 521, 16-29.

Sorokin, S.; Holst-Jensen, O.
On power flow suppression in straight elastic pipes by use of equally apced eccentric inertial attachments. Journal of Vibration and Acoustics, (2012), 134(4), article no. 0410039.

Morfey, C.L.; Sorokin, S.; Gabard, G.
The effects of viscosity on sound radiation near solid surfaces. Journal of Fluid Mechanics, (2012), 690, 441-460.

Spangenberg, J.; Roussel, N.; Hattel, J.H.; Sarmiento, E.V.; Zirgulis, G.; Geiker, M.R.
Patterns of gravity induced aggregate migration during casting of fluid concretes. Cement and Concrete Research, (2012), 42(12), 1571-1578.

Spangenberg, J.; Roussel, N.; Hattel, J.H.; Stang, H.; Skocek, J.; Geiker, M.R.
Flow induced particle migration in fresh concrete: Theoretical frame, numerical simulations and experimental results on model fluids. Cement and Concrete Research, (2012), 42(4), 633-641.

Sumer, B.M.; Kirca, Ö.; Fredsøe, J.
Experimental Validation of a Mathematical Model for Seabed Liquefaction Under Waves. International Journal of Offshore and Polar Engineering, (2012), 22(2), 133-141.

Carstensen, S.; Sumer, B.M.; Fredsøe, J.

A note on turbulent spots over a rough bed in wave boundary layers' Physics of Fluids, (2012), 24, paper 115104.

Nielsen, A.W.; Sumer, B.M.; Fredsøe, J.

Suction removal of sediment from between armor blocks. III: Breaking waves. Journal of Hydraulic Engineering (Reston), (2012), 138(September), 803-811.

Nielsen, A.W.; Sumer, B.M.; Ebbe, S.S.; Fredsøe, J.

Experimental study on the scour around a monopile in breaking waves. Journal of Waterway, Port, Coastal, and Ocean Engineering, (2012), 138(November), 501-506.

Sørensen, B.F.; Toftegaard, H.L.; Linderoth, S.; Lundberg, M.; Feih, S.

Strength and failure modes of ceramic multilayers. European Ceramic Society Journal, (2012), 32(16), 4165-4176.

Goutianos, S.; Sørensen, B.F.

Path dependence of truss-like mixed mode cohesive laws. Engineering Fracture Mechanics, (2012), 91, 117-132.

Rask, M.; Sørensen, B.F.

Determination of the J integral for laminated double cantilever beam specimens: The curvature approach. Engineering Fracture Mechanics, (2012), 96, 37-48.

Sørensen, John Dalsgaard; Rizzuto, Enrico; Narasimhan, Harikrishna; Faber, Michael Havbro

Robustness : Theoretical Framework. Structural Engineering International, (2012), 22(1), 66-72.

Dominguez, Sergio Marquez; Sørensen, John Dalsgaard

Fatigue Reliability and Calibration of Fatigue Design Factors for Offshore Wind Turbines. Energies, (2012), 5(6), 1816-1834.

Kostandyan, Erik; Sørensen, John Dalsgaard

Physics of Failure as a Basis for Solder Elements Reliability Assessment in Wind Turbines. Reliability Engineering & System Safety, (2012), 108(December 2012), 100–107.

Sieros, G.; P.; Sørensen, John Dalsgaard; Bulder, B.H.; Jamieson, P. Upscaling Wind Turbines : Theoretical and practical aspects and their impact on the cost of energy.

Wind Energy, (2012), 15(1), 3-17.

Ögren, Magnus; Sørensen, Mads Peter; Pedersen, Niels Falsig.

Self-Consistent Ginzburg-Landau Theory for Transport Currents in Superconductors. Physica C: Superconductivity and its Applications (2012).

Sørensen, R.M.; Hansen, M.R.; Mouritsen, O.Ø.

Numerical and Experimental Study of Friction Loss in Hydrostatic Motor. Modeling, Identification and Control (Online) , (2012), 33(3), 99-109.

Sørensen, R.M.; Hansen, M.; Mouritsen, O.Ø.

Numerical and experimental study of hydrostatic displacement machine. *International Journal of Fluid Power*, (2012), 13(2).

Taher, S.T.; Thomsen, O.T.; M Dulieu-Barton, J.; Zhang, S.

Determination of mechanical properties of PVC foam using a modified Arcan fixture. *Composites Part A: Applied Science and Manufacturing*, 1698-1708

Thoft-Christensen, Palle

Infrastructures and Life-Cycle Cost-Benefit Analysis. *Structure & Infrastructure Engineering*, (2012), 8(5), 507-516.

Thomassen, Carsten

The Weak 3-flow Conjecture and the Weak Circular Flow. *Journal of Combinatorial Theory. Series B*, (2012), 102(2), 521-529.

Chia, Gek Ling; Thomassen, Carsten

On the Number of Longest and Almost Longest Cycles in Cubic Graphs. *Ars Combinatoria*, (2012), 104, 307-320.

Kawarabayashi, Ken-ichi; Thomassen, Carsten

From the Plane to Higher Surfaces. *Journal of Combinatorial Theory. Series B*, (2012), 102(4), 852-868.

Khalili, S.M.R.; Malekzadeh, F.; Rahmani, O.; Thomsen, O.T.

High-order Modeling of Circular Cylindrical Composite Sandwich Shells with a Transversely Compliant Core Subjected to Low Velocity Impact. *Mechanics of Advanced Materials and Structures*, (2012).

Leong, M.K.; Overgaard, L.C.T.; Thomsen, O.T.; Lund, E.; Daniel, I.M.

Investigation of failure mechanisms in GFRP sandwich structures with face sheet wrinkle defects used for wind turbine blades. *Composite Structures*, (2012), 94(2), 768-778.

Rahmani, O.; Khalili, S.M.R.; Thomsen, O.T.

A High-Order Theory for the Analysis of Circular Cylindrical Composite Sandwich Shells with Transversely Compliant Core Subjected to External Loads. *Composite Structures*, (2012), 94(7), 2129-2142.

Zhang, S.; Dulieu-Barton, J.M.; Fruehmann, R.; Thomsen, O.T.

A Methodology for Obtaining Material Properties of Polymeric Foam at Elevated Temperatures. *Experimental* (2012), 52(1), 3-15.

Tiedje, N.S.; Taylor, J.A.; Easton, M.A.

Feeding and Distribution of Porosity in Cast Al-Si Alloys as Function of Alloy Composition and Modification' *Metallurgical and Materials Transactions A - Physical Metallurgy and Materials Science*, (2012), 43(12), 4846-4858.

Nwaogu, U.C.; Tiedje, N.S.

Mechanical properties of chemically bonded sand core materials dipped in sol-gel

coating impregnated with filter: novel approach to improve casting quality. *International Journal of Cast Metals Research*, (2012), 25(5), 307-317.

Nwaogu, U.C.; Poulsen, T.; Gravesen, B.; Tiedje, N.S.
Using sol-gel component as additive to foundry coatings to improve casting quality. *International Journal of Cast Metals Research* (2012), 176-187.

Tommerup, S.; Endelt, B.Ø.
Experimental verification of a deep drawing tool system for adaptive blank holder pressure distribution. *Journal of Materials Processing Technology*, (2012), 212(11), 2529-2540.

Tosello, G.; Marinello, F.; Hansen, H.N.
Characterization and analysis of micro channels and sub-micron surface roughness of injection moulded microfluidic systems using optical metrology. *Plastics, Rubber & Composites*, (2012), 41(1), 29-39.

Tosello, G.; Hansen, H.N.; Gasparin, S.; Albajez, J.A.; Esmoris, J.I.
Surface wear of TiN coated nickel tool during the injection moulding of polymer micro Fresnel lenses' *C I R P Annals*, (2012), 61(1), 535-538.

Fantoni, G.; Tosello, G.; Gabelloni, D.; Hansen, H.N.; Wessel W. Wits, J.M.J-B.H.-C.M.
Modelling injection moulding machines for micro manufacture applications through functional analysis. *Procedia CIRP*, (2012), 2, 107-112.

Gasparin, S.; Tosello, G.; Hansen, H.N.; Islam, A.
Quality control and process capability assessment for injection-moulded micro mechanical parts. *International Journal of Advanced Manufacturing Technology*, (2012), 62(1-4).

Ontiveros, S.; Yagüe-Fabra, J.A.; Jiménez, R.; Tosello, G.; Gasparin, S.; Pierobon, A.; Carmignato, S.; Hansen, H.N.
Dimensional measurement of micro-moulded parts by computed tomography: Paper' *Measurement Science and Technology*, (2012), 23(12), Paper 125401.

Deb, K.; Bandaru, S.; Tutum, C.C.
Temporal Evolution of Design Principles in Engineering Systems: Analogies with Human Evolution. *Lecture Notes in Computer Science*, (2012), 7492, 1-11.

Tvergaard, V.
On cavitation instabilities with interacting voids. *European Journal of Mechanics A - Solids*, (2012), 32, 52-58.

Tvergaard, V.
Effect of stress-state and spacing on voids in a shear-field. *International Journal of Solids and Structures*, (2012), 49(22), 3047-3054.

Tvergaard, V. ; Needleman, A.

Effect of viscoplastic material parameters on polymer indentation. Modelling and Simulation in Materials Science and Engineering, (2012), 20(6), Paper 065002.

Vedel-Smith, N.K.; Lenau, T.A.

Casting traceability with direct part marking using reconfigurable pin-type tooling based on paraffin-graphite actuators. Journal of Manufacturing Systems, (2012), 31(2), 113-120.

Velte, C.M.; Okulov, V.; Naumov, I.V.

Rezimy obtekanija vichrevogo generator. Technical Physics Letters, (2012), 38(8), 54-62.

Velte, C.M.; Okulov, V.; Naumov, I.V.

Regimes of flow past a vortex generator' Technical Physics Letters, (2012), 38(4), 379-382.

Velte, C.M.

A Vortex Generator Flow Model Based on Self-Similarity: Technical notes. AIAA Journal (2012).

Vinther, Frank; Pinelo, Manuel; Brøns, Morten; Jonsson, Gunnar; Meyer, Anne S.
Statistical Modelling of the Interplay between Solute Shape and Rejection in Porous Membranes. Separation and Purification Technology, (2012), 89, 261-269.

Walther, J.H.; Praprotnik, M.; Kotsalis, E.M.; Koumoutsakos, P.

Multiscale simulation of water flow past a C540 fullerene. Journal of Computational Physics, (2012), 231(7), 2677-2681.

Wang, F.; Jensen, J.S.; Sigmund, O.

High-performance slow light photonic crystal waveguides with topology optimized or circular-hole based material layouts. Photonics and Nanostructures, (2012), 10(4), 378-388.

Wang, F.; Jensen, J.S.; Mørk, J.; Sigmund, O.

Systematic design of loss-engineered slow-light waveguides. Optical Society of America. Journal A: Optics, Image Science, and Vision, (2012), 29(12), 2657-2666.

Grgic, J.; Ott, J.R.; Wang, F.; Sigmund, O.; Jauho, A-P, Mørk, J & Mortensen, N.A.
Fundamental Limitations to Gain Enhancement in Periodic Media and Waveguides. Physical Review Letters, (2012), 108(18), 183903.

Winther, G.

Theoretical analysis of slip-plane-aligned geometrically necessary dislocation boundaries originating from two sets of coplanar slip systems. Risoe International Symposium on Materials Science. Proceedings, (2012), 33, 115-128.

Azuma, M.; Goutianos, S.; Hansen, N.; Winther, G.; Huang, X.

Effect of hardness of martensite and ferrite on void formation in dual phase steel' Materials Science and Technology, (2012), 28(9-10), 1092-1100.

Hong, C.; Huang, X.; Winther, G.

Experimental characterization of dislocations in deformation induced planar boundaries of rolled aluminium. *Risoe International Symposium on Materials Science. Proceedings*, (2012), 33, 239-248.

Kidmose, J.; Lu, L.; Hansen, N.; Winther, G.; Huang, X.

Onset of strain localisation in nanostructured aluminium. *Risoe International Symposium on Materials Science. Proceedings*, (2012), 33, 265-270.

Kidmose, J.; Lu, L.; Winther, G.; Hansen, N.; Huang, X.

Strain distribution during tensile deformation of nanostructured aluminum samples. *Journal of Materials Science*, (2012), 47, 7901-7907.

Le, G.M.; Godfrey, A.; Winther, G.; Hansen, N.; Huang, X.

Length scale effects on deformation microstructure formation in the near-micrometre grain size regime. *Risoe International Symposium on Materials Science. Proceedings*, (2012), 33, 63-78.

Zhang, X.; Godfrey, A.; Winther, G.; Hansen, N.; Huang, X.

Plastic deformation of submicron-sized crystals studied by in-situ Kikuchi diffraction and dislocation imaging. *Materials Characterization*, (2012), 70, 21-27.

Wu, G.

Multiobjective Optimum Design of a 3-RRR Spherical Parallel manipulator with Kinematic and Dynamic Dexterities. *Modeling, Identification and Control (Online)*, (2012), 33(3), 111-121.

Wu, G.; Bai, S.; Kepler, J.A.; Caro, S.

Error Modelling and Experimental Validation of a Planar 3-PPR Parallel Manipulator with Joint Clearances. *Journal of Mechanisms and Robotics*, (2012), 4(4).

Zafar, A.; Bertocco, F.; Schjødt-Thomsen, J.; Rauhe, J.C.M.M.

Investigation of the long term effects of moisture on carbon fibre and epoxy matrix composites. *Composites Science and Technology*, (2012), 72(6), 656-666.

Zafar, A.; Schjødt-Thomsen, J.; Sodhi, R.; Goacher, R.; de Kubber, D.

X-ray photoelectron spectroscopy and time-of-flight secondary ion mass spectrometry characterization of aging effects on the mineral fibers treated with aminopropylsilane and quaternary ammonium compounds. *Surface and Interface Analysis*, (2012), 44(7), 811-818.

Lin, F.; Zhang, Y.; Pantleon, W.; Juul Jensen, D.

Recrystallization kinetics of nanostructured copper processed by dynamic plastic deformation. *Risoe International Symposium on Materials Science. Proceedings*, (2012), 33, 217-222.

Zhou, L.; Bai, S.; Hanssen, M.R.

Integrated Dimensional and Drive-Train Design Optimization of a Light-Weight Anthropomorphic Arm. *Robotics and Autonomous Systems*, (2012), 60(1), 113-122.

4B. BOOKS

Elmegaard, B.; Brix, W.; Kærn, M.R.; Ommen, T.S.; Wronski, J.; Holten-Tingleff, F.; Poulsen, C.S.; Jensen, J.B.; Skovrup, M.J.; Jakobsen, A.
Proceedings of the 1st Symposium on Advances in Refrigeration and Heat Pump Technology.

Mortensen, N.H.; Gamillscheg, B.; Bruun, H.P.L.; Hansen, C.L.; Cleemann, K.K.; Junkov, K.H.
Radikal Forenkling via Design.

Nielsen, C.V.; Zhang, W.; Alves, L.; Bay, N.; Martins, P.F.
Modeling of Thermo-Electro-Mechanical Manufacturing Processes with Applications in Metal Forming and Resistance Welding: Applications in Metal Forming and Resistance Welding. *Springer. Springer Briefs in Applied Sciences and Technology: Manufacturing and Surface Engineering*

5. LIST OF DCAMM S-REPORTS (from no. S85)

S1 - S84: Ask for separate book.

- S85. HANSEN, MORTEN H.: Aeroelasticity and Dynamics of Spinning Disks (September 1999)
- S86. POULSEN, THOMAS A.: Controlling Geometry in Topology Optimization (April 2002)
- S87. PEDERSEN, CLAUS B.W.: On Topology Design of Frame Structures for Crashworthiness (July 2002)
- S88. NIORDSON, CHRISTIAN F.: Non-local Modeling of Materials (September 2002)
- S89. BUHL, THOMAS: Design of Non-linear Mechanisms - Topology and Shape Optimization - (November 2002)
- S90. de la COUR, DORTHE D.: Identification of Material and Friction Parameters from Deep Drawing (August 2003)
- S91. LEGARTH, BRIAN NYVANG: Fracture and Damage with Plastic Anisotropy (April 2004)
- S92. PEDERSEN, SINE L.: Simulation and Analysis of Roller Chain Drive Systems (September 2004)
- S93. KAWAMOTO, ATSUSHI: Generation of Articulated Mechanisms by Optimization Techniques (December 2004)
- S94. HANSEN, LARS VOXEN: Design of fiber laser packages: Reducing and enhancing sensitivity to mechanical vibrations (February 2005)
- S95. BORG, ULRIK: Size Effects in Crystal Plasticity (January 2007).
- S96. GERSBORG-HANSEN, ALLAN: Topology Optimization of Flow Problems (April 2007).
- S97. KALLESØE, BJARNE SKOVMOSE: Aeroservoelasticity of Wind Turbines (April 2007).
- S98. FELTER, CHRISTIAN LOTZ: Lubrication of Piston Rings in Large 2- and 4-stroke Diesel Engines (March 2007).
- S99. DAM, BJARKE SKOVGÅRD: Experimental and Numerical Investigations of Sprays in Two Stroke Diesel Engines (May 2007).
- S100. ZHU, WEI JUN: Aero-Acoustic Computation of Wind Turbines (October 2007).

- S101. KJØLHEDE, KLAUS: Experimental Contribution to the Problem of Model Parameter Identification in Rotating Machines via Active Magnetic Bearings (March 2007).
- S102. ØSTERGAARD, RASMUS C.: Interface Fracture in Composite Materials and Structures (November 2007).
- S103. LUCHT, TORE: Analysis of Cracks in Large Diesel Engines (November 2007).
- S104. LINDGREEN, BRITTA: Large Deformations of Polymers (February 2008).
- S105. NORDKVIST, NICOLAI: Motion Control along Relative Equilibria (February 2008).
- S106. HANSEN, MICHAEL SONNE: Geometrical and mechanical aspects of structure and exibility in proteins (September 2007).
- S107. LUNDSGAARD-LARSEN, CHRISTIAN: Predicting and Improving Damage Tolerance of Composite Structures (August 2008).
- S108. JONCQUEZ, SOIZIC ANNICK GABRIELLE: Second-order Forces and Moments acting on Ships in Waves (August 2009)
- S109. DÜHRING, MARIA BAYARD: Optimization of acoustic, optical and optoelastic devices (July 2009)
- S110. NIELSEN, KIM LAU: Modelling of damage development and ductile failure in welded joints (December 2009)
- S111. ESTUPINAN, EDGAR ALBERTO: Feasibility of Applying Controllable Lubrication Techniques to Reciprocating Machines (December 2009)
- S112. BANG-MØLLER, CHRISTIAN: Design and Optimization of an Integrated Biomass Gasification and Solid Oxide Fuel Cell System (April 2010)
- S113. PEDERSEN, RUNE: Dynamic Modeling of wind Turbine Gearboxes and Experimental Validation (April 2010)
- S114. BRIX, WIEBKE: Modelling refrigerant distribution in minichannel evaporators (May 2010)
- S115. HUMMELSHØJ, THOMAS STRABO: Mechanisms of metal dusting corrosion (December 2009)
- S116. CIPOLLA, LEONARDO: Conversion of MX Nitrides to Modified Z-Phase in 9-12%Cr Ferritic Steels (March 2010)

- S117. HAIDER, SAJJAD: Two Stroke diesel Engines for Large Ship Propulsion (January 2011).
- S118. VELTE, CLARA: Simulation and control of Wind Turbine Flows using Vortex Generators (February 2009)
- S119. ENZ, STEPHANIE: Factors Affecting Coriolis Flowmeter Accuracy, Precision, and Robustness (September 2010)
- S120. KJÆRSGAARD-RASMUSSEN, JIMMY: Inside-out electrical capacitance tomography for downhole multiphase flow evaluation (April 2010)
- S121. LAJIC, ZORAN: Fault-Tolerant Onboard monitoring and Decision Support Systems (October 2010)
- S122. SVENDSEN, MARTIN NYMANN: Wind Turbine Rotors with Active Vibration Control (January 2011)
- S123. CLAUSEN, LASSE RØNGAARD: Design of novel DME/methanol synthesis plants based on gasification of biomass (February 2011)
- S124. SHIN, KEUN WOO: Cavitation simulation on marine propellers (November 2010)
- S125. HAUGAARD, ASGER MARTIN: On Controllable Elastohydrodynamic Fluid Film Bearings (May 2010).
- S126. PEDERSEN, TROELS DYHR: Homogeneous Charge Compression Ignition Combustion of Dimethyl Ether
- S127. GARCÍA, NÈSTOR RAMOS: Quasi-3d aerodynamic code for analysing dynamic flap response (April 2011)
- S128. ZAMBRANO, HARVEY A: Molecular Dynamics Studies of Nanofluidic Devices (May 2011)
- S129. AAGE, NIELS: Topology optimization of radio frequency and microwave structures (April 2011)
- S130. MATZEN, RENÉ: Topology Optimization for Transient Wave Propagation Problems (March 2011)
- S131. ANDREASEN, CASPER SCHOUSBOE: Multiscale topology optimization of solid and fluid structures (May 2011)
- S132. KÆRN, MARTIN RYHL: Analysis of flow maldistribution in fin-and-tube evaporators for residential air-conditioning systems (August 2011)

- S133 BEHRENS, TIM: Simulation of Moving Tailing edge Flaps on a Wind Turbine Blade using a Nivier-Stokes based Immersed Boundary Method (July 2011)
- S134 BLASQUES, JOSÉ PEDRO ALBERGARIA AMARAL: Optimal Design of Laminated Composite Beams (August 2011)
- S135 AZIZI, REZA: Multi-scale modelling of composites (September 2011)
- S136 JACOBSEN, NIELS GJØL: A Full Hydro- and Morphodynamic Description of Breaker Bar Development (April 2011)
- S137 MOROSI, STEFANO: From Hybrid to Actively-Controlled Gas Lubricated Bearings – Theory and Experiment (September 2011)
- S138 KÆRGAARD, KASPER: Numerical Modeling of Shoreline Undulations (September 2011)
- S139 BHOWMIK, SUBRATA: Modelling and Control of Magnetorheological Damper: Real-time implementation and experimental verification (October 2011)
- S140 ANDKJÆR, JACOB: Wave Manipulation by Topology Optimization (January 2012)
- S141 MOSLEMIAN, RAMIN: Residual Strength and Fatigue Lifetime of Debond Damaged Sandwich Structures (September 2011)
- S142 HANSEN, SØREN VINTHER: Performance Monitoring of Ships (September 2011)
- S143 HANSEN, NILAS MANDRUP: Interaction between Seabed Soil and Offshore Wind Turbine Foundations (March 2012)
- S144 THOMSEN, KIM: Modeling of dynamically loaded hydrodynamic bearings at low Sommerfeld numbers (March 2012)
- S145 WANG, FENGWEN: Systematic Design of Slow Light Waveguides (August 2012)
- S146 RASMUSSEN, JOHANNES TOPHØJ: Particle Methods in Bluff Body Aerodynamics (October 2011)
- S147 ANDERSEN, SØREN BØGH: Design and Optimization of Gearless Drives using Multi-Physics Approach (September 2012)
- S148 LAHRIRI, SAID: On the Rotor to Stator Contact Dynamics with Impacts and Friction – Theoretical and Experimental Study (November 2012)

S149 VARELA, ALEJANDRO CERDA: Mechatronics Applied to Fluid Film Bearings: Towards More Efficient Machinery (December 2012)

6. OTHER THESES

ALIMADADI, HOSSEIN: “Grain Boundary Engineering of Electrodeposited Thin Films”, DTU Mechanical Engineering, 2012. PhD Thesis

ASLAN, M.: “Characterisation of Flax Fibres and Flax Fibre Composites. being cellulose based sources of materials”, DTU Wind Energy, 2012. PhD Thesis.

BARARA, AMIN: “Characteristic Behavior of Bucket Foundations”. Aalborg University, Department of Civil Engineering, 2012, PhD Thesis.

BEJDER, ANNE KIRKEGAARD: “Aesthetic Qualities of Cross Laminated Timber”, Aalborg University, Department of Civil Engineering, 2012, PhD Thesis.

BØGH, SIMON: “Identifying Skills for AIMM Robots”, Aalborg University, Department of Mechanical and Manufacturing Engineering, 2012, PhD Thesis.

DAHL, JONAS: “Failure of Metals”, Aalborg University, Department of Mechanical and Manufacturing Engineering, 2012, PhD Thesis.

GASPARIN, STEFANIA: “Cerification of Tolerance Chains in Micro Manufacturing”, DTU Mechanical Engineering, 2012, PhD Thesis.

GUNNARSSON, SVERRIR G.: “Self Cleaning Point: introduction of Photocatalytic Particles into a Paint System”, DTU Mechanical Engineering, 2012, PhD Thesis.

HVILSHØJ, MADS: “AIMM Families Based on Architectures Dynamically Loaded Tubes and Plates and Cell Models for Ductile Failure of Metals”, Aalborg University, Department of Mechanical and Manufacturing Engineering, 2012, PhD Thesis.

HAASTRUP, MORTEN: “Dynamic Drive Train Simulation Autonomous Industrial Mobile Manipulation (AIMM)-Maturation, Exploitation and Implementation – Developing Modular and (Re) Configurable”, Aalborg University, Department of Mechanical and Manufacturing Engineering, 2012, PhD Thesis.

KLITKOU, RASMUS: “Mechanical Response of Polypropylene/Clay Nanocomposites”, Aalborg University, Department of Mechanical and Manufacturing Engineering, 2012, PhD Thesis.

LEONG, MARTIN KLITGAARD: “The Influence of Defects on the Failure of Wind Turbine Blades”, Aalborg University, Department of Mechanical and Manufacturing Engineering, 2012, PhD Thesis.

LOMHOLT, TRINE C.: “Microstructure Evolution during Friction Stir Spot Welding of TRIP Steel”, DTU Mechanical Engineering, 2012, PhD Thesis.

MANH, NGUYEN DANG: “Isogeometric Analysis and Shape Optimization in Electromagnetism”, DTU Mathematics, 2012, PhD Thesis.

MARSZAL, ANNA JOANNA: “Life Cycle Cost Optimization of a BOLIG+ Zero Energy Building”, Aalborg University, Department of Civil Engineering, 2012, PhD Thesis.

NIELSEN, CHRIS VALENTIN: “3D Modeling and Testing of Contact Problems in Resistance Welding”, DTU Mechanical Engineering, 2012, PhD Thesis.

NIELSEN, MICHAEL WENANI: “Prediction of process induced shape distortions and residual stresses in large fibre reinforced composite laminates – with application to Wind Turbine Blades”, DTU Mechanical Engineering, 2012, PhD Thesis.

NIELSEN, PETER NØRTOFT: “Isogeometric Analysis and Shape Optimization in Fluid Mechanics”, DTU Mathematics, 2012, PhD Thesis.

NWAOGU, UGOCHUKWU CHIBUSOH: “New Sol-Gel Coatings to Improve Casting Quality”, DTU Mechanical Engineering, 2012, PhD Thesis.

OLESEN, CHRISTIAN GAMMELGAARD: “The Influence of Sitting Conditions on Soft Tissue Loads”, Aalborg University, Department of Mechanical and Manufacturing Engineering, 2012, PhD Thesis.

OLMEDO, INÉS: “Indoor Airflow Patterns, Dispersion of Human Exhalation Flow and Risk of Airborne Cross-infection between People in a Room”, Aalborg University, Department of Civil Engineering, 2012, PhD Thesis.

PECHER, ARTHUR: “Performance Evaluation of Wave Energy Converters”, Aalborg University, Department of Civil Engineering, 2012, PhD Thesis.

RAMIREZ, JORGE ROBERT RODRIGUEZ: “Wave Run-Up on Offshore Wind Turbines: numerical and experimental results”, Aalborg University, Department of Civil Engineering, 2012, PhD Thesis.

RASK, M.: “Microstructure and Mechanical Properties of Aligned Natural Fibre Composites”, DTU Wind Energy, 2012, PhD Thesis.

SØRENSEN, SØREN PEDER HYLDAL: “Soil-Structure Interaction For Nonslender, Large-Diameter Offshore Monopiles: Vol 1 + Vol 2.”, Aalborg University, Department of Civil Engineering, 2012, PhD Thesis.

TOMMERUP, SØREN ANKJÆR: “Feedback Control of Deep Drawing Processes Autonomous Industrial Mobile Manipulation (AIMM)-Maturation, Exploitation and Implementation”, Aalborg University, Department of Mechanical and Manufacturing Engineering, 2012, PhD Thesis.

VELURIS, BADRINATH: “Failure modes of wind turbine components”, Aarhus University, Department of Engineering, 2012. PhD Thesis.

ZAFAR, ASHAR: “Mineral Wool Products Modelling, Design and Optimization of a Lightweight Robotic”, Aalborg University, Department of Mechanical and Manufacturing Engineering, 2012, PhD Thesis.

ZERMEÑO, VICTOR MANUEL RODRÍGUEZ: “Computation of Superconducting Generators for Wind Turbine Applications”, DTU Mathematics, 2012, PhD Thesis.

ZHANG, LAI: “Mathematical Models of Ecology and Evolution – analysis of size-structured populations and communities in aquatic ecosystems”, DTU Mathematics, 2012, PhD Thesis.

ZHOU, LELAI: “Arm toward Aissted Living Applications”. Aalborg University, Department of Mechanical and Manufacturing Engineering, 2012, PhD Thesis.

ØSTERGAARD, NIELS HØJEN: “On Lateral Buckling of Armouring Wires in Flexible Pipes Investigation of Ageing Effects on Organic Binders Used for”, Aalborg University, Department of Mechanical and Manufacturing Engineering, 2012, PhD Thesis.

7. DCAMM SEMINARS GIVEN IN 2012

Professor Vassili Toropov. Design optimization techniques for industrial applications: challenges and progress. 10 December 2012. Aerospace and Structural Engineering, School of Mechanical Engineering, School of Civil Engineering, University of Leeds, United Kingdom.

Professor Johan Meyers: Large-eddy simulation of wind-farm boundary layers: insights into energy extraction. 4 December 2012. Department of Mechanical Engineering, KU Leuven, Belgium.

Professor Wen Jin Meng: Fabrication, assembly, and application of metal-based microdevices. 9 October 2012. Department of Mechanical and Industrial Engineering, Louisiana State University, USA.

Professor Zdeněk P. Bažant: Probabilistic Nano-Mechanical Theorey of Quasibrittle Structure Strength, Crack Growth, Lifetime and Fatigue. 1 October 2012. Civil and Mechanical Engineering and Materials Science, Northwestern University, USA.

Senior Research Fellow Thomas A. Grandine: The case against interactivity in geometric design. 2 May 2012. The Boeing Company, Seattle, USA

Yuriy Bazilevs: Fluid-Structure Interaction simulation of Wind Turbines: Methods and Applications. 19 April 2012. Department of Structural Engineering and Center for Computational Mathematics, University of California, San Diego, USA

Associate Professor Pilar Ariza: Stability of discrete defects in grapheme at finite temperature. 7 March 2012. University of Seville, Spain.

Professor Chong-Won Lee: Saving Campbell Diagram for dynamic Analysis of complex Rotor Systems. 31 January 2012. Center for Noise and Vibration Control, Department of Mechanical Engineering, KAIST, Daejeon, Korea

DCAMM ANNUAL SPEAKER SEMINAR 2012

Professor Nigel Peake, Department of Applied Mathematics and Theoretical Physics, University of Cambridge, UK : Sound Generation by Aircraft, and by Owls. This lecture was given both at the Technical University of Denmark and at Aalborg University, 21 and 22 November, respectively

APPENDIX: List of members 2012

Abbreviations:

from Technical University of Denmark

IMM: Dept. of Informatics and Mathematical Modelling
 MAT: Dept. of Mathematics
 MEK-FAM: Dept. of Mechanical Engineering, Solid Mechanics
 MEK-FVM: Dept. of Mechanical Engineering, Fluid Mechanics
 MEK-K&P: Dept. of Mechanical Engineering, Engineering Design and Product Development
 MEK-MPP: Dept. of Mechanical Engineering, Manufacturing Engineering
 MEK-MTU: Dept. of Mechanical Engineering, Materials Science and Engineering
 MEK-TES: Dept. of Mechanical Engineering, Thermal Energy Systems

WIND: DTU Wind Energy

from Aalborg University

CIVIL, AAU: Department of Civil Engineering
 M-TECH, AAU: Department of Mechanical and Manufacturing Engineering

from Aarhus University

ENG, AU: Department of Engineering

Abdelrahemm, Mohammed A.	(MAT)	PhD student
Adesokan, Bolaji James	(MAT)	PhD student
Aggerbeck, Martin	(MEK-MTU)	PhD student
Albrecht, Martin Roland	(MAT)	Postdoc
Alkhzaimi, Hoda	(MAT)	PhD student
Ambat, Rajan	(MEK-MTU)	Associate Professor
Amini Afshar, Mostafa	(MEK-FVM)	PhD student
Andersen, Frederik Herland	(MEK-FVM)	PhD student
Andersen, Ingrid Marie Vincent	(MEK-FVM)	PhD student
Andersen, Jakob Axel Bejbro	(MEK-K&P)	PhD student
Andersen, Lars	(CIVIL, AAU)	Associate Professor, PhD
Andersen, Martin	(M-TECH, AAU)	PhD student
Andersen, Michael Skipper	(M-TECH-AAU)	PhD student
Andersen, Morten	(MAT)	PhD student
Andersen, Poul	(MEK-FVM)	Associate Professor
Andersen, Rasmus	M-TECH, AAU	Scientific Assistant
Andersen, Søren Bøgh	(MEK-FAM)	PhD student
Andersen, Søren Juhl	WIND	PhD student
Andersen, Søren Mikkel	(CIVIL, AAU)	Assistant Professor
Andkjær, Jacob Anders	(MEK-FAM)	Postdoc
Andreasen, Casper Schousboe	(MEK-FAM)	Researcher
Andreasen, Jens H.	(M-TECH, AAU)	Associate Professor
Andreasen, Mogens Myrup	(MEK-K&P)	Professor, Emeritus
Andreassen, Erik	(MEK-FAM)	PhD student

Angel, Jais Andreas Breusch	(MEK-MPP)	PhD student
Azizi, Reza	(MEK-FAM)	Elected member, PhD
Baby, Sanmohan	(M-TECH, AAU)	Postdoc
Back-Pedersen, Andreas		Elected member, PhD.
Baghsheikhi, Saeed	(MEK-MTU)	PhD student
Bai, Shaoping	(M-TECH, AAU)	Assistant Professor
Bak, Brian Lau Verndal	(M-TECH, AAU)	PhD student
Bakkedal, Morten	(MEK-MTU)	PhD student
Balci, Adnan	(MAT)	PhD student
Balling, Ole	ENG, AU	Professor
Baran, Ismet	(MEK-MPP)	PhD student
Barton, Janice	M-TECH, AAU	Professor
Bay, Niels	(MEK-MPP)	Professor
Beelen, Peter	(MAT)	Associate Professor
Bellemo, Lorenzo	(MEK-TES)	PhD student
Bendsøe, Martin		Elected member, Professor
Berggreen, Christian	WIND	Associate Professor
Bialas, Zuzana	WIND	PhD student
Bihlet, Uffe	(MEK-MTU)	PhD student
Bingham, Harry B.	(MEK-FVM)	Associate Professor
Bisacco, Giuliano	(MEK-MPP)	Assistant Professor, PhD
Boelskifte, Per	(MEK-K&P)	Professor
Bogdanov, Andrey	(MAT)	Assistant Professor
Bohr, Tomas		Elected member, Professor
Borg, Ulrik		Elected member, Senior Engineer
Borghoff, Julia	(MAT)	Postdoc.
Brander, David	(MAT)	Associate Professor
Branner, Kim	WIND	Senior Scientist
Bredmose, Henrik	WIND	Assistant Professor
Brincker, Rune	ENG, AU	Professor
Brink, Bastian	(MEK-MTU)	PhD student
Brohus, Henrik	(CIVIL, AAU)	Associate Professor, ph.d.
Bruun, Hans Peter Lomholt	(MEK-K&P)	PhD student
Bræstrup, M. W.		Elected member, PhD.
Bräuner, Lars	ENG, AU	Associate Professor
Brøndsted, Povl	WIND	Senior Scientist
Brøns, Morten	(MAT)	Professor, PhD
Buhl, Jacob	(M-TECH, AAU)	Scientific Assistant
Buhl, Thomas	WIND	Senior Scientist
Bureau, Emil	(MEK-FAM)	PhD student
Byskov, Esben	(CIVIL, AAU)	Emeritus Professor, dr.techn.
Bøgh, Simon	(M-TECH, AAU)	PhD student
Calaon, Matteo	(MEK-MPP)	Research Assistant
Carlsen, Martin	(MAT)	PhD student
Carøe, Christina Friis	M-TECH, AAU	Scientific Assistant
Cavar, Dalibor	WIND	Assistant Professor
Cederkvist, Jan		Elected member, PhD.
Cerda, Alejandro	(MEK-FAM)	PhD student
Ceron, Emanno	(MEK-MPP)	PhD student
Cerullo, Michele	(MEK-FAM)	PhD student
Cétina, Francis Avilles	M-TECH, AAU	Scientific Assistant
Chivaaee, Hamid Sarlak	WIND	PhD student
Chougule, Prasad	(CIVIL, AAU)	PhD student
Christensen, Erik Damgaard	(MEK-FVM)	Professor
Christensen, Georg Kronborg	(MEK-K&P)	Associate Professor
Christensen, Martin Ebro	(MEK-K&P)	PhD student
Christensen, Ole	(MAT)	Professor, dr.scient.

Christiansen, Christian Kim	(MEK-FAM)	PhD student
Christiansen, Jesper De Claville	(M-TECH, AAU)	Professor
Christiansen, Niels Hørbye	(MEK-FVM)	PhD student
Christiansen, Peter	(MEK-MPP)	PhD student
Christiansen, Thomas	(MEK-MTU)	Senior Scientist
Christiansen, Torben R. Bilgrav	(MEK-FVM)	PhD student
Clausen, Johan Christian	(AAU-CIVIL)	Asstant Professor
Clausen, Lasse Røngaard	(MEK-TES)	PhD student
Comminal, Raphael	(MEK-MPP)	PhD student
Cordtz, Rasmus	(MEK-FM)	PhD student
Dahl, Kristian Vinter	(MEK-MTU)	Postdoc.
Dalen, Kristine Røste	(MEK-TES)	PhD student
Damgaard, Jens Skov	M-TECH, AAU	Scientific Assistant
Damkilde, Lars	(CIVIL, AAU)	Professor
Dammann, Bernd	(IMM)	Associate Professor
Danckert, Joachim	(M-TECH, AAU)	Professor
Danielsen, Hilmar	(MEK-MTU)	Postdoc.
Darula, Radoslav	(M-TECH, AAU)	PhD student
Davidsdóttir, Svava	(MEK-MTU)	PhD student
De Chiffre, Leonardo	(MEK-MPP)	Professor
Dimitrov, Nikolai	WIND	PhD student
Din, Rameez Ud	(MEK-MTU)	PhD student
Dolomanova, Viktoriya	(M-TECH, AAU)	PhD student
Dou, Suguang	(MEK-FAM)	PhD student
Drozdo, Aleksey	M-TECH, AAU	Adjunct Professor
Egelund, Arne Jørgensen	(MEK-TES)	Associate Professor
Elesin, Yuriy	(MEK-FAM)	Postdoc
Elmegaard, Brian	(MEK-TES)	Head of Section, Associate Prof.
Elmegaard, Michael	(MAT)	PhD student
El-Naaman, Salim	(MEK-FAM)	PhD student
Endelt, Benny Ørtoft	(M-TECH, AAU)	Associate Professor
Engsig-Karup, Allan Peter	(IMM)	Assistant Professor
Eriksen, Rasmus Normann W.	WIND	PhD student
Evgrafov, Anton	(MAT)	Associate Professor
Farahani, Saeed D.	(M-TECH, AAU)	PhD student
Farcia, Néstor Ramos	(WIND)	Researcher)
Fedorov, Vladimir	WIND	PhD student
Filippenko, Georg V.	M-TECH, AAU	Associate Professor
Fredsøe, Jørgen	(MEK-FVM)	Professor
Frier, Christian	CIVIL, AAU	Associate Professor, PhD
Friis, Kasper Storgaard	(MEK-FAM)	Postdoc
Fuglede, Niels	(MEK-FAM)	PhD student
Fuhrman, David R.	(MEK-FVM)	Associate Professor
Gallego-Calderon, Juan	(WIND)	PhD student
Giversen, Søren	WIND	PhD student
Godi, Allesandro	(MEK-MPP)	PhD student
Graeme, Keith		Elected member
Gravesen, Jens	(MAT)	Associate Professor, dr.phil
Greiner, Martin	ENG, AU	Professor
Gudia, Visweswara	(MEK-MTU)	PhD student
Guerrier, Patrick	(MEK-MPP)	PhD student
Gunnarsson, Sverrir Grjimir	(MEK-MTU)	PhD student
Gunneskov, Ole		Elected member, PhD.
Guolaugsson, Tómas Vignir	(MEK-K&P)	PhD student
Haglund, Fredrik	(MEK-TES)	Associate Professor
Haider, Sajjad	(MEK-FM)	Postdoc
Hald, John	(MEK-MTU)	Affiliated Professor

Halkjær, Søren		Elected member
Haloui, Safia	(MAT)	Postdoc
Hamilton, Andrew	(M-TECH, AAU)	Postdoc
Hansen, Christian Lindschou	(MEK-K&P)	PhD student
Hansen, Claus Thorp	(MEK-K&P)	Associate Professor
Hansen, Hans Nørgaard	(MEK-MPP)	Professor
Hansen, Jens Zangenberg	WIND	PhD student
Hansen, John M.	WIND	Senior Scientist
Hansen, Kim Rene	(MEK-FM)	Postdoc
Hansen, Klaus Schütt	(M-TECH, AAU)	PhD student
Hansen, Kurt Schaldemose	WIND	Senior Researcher
Hansen, Martin Otto Laver	WIND	Associate Professor
Hansen, Morten Hartvig	WIND	Senior Scientist
Hansen, Per Chr.	(IMM)	Professor, dr. techn.
Hansen, Thomas Mejer	IMM	Associate Professor
Harthøj, Anders	(MEK-MTU)	PhD student
Hattel, Jesper Henri	(MEK-MPP)	Professor
Hauksdóttir, Dagný	(MEK-K&P)	PhD student
Heilmann, Irene	(MAT)	PhD student
Heinen, Frederik	M-TECH, AAU	PhD student
Henriksen, Christian	(MAT)	Associate Professor, PhD
Henriksen, Søren Randrup	M-TECH, AAU	Scientific Assistant
Hiller, Jochen	(MEK-MPP)	Postdoc
Hjorth, Poul	(MAT)	Associate Professor, PhD
Hoffmann, Kristoffer	(MAT)	PhD student
Horsewell, Andy	(MEK-MTU)	Professor
Hosseinzadeh, Elham	(MEK-TES)	PhD student
Howard, Thomas J.	(MEK-K&P)	Associate Professor
Hudecz, Adriana	WIND	PhD student
Hvilshøj, Mads	(M-TECH, AAU)	PhD student
Høgsberg, Jan Becker	(MEK-FAM)	Associate Professor
Høholdt, Tom	(MAT)	Professor
Højlund, Carsten	(M-TECH, AAU)	PhD student
Ibsen, Lars Bo	(CIVIL, AAU)	Professor, MSO, PhD
Ingvorsen, Kristian Mark	(MEK-FVM)	PhD student
Islam, Mohammad Aminul	(MEK-MPP)	Postdoc.
Jabbari, Masoud	(MEK-MPP)	PhD student
Jacobsen, Christian Brix		Elected member, PhD.
Jacobsen, Niels Gjøøl	(MEK-FVM)	Postdoc
Jakobsen, Johnny	(M-TECH, AAU)	Postdoc
Jakobsen, Kasper Rønnow	WIND	PhD student
Janakiraman, Shravan	(MEK-FAM)	PhD student
Jellesen, Morten Stendahl	(MEK-MTU)	Postdoc
Jensen, Bjarne	(MEK-FVM)	PhD student
Jensen, Erik Appel	(M-TECH, AAU)	Associate Professor
Jensen, Henrik Myhre	ENG, AU	Professor
Jensen, Jacob Hjelmager	(MEK-FVM)	Associate Professor
Jensen, Jakob S.	(MEK-FAM)	Associate Professor, PhD
Jensen, Jørgen Juncher	(MEK-FVM)	Head of Section, Professor
Jensen, Karsten Lindegård	(MEK-FVM)	PhD student
Jensen, Lars Rosgaard	(M-TECH, AAU)	Associate Professor
Jensen, Louise Søgaard	(MEK-MTU)	PhD student
Jepsen, Allan Dam	(MEK-K&P)	PhD student
Jespersen, Freja Nygaard	(MEK-MTU)	PhD student
Jessen, Jannie	(CIVIL, AAU)	PhD student
Johansen, Axel Ohrt	(MEK-TES)	PhD student
Johansen, Villads Egede	(MEK-FAM)	PhD student

Juhl, Thomas Brokholm	(M-TECH, AAU)	PhD student
Jørgensen, John Bagtermp	(IMM)	Assistant Professor
Jørgensen, Martin Felix	(MEK-FAM)	PhD student
Kepler, Jørgen Asbøl	(M-TECH, AAU)	Associate Professor
Kimiaefar, Amin	(M-TECH, AAU)	PhD student
Kirkegaard, Poul Henning	(CIVIL, AAU)	Associate Professor
Kjartansdóttir, Cecilia	(MEK-MTU)	PhD student
Klit, Peder	(MEK-FAM)	Professor, PhD
Klitkou, Rasmus	(M-TECH, AAU)	PhD student
Knudsen, Kim	(MAT)	Associate professor
Knudsen, Lars Ramkilde	(MAT)	Professor
Knudsen, Thomas S.		Elected member, PhD.
Kolakowska, Ewa	(M-TECH, AAU)	Associate Professor
Kolmogorov, Dmitry	WIND	PhD student
Kotas, Petr	(MEK-MPP)	PhD student
Kragh, Knud	WIND	PhD student
Krenk, Steen	(MEK-FAM)	Professor
Kristensen, Anders Schmidt	(CIVIL, AAU)	Associate Professor
Kristensen, Hans O. H.	(MEK-FVM)	Senior Researcher
Kristensen, Kristian	IMM	IT-Manager
Kristensen, Sten Esbjørn	(MEK-FVM)	PhD student
Kristiansen, Kristian Uldall	(MAT)	Postdoc
Kristiansen, Morten	(M-TECH, AAU)	Associate Professor
Krüger, Voker	(M-TECH, AAU)	Associate Professor
Kærn, Martin Ryhl	(MEK-TES)	PhD student
Lahriri, Said	(MEK-FAM)	PhD student
Laiier-Brodersen, Mark	(MEK-FAM)	PhD student
Langer, Thomas Heegaard	M-TECH, AAU	PhD student
Larsen, Jan Balle		Elected member, PhD.
Larsen, Jon Steffen	(MEK-FAM)	PhD student
Larsen, Mikael	(M-TECH, AAU)	Associate professor
Larsen, Poul Scheel	(MEK-FVM)	Emeritus Professor
Larsen, Ulrik	(MEK-TES)	PhD student
Lauridsen, Martin Mehl	(MAT)	PhD student
Laustsen, Steffen	(M-TECH, AAU)	PhD student
Lazarov, Boyan Stefanov	(MEK-FAM)	Postdoc., PhD
Leander, Gregor	(MAT)	Associate Professor
Lee, Seunghwan	(MEK-MTU)	Associate Professor
Legarth, Brian N.	(MEK-FAM)	Associate Professor, PhD
Lemvig, Jakob	(MAT)	Assistant Professor
Lenau, Torben Anker	(MEK-K&P)	Associate Professor
Lillholt, Hans	WIND	Chief Scientist
Lindgren, Peter	(M-TECH, AAU)	Associate Professor
Lindgaard, Esben	M-TECH, AAU	Assistant Professor
Lind-Nielsen, Birger		Elected member, PhD.
Littlewood, Philip	(MEK-MTU)	Researcher
Lomholt, Trine Colding	(MEK-MTU)	PhD student
Lopez, Angel Alfonso	(MEK-MTU)	PhD student
Lund, Erik	(M-TECH, AAU)	Professor
Lund, Morten Enemark	(M-TECH, AAU)	PhD student
Lythcke-Jørgensen, Christoffer	(MEK-TES)	PhD student
Lützen, Marie		Elected member, Assistant Professor
Ma, Jing	M-TECH, AAU	PhD student
Madaleno, Liliana	(M-TECH, AAU)	PhD student
Madsen, Bo	WIND	Senior Scientist
Madsen, Jan Busk	(MEK-MTU)	PhD student
Madsen, Ole	(M-TECH, AAU)	Professor

Madsen, Per A.	(MEK-FVM)	Professor
Mahshid, Rasoul	(MEK-MPP)	PhD student
Manca, Marcello	WIND	PhD student
Markussen, Wiebke	(MEK-TES)	Assistant Professor
Markvorsen, Steen	(MAT)	Professor, dr. techn.
Marschler, Christian	(MAT)	PhD student
Martakos, Georgios	M-TECH, AAU	PhD student
McAloone, Tim C.	(MEK-K&P)	Associate Professor
Menotti, Stefano	(MEK-MPP)	PhD student
Meyer, Knud Erik	(MEK-FVM)	Associate Professor
Mikkelsen, Lars Pilgaard	WIND	Senior Scientist
Mikkelsen, Robert Flemming	WIND	Senior Researcher
Mishnaevsky, Leon	WIND	Senior Scientist
Mohaghegh, Kamran	(MEK-MPP)	Researcher
Mohanty, Sankhya	(MEK-MPP)	PhD student
Montgomery, Melanie	(MEK-MTU)	Associate Professor
Morsbøl, Jonas	(M-TECH, AAU)	PhD student
Mortensen, Niels Henrik	(MEK-K&P)	Professor, Head of the section
Mosegaard, Klaus	(IMM)	Professor
Mougaard, Krestine	(MEK-K&P)	PhD student
Moumeni, Elham	(MEK-MPP)	PhD student
Mouritsen, Ole Ø.	(M-TECH, AAU)	Associate Professor
Müller, Pavel	(MEK-MPP)	PhD student
Møller, Per	(MEK-MTU)	Professor
Nellemann, Christopher	(MEK-FAM)	PhD student
Neugebauer, Line Maria	(MEK-K&P)	PhD student
Neumeyer, Stefan	(MEK-FAM)	PhD student
Nezhentseva, Anastasia	(CIVIL, AAU)	PhD student
Nguyen, Nhut	(MAT)	PhD student
Nguyen, Tuong-Van	(MEK-TES)	PhD student
Nielsen, Chris Valentin	(MEK-MPP)	PhD student
Nielsen, Claus Suldrup	(MEK-FM)	PhD student
Nielsen, Daniel Rønne	(MEK-TES)	PhD student
Nielsen, Johan S. Rosenkilde	(MAT)	PhD student
Nielsen, Karl Brian	(M-TECH, AAU)	Professor
Nielsen, Kim Lau	(MEK-FAM)	PhD student
Nielsen, Leif Otto		Elected member, Associate Prof.
Nielsen, Martin Bjerre	(MEK-SKK)	PhD student
Nielsen, Michael Wenani	(MEK-MPP)	PhD student
Nielsen, Niels-Jørgen Rishøj		Elected member, PhD.
Nielsen, Oluf Skov	(M-TECH, AAU)	PhD student
Nielsen, Peter Søe	(MEK-MPP)	PhD student
Nielsen, Rasmus Bruus	(M-TECH, AAU)	PhD student
Nielsen, Søren R.K.	(CIVIL, AAU)	Professor, dr.techn.
Nielsen, Ulrik Dam	(MEK-FVM)	Assistant Professor
Niordson, Christian	(MEK-FAM)	Associate Professor, PhD
Niu, Bin	(M-TECH, AAU)	Postdoc
Nygaard, Jens Vinge	ENG, AU	Head of Mechanical Engineering
Obeidat, Anas	(MEK-FVM)	PhD student
Ok, Seongmin	(MAT)	PhD student
Okulov, Valery	WIND	Professor
Olafsson, Olafur Magnus	WIND	PhD student
Olesen, Christian Gammelgaard	(M-TECH, AAU)	Assistant Professor
Olhoff, Niels	(M-TECH, AAU)	Emeritus Professor
Omidvarnia, Farzaneh	(MEK-MPP)	PhD student
Ommen, Torben Schmidt	(MEK-TES)	PhD student
Oshkovr, Simin A.	(M-TECH, AAU)	PhD student

Ottosen, Niels Saabye		Elected member, Professor
Ózkil, Ali Gürcan	(MEK-K&P)	Assistant Professor
Pakkanen, Kirsi Inkeri	(MEK-MTU)	PhD student
Paletti, Hara Naga K. T.	(M-TECH, AAU)	PhD student
Pang, Kar Mun	(MEK-TES)	Postdoc
Pantleon, Karen	(MEK-MTU)	Associate Professor
Pantleon, Wolfgang	(MEK-MTU)	Associate Professor
Paulsen, Bo Terp	(MEK-FVM)	PhD student
Pedersen, David Bue	(MEK-MPP)	PhD student
Pedersen, Louis	(MAT)	PhD student
Pedersen, Michael	(IMM)	Professor
Pedersen, Mikkel Rath	(M-TECH, AAU)	PhD student
Pedersen, Niels L.	(MEK-FAM)	Associate Professor, dr.techn.
Pedersen, Pauli	(MEK-FAM)	Emeritus Professor, dr.techn., HD
Pedersen, Preben Terndrup	(MEK-FVM)	Emeritus Professor, PhD
Pedersen, Thomas Ørts		Elected member, PhD.
Pedersen, Troels Dyhr	(MEK-FVM)	Postdoc
Peters, Christiane Pascale	(MAT)	Postdoc
Petersen, Henrik Gordon		Elected member, Professor
Petersen, Thomas		Elected member, PhD
Petersen, Thor Ugelvig	(MEK-SKK)	PhD student
Pierobon, Leonardo	(MEK-TES)	PhD student
Pilný, Lukás	(MEK-MPP)	PhD student
Pinero, Fernando	(MAT)	PhD student
Potamiche, Catalina-Gabriela	(M-TECH, AAU)	Scientific Assistant
Poulios, Konstantinos	(MEK-FAM)	PhD student
Poulsen, Uffe	ENG, AU	Assistant Professor
Pyrz, Ryszard	(M-TECH, AAU)	Professor
Rabbani, Raja Abid	(MEK-TES)	PhD student
Ramachandran, Gireesh K.V. R.	WIND	PhD student
Rask, Morten	WIND	PhD student
Rasmussen, Henrik K.	(MEK-MPP)	Associate Professor
Rasmussen, John	(M-TECH, AAU)	Professor
Rauhe, Jens Christian M	(M-TECH, AAU)	Associate Professor
Ravn, Poul Martin	(MEK-K&P)	PhD student
Ravn-Jensen, Kim		Elected members, PhD.
Read, Robert	(MEK-FVM)	Postdoc
Rech, Mads		Elect. Mem., CFD Specialist – aerodyn..
Rechberg, Christian	(MAT)	Associate Professor
Redanz, Pia		Elected member, Senior Engineer
Rezaei, Mohsen	M-TECH, AAU	PhD student
Richelsen, Ann Bettina	(MEK-FAM)	Professor, PhD
Rogowska, Magdalena	(MEK-MTU)	PhD student
Rokni, Masoud	(MEK-TES)	Associate Professor
Rootzén, Helle	(IMM)	Professor, Head of Department
Rosbjerg, Dan		Elected members, Professor
Rothuizen, Erasmus Damgaard	(MEK-TES)	PhD student
Røgen, Peter	(MAT)	Associate Professor
Røn, Troels	(MEK-MTU)	PhD student
Salazar, Jorge A. González	(MEK-FAM)	PhD student
Santos, Ilmar F.	(MEK-FAM)	Professor, Dr.-Ing.
Saremi, Sina	(MEK-FVM)	PhD student
Sarhadi, Ali	(MEK-MPP)	PhD student
Schilder, Frank	(MAT)	Assistant Professor, dr.phil.
Schirazifard, Bahzad Saboori	M-TECH, AAU	PhD student
Schjødt-Thomsen, Jan	(M-TECH, AAU)	Associate Professor
Schlechtingen, Meik	(MEK-FAM)	PhD student

Schløer, Signe	WIND	PhD student
Schmiegel, Jürgen	ENG, AU	Associate Professor
Schou, Casper	M-TECH, AAU	Scientific Assistant
Schramm, Jesper	(MEK-FM)	Associate Professor
Selchau, Jacob	M-TECH, AAU	Staff member with university degree
Seng, Sopheak	(MEK-FVM)	PhD student
Shen, Wen Zhong	WIND	Associate Professor
Sichani, Mahdi Teimouri	(CIVIL, AAU)	PhD student
Sigmund, Ole	(MEK-FAM)	Professor, dr.techn.
Sivebæk, Ion Marius	(MEK-MPP)	Associate Professor
Skovgaard, Ove	(MAT)	Professor
Somers, Marcel A. J.	(MEK-MTU)	Section head, Professor
Sonne, Mads Rostgaard	(MEK-MPP)	PhD student
Sorenson, Spencer C.	(MEK-TES)	Docent, Emeritus
Sorokin, Sergey	(M-TECH, AAU)	Professor, PhD
Spangenberg, Jon	(MEK-MPP)	PhD student
Stang, Henrik		Elected member, Associate Prof.
Starke, Jens	(MAT)	Associate Professor
Sterndorff, Martin J.		Elected member, PhD.
Stolpe, Mathias	WIND	Associate Professor
Sumer, B. Mutlu	(MEK-FVM)	Professor
Svensson, Eilif		Elected member, Manager
Sønderby, Ivan Bergquist	WIND	PhD student
Sørensen, Bent	WIND	Head of Research Programme
Sørensen, Claus Aage Grøn	ENG, AU	Senior Researcher
Sørensen, Jens Nørkær	WIND	Professor
Sørensen, John Dalsgaard	(CIVIL, AAU)	Professor, ph.d.
Sørensen, Mads Peter	(MAT)	Associate Professor
Sørensen, Niels Jakob		Elected member, PhD
Sørensen, Rasmus Mørk	(M-TECH, AAU)	PhD student
Sørensen, René	(M-TECH, AAU)	PhD student
Sørensen, Søren Nørgaard	(M-TECH, AAU)	PhD student
Taher, Siavash Talebi	(M-TECH, AAU)	PhD student
Thoft-Christensen, Palle	(CIVIL, AAU)	Emeritus Professor, ph.d.
Thomassen, Søren Lindhard	(M-TECH, AAU)	PhD student
Thomassen, Carsten	(MAT)	Professor
Thompson, Mary Kathryn	(MEK-K&P)	Associate Professor
Thomsen, Jon Juel	(MEK-FAM)	Associate Professor, dr.techn.
Thomsen, Ole Thybo	(M-TECH, AAU)	Professor
Thorborg, Jesper	(MEK-MPP)	Assistant Professor
Tiedje, Niels Skat	(MEK-MPP)	Associate Professor
Toft, Henrik Stensgaard	(CIVIL, AAU)	Assistant Professor
Toftegaard, Helmuth L.	WIND	Senior Scientist
Tommerup, Søren	(M-TECH, AAU)	Assistant Professor
Torry-Smith, Jonas	(MEK-K&P)	PhD student
Tosello, Guido	(MEK-MPP)	Assistant Professor
True, Hans	(IMM)	Emeritus Professor
Tutum, Cem Celal	(MEK-MPP)	Postdoc
Tvergaard, Viggo	(MEK-FAM)	Professor, dr.techn.
Vajari, Danial	(MEK-FAM)	PhD student
Vásquez, Fabian G. Pierart	(MEK-FAM)	PhD student
Vedel-Smith, Nikolaj Kjelgaard	(MEK-MPP)	PhD student
Velte, Clara Marika	WIND	Postdoc
Verdingovas, Vadimas	(MEK-MTU)	PhD student
Vestergaard, Jens Brusgaard	ENG, AU	Associate Professor
Villa, Matteo	(MEK-MTU)	PhD student
Villumsen, Sigurd	M-TECH, AAU	PhD student

Vinther, Frank	(MAT)	PhD student
Voigt, Andreas Jauernik	(MEK-FAM)	PhD student
Wahlgren, Søren	WIND	PhD student
Walther, Jens Honore	(MEK-FVM)	Associate Professor
Wang, Fengwen	(MEK-FAM)	PhD student
Wang, Peng	(M-TECH, AAU)	PhD student
Weldeyesus, Alemseged G.	WIND	PhD student
West, Ole	(MEK-MTU)	PhD student
Wiggers, Sine Leergaard		Elected member, Assistant Professor
Wind-Willassen, Øistein	(MAT)	PhD student
Winther, Grethe	(MEK-MTU)	Associate Professor, Dr. techn.
Wronski, Jorrit	(MEK-TES)	PhD student
Wu, Guanglei	(M-TECH, AAU)	PhD student
Wörösch, Michael	(MEK-K&P)	PhD student
Yang, Jian	M-TECH, AAU	Staff member with university degree
Zadeh, Maziyar Nesari	(M-TECH, AAU)	PhD student
Zafar, Ashar	(M-TECH, AAU)	PhD student
Zhang, Yang	(MEK-MPP)	PhD student
Zhou, Lelai	(M-TECH, AAU)	PhD student
Zhu, Wei Jun	WIND	Senior Researcher
Øye, Stig	WIND	Senior Researcher
Aage, Niels	(MEK-FAM)	Researcher

