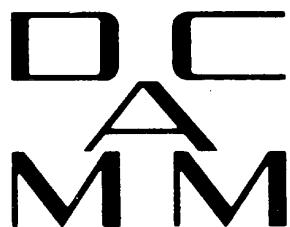


# **DANISH CENTER FOR APPLIED MATHEMATICS AND MECHANICS**

## **ANNUAL REPORT 2014**



**TECHNICAL UNIVERSITY OF DENMARK -  
AALBORG UNIVERSITY - AARHUS UNIVERSITY  
– UNIVERSITY OF SOUTHERN DENMARK**

**DANISH CENTER FOR  
APPLIED MATHEMATICS AND MECHANICS**

**Scientific Council as of January 2015**

Morten Brøns	DTU Compute
Allan P. Engsig-Karup	DTU Compute
Michael Havbro Faber	DTU Civil Engineering
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
Niels Leergaard Pedersen	Dept. of Mechanical Engineering, DTU
Pauli Pedersen	Dept. of Mechanical Engineering, DTU
Achim Schroll	Dept. of Mathematics and Computer Science
Jens Starke	DTU Compute
Mathias Stolpe	DTU Wind Energy
Jens Nørkær Sørensen	DTU Wind Energy
Sine Leergaard Pedersen	Institute of Technology and Innovation, SDU

**Chairman**

Associate Professor Niels Leergaard Pedersen  
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## **FOREWORD**

This 2014 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.dcamm.dk](http://www.dcamm.dk) and on the hompages of the cooperating departments.

This year's annual speaker seminar was given by Professor GertJan van Heijst from Eindhoven University of Technology under the title "The behavior of vortex structures near solid obstacles". For the first time the annual lecture was also given at Aarhus University. Furthermore, a total of 9 DCAMM seminars were held in 2014 and 20 courses were given in the auspices of DCAMM. All the details are available at the DCAMM webpage.

As of September 1<sup>st</sup>, 2014 Niels Leergaard Pedersen has taken over the chairmanship of DCAMM.

As of January 1<sup>st</sup> 2015, the departments cooperating in DCAMM are:

from the **Technical University of Denmark**:

DTU Civil Engineering

DTU Compute

DTU Mechanical Engineering

DTU Wind Energy

from **Aalborg University**:

Department of Civil Engineering

Department of Mechanical and Manufacturing Engineering

from **Aarhus University**

Department of Engineering

from **University of Southern Denmark**

Department of Mathematics and Computer Science

Department of Technology and Innovation

I thank all the members of DCAMM and our international contacts for their support and inspiration, and I look forward to our future continued collaboration.

Niels Leergaard Pedersen

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## 1. MEMBERS 2014

57 professors  
 208 scientific members  
 132 PhD students
 } at the nine cooperating departments at the Center

27 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 Evans 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.  
Texas A&M University 3003  
College Station  
TX 77843-3003  
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 2014**  
(more than a fortnight)

**Guest professors & post docs:**

- Al-Naimi, Ihsan Kadhom Abbas Mostafa, Ministry of Education, Iran, 1.4.14 – 31.12.14
- Caliskan, Ugur, Istanbul Technical University, Turkey, 1.12.14 –
- Carlsson, Leif A., Florida Atlantic University, USA, 1.5.14 – 31.5.14
- Donoso, Alberto, Universidad de Castilla – La Mancha (ULM), Spain, 1.8.14 – 31.8.14
- Gruzman, Mauricio, IME, Brazil, 1.8.14. –
- Guest, James, Johns Hopkins University, USA, 15.4.14 – 15.8.14
- Gimeno, Vicent, Universitat Jaume I, Castello de la Plana, Spain, 20.4.14 – 30.5.14
- Hogan, John, Bristol University, UK, 1.1.14 – 31.8.14
- Isobe, Takanori, Sony Corporation, Japan, 1.3.14 – 31.5.14 & 5.11.14 – 5.12.14
- Kim, Rae Young, KAIST, Korea, 29.7.14 – 27.8.14
- Larsen, Ulrik, Chalmers Tekniska Högskola, Sweden, 1.10.14 –
- Lian, Haojie, Cardiff University, Cardiff, UK, 1.11.14 –
- Lorenz, Thomas, University of App. Sciences Wiesbaden, Germany, 14.8.14 – 26.8.14
- Machuta, Jiri, Czech Republic, 1.9.14 – 19.10.14
- Mansouri, Seyed Hossein, Shahid Bahonar University of Kerman, Iran, 1.2.14 – 31.10.14
- Snyder, Troy, University of Akron, USA, 1.2.14 – 30.6.14
- Stoeva, Diana, University of Wien, Austria, 2.3.14 – 31.3.14
- Yu, Hongbo, Tsinghua University, China, 10.9.14 –
- Zambrano, Harvey, Universidad de Concepcion, Chile, 1.7.14 – 24.8.14

**PhD students**

Becker, Sarah, University of Frankfurt, Germany, 1.1.14 – 31.12.14

Choi, Ju-Hyuck, Hyundai Heavy Industries co. Ltd., Korea, 11.8.14 – 31.1.17

Esfahani, Mohammad Nasr, KOC University, Iran, 1.11.14 –

Fernandez, Unai, University of Basque Country, Spain, 1.8.14 – 31.8.14

Groden, Mark, University of Michigan, USA, 20.1.14 – 7.6.14

Gullo, Paride, University of Udine, Italy, 4.11.14 –

Hasannasab, Marzieh, Kharazmi University of Tehran, Iran, 22.9.14 –

Jianjun, Shi, Soochow University, China, 1.9.14 –

Morales, Hector Fernandez, University Carlos III Madrid, Spain, 25.4.14 – 30.5.14

Orlandini, Valentina, Bologna University, Italy, 28.8.14 – 21.12.14

Pañeda, Emilio Martinez, University of Oviedo, Spain, 12.8.14 – 30.11.14

Pang, Li Jian Andrew, Nanyang Technological University, Singapore, 1.8.14 –

Suarez de la Fuente, Santiago, University College London, UK, 1.8.14 – 31.8.14

Van Hoorickx, Cédric, KU Leuven, Belgium, 11.8.14 – 11.10.14

## 4 . PUBLICATIONS IN 2014

### 4A. INTERNATIONAL JOURNALS WITH PEER REVIEW

#### A

Aage, N.; Andreassen, E.; Lazarov, B. S.

Topology optimization using PETSc: An easy-to-use; fully parallel; open source topology optimization framework. Structural and Multidisciplinary Optimization, (2014).

Nobel-Jørgensen, M.; Aage, N.; Christiansen, A. N.; Igarashi, T.; Bærentzen, J. A.; Sigmund, O. 3D interactive topology optimization on hand-held devices. Structural and Multidisciplinary Optimization, (2014).

Shabadi, R.; Ambat, R.; Dwarakadasa, E. S.

AZ91C magnesium alloy modified by Cd. Materials, Design, (2014), 53, 445-451.

Aggerbeck, M.; Junker-Holst, A.; Vestergaard Nielsen, D.; Gudla, V. C.; Ambat, R.

Anodisation of sputter deposited aluminium–titanium coatings: Effect of microstructure on optical characteristics. Surface and Coatings Technology, (2014), 254, 138-144.

Canulescu, S.; Rechendorff, K.; Borca, C. N.; Jones, N. C.; Bordo, K.; Schou, J.; Nielsen, L. P.; Hoffmann, S. V. ; Ambat, R.

Band gap structure modification of amorphous anodic Al oxide film by Ti-alloying. Applied Physics Letters, (2014), 104(12).

Gudla, V. C.; Canulescu, S.; Shabadi, R.; Rechendorff, K.; Dirscherl, K. ; Ambat, R.

Structure of anodized Al–Zr sputter deposited coatings and effect on optical appearance. Applied Surface Science, (2014), 317, 1113-1124.

Alexandersen, J.; Aage, N.; Andreasen, C. S. ; Sigmund, O.

Topology optimisation of natural convection problems. International Journal for Numerical Methods in Fluids, (2014), 76(10), 699-721.

Andersen, I. M. V. ; Jensen, J. J.

Measurements in a container ship of wave-induced hull girder stresses in excess of design values. Marine Structures, (2014), 37, 54-85.

Damgaard, M.; Bayat, M.; Andersen, L. V.; Ibsen, L. B.

Assessment of the Dynamic Behaviour of Saturated Soil Subjected to Cyclic Loading from Offshore Monopile Wind Turbine Foundations. Computers and Geotechnics, (2014), 61(September 2014), 116-126.

Damgaard, M.; Andersen, L.V.; Ibsen, L.B.

Computationally Efficient Modelling of Dynamic Soil-Structure Interaction of Offshore Wind Turbines on Gravity Footings. Renewable Energy, (2014), 68(August), 289-303.

Damgaard, M.; Zania, V.; Andersen, L.V.; Ibsen, L.B.

Effects of soil-structure interaction on real time dynamic response of offshore wind turbines on monopiles. Engineering Structures, (2014), 75(September 1014), 388-401.

- Vahdatirad, M.; Andersen, L. V.; Ibsen, L. B.; Sørensen, J. D.  
 Stochastic dynamic stiffness of surface footing for offshore wind turbines — a subset simulation approach. *Soil Dynamics and Earthquake Engineering*, (2014), 65, 89-101.
- Vahdatirad, M. J.; Griffiths, D. V.; Andersen, L. V.; Sørensen, J. D.; Fenton, G. A.  
 Reliability analysis of a gravity-based foundation for wind turbines: a code-based design assessment. *Geotechnique*, (2014), 64(8), 635 – 645.
- 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*, (2014), 17(14), 1602-1616.
- Fluit, R.; Andersen, M.S.; Kolk, S.; Verdonschot, N.; Koopman, B.H.F.J.M.  
 Prediction of ground reaction forces and moments during various activities of daily living. *Journal of Biomechanics*, (2014), 47(10), 2321-2329.
- Andreasen, C. S.; Andreassen, E.; Jensen, J. S. ; Sigmund, O.  
 On the realization of the bulk modulus bounds for two-phase viscoelastic composites. *Journal of the Mechanics and Physics of Solids*, (2014), 63, 228-241.
- Andreasen, J. G.; Larsen, U.; Knudsen, T.; Pierobon, L.& Haglind, F.  
 Selection and optimization of pure and mixed working fluids for low grade heat utilization using organic Rankine cycles. *Energy*, (2014), 73, 204-213.
- Andreassen, E.; Andreasen, C. S.  
 How to determine composite material properties using numerical homogenization. *Computational Materials Science*, (2014), 83, 488-495.
- Andreassen, E. ; Jensen, J. S.  
 Topology optimization of periodic microstructures for enhanced dynamic properties of viscoelastic composite materials. *Structural and Multidisciplinary Optimization*, (2014), 49(5), 695-705.
- Andreassen, E.; Lazarov, B. S.; Sigmund, O.  
 Design of manufacturable 3D extremal elastic microstructure. *Mechanics of Materials*, (2014), 69, 1-10.
- Andresen, Gorm B.; Rodriguez, Rolando A.; Becker, Sarah; Greiner, Martin  
 The potential for arbitrage of wind and solar surplus power in Denmark. *Energy*, (2014), 49-58.
- Becker, Sarah; Frew, Bethani A.; Andresen, Gorm B.; Zeyer, Timo; Schramm, Stefan; Greiner, Martin; Jacobson, Mark Z.  
 Features of a fully renewable US electricity system: Optimized mixes of wind and solar PV and transmission grid extensions. *Energy*, (2014), 72, 443-458.

Becker, S.; Rodriguez, Rolando A.; Andresen, Gorm B.; Schramm, S.; Greiner, Martin

Transmission grid extensions during the build-up of a fully renewable pan-European electricity supply. Energy, (2014), 64, 404-418.

Rodríguez, R.A.; Becker, S.; Andresen, G.B.; Heide, Dominik; Greiner, M.

Transmission needs across a fully renewable European power system. Renewable Energy, (2014), 63, 467-476.

Arora, V.

Structural damping identification method using normal FRFs. International Journal of Solids and Structures, (2014), 51, 133-143.

Arora, V.

Constrained antiresonance frequencies based model updating method for better matching of FRFs. Inverse problems in Science and Engineering, (2014), 22, 873-888.

Arora, V.

Use of resonance and antiresonance frequencies for better matching of frequency response function. International Journal of Structure Engineering, (2014), 5, 13-23.

Arora, V.

FE model updating method incorporating damping matrices for structural dynamic modifications. Structural Engineering and Mechanics, and International Journal, (2014), 52, 261-274.

Arora, V.; Wijnant, Y.H.; Boer, A.

Acoustic-based damage detection method. Applied Acoustics, (2014), 80, 23-27.

Azizi, R.; Niordson, C. F. ; Legarth, B. N.

On the homogenization of metal matrix composites using strain gradient plasticity. Acta Mechanica Sinica, (2014), 30(2), 175-190.

## B

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

Mobile Platform Center Shift in Spherical Parallel Manipulators with Flexible Limbs, (2014), 75, 12-26.

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

Stiffness characterization of a 3-PPR planar parallel manipulator with actuation compliance. Journal of Mechanical Engineering Science, (2014).

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

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Analysis of the Integration of Cohesive Elements in regard to Utilization of Coarse Mesh in Laminated Composite Materials. International Journal for Numerical Methods in Engineering, (2014), 99(8), 566-586.

Hyldahl, Per; Mikkola, Aki M.; Balling, O.; Soppanen, Jussi T.  
 Behavior of thin rectangular ANCF shell elements in various mesh configurations.  
*Nonlinear Dynamics*, (2014), 1277-1291.

Bang-Jensen, J.; Bessy, S.  
 (Arc-)disjoint flows in networks. *Theoretical Computer Science*, (2014), 526, 28-40.

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 Galois towers over non-prime finite fields. *Acta Arithmetica*, (2014), 164(2), 163-179.

Anyfantis, K.; Berggreen, C.

Characterizing and Modeling Brittle Bi-material Interfaces Subjected to Shear.  
Applied Composite Materials, (2014), 21, 905–919.

Yang, Z.; Liu, S.; Bingham, H. B.; Li, J.

Corrigendum to “Second-order theory for coupling 2D numerical and physical wave tanks-Derivation; evaluation and experimental validation” [Coast. Eng. 71 (2013) 37–51]. Coastal Engineering, (2014), 85, 87-88.

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Second-order coupling of numerical and physical wave tanks for 2D irregular waves.  
Part I: Formulation; implementation and numerical properties. Coastal Engineering, (2014), 92, 48-60.

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Part II: Experimental validation in two-dimensions. Coastal Engineering, (2014), 92, 61-74.

Yang, Z. W.; Bingham, H. B.; Li, J. X.; Liu, S. X.

The second-order decomposition model of nonlinear irregular waves. Dalian Ligong Daxue Xuebao (Shehui Kexue Ban), (2013), 53(6), 871-878.

Brandt, A.; Brincker, R.

Integrating time signals in frequency domain – comparison with time domain integration. Measurement, (2014), 58, 511-519.

Brandt, A.; Sturesson, P.-O.; Ristinmaa, M.

An illustrative test analysis verification wxtercise using open software. Sound and Vibration, (2014), June.

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FE modelling of light weight wooden assemblies – parameter study and comparison between analyses and experiments. Engineering Structures, (2014), 73, 125-142.

Gaiotti, M.; Rizzo, C.M.; Branner, K.; Berring, P.

An high order Mixed Interpolation Tensorial Components (MITC) shell element approach for modeling the buckling behavior of delaminated composites. Composite Structures, (2014), 108(1), 657-666.

Passon, P.; Branner, K.

Load calculation methods for offshore wind turbine foundations. Ships and Offshore Structures, (2014), 9(4), 433-449.

Luczak, M.; Manzato, S.; Peeters, B.; Branner, K.; Berring, P.; Kahsin, M.

Updating Finite Element Model of a Wind Turbine Blade Section Using Experimental Modal Analysis Results. Shock and Vibration, (2014), 12.

- Hansen, A.M.; Laugesen, R.; Bredmose, H.; Mikkelsen, R.F.  
 Small scale experimental study of the dynamic response of a tension leg platform wind turbine. Journal of Renewable and Sustainable Energy, (2014), 6(5).
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 An efficient domain decomposition strategy for wave loads on surface piercing circular cylinders. Coastal Engineering, (2014), 86, 57-76.
- Paulsen, B. T.; Bredmose, H.; Bingham, H. B.; Jacobsen, N. G.  
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 Thermal expansion and phase transformations of nitrogen-expanded austenite studied with in situ synchrotron X-ray diffraction. Journal of Applied Crystallography, (2014), 47, 819-826.
- Homics, V.; Kirkedal, M.; Brohus, H.; Jensen, R.L.  
 Be10 med termisk beregning: En første analyse af Sommerkomfort. H V A C Magasinet, (2014), 50(8), 26-32.
- Rønholdt, B.; Brohus, H.  
 Towards more efficient student course evaluations for use at management level. Tertiary Education and Management, (2014), 20(1), 72-83.
- Hansen, J.Z.; Brøndsted, P.; Kofoed, M.  
 Design of a fibrous composite preform for wind turbine rotor blades. Materials & Design, (2014), 56, 635-641.
- Andersen, M.; Brøns, M.  
 Topology of helical fluid flow. European Journal of Applied Mathematics, (2014), 25(03), 375-396.
- Vinther, F.; Pinelo, M.; Brøns, M.; Jonsson, G.E.; Meyer, A.S.  
 Mathematical modelling of dextran filtration through hollow fibre membranes. Separation and Purification Technology, (2014), 125.
- Vinther, F.; Pinelo, M.; Brøns, M.; Jonsson, G.E.; Meyer, A.S.  
 Predicting optimal back-scan times in ultrafiltration hollow fibre modules through path-lines. Journal of Membrane Science, (2014), 470, 275-293.
- Budzik, Michael K.; Jensen, Henrik Myhre  
 Bonded Bimaterial Ring under Compressive Load. Institution of Mechanical Engineers. Proceeding. Part L: Journal of Materials: Design and Applications, (2014), 228, 100-108.

Budzik, Michael K.; Jensen, Henrik Myhre

Perturbation analysis of crack front in simple cantilever plate peeling experiment. International Journal of Adhesives and Adhesives, (2014), 53, 29-33.

Budzik, Michael K.; Jumel, Julien; Shanahan, Martin E.R.

Experimental investigation of mesoscale crack front triple line. Applied Physics A, (2014) 114(2), 495-501.

ben Salem, N.; Jumel, J.; Budzik, Michael K.; Shanahan, M.E.R.; Lavelle, F. Analytical and Experimental Investigations of Crack Propagation in Adhesively Bonded Joints with the Mixed Mode Bending (MMB) test Part I: Macroscopic analysis & Digital Image Correlation measurement. Theoretical and Applied Fracture Mechanics, (2014), 74, 209-221.

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Landowski, M.; Budzik, Michal K.; Imieliska, K.

Dynamic Mechanical Behavior of GFRP Composites with SiO<sub>2</sub> Nano Particles Reinforces Epoxy Matrix. Advances in Materials Science (Online), (2014), 13(4), 5-8.

Landowski, M.; Budzik, Michal K.; Imieliska, K.

Water absorption and blistering of GFRP marine laminates with nano particle modified coatings. Journal of Composite Materials, (2014), 2805-2813.

**C**Calaon, M.; Hansen, H. N.; Tosello, G.; Garnæs, J.; Nørregaard, J.; Li, W.

Microfluidic chip designs process optimization and dimensional quality control. Microsystem Technologies, (2015), 21(3), 561-570.

Carlsen, M.

Using Operators to Expand the Block Matrices Forming the Hessian of a Molecular Potential. Journal of Computational Chemistry, (2014), 35(15), 1149-1158.

Carlsen, M.; Koehl, P.; Røgen, P.

On the importance of the distance measures used to train and test knowledge-based potentials for proteins. P L o S One, (2014), 9(11).

Carstensen, S.; Mandviwalla, X.; Vita, L. ; Schmidt Paulsen, U.

Lift of a Rotating Circular Cylinder in Unsteady Flows. Journal of Ocean and Wind Energy, (2014), 1(1), 41-49.

Cerda Varela, A. J. ; Santos, I.

Tilting-Pad Journal Bearings with Active Lubrication Applied as Calibrated Shakers: Theory and Experiment. Journal of Vibration and Acoustics, (2014), 136(6).

Simmons, G. F.; Cerdá Varela, A. J.; Santos, I. ; Glavatskikh, S.  
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Cerullo, M.

Application of Dang Van criterion to rolling contact fatigue in wind turbine roller bearings under elastohydrodynamic lubrication conditions. *Institution of Mechanical Engineers. Proceedings. Part C: Journal of Mechanical Engineering Science*, (2014), 228(12), 2079-2089.

Christensen, O.

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Christensen, O.; Goh, S.S.

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Christensen, O.; Kim, H.O.; Kim, R.Y.

On Parseval Wavelet Frames with Two or Three Generators via the Unitary Extension Principle. *Canadian Mathematical Bulletin*, (2014), 57(2), 254-263.

Christensen, O.; Kim, H.O.; Kim, R.Y.

On entire functions restricted to intervals, partition of unities, and dual Gabor frames. *Applied and Computational Harmonic Analysis*, (2014), 38(1), 72-86.

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Investigation of Jojoba Oil-wax as a Plasticizer for Poly(lactic acid), (2014), 8(1-2), 109-114.

Christiansen, P.; Hattel, J. H.; Bay, N.; Martins, P. A. F.

Physical modeling and numerical simulation of V-die forging ingot with central void. *Institution of Mechanical Engineers. Proceedings. Part C: Journal of Mechanical Engineering Science*, (2014), 228(13), 2347-2356.

Clausen, A.; Aage, N.; Sigmund, O.

Topology optimization with flexible void area. *Structural and Multidisciplinary Optimization*, (2014), 50(6), 927-943.

Clausen, L. R.

Integrated torrefaction vs. external torrefaction - A thermodynamic analysis for the case of a thermochemical biorefinery. *Energy*, (2014), 77, 597-607.

Conseil, H.; Jellesen, M. S.; Ambat, R.

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- S174: BRUUN, HANS PETER LOMHOLT: PLM support to architecture based development – Contribution to computer-supported architecture modelling (January 2015)
- S175: FUGLEDE, NIELS: Kinematics and Dynamics of Roller Chain Drives (July 2014)
- S176: LARSEN, ULRIK: Design and modelling of innovative machinery systems for large ships (October 2014)
- S177: LARSEN, JON STEFFEN: Nonlinear Analysis of Rotors Supported by Air Foil Journal Bearings – Theory & Experiments (February 2015)

## 6. OTHER THESES

AGGERBECK, MARTIN: "Tailored Aluminium based Coatings for Optical Appearance and Corrosion Resistance", DTU Mechanical Engineering, 2014, PhD Thesis.

ALKHZAIMI, HODA A.: "Cryptanalysis of Selected Block Ciphers", DTU Compute, Department of Applied Mathematics and Computer Science, 2014, PhD Thesis.

ANDERS, ANNETT: "Real-time decision support in the face of emergin natural hazard events", DTU Civil Engineering, 2014, PhD Thesis.

ANDERSEN, CAMILLA SLOTH: "Udpegning af risikolokaliteter på det tosporede vejnet I åbent land baseret på data om vejens karakteristika", Aalborg University, Department of Civil Engineering, 2014, PhD Thesis.

ANDERSEN, SØREN JUHL: "Simulation and prediction of wakes and wake interaction in wind farms", DTU Wind Energy, 2014, PhD Thesis.

AWADALKARIM, AHMED: "Petrophysics of Palaeogene sediments", DTU Civil Engineering, 2014, PhD Thesis.

BIGONI, DANIELE: "Uncertainty Quantification with Applications to Engineering Problems", DTU Compute, Department of Applied Mathematics and Computer Science, 2014, PhD Thesis.

BIHLET, UFFE: "High Temperature Resistant Exhaust Valve Spindle", DTU Mechanical Engineering, 2014, PhD Thesis.

BRAND, MARCK: "Heating and Domestic Hot Water Systems in Buildings Supplied by Low-Temperature District Heating", DTU Civil Engineering, 2014, PhD Thesis.

CALAON, MATTEO: "Process validation in micro and nano replication", DTU Mechanical Engineering, 2014, PhD Thesis.

CHIVAAE, HAMID SARLAK: "Simulation and Modelling of Wakes and Wake Interaction in Offshore Wind Farms", DTU Wind Energy, 2014, PhD Thesis.

DAMGAARD, MADS: "Dynamic Properties of Offshore Wind Turbine Foundations", Aalborg University, Department of Civil Engineering, 2014, PhD Thesis.

DARULA, RADOSLAV: "Semi-active vibration control by means of electro-magnetic elements", Aalborg University, Department of Mechanical and Manufacturing Engineering, 2014, PhD Thesis.

DAVIDSDOTTIR, SVAVA: "Investigation of photocatalytic activity of TiO<sub>2</sub> coatings on metallic substrates prepared by PVD", DTU Mechanical Engineering, 2014, PhD Thesis.

DICKOW, KRISTOFFER AHRENS: "Prediction of Noise Transmission in Lightweight Building Structures", Aalborg University, Department of Civil Engineering, 2014, PhD Thesis.

- DOMADIYA, PARTHKUMAR GANDALAL: "Mitigation of Flanking Noise Transmission in Periodic Structures of Lightweight Elements", Aalborg University, Department of Civil Engineering, 2014, PhD Thesis.
- ELMEGÅRD, MICHAEL: "Mathematical Modeling and Dimension Reduction in Dynamical Systems", DTU Compute, Department of Applied Mathematics and Computer Science, 2014, PhD Thesis.
- ERIKSEN, RASMUS NORMANN: "High Strain Rate Characterisation of Composite Materials", DTU Mechanical Engineering, 2014, PhD Thesis.
- FARAHANI, SAEED DAVOUDABADI: "Human Posture and Movement Prediction Based on Musculoskeletal Modeling", Aalborg University, Department of Mechanical and Manufacturing Engineering, 2014, PhD Thesis.
- FERRI, FRANCESCO: "Wave-to-wire Modelling of Wave energy Converters: Critical Assessment, Developments and Applicability for Economical Optimisation", Aalborg University, Department of Civil Engineering, 2014, PhD Thesis.
- FLOORS, ROGIER RALPH: "Boundary-layer wind profile, measurements and theory", DTU Wind Energy, 2014, PhD Thesis.
- GALIOTTO, NICOLAS: "The Integrated Renovation Process: A Holistic Methodology Towards Nearly Zero Energy Buildings", Aalborg University, Department of Civil Engineering, 2014, PhD Thesis.
- GASSO-TORTAJADA, VICENT: "Assessing Sustainability of Agricultural Systems: Balancing context specificity and generality", Aarhus University, Department of Engineering, 2014, PhD Thesis.
- GONZÁLEZ, FERNANDO LUIS PINERO: "An Algebraic Approach to Graph Codes", DTU Compute, Department of Applied Mathematics and Computer Science, 2014, PhD Thesis.
- HANSEN, CHRISTIAN LINDSCHOU: "Coordinated development of product architecture and business processes", DTU Mechanical Engineering, 2014, PhD Thesis.
- HARTHØJ, ANDERS: "Electroplating of Protective Coatings on Intercconnects Used for Solid Oxide Fuel Cell Stacks", DTU Mechanical Engineering, 2014, PhD Thesis.
- HUDECZ, ADRIÁNA: "Icing Problems of Wind Turbine Blades in Cold Climates", DTU Wind Energy, 2014, PhD Thesis.
- JENSEN, MARTIN ANDREAS FALK: "Operations planning for agricultural machinery under capacity constraints", Aarhus University, Department of Engineering, 2014, PhD Thesis.
- JENSEN, M.M.: "A Coupled Transport and Chemical Model for Durability Predictions of Cement Based Materials", DTU Civil Engineering, 2014, PhD Thesis.
- KIAMEHR, SAEED: "Modelling of High Temperature Corrosion of Metals in Biomass-fired Power Plants", DTU Mechanical Engineering, 2014, PhD Thesis.

KJARTANSOTTIR, CECILIA K.: "Development of Hydrogen Electrodes for Alkaline Water Electrolysis", DTU Mechanical Engineering, 2014, PhD Thesis.

KOLMOGOROV, DMITRY: "Simulation of flows past a wind turbine with wind shear using Navier-Stokes based sliding mesh technique", DTU Wind Energy, 2014, PhD Thesis.

KOTOL, MARTIN: "Energy use and indoor environment in new and existing dwellings in Arctic climates", DTU Civil Engineering, 2014, PhD Thesis.

KOUKOURA, CHRISTINA: "Validated loads prediction models for offshore wind turbines for enhanced component reliability", DTU Wind Energy, 2014, PhD Thesis.

KRABBE, MADS: "Fracture Toughness of Thin Films Estimated by Rockwell C Indentation", Aarhus University, Department of Engineering, 2014, PhD Thesis.

LAUSTSTEN, STEFFEN: "Investigation of the failure behaviour and design of sandwich structures with grid-scored core materials for wind turbine blades", Aalborg University, Department of Mechanical and Manufacturing Engineering, 2014, PhD Thesis.

LÁRUSDÓTTIR, ALDÍS RÚN: "Evacuation of Children: Focusing on daycare centers and elementary schools", DTU Civil Engineering, 2014, PhD Thesis.

LAURITSEN, DIANG: "Durability of future energy-efficient building components", DTU Civil Engineering, 2014, PhD Thesis.

LE DRÉAU, JÉRÔME: "Energy flow and thermal comfort in buildings: Comparison of radiant and air-based heating & cooling systems", Aalborg University, Department of Civil Engineering, 2014, PhD Thesis.

LEONG, MARTIN KLITGAARD: "The influence of defects on the failure of wind turbine blades", Aalborg University, Department of Mechanical and Manufacturing Engineering, 2014, PhD Thesis.

MA, JING: "Study of single walled carbon nanotube reinforced polymer composites by Hansen solubility parameters", Aalborg University, Department of Mechanical and Manufacturing Engineering, 2014, PhD Thesis.

MADSEN, JAN BUSK: "Investigation of the surface adsorption and biotribological properties of mucins", DTU Mechanical Engineering, 2014, PhD Thesis.

MADSEN, SØREN: "Buckling of Bucket Foundations During Installation", Aalborg University, Department of Civil Engineering, 2014, PhD Thesis.

MARMARAS, KONSTANTINOS: "Optimal Design of Composite Structures under Manufacturing Constraints", DTU Wind Energy, 2014, PhD Thesis.

MARSCHLER, CHRISTIAN: "Coarse Analysis of Microscopic Models using Equation-Free Methods", DTU Compute, Department of Applied Mathematics and Computer Science, 2014, PhD Thesis.

MARTYNIUK, KAROLINA: "Studies of 3D microscale damage evolution in composites materials for wind turbines", DTU Wind Energy, 2014, PhD Thesis.

MAHSHID, RASOUL: "High Performance Transfer Press for Precision Manufacturing of Micro Parts", DTU Mechanical Engineering, 2014, PhD Thesis.

MATTEONI, G.: "Understanding and simulating vibrations of plain bridge cables under varying meteorological conditions: Wind tunnel experimental work and analytical modelling", DTU Civil Engineering, 2014, PhD Thesis.

MBIA, ERNEST NCHA: "Assessment of Dynamic Flow Pressure and Geomechanical Behaviour of a CO<sub>2</sub> Storage Complex", DTU Civil Engineering, 2014, PhD Thesis.

NIELSEN, JESPER ELLERBÆK: "Combining C- and X-band Weather Radars for Improving Precipitation Estimates over Urban Areas", Aalborg University, Department of Civil Engineering, 2014, PhD Thesis.

OLESEN, CHRISTIAN GAMMELGAARD: "The Influence of Sitting Conditions on Soft Tissue Loads", Aalborg University, Department of Mechanical and Manufacturing Engineering, 2014, PhD Thesis.

OROPEZA-PEREZ, IVAN: "The Impact of an Extensive Usage of Controlled Natural Ventilation in the Residential Sector on Large-Scale Energy Systems", Aalborg University, Department of Civil Engineering, 2014, PhD Thesis.

PEDERSEN, HANS HENRIK: "Wide Span technology for efficient and environmental friendly vegetable production", Aarhus University, Department of Engineering, 2014, PhD Thesis.

PEDERSEN, JESPER GRØNNEGAARD: "Numerical modelling of the boundary-layer wind profile", DTU Wind Energy, 2014, PhD Thesis.

PERISIC, NEVANA: "System Identification of Wind Turbines for Structural Health Monitoring", Aalborg University, Department of Civil Engineering, 2014, PhD Thesis.

ROSENBRAND, ESTHER: "Effect of temperature on sandstone permeability: Mineral-fluid interaction", DTU Civil Engineering, 2014, PhD Thesis.

RØN, TROELS: "A Biometric Approach to Lubricate Engineering Materials", DTU Mechanical Engineering, 2014, PhD Thesis.

SKIBSTED, GRY: "Matrix changes and side effects induced by electrokinetic treatment of porous and particulate materials", DTU Civil Engineering, 2014, PhD Thesis.

SOLGAARD, ANDERS O.S.: "Corrosion of reinforcement bars in steel fibre reinforced concrete structures" DTU Civil Engineering, 2014, PhD Thesis.

SVEC, OLDRICH: "Flow modelling of steel fibre reinforced self-compacting concrete", DTU Civil Engineering, 2014, PhD Thesis.

VAHDATIRAD, MOHAMMAD JAVAD: "Reliability-Based Design of Wind Turbine Foundations – Computational Modelling", Aalborg University, Department of Civil Engineering, 2014, PhD Thesis.

VANHOUTTEGHEM, LIES: "Method for design of two-energy type houses based on simulations of indoor environment and energy use", DTU Civil Engineering, 2014, PhD Thesis.

VILLA, MATTEO: "Isothermal Martensite Formation", DTU Mechanical Engineering, 2014, PhD Thesis.

WEHMEYER, CHRISTOF: "A Floating Offshore Wind Turbine in Extreme Wave Conditions", Aalborg University, Department of Civil Engineering, 2014, PhD Thesis.

WELDEYESUS, ALEMSEGED GEBREHIWOT: "Free Material Optimization of Wind Turbine Blades", DTU Wind Energy, 2014, PhD Thesis.

WEST, OLE H.: "Failure Analysis and Thermochemical Surface Engineering of Barings in the Wind Turbine Drivetrain", DTU Mechanical Engineering, 2014, PhD Thesis.

WIND-WILLASSEN, ØISTEIN: "Mathematical modelling of wetting properties of micro- and nano structured polymer surfaces", DTU Compute, Department of Applied Mathematics and Computer Science, 2014, PhD Thesis.

WU, MIN: "Using low temperature calorimetry and moisture fixation method to study the pore structure of cement based materials", DTU Civil Engineering, 2014, PhD Thesis.

WÖRÖSCH, MICHAEL: "End-to-end requirements management for multi-projects in the construction industry" DTU Mechanical Engineering, 2014, PhD Thesis.

ZAJAS, JAN JAKUB: "Experimental Characterization and modeling of Advanced Polymer Composite Window Frames", Aalborg University, Department of Civil Engineering, 2014, PhD Thesis.

ZURKINDEN, ANDREW: "Analysis of a Wave Energy Converter with Particular Focus on the Effects of Power Take-Off Forces on the Structural Responses", Aalborg University, Department of Civil Engineering, 2014, PhD Thesis.

## 7. DCAMM SEMINARS GIVEN IN 2014

Professor Alberto Cardona: Simultaneous enforcement of constraints at position and velocity levels in the nonsmooth generalized- $\alpha$  scheme. 18 March 2014. Universidad Nacional del Litoral, Santa Fe, Argentina.

Researcher, PhD Carl Dahlberg: Direct measurements of grain boundary mechanics in an Aluminium bicrystal using a newly developed EBSD-based method. 13 May 2014. KTH Royal Institute of Technology, Stockholm, Sweden.

Dr. Antonio Filippone: Long-Range Noise Propagation. 20 May 2014. The University of Manchester, Manchester, United Kingdom.

Dr. Basil Audoly: Non-linear mechanics of elastic and viscous threads. 24 June 2014. CNRS and University Paris 6, Paris, France.

Professor Kurt Anderson: Multibody methods for the Efficient modeling and Simulation of large Molecular Systems. 25 June 2014. Dept. of Mechanical, Aerospace and Nuclear Engineering, Rensselaer Polytechnic Institute, Troy, USA.

Associate Professor Qingda Yang: Micro- and Macroscopic Failure Mechanisms in Composites and High-Fidelity Simulation based Virtual Testing. 26 June 2014. Dept. of Mechanical and Aerospace Engineering, University of Miami. Cora Gables, FL, USA.

Professor, Dr. Sujoy Kumar Saha: Enhanced Heat Transfer. 29 August 2014. Dept. of Mechanical Engineering, Indian Institute of Engineering Science and Technology, Shibpur, India.

Principal Reservoir Engineer Ole Jørgensen: Novel finite-element approach arising from composite materials research Applied to borehole acoustics. 10 December 2014. Mærsk Oil and Gas A/S, Copenhagen, Denmark.

Dr., PhD Daniel Balint: Dynamic Discrete Dislocation Plasticity for Extremely High Strain Rates. 12 December 2014  
Dept. of Mechanical Engineering, Imperial College London, United Kingdom

## **8. DCAMM COURSES GIVEN IN 2014**

### **DTU Mechanical Engineering**

Experimental fluid dynamics and data interpretation

High Performance Computing: FORTRAN, Open MP and MPI

Journal club in fluid mechanics

Journal club in internal Combustion Engines

Advanced Engineering Thermodynamics

Electron Microscopy and Analysis for Materials Research

Micro Mechanical Systems Design and Manufacture (PhD summer school)

Nanotribology: Theory and applications

Measurement uncertainty estimation using statistical methods

### **DTU Compute**

Advanced Numerical Methods for Differential Equations

## APPENDIX: List of members 2014

Abbreviations:

from Technical University of Denmark

CIVIL:	Dept. of Civil Engineering
COMPUTE:	Dept. of Applied Mathematics and Computer Science
MEK-FAM:	Dept. of Mechanical Engineering, Solid Mechanics
MEK-FVM:	Dept. of Mechanical Engineering, Fluid Mechanics, Coastal and Maritime Engineering
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 and Surface Engineering
MEK-TES:	Dept. of Mechanical Engineering, Thermal Energy

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

from University of Southern Denmark

SDU-MAT:	Dept. of Mathematics and Computer Science
SDU-ITI:	Dept. of Technology and Innovation

Aage, Niels	(MEK-FAM)	Researcher
Adesokan, Bolaji James	(COMPUTE)	PhD student
Alexandersen, Joe	(MEK-FAM)	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)	Head of center
Andersen, Jakob Axel Bejbro	(MEK-K&P)	PhD student
Andersen, Lars Vabbersgaard	(CIVIL, AAU)	Associate Professor, PhD
Andersen, Michael Skipper	(M-TECH, AAU)	Assistant Professor
Andersen, Morten Thøtt	(CIVIL, AAU)	PhD student
Andersen, Poul	(MEK-FVM)	Associate Professor
Andersen, Søren Juhl	(WIND)	Postdoc
Andreasen, Casper Schousboe	(MEK-FAM)	Associate Professor
Andreasen, Jens H.	(M-TECH, AAU)	Associate Professor
Andreasen, Jesper Graa	(MEK-TES)	Scientific Assistant
Andreasen, Mogens Myrup	(MEK-K&P)	Professor, Emeritus
Andreassen, Erik	(MEK-FAM)	PhD student
Andresen, Gorm	(ENG, AU)	Postdoc

Andrillo, Tito	(MEK-MPP)	PhD student
Arora, Vikas	(SDU-ITI)	Associate Professor
Azizi, Reza		Elected member, PhD
Back-Pedersen, Andreas		Elected member, PhD.
Bai, Shaoping	(M-TECH, AAU)	Assistant Professor
Bak, Brian Lau Verndal	(M-TECH, AAU)	Postdoc
Bakkedal, Morten	(MEK-MTU)	PhD student
Balci, Adnan	(COMPUTE)	PhD student
Balling, Ole	(ENG, AU)	Aff. Professor
Bang-Jensen, Jørgen	(SDU-MAT)	Professor
Barington, Alexander	(MEK-MTU)	PhD student
Barton, Janice	M-TECH, AAU	Professor
Baumbach, Jan	(SDU-MAT)	Associate Professor
Bay, Niels	(MEK-MPP)	Professor
Beelen, Peter	(COMPUTE)	Associate Professor
Bellemo, Lorenzo	(MEK-TES)	PhD student
Bendsøe, Martin		Elected member, Professor
Berggreen, Christian	(MEK-FAM)	Associate Professor
Biel, Anders	(WIND)	Postdoc
Bingham, Harry B.	(MEK-FVM)	Associate Professor
Bisacco, Giuliano	(MEK-MPP)	Assistant Professor, PhD
Bitsche, Robert	(WIND)	Researcher
Blasques, José Pedro	(WIND)	Postdoc
Boelskifte, Per	(MEK-K&P)	Professor
Bohr, Tomas		Elected member, Professor
Bordi, Kirill V.	(MEK-MTU)	Postdoc
Borg, Ulrik		Elected member, Senior Engineer
Bossolini, Elena	(COMPUTE)	PhD student
Bottoli, Federico	(MEK-MTU)	PhD student
Bræstrup, M. W.		Elected member, PhD.
Brander, David	(COMPUTE)	Associate Professor
Brandt, Anders	(SDU-ITI)	Associate Professor
Branner, Kim	(WIND)	Senior Researcher
Bräuner, Lars	(ENG, AU)	Associate Professor
Bredmose, Henrik	(WIND)	Associate Professor
Brincker, Rune	(ENG, AU)	Professor
Brink, Bastian	(MEK-MTU)	PhD student
Brohus, Henrik	(CIVIL, AAU)	Associate Professor, ph.d.
Brøndsted, Povl	(WIND)	Professor
Brøns, Morten	(COMPUTE)	Professor, PhD
Budzik, Michal	(ENG, AU)	Assistant Professor
Buhl, Thomas	(WIND)	Head of Section
Calaon, Matteo	(MEK-MPP)	Postdoc
Carlsen, Martin	(COMPUTE)	PhD student
Carstensen, Stefan	(MEK-FVM)	Associate Professor
Cederkvist, Jan		Elected member, PhD.
Cerullo, Michele	(MEK-FAM)	PhD student
Chapelle, Lucie	(WIND)	PhD student
Chen, Hao	(MEK-FVM)	PhD student
Chirandini, Marco	(SDU-MAT)	Associate Professor
Chivaee, Hamid Sarlak	(WIND)	Postdoc
Christensen, Erik Damgaard	(MEK-FVM)	Professor, Head Section
Christensen, Georg Kronborg	(MEK-K&P)	Associate Professor
Christensen, Martin Ebro	(MEK-K&P)	PhD student
Christensen, Ole	(COMPUTE)	Professor, dr.scient.
Christiansen, Christian Kim	(MEK-FAM)	PhD student
Christiansen, Esben Toke	(M-TECH, AAU)	PhD student

Christiansen, Jesper De Claville	(M-TECH, AAU)	Professor
Christiansen, Peter	(MEK-MPP)	Researcher
Christiansen, Ramus Ellebæk	(MEK-FAM)	PhD student
Christiansen, Rune Juul	(MEK-MTU)	PhD student
Christiansen, Thomas	(MEK-MTU)	Senior Scientist
Clausen, Anders	(MEK-FAM)	PhD student
Clausen, Johan Christian	(CIVIL, AAU)	Assistant Professor
Clausen, Lasse Røngaard	(MEK-TES)	Assistant Professor
Comminal, Raphael	(MEK-MPP)	PhD student
Conseil, Helene	(MEK-MTU)	PhD student
Cordtz, Rasmus	(MEK-FM)	Postdoc
Costache, Andrei	(MEK-FAM)	PhD student
Couturier, Philippe	(MEK-FAM)	PhD student
D'Angelo, Greta	(MEK-MPP)	PhD student
Da Fonseca, Cesar Augusto Lampe Linhares	(MEK-FAM)	PhD student
Dag, Kaya Onur	(WIND)	PhD student
Dahl, Kristian Vinter	(MEK-MTU)	Senior Researcher
Dalen, Kristine Røste	(MEK-TES)	PhD student
Dalla, Guiseppe Costa	(MEK-MPP)	PhD student
Dam, Magnus	(COMPUTE)	PhD student
Damkilde, Lars	(CIVIL, AAU)	Professor
Dammann, Bernd	(COMPUTE)	Associate Professor
Danckert, Joachim	(M-TECH, AAU)	Professor
Davidsdóttir, Svava	(MEK-MTU)	PhD student
De Chiffre, Leonardo	(MEK-MPP)	Professor
Debertshäuser, Harald	(WIND)	PhD student
Debrabant, Kristian	(SDU-MAT)	Associate Professor
Della Morte, Michele	(SDU-MAT)	Associate Professor
Din, Rameez Ud	(MEK-MTU)	PhD student
Dou, Suguang	(MEK-FAM)	PhD student
Drozdov, Aleksey	(M-TECH, AAU)	Adjunct Professor
Eder, Martin Alexander	(WIND)	Researcher
Efler, Petr	(MEK-MTU)	Postdoc
Egelund, Arne Jørgensen	(MEK-TES)	Associate Professor
Elmegaard, Brian	(MEK-TES)	Associate Professor, Head of section
El-Naaman, Salim	(MEK-FAM)	PhD student
Endelt, Benny Ørtoft	(M-TECH, AAU)	Associate Professor
Enemark, Søren	(MEK-FAM)	PhD student
Engsig-Karup, Allan Peter	(COMPUTE)	Associate Professor
Eriksen, Rasmus Normann W.	(MEK-FAM)	Scientific Assistant
Eriksen, René Lynge	(SDU-ITI)	Associate Professor
Evgrafov, Anton	(COMPUTE)	Associate Professor
Faber, Michael H.	(CIVIL)	Head of department
Fasano, Andrea	(MEK-MPP)	PhD student
Fedorov, Vladimir	(WIND)	Postdoc
Feng, Ju	(WIND)	Postdoc
Fernandes, Frederico Augusto	(MEK-MTU)	Postdoc
Frandsen, Niels Morten Marselv	(MEK-FAM)	PhD student
Fredsøe, Jørgen	(MEK-FVM)	Professor
Frier, Christian	(CIVIL, AAU)	Associate Professor, PhD
Fuhrman, David R.	(MEK-FVM)	Associate Professor
Gallego-Calderon, Juan	(WIND)	PhD student
Garcia, Néstor Ramos	(WIND)	Researcher
Georgakis, Christos	(CIVIL)	Associate Professor
Gervang, Bo	(ENG, AU)	Associate Professor
Giannekas, Nikolaos	(MEK-MPP)	Scientific Assistant

Glud, Jens Ammitzbøll	(M-TECH, AAU)	PhD student
Gogebeur, Yuri	(SDU-MAT)	Associate Professor
Goodsite, Michael Evan	(SDU-ITI)	Professor, Head of Department
Graeme, Keith		Elected member
Gravesen, Jens	(COMPUTE)	Associate Professor, dr.phil
Greiner, Martin	(ENG, AU)	Professor
Gudia, Visweswara	(MEK-MTU)	PhD student
Guerrier, Patrick	(MEK-MPP)	PhD student
Gunneskov, Ole		Elected member, PhD.
Guolaugsson, Tómas Vignir	(MEK-K&P)	Scientific Assistant
Haglind, Fredrik	(MEK-TES)	Associate Professor
Haider, Sajjad	(MEK-FM)	Researcher
Hald, John	(MEK-MTU)	Affiliated Professor
Halkjær, Søren		Elected member
Hansen, Claus Thorp	(MEK-K&P)	Associate Professor
Hansen, Hans Nørgaard	(MEK-MPP)	Professor, Head of Section
Hansen, John M.	(MEK-FAM)	Associate Professor
Hansen, Kurt Schaldemose	(WIND)	Senior Researcher
Hansen, Martin Otto Laver	(WIND)	Associate Professor
Hansen, Morten H.	(WIND)	Professor
Hansen, Per Chr.	(COMPUTE)	Professor, dr. techn.
Harthøj, Anders	(MEK-MTU)	Scientific Assistant
Haselbach, Philipp	(WIND)	PhD student
Hassing, Henrik		Elected member, PhD
Hattel, Jesper Henri	(MEK-MPP)	Professor
Hauksdóttir, Dagný	(MEK-K&P)	PhD student
Heilmann, Irene	(COMPUTE)	PhD student
Heinen, Frederik	(M-TECH, AAU)	PhD student
Henningensen, Casper Schytte	(MEK-FVM)	Scientific Assistant
Henriksen, Christian	(COMPUTE)	Associate Professor, PhD
Henriksen, Søren Randrup	(M-TECH, AAU)	PhD student
Hiller, Jochen	(MEK-MPP)	Postdoc
Hjorth, Poul	(COMPUTE)	Associate Professor, PhD
Høgh, Jacob Herold	(MEK-FAM)	Scientific Assistant
Høgsberg, Jan Becker	(MEK-FAM)	Associate Professor
Horsewell, Andy	(MEK-MTU)	Professor
Hougaard, Peter		Elected member, PhD
Howard, Thomas J.	(MEK-K&P)	Associate Professor
Hrgovan, Iva	(WIND)	PhD student
Huang, Fenix Wenda	(SDU-MAT)	Postdoc
Ibsen, Lars Bo	(CIVIL, AAU)	Professor, MSO, PhD
Ingvorsen, Kristian Mark	(MEK-FVM)	Postdoc.
Islam, Mohammad Aminul	(MEK-MPP)	Postdoc.
Ivarsson, Anders	(MEK-TES)	Associate Professor
Jabbarinehnam, Mirmasoud	(MEK-MPP)	Postdoc
Jacobsen, Christian Brix		Elected member, PhD.
Jacobsen, Henrik S.	(MEK-TES)	Scientific Assistant
Jakobsen, Johnny	(M-TECH, AAU)	Associate Professor
Jakobsen, Mads Sielemann	(COMPUTE)	PhD student
Janakiraman, Shravan	(MEK-FAM)	PhD student
Jellesen, Morten Stendahl	(MEK-MTU)	Senior Researcher
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, Jonas Kjær	(MEK-TES)	PhD student
Jensen, Jørgen Juncher	(MEK-FVM)	Professor, dr. techn.

Jensen, Karsten Lindegård	(MEK-FVM)	PhD student
Jensen, Lars Rosgaard	(M-TECH, AAU)	Associate Professor
Jespersen, Freja Nygaard	(MEK-MTU)	PhD student
Jespersen, Kirstine Munk	(WIND)	PhD student
Johannesson, Björn	(CIVIL)	Associate Professor
Johansen, Villads Egede	(MEK-FAM)	PhD student
Johansson, Jens	(SDU-ITI)	Assistant Professor
Jönsson, Jeppe	(CIVIL)	Professor
Jørgensen, Jeppe Bjørn	(WIND)	PhD student
Jørgensen, John Bagterp	(COMPUTE)	Assistant Professor
Jørgensen, Mads Carsten	(MEK-TES)	Scientific Assistant
Jørgensen, Martin Heide	(M-TECH, AAU)	Head of Department
Juul, Nicolai Ytterdal	(MEK-MTU)	PhD student
Kærn, Martin Ryhl	(MEK-TES)	Researcher
Karamehmedovic, Mirza	(COMPUTE)	Associate Professor
Karatzas, Vasileios	(MEK-FAM)	Scientific Assistant
Kepler, Jørgen Asbøl	(M-TECH, AAU)	Associate Professor
Kermani, Nasrin Arjomand	(MEK-TES)	PhD student
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Lenau, Torben Anker	(MEK-K&P)	Associate Professor
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Lund, Erik	(M-TECH, AAU)	Professor, PhD
Lund, Ivar	(SDU-ITI)	Associate Professor
Lund, Morten Enemark	(M-TECH, AAU)	PhD student
Lützen, Marie	(SDU-ITI)	Associate Professor
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Mikkelsen, Lars Pilgaard	(WIND)	Associate Professor
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Mischkot, Michael	(MEK-MPP)	PhD student
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Mohanty, Sankhya	(MEK-MPP)	PhD student
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