

## RATIONAL DESIGN AND OPTIMIZATION OF MATERIALS AND STRUCTURES – PAST, PRESENT AND FUTURE

## WORKSHOP

6 April 2011 at Aalborg University, Department of Mechanical and Manufacturing Engineering

In celebration of the 70<sup>th</sup> birthday of

Professor, Dr.techn. Niels Olhoff



Location: Fibigerstræde 16, Room 1.208, DK-9220 Aalborg East, Denmark

## PROGRAMME:

9:00-9:45	Breakfast – Buffet
9:50:10:00	Welcome
	Head of Department, Martin Heide Jørgensen
10:00-10:30	Singular Optimum Topology of Frame Structures and
including 10 min for discussions	Numerical Algorithms for Maximizing Frequency
	Prof. Gendong Cheng
10:30-11:00	Historic Applications of the Olhoff-Cheng Principles in
including 10 min for discussions	Topology Optimization
	Prof. George Rozvany
11:00-11:30	Parameter Optimization of a Neuro-Musculo-Skeletal
including 10 min for discussions	Model for Human Locomotion
	Prof. Werner Schiehlen
11:30-12:00	Optimized Designs for 2D Thermoelastic Structures
including 10 min for discussions	Prof. Pauli Pedersen
12:00-13:00	Lunch, AAU restaurant, Fibigerstræde 15
13:10-13:40	Hierarchical Optimization of the Structure and its
including 10 min for discussions	Material: New Developments and Applications
	Prof. Helder Rodrigues
13:40-14:10	Robust Topology Optimization Considering Geometric
including 10 min for discussions	Imperfections
	Prof. Ole Sigmund
14:10-14:40	For our common Benefit - Cooperation between
including 10 min for discussions	University and Company
	Dr. Andreas Back-Pedersen
14:40-15:10	Modeling and Simulation of Offshore Drilling
including 10 min for discussions	Equipment
5	Prof. Michael Rygaard Hansen
15:10-15:40	Refreshments
15:40-16:10	On some Olhoff Results in Structural Optimization
including 10 min for discussions	Prof. Erik Lund
16:10-16:40	Optimization from Structures to Biology
including 10 min for discussions	Prof. John Rasmussen
16:40-17:00	Plenary discussion and closing remarks
17:00-18:30	Reception at the Department of Mechanica Manufacturing Engineering, Fibigerstræde 16, room

## **REGISTRATION:**

Participation is free of charge (including printed abstracts, refreshments, lunch and reception).

To register for the workshop please do so by e-mail to Secretary Lis Bach, E-mail: <u>sekr@m-tech.aau.dk;</u> Phone: +45 9940 8981.

Deadline for registration is Wednesday 30 March 2011.