Workshop High Performance Steels 11-12 June 2009

Programme

Thursday 11th June
12.00 -13.00 Lunch
13.10 -13.30 - welcome address and short presentation of Ltu
13.30 -14.30 talk 1: **G Olson** – gives a general talk about his research
14.30 -15.00 coffe break
15.00 -16.00 talk 2: **H Bhadeshia** – gives a general talk about his research
16.00 -17.00 Overview of (selected) research at Ltu
Visit to Storforsen (depending on weather)
Dinner (buffe) 20.00
Friday 12th June
Breakfast at hotel (those in Älvsbyn have breakfast there and has to drive about 35 km)
08.30 - 09 .30 talk 3: **G Olson** – talks about High Performance Steel
09.30 -10.00 coffee break
10.00 -11.00 talk 4: **H Bhadeshia** – talks about High Performance Steel
11.00 – 11.15 Closing of workshop.
11.15 - lunch

Location Hotel Storforsen

Phone: 0929-72100
Adress: Bredsel 105, 942 95 VIDSEL
Distance 92 km from airport. Takes less than 1,5 hours.

Guest speakers

Greg Olson golson@questek.com

Wilson-Cook Chaired Professor in Engineering Design
Northwestern University, Evanston, Chicago

http://www.matsci.northwestern.edu/faculty/gbo.html

Harry Bhadeshia hkdb@cam.ac.uk

Harry Bhadeshia FREng, FRS, FNAE
Tata Steel Professor of Metallurgy
Cambridge University

http://www.msm.cam.ac.uk/Department/DeptInfo/StaffProfiles/Bhadeshia.html

Participants from Swedish Steel AB www.ssab.com

Anders Borggren, Anders.Borggren@ssab.com
Astrid Granberg, astrid.granberg@ssab.com
Ylva Granbom Ylva.Granbom@ssab.com
Title: M.Sc in Materials Science
Work: Product development, Ph.D-student in microstructure development in AHSS
Special interest: annealing phenomena/phase transformations, deformation hardening, materials modeling
Karin Hoppe-Storck karinh.hoppe.storck@ssab.com
Erik Karlsson Erik.Karlsson@ssab.com
Mikael Larsson Mikael.Larsson@ssab.com

Participants from AB Sandvik Materials Technology www.sandvik.com

Guocai Chai guocai.chai@sandvik.com

Title: senior specialist in mechanical metallurgy, R&D, Sandvik Materials Technology, PhD, Docent
Work: material research (responsible to establish a tribology laboratory at SMT now).
Special interest: strength, deformation, fatigue and fracture of metal materials, multiscale modelling focusing on material mechanics.

Sofia Hansson sofia.e.hansson@sandvik.com
Title: Research engineer at Sandvik Materials Technology (SMT). Tech.Lic in Material Mechanics,
Work: FE simulation of manufacturing processes at SMT. PhD student.
Special interest: Simulation of stainless steel tube extrusion.
Erika Hedblom erika.hedblom@sandvik.com

Title: Modeling Manager, R&D, Sandvik Materials Technology, Tech. Lic.
Work: Manager of a department that works with finite element modeling and computational fluid dynamics for SMT´s processes and products.
Special interest: Simulation of materials processing

Lars Nylöf lars.nylof@sandvik.com
Title: Senior research engineer in physical metallurgy
Work: Material research/ Product development/ Physical metallurgy
Special interest: Phase transformations/ Microstructural and alloy design/ Thermal analysis/ Thermodynamic modelling of stainless steels and alloys.

Participants from AB Sandvik Coromant www.sandvik.com

Vahid Kalhori vahid.kalhori@sandvik.com
Title: Sr- Research Engineeri
Work: R&D in metal cutting and product innovatiob, research coordinator
Special interest: Modeling and simultion of metal cutting, material behavior and material modeling, product and knowledge innovation
Dan Wedberg dan.wedberg@sandvik.com
Title: Industrial PhD-studen in Material Mechanics
Work: Research in material modelling and simulations of metal cutting
Special interest: Material behavior and modelling, FE-simulation of metal cutting, fatigue, fracture

Participants from Volvo Aero www.volvo.com

Robert Pederson robert.pederson@volvo.com

Title: Company specialist in Materials Technology; PhD in Materials Science and Technology.
Work: R&D focus on Titanium alloys; MAE for the manufacturing of the current and next generation space rocket turbines in the Ariane 5 space rocket.
Special interest: Physical material models for titanium alloys.

Magnus Hörnqvist magnus.hornqvist@volvo.com
Title: Materials Behaviour Engineer, PhD in Materials Science and Engineering
Work: Mechanical properties of aero engine materials (R&D)
Special interest: Fracture mechanics, fatigue crack growth, material modeling
Henrik Tersing (Alberg) Henrik.Alberg@volvo.com
Title: Process Modelling Technologist
Work: Responsible for the R&D of (manufacturing) process modeling group. Coordinator of one European Project Research and Technology (FP6-STREP) and for several national R&T projects.
Special interest: Simulation of manufacturing processes, chaining of processes, material modelling and validation of models.

Participants from Gestamp-HardTech www.hardtech.gestamp.com

Daniel Berglund daniel.berglund@hardtech.gestamp.com
Title: PhD in Computer Aided Design
Work: Research Engineer at Gestamp HardTech
Special interest: Development of finite element methods for hot forming and crash analysis. Process development of new hot forming technologies
Katarina Lindström katarina.lindstrom@hardtech.gestamp.com
Title: MSc in Metallurgy and Materials Technology
Work: Research engineer at Gestamp HardTech AB
Special interest: The hot forming process and the connections between process parameters, microstructure and mechanical properties

Participant from Indexator www.indexator.se

Richard Larker Richard.Larker@indexator.se

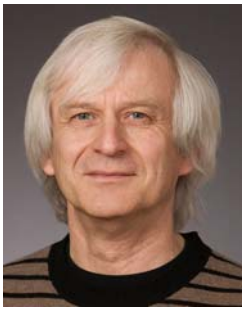
Title: R&D Manager, Indexator AB, PhD & DSc in Eng. Materials, LTU
Work: Development of cost-efficient materials for hydraulic rotators and tiltrotators, with focus on high-performance castings based on Si-solution strengthened ferritic ductile irons and on ausferritic ductile irons (ADI). Tribological research about boundary lubricated contacts & performance of ADI.

Participants from Luleå University of Technology www.ltu.se

Lars-Erik Lindgren lars-erik.lindgren@ltu.se

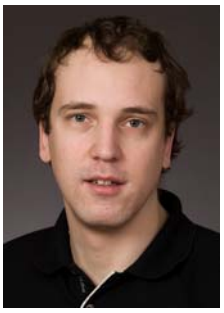
Title: Professor in Material Mechanics and head of division of Material Mechanics
Work: Teaching in undergraduate and graduate courses,supervisning PhD students and conducting research.
Special interest: Simulation of manufacturing processes and material modeling.

Ales.Svoboda ales.svoboda@ltu.se



Title: Senior lecturer in Material Mechanics, PhD
Work: Teaching in undergraduate courses, supervising PhD students and conducting research.
Special interest: Simulation of manufacturing processes and especially machining and powder compaction simulations.

Martin Fisk martin.fisk@ltu.se



Title: PhD student in Material Mechanics
Work: Teaching in undergraduate courses and conducting research.
Special interest: Simulation of manufacturing processes and especially induction heating and welding simulations. Electro-magnetic and thermo-mechanical properties of Alloy 718.

Bijish Babu bijish.babu@ltu.se

Title: Ph.D. student in Material Mechanics
Work: Develop physically based material model for metal plasticity to be used in FE simulations.
Special Interest: Study of microstructure evoltion and structure property relationship in Ti-6Al-4V.

Andreas Lundbäck andreas.lundback@ltu.se

Title: PhD student in Material Mechanics
Work: Teaching in undergraduate courses and conducting research.
Special interest: Simulation of manufacturing processes and especially welding simulations.

Magnus Söderberg magnus.soderberg@ltu.se

Title: PhD student in Material Mechanics
Work: Teaching in undergraduate courses and conducting research.
Special interest: Simulation of manufacturing processes and especially welding simulations.

John C. Ion john.ion@ltu.se

Title: Engineering Materials, Assoc. Prof.
Work: Teaching of undergraduate and graduate courses; supervising of MSc and PhD students; conducting research.
Special interest: Analytical modelling of manufacturing processes and materials.

Esa Vuorinen esa.vuorinen@ltu.se bekräftad – hotell

Title: Lecturer in Engineering Materials, Licentiate in Technology
Work: Teaching in the field of metallic materials and materials selection in undergraduate courses and conducting research in the field of steels.
Special interest: Microstructure to property relationship especially for steels with ausferritic (austenitic ferritic) microstructures.

Raguveer Gaddam raguveer.gaddam@ltu.se
PhD-student in Engineering Materials
Alejandro Leiro alejandro.leiro@ltu.se
PhD-student in Engineering Materials

Mats Oldenburg mats.oldenburg@ltu.se

Title: Professor in Solid Mechanics
Work: Teaching in undergraduate and graduate courses, supervising graduate and PhD students
and research.
Special interest: Numerical analysis applied to coupled thermo-mechanical forming and the mechanics of granular materials.

Milan Veljkovic milan.veljkovic@ltu.se

Title: Professor in Steel Structures and Chair of Steel Structure research group
Work: Teaching in undergraduate and graduate courses, supervising graduate and PhD students
and research.
Special interest: Use of higher strength steels in bridges and special structures
He participates the first day from lunch to 17.00 and recieves visitors on Friday after lunch.