

PROGRAM MSW '02

MARCH 20 (WEDNESDAY)

8.30-9.15 *Registration*

9.15 Welcome and opening of the workshop
Jan Söderkvist², Pelle Rangsten², Patrik Hollman³ (¹Colibri Pro Dev. AB, ²Silex Microsystems AB, ³Ämic AB)

9.30 INVITED: Microsystems in automotive applications
Helmut Seidel (Conti Temic microelectronic GmbH, Germany)

10.10 Silicon sensors for high pressure and high temperature applications
Martin Nese (PreSens A/S)

10.30 ☕ *Coffee*

11.00 INVITED: MIC start-ups – current and future business models of commercialization of research
Anders Larsen (Yole Development & MIC)

11.40 Microsystems in wireless communication
Anders Olsson (Acreo AB)

11.55 3-D micromachined devices based on the polymer V-groove (PVG) technology
Thorbjörn Ebefors^{1,2}, Edvard Kälvesten², Göran Stemme¹ (¹KTH, ²Silex)

12.10 Poster presentations

12.40 ✕ *Lunch*

13.50 Microsystem activities in Oslo
Liv Furuberg (SINTEF-Oslo)

14.10 Acreo – a presentation
Anders Olsson (Acreo AB)

14.25 Imego a research institute –
in step with the times
Gert Andersson (Imego AB)

14.40 Summit – The VINNOVA Competence Center
of Surface and Microstructure Technology
Klas Hjort (UU)

14.55 Design and development support –
a look behind the scene
Jari Hyvärinen¹, Jan Söderkvist² (¹Anker-Zemer
Engineering AB, ²Colibri Pro Development AB)

15.15 ☕ *Coffee and Poster Session*

15.45 INVITED: Electronics manufacturing
learning factory
Ari Lehto (Espoo-Vantaa Inst. of Tech.)

16.15 Microglow: A microsystems laboratory course
Sami Franssila, Ilkka Tittonen,
Kestutis Grigoras, Tuuli Juvonen,
Kaisa Nera, Paula Heikkilä (HUT)

16.30 Increasing interest for MEMS in
telecommunication
Katarina Boustedt¹, Kåre Gustafsson²
(¹Ericsson Mobile Communications AB,
²Ericsson Radio Systems AB)

16.50 Summary of who are active in the
Nordic region + MSx update
Jan Söderkvist (Colibri Pro Development AB)

17.05 Discussion on
Nordic MEMS strategies and support

18.30 ✕ *Dinner*

POSTERS & EXHIBITORS

- High power Q-switched Nd:YAG laser mounted in a microstructure silicon carrier
Jacob Rydholm, David Evekull, Maria Kindlundh, Stefan Bjurshagen, Leif Kjellberg, Lennart Bäcklin, Ralf Koch, Magnus Olson (Acreo AB)
- Homogeneous porous layers in high aspect ratio enzyme microreactors improves performance
Martin Bengtsson¹, Simon Ekström¹, György Marko-Varga², Thomas Laurell¹ (¹LTH, ²LU)
- Injection molded subwavelength gratings as low-cost antireflection surfaces
Fredrik Nikolajeff (UU)
- Integration of micro-optics with semiconductor lasers
Mikael Karlsson, Fredrik Nikolajeff (UU)
- Notch mechanics for silicon microstructures
Zhiliang Zhang (SINTEF-Trondheim)
- Ultraminiaturized leverage beam pressure sensors
Patrik Melvås, Edvard Kälvesten, Göran Stemme (KTH)
- Spiked biopotential electrodes
Patrick Griss¹, Pekka Meriläinen² (¹KTH, ²Datex-Ohmeda)
- Acreo AB
- Anker-Zemer Engineering AB
- Colibri Pro Development AB
- Comsol AB
- Ericsson Microelectronics AB
- EV Group
- Megatel AB
- Silex Microsystems AB
- Ämic AB

PROGRAM MSW '02

MARCH 21 (THURSDAY)

- 8.50 Cleanroom and vibration control for MEMS manufacturing
Romain Haettel (ABB Airtech)
- 9.10 Quartz direct bonding for increased resonator stability
Örjan Vallin (UU)
- 9.25 Double sided bulk micromachining of SOI films using room temperature oxygen plasma assisted bonding
Anke Sanz-Velasco¹, Henrik Rödjegård², Gert I. Andersson² (¹CTH, ²Imego AB)
- 9.40 Electrospray ionization mass spectrometry using a plastic chip
Malin Svedberg, Fredrik Nikolajeff (UU)
- 9.55 Micromechanics in <111> silicon
Tuuli Juvonen, Jenny Poulsen, Sami Franssila (HUT)
- 10.10 ☕ *Coffee and Poster Session*
- 10.40 INVITED: Microsystem in biotechnology – a commercial perspective
Björn Ekström (Pyrosequencing AB)
- 11.10 Microfluidic devices for biotechnology
Aman Russom, Wouter van der Wijngaart, Helene Andersson, Göran Stemme (KTH)
- 11.25 Development of multisite microelectrodes for neuroscience
Maria Kindlundh (Acreo AB)
- 11.40 ✂ *Lunch*
- 12.55 Simulation of simultaneous flow, diffusion and reaction
Gunnar Kylberg (Gyros Microlab AB)
- 13.15 Piezo-driven inkjet
Mats Ottoson (XaarJet AB)
- 13.35 Microdispensing using the compound method
Johan Nilsson, Jonas Bergkvist, Simon Ekström, Thomas Laurell (LTH)
- 13.50 Microcombustion / PowerMEMS
Nina Bjerkebo et al (Telemark University College)
- 14.10 ☕ *Coffee and Poster Session*
- 14.40 MOEMS for biomedical applications
Fredrik Nikolajeff (UU)
- 15.00 Functional testing and calibration of microsystems at wafer level
Mette Brunbjerg Olesen, Jesper Bay, Jens Branebjerg, DELTA Danish Electronics, Light & Acoustics
- 15.20 The design of a bistable micro-switch
Britta Ottoson (Imego AB)
- 15.35 Diamond – optic's best friend
Mikael Karlsson, Fredrik Nikolajeff (UU)
- 15.50 – ~16.00 Open discussion on prototyping, industrialization, and the steps thereafter

Late News Posters

The conference site still permits the acceptance of one or two additional Late News posters.

Please contact the MSW-organizer for more information.



- I register to MSW '02 (March 20-21) I register to only one of the days, namely March
- I wish to participate in the dinner (included in the registration fee) I am a student
- I wish to book a hotel room at the conference site (20-21 mars)

Name: _____

Company / Institute: _____

Address: _____

Phone: _____ Fax: _____ E-mail: _____