

# PROGRAM MSW '02

MARCH 20 (WEDNESDAY)

8.30-9.15 *Registration*

9.15 Welcome and opening of the workshop  
Jan Söderkvist<sup>2</sup>, Pelle Rangsten<sup>2</sup>, Patrik Hollman<sup>3</sup> (<sup>1</sup>Colibri Pro Dev. AB, <sup>2</sup>Silex Microsystems AB, <sup>3</sup>Ämic 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<sup>1,2</sup>, Edvard Kälvesten<sup>2</sup>, Göran Stemme<sup>1</sup> (<sup>1</sup>KTH, <sup>2</sup>Silex)

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 Hyvärinen<sup>1</sup>, Jan Söderkvist<sup>2</sup> (<sup>1</sup>Anker-Zemer  
Engineering AB, <sup>2</sup>Colibri 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 Boustedt<sup>1</sup>, Kåre Gustafsson<sup>2</sup>  
(<sup>1</sup>Ericsson Mobile Communications AB,  
<sup>2</sup>Ericsson 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 Bengtsson<sup>1</sup>, Simon Ekström<sup>1</sup>, György Marko-Varga<sup>2</sup>, Thomas Laurell<sup>1</sup> (<sup>1</sup>LTH, <sup>2</sup>LU)
- 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 Griss<sup>1</sup>, Pekka Meriläinen<sup>2</sup> (<sup>1</sup>KTH, <sup>2</sup>Datex-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-Velasco<sup>1</sup>, Henrik Rödjegård<sup>2</sup>, Gert I. Andersson<sup>2</sup> (<sup>1</sup>CTH, <sup>2</sup>Imego 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: \_\_\_\_\_