

Session 4: Sensing for volume applications – Chair Anna Rissanen

- 9.00 - 9.20 Hyperspectral imaging: an industry perspective on the path forward, *Bruce Greenwood, Corporate R&D, ON Semiconductor*
- 9.20 - 9.40 Productisation of graphene based vis-SWIR detectors, *Vuokko Lantz, Product & Project Manager, Emberion Oy*
- 9.40 - 10.00 VTT photonics and optical sensors, *Timo Aalto, Research Team Leader, VTT*
- 10.00 - 10.15 3 x 5 min pitch talks: *Aeromon Oy, RD Velho Oy, SICK Oy*

Session 5: Industrial internet and cyber security – Chair Marko Jurvansuu

- 10.15 - 10.35 Radio technologies and solutions evolving for different purposes: horses for courses or 1SFA?, *Martti Mustajärvi, Principal Technologist, Nokia*
- 10.35 - 10.55 Communications for IoT applications, *Esa Viljamaa, Research Team Leader, VTT*
- 10.55 - 11.15 Industrial cyber security and IoT. They are one – but how?, *Andreas Frejborg, Technical Sales Manager, Neste Jacobs*
- 11.15 - 11.30 3 x 5 min pitch talks: *Blumorpho/GateOne, Photonics Finland, Minima Processor*

11.30 - 12.30 Lunch and demonstrators

Plenary and closing words

- 12.30 - 13.15 Introducing direct conversion group – design and production of X-ray imaging sensors, *Pasi Laukka, General Manager, Ajat Oy*
- 13.15 - 13.45 Providing a seamless route from R&D to volume manufacturing, *Howard Rupprecht, Vice President, Micronova Manufacturing Services, VTT*
- 13.45 - 14.00 Closing words, *Kimmo Solehmainen, Key Account Manager, VTT*

COMPANIES TO BE PRESENTED ON SENSE'17 EXHIBITION AREA:

Oplatek Group Oy, Aeromon Oy, Kimmy Photonics, COMSOL Oy, Skunk Developments Oy, BluMorpho/GateOne, RD Velho Oy, Hamamatsu Photonics Norden AB, Fintronic Oy, Photonics Finland, SICK Oy



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Sense'17



Sensors
and
sensing
from
silicon
to
cloud



TECHNOLOGY FOR BUSINESS

Opening and plenary

- 9.00 - 9.15 Welcome and opening of the seminar, *Kimmo Solehmainen, Key Account Manager, VTT*
9.15 - 10.00 Sensing today and outlook to future, *Professor Harri Kopola, VTT*
10.00 - 10.30 Market view and opportunities on sensing technologies, *Ankit Shukla, Practice Director, Frost & Sullivan*

10.30 - 11.00 Break

Session 1: Market needs and emerging applications – Chair Jouko Malinen

- 11.00 - 11.20 Sensing needs for lithium mining, *Pertti Lamberg, CEO, Keliber Oy*
11.20 - 11.40 Internet of farming, *Ilmo Aronen, Director Research and IPR, Raisioagro Ltd*
11.40 - 12.00 24/7 monitoring of elevators, *Jani Hautakorpi, Program Manager, Remote Maintenance, KONE Corporation*

12.00 - 12.15 3 x 5 min pitch talks: *Oplatek Group Oy, Hamamatsu Photonics Norden AB, Kimmy Photonics*

12.15 - 13.30 Lunch and demonstrators

Session 2: Photonics Measurement science and traceability – Chair Maija Ojanen-Saloranta

- 13.30 - 13.50 Metrology and traceability in renewable energy production, *Dr. Toni Laurila, Neste Oy*
13.50 - 14.10 Metrology and traceability in meteorological observations, *Samuli Laukkanen, Technology Manager, Vaisala Oyj*
14.10 - 14.30 Competitiveness, safety and welfare through accuracy and consistency of measurements, *Mikko Merimaa, Vice President, MIKES Metrology*

14.30 - 14.45 3 x 5 min pitch talks: *COMSOL Oy, Skunk Developments Oy, Fintronic Oy*

14.45 - 15.15 Coffee break and demonstrators

Session 3: High-performance sensor technologies – Chair Pekka Pursula

- 15.15 - 15.35 Space solutions as part of IoT systems, *Juha-Matti Liukkonen, Director, Space and Robotics, Reaktor*
15.35 - 15.55 Sensors from optronics to hyperspectral imaging, *Jani Mäklin, Unit Manager, Senop Oy*
15.55 - 16.15 Millimeterwave radars and radiometers, *Tero Kiuru, Senior Scientist, VTT*
16.15 - 16.35 Why technology alone is not enough? – The story of DMS analyzer, *Osmo Anttalainen, Senior Scientist, Enviroics Oy*

16.35 - 17.30 Demonstrators and posters

17.30 Transportation to GLO Hotel Art, Lönnrotinkatu 29, 00180 Helsinki (*

19.30 Reception, cocktail dinner, GLO Hotel Art (**



*) Bus transportation:

Thu 6th April:

at 8.15 from GLO Hotel Art to Innopoli 2, and
at 17.30 from Innopoli 2 to GLO Hotel Art.

Fri 7th April:

at 8.30 from GLO Hotel Art to Innopoli 2,
at 14.00 from Innopoli 2 to Helsinki-Vantaa airport and
to Helsinki railway station.



**) Sense'17 evening network banquet will take place in the unique Jugend Hall of GLO Hotel Art, conveniently at the same location with the accommodation.

Parking: GLO Hotel Art, Lönnrotinkatu 29, Helsinki