

## **MRI DC Meeting 12.06.2011 Aavaranta, Kirkkonummi**

18:00 – 19:40

### Attendants:

Erkki Ikonen  
Petri Kärhä (Secretary)  
Antti Pietiläinen (Chairman)  
Farshid Manoocheri  
Jari Hovila  
Antti Lamminpää  
Markku Vainio  
Mikko Puranen  
Antti Lassila  
Tuomas Hieta  
Silja Häkkinen (ex Holopainen)  
Ville Ahtee  
Jouni Envall

## **Opening**

Antti Pietiläinen welcomed all and opened the official meeting at 18:00.

## **Round the table discussion**

Petri Kärhä works with Mikes-Aalto as a Senior University Lecturer, a new title introduced by the career track system of Aalto. His work is more or less the same as earlier including teaching and project work. Aalto changes have introduced lot of new administrative work. With the new “tutkintorakenneuudistus” the two biggest courses of the laboratory, Mittaustekniikan perusteet and Elektroniset mittaukset will vanish to history within the next few years. Instead, the lab will have roles in two new practice-oriented courses, Elec Hands-on for freshmen, and EST Labs for 3. year students. In personal life has started to fix old cars as a hobby.

Antti Lassila works with MIKES as a Principal Metrologist, leading the Length group of approximately 10 scientists. Occupied a lot with preparing and managing the EMRP projects financed by Euramet. Length group presently has 4 EMRP projects ongoing, 3 new ones starting, and 2 – 3 new ones should be applied for. The efficiency program of the government makes participating somewhat challenging. Antti works as the Euramet TC Length chairman since 2011.

Mikko Puranen works with Kone designing high-rise elevators. Work includes e.g. electrical design and studying wind induced sway of buildings. Considering a joint

publication with an SOM architect bureau about the results. Studying wireless solutions for elevators.

Atte Haapalinna works with Ocmetic leading a group of new business development. Work has shifted toward management but he is still doing practical work as well. Two of Attes sons play football, which keeps him occupied. Would rather be sailing.

Ville Ahtee is a rather new member of the DC (graduated in 2010 with his thesis *Advanced Applications of Wavelength Tunable Lasers in Metrology and Fundamental Physics*). Works with Murata (ex VTI) as a sensor designer. The company was sold to Murata in late 2011, and has now a new managing director from Japan.

Tuomas Hieta is the latest member of the DC (graduated in 2011 with his thesis *Applied diode laser spectroscopy and characterization of optical fiber nonlinearity*). Works at MIKES with spectroscopy. Has done research for Gasmot projects which end soon. Happy father of an 8-month girl child.

Erkki Ikonen presented some latest news from the Aalto University. MRI belongs to the Department of Signal Processing and Acoustics where it fits quite well actually. It is a natural place. Project taxation makes external projects such as EMRP very difficult. Part of research has thus been transferred to MIKES. Transformation of TKK to Aalto has funny consequences, e.g. some laboratories had to pay again for the devices that they purchased for TKK. This did not concern MRI.

Farshid Manoocheri is with Mikes-Aalto. Still active with EMRP PQED project aiming to quantum candela. Device works fine at room temperatures with 100 ppm uncertainty. Other research includes reflectometry, thin film projects, and quantum communication. Role in EMRP projects is shifting towards administrative work, research work is carried out in MIKES. Children play football which keeps Farshid busy in private life.

Silja Häkkinen works at VTT as nuclear physicist. Studying Advanced Fuel Cycles and Computational Fuel Cycle Analysis. The idea is to break nuclear wastes with fission to more stable elements. Described Otaniemi reactor and busted the myth we all have wondered – the reactor is not really cooled to the duck pond. Silja is on maternity leave since Jan 2012 with a daughter.

Antti Pietiläinen works with packet timing at NSN since 2003. The work has shifted from frequency synchronization to time synchronization. Operators would rather use synchronization through network than GPS because of cost and even jamming caused by, for example so-called personal privacy devices. Works with standardization. Written a book chapter about synchronization to a Wiley book. As others get more children Anttis number of children is decreasing due to growing up.

Markku Vainio works in the Laboratory of Physical chemistry at HY researching laser spectroscopy, mid IR spectroscopy, now extending to far-IR and Terahertz spectroscopy. Works to some extent in MIKES as well but mainly HY.

Jari Hovila works at FMI with satellite projects. Pendeling from Hämeenlinna and likes train traveling. Processes data from METOP A satellite which is coming to the end of its life cycle. METOP B satellite replacing it is to be launched perhaps in August. Has been studying a measurement package from NASA measurement network and is considering buying one.

Antti Lamminpää works with Accenture as a strategy consultant. He has recently worked with a couple of customers from e.g. forest industry, energy sector, and building automation. Lots of Symbian people were transferred to Accenture from Nokia, which also has occupied. Antti will soon start building a summer cottage in Mustio.

Jouni Envall has come back from Estonia, and now works with FMI. Continuing the same work as before – research subject is an Electric Solar Wind Sail for satellites. Project contains simulation and experiments in solar wind. Involved in two satellite projects, ESTcube-1 to be launched in 2013 and Aalto-1 in 2014, as the Contact person of FMI. Interplanetary cubesat is foreseen.

## **Discussion**

Descriptions of people in the web page could be updated. Petri sends a reminder. History could remain, just latest occupation to be added first in the entry.

Jari Hovila presented the operation and results of a new Pandora Spectrometer at the FMI roof. The instrument designed by NASA measures direct solar spectral irradiance in the wavelength region 280 - 530 nm with a solar tracker. Results are used to analyse contents of gases, such as O<sub>3</sub>, NO<sub>2</sub>, SO<sub>2</sub>, H<sub>2</sub>O, HCHO, CHOCHO

There was discussion about a decision made in 2011: “Discussion about whether graduating students should be allowed to participate. It was agreed to try with the next meeting. Candidates are asked to present their planned doctoral theses. Concerns people graduating before next meeting to be.” This seemed to have been forgotten, so it was decided to try again next year.

## **Next meeting**

June 2012 in Kone mine shaft at Lohja.

## **Closing and conclusions**

Antti closed the meeting at 19:40. After this, there was a “savusauna” and dinner near the lake Hvitträsk.

Petri Kärhä  
Secretary

Antti Pietiläinen  
Chairman