Metrology Research Institute Dr's Club 16.06.2010

Minutes of the meeting

MRI DC meeting 10.06.2010 18:15 – 19:50

Hanasaari, Espoo

Participants:

Petri Kärhä (Secretary)

Antti Pietiläinen (Chairman)

Erkki Ikonen

Toomas Kübarsepp

Atte Haapalinna

Jari Hovila

Farshid Manoocheri

Hannu Talvitie

Mikko Merimaa

Mikko Puranen

Markku Vainio

Mart Noorma

1§ Formalities

Antti Pietiläinen, as the chairman, opened the meeting at 18:15. Petri Kärhä acted as the secretary.

Erkki Ikonen as the host welcomed people and gave a presentation on recent activities in the Aalto University and the Laboratory. Three topics were covered: 1. Department of SPA did extremely well in the research assessment (RAE). Also MRI did remarkably well. 2. On higher level, TKK will shortly vanish. Aalto will include six Schools of which former TKK forms four. 3. MRI has done extensive work with the EMRP call. It was noted with pleasure that of the 14 Finnish delegations to preparative meetings, half are members of the MRI DC

2§ Round the table discussion

People briefly presented what they have done during the recent times:

Petri Kärhä works with the Metrology Research Institute as a Teaching Research Scientist. This year Petri acts as the substitute to Erkki during his leave of absence, and is thus acting Professor during period 1.1. – 31.12.2010. He has a new EMRP project on solid state lighting (SSL) starting. In addition to other duties He will supervise 8 masters theses this year.

Toomas Kübarsepp works with the Metrosert as the Chief of the Department for Research and Development. Toomas now lives now in Tallinn. He has established his own global company Hohenheide, producing trap detectors to various countries.

Jari Hovila works at the Finnish Meteorological Institute with satellite projects. His work includes managing projects and processing data. Main project presently is the Satellite Application Facility on Ozone and Atmospheric Chemistry Monitoring.

Farshid Manoocheri works at the Metrology Research Institute as a Teaching Research Scientist. His main research topic is the European level project Q-Candela aiming to quantum candela. The role of MRI is to build a cryogenic silicon trap detector measuring with accuracy of 10^{-6}. He is also involved in teaching and calibrations.

Hannu Talvitie has gradually changed field from technology to business development. He still works with Vaisala. Hannu was involved in the development of the new customer-based strategy and with the resulting organizational change project. Present duties include bying companies.

Mikko Merimaa is nowadays in charge of time and frequency of Finland in MIKES. Major part of his time also goes to EMRP projects in various fields. Mikko will get a third child shortly.

Atte Haapalinna still works with Ocmetic. Semiconductor industry is nowadays doing remarkably well. Selling problems have changed to capacity problems. Present work includes collaborating with the Japanese. Metrological highlights include production of very high resistivity silicon for CERN. Atte has a new 9-m sailing boat.

Mikko Puranen is one of the newest members of the club, graduated in March 2009. Mikko works with the Kone corporation High Rice Competence Center in Hyvinkää, where his specialty areas are electronics and electrification. He has designed among other things filters for currents upto 1000 A.

Markku Vainio works in two places: 1. Laboratory of Physical chemistry (HY) doing laser spectroscopy, and 2. MIKES with EMRP projects, mostly environmental projects, spectroscopy, and life sciences.

Mart Noorma works as a Vice Dean at the Tartu University. Still has minor activity in optics but his main interest is the Estonian student satellite project. The first satellite will fly in 2012 demonstrating electric solar wind sail. In 2014 there will be another satellite going to orbit moon. The role of Tartu will be assembling, integration and testing the stallite. “Tartu, we have a problem.” 2012 there will be new facilities in Tõravere observatory.

Antti Pietiläinen works with the Nokia Siemens Networks (NSN). He is the packet synchronization guru synchronizing base stations with accuracy of 10^{-8}. Antti is working with standardization with the International Telecommunications Union. New mobile networks will need accurate time in addition to accurate frequency, which is a new challenge and topic for standardization.

3§ Next meeting

Next meeting will be arranged by FMI in Helsinki. This arrangement still has to be confirmed. The time will be approximately March 2011.

4§ Conclusions

After the official meeting, there was a dinner and sauna in the premises of the Hanasaari Cultural Center.

Signatures

Antti Pietiläinen
Chairman

Petri Kärhä
Secretary