Opening
Before the meeting, there was a guided tour in the new laboratories of MRI. Erkki Ikonen gave an introduction on the move.

Antti Pietiläinen welcomed all and opened the official meeting at 18:40.

Round the table discussion
Hannu Talvitie works with Vaisala. Responsible of strategy and planning process. Working with purchases and organizational changes. Last summer Vaisala purchased a small start-up company to move towards air quality market. Mountain bikes as a hobby.

Antti Pietiläinen works at Nokia, gradually shifting from network synchronization to other base station backhaul related topics now that the packet timing revolution in base station synchronization is largely over. Currently, packet timing standards define about 1-us timing accuracy, and imaginable roadmap is open to below 1 ns. His metric “pktSelected2way time error” has been accepted into ITU recommendations, Free-space optics with Markku Vainio: how do different IR wavelengths propagate.
Martti Heinonen works as the research manager of VTT-MIKES. Biggest challenge in widening the impact of research. Looking for co-operation with industry. Not leading a research team any more. Living nice family life with wife. Three weeks around the world. MIKES is gradually changing after merging with VTT to good direction, more industry and customer oriented, also more related with everyday world around us.

Richard Högström graduated in 2015 and works with VTT MIKES for ten years. Still mainly works in laboratory but also gets more duties related with planning proposals. Recent project on dynamic pressure is approaching completion. Unique setup not available in many places. Participated in sales training – in future will also be involved with selling services to industry. Has two kids, 7 and 4 years, but also has time for activities such as sport.

Atte Haapalinna still works with Okmetic. Responsible for product and process development. Okmetic has been purchased by a Chinese holding company. Positive experiences with that. Has brought major investments for the house. Still the same boat.

Mikko Merimaa works as the vice president of the NMI within VTT (MIKES). Mikes has integrated nicely with VTT. On civil side, has nice family life, not much changes.

Erkki Ikonen works with Aalto and VTT Mikes. During 2017, the lab should graduate 4 – 5 doctoral students, which is slowing down laboratory building.

Tuomas Poikonen works at VTT MIKES and Aalto. Responsible for photometry. Coordinates an EMPIR project PhotoLED on Future Photometry, developing new LED based lighting standard sources. Major role in the move of MRI, e.g. design of the labs. As a hobby collects studio equipment, synthesizers etc, and makes electronic music. Changing from Mac environment to Windows. Focke-Wulf?

Mikko Puranen works at Kone. Lives in Riihimäki, hiking and biking. Works with projects on wireless things. Has a new master student developing an intelligent car brake. Due to light weight ropes, buildings up to 1000 m can be built with 600 m elevators.

Jouni Envall works with FMI on Electric Solar Wind Sail project. In charge of technical payloads on all E-sail satellite projects. Aalto-1 will fly in spring with FMI payload. Service provider is ISIS-Space. FMI has its own facility for tether production of which Jouni is in charge. Has a hobby as flying a glider.

Mart Noorma is a vice rector at Tartu University and Mr. Space of Estonia. Still works with Estonian student satellite program. Lot of satellite projects e.g. building camera systems. Planning a project involving multiple satellites for asteroid mining, which still a couple of years ago would have been science fiction. Due to rectoral elections in TU, considers moving to industry for a change. As a hobby, sails. Plans to cross Atlantic sailing.

Petri Kärhä works with Mikes-Aalto as a Senior University Lecturer. On research side, he has an EMRP ATMOZ project studying measurements of stratospheric ozone. Eagerly waiting for the financing results from the Academy of Finland and preparing a new
EMPIR project on smart lighting. Sons are at moped age, so building of old cars has been superseded by building mopeds for a while.

Meelis Sildoja works with PTB in Germany in Saulius Nevas’s group. Works in the EMRP ATMOZ project characterizing Brewer spectrophotometers. Still also involved with PQED work. Designing a 5-element trap detector. Has a swing dancing as a hobby.

Maksim Shpak is the latest member in the club working with VTT Mikes. Graduated in 2016. Used to work with temperature measurements, but now has changed to length in Antti Lassila’s group. Proposing EMPIR projects, hoping to be a coordinator. As a hobby has an orange Lotus 7.

Jari Hovila works with FMI for 11th year. Works as technical manager in AC SAF project funded by EUMETSAT (http://acsaf.org/) and is responsible for project reporting, Sodankylä data archive and user services. Operates Pandora spectrometer on the roof of FMI HQ measuring O3 and NO2 total columns (http://pandora.fmi.fi/). Participating in an EUDAT pilot project with CSC to release Pandora measurements as open data. Lives in Hämeenlinna, works remotely 2 – 3 days a week. Wife, three children and three cats. Along with badminton has a new hobby singing as a tenor in a mixed choir.

Maija Ojanen-Saloranta works with MIKES as a research team leader of environmental metrology with 18 scientists and technicians. Thermal and mass quantities, spectroscopy. Head of mass. Has recently seen and used the Finnish kilogram! Lots of administrative duties such as development meetings, but still manages to get to labs. Two kids aged 2 and 5, no other major hobbies.

Ville Voipio of Vaisala and Saulius Nevas of PTB could not participate in the meeting but sent regards through their colleagues.

**Next meeting**

At Vaisala, hosted by Hannu Talvitie and Ville Voipio. In about one year before summer vacation. Around March – May.

**Closing and conclusions**

Antti closed the meeting at 19:55. After this, there was a salad dinner and sauna in the Donors’ Lounge of Aalto.