

TEKNILLINEN KORKEAKOULU – MITTAUSTEKNIKKAN LABORATORIO
NATIONAL STANDARDS LABORATORY OF OPTICAL QUANTITIES
(May 2004 and May 2005)

Mission

The laboratory carries out research in measurement science and technology and provides consultation and calibration services for the Finnish industry in collaboration with MIKES and other organizations interested in metrology.

The laboratory educates students in electronics and in measurement science and technology to receive the doctoral degree and/or diploma engineer degree. The laboratory gives training in optical measurements to experts of other fields.

Vision

The laboratory stays within the four most significant NMIs worldwide in the research activities of photometry and radiometry. Research projects in electrical measurements will have a substantial volume of 20 % of total external income. Students are guided for cutting edge research, which is internationally recognized in terms of the number of citations and oral presentations in conferences.

The provided services are profitable and there are also foreign customers, including those NMIs which take traceability from HUT.

The graduating doctors and diploma engineers have knowledge and capabilities, which allow them to become employed outside HUT without difficulties. The laboratory gets ratings in the highest quarter in working atmosphere studies. Twenty percent of the personnel are women.

Strategy

Research and Services:

Active international collaboration

Coherence between research projects

Structured project organization

Working atmosphere which supports creativity and initiatives

Existing expertise is made available to everybody

Fix the resources: MIKES, HUT, SA, TEKES, industry, international, others

Teaching and Students:

Make the lab attractive to students

Advertise to students, tutors, special assignments...

High-quality courses (new courses?)

Teaching that is relevant to industry

Keep contacts with former students

Emphasize doctor's degrees

Threats

Changes in HUT funding level and principles

Changes in MIKES funding level and principles

Competitor NMIs to the "gang of four": Singapore, KRIS, metas, Nmi-VSL, IEN, NRC, VNIIOFI

Weakening working atmosphere

Calibration and routine work endangers the development

Longer graduation times

Possibilities

Excellent students

High TkT production in the coming years

Collaboration with physics department

MIKES comes to Otaniemi

Laboratory has excellent expertise