P41: Kungliga Tekniska Högskola – KTH (Sweden)

Description of expertise & activities

Kista Photonics Research Centre (KPRC): The Kista Photonics Research Center, created in 2002, is a Joint Research Unit (JRU) organising and giving a structure to the collaboration in photonics between the Royal Institute of Technology (Kungliga Tekniska Högskolan or KTH) and the private research institute Acreo AB. It comprises more than 100 researchers, PhD students and technicians with activities ranging from basic research and education to prototyping and commercialisation of research results, small-scale production and creation of spin-off companies. The KPRC is a major player in the field of Photonics in Europe and in particular in matters regarding optical communication. As a partner in BONE KPRC would bring its proven expertise in high-speed fibre-optic transmission, access networks, fault management and reliability issues in optical networks and photonics in switching.

Tasks within BONE

See individual WP descriptions.

Key personnel

Lena Wosinska received her M. Sc. degree in Electrical Engineering from the Warsaw Institute of Technology, Poland and Ph.D. degree in Photonics from the Royal Institute of Technology KTH in Stockholm, Sweden. She joined KTH in 1986 where she is currently an Assoc. Prof. at the School of Information and Communication Technology (ICT). Her current research interests are in the areas of IP over WDM networking, optical network reliability and survivability, and optical packet switching.

Lars Thylen received the M. Sc. degree in Electrical Engineering and the Ph.D. degree in Applied Physics in 1972 and 1982, respectively, both from the Royal Institute of Technology (KTH) in Stockholm. Since 1992, he is a professor at the department of Microelec-tronics and Information Technology, KTH, heading the Laboratory of Photonics and Microwave Engineering. Current research interests include low dimensional optics and electronics, devices for photonic switching, optical networks as well as the physics involved in electronic and photonic switching operations.

Marco Forzati received the “Laurea” degree in telecommunication engineering from the Politecnico di Milano, Italy, M.Sc. and Ph.D. from the Chalmers University of Technology, Gothenburg, Sweden. Since 2002, he has been with the Optical Systems and Networks Laboratory at Acreo AB, Stockholm. His research interest is on high-speed transmission in optical fibers, especially in advanced modulation formats for the suppression of nonlinear impairments.

Jiajia Chen received her B.S degree (with honors Top 3%) in Mixed Class of Chukechen Honors College, in Zhejiang University, China in 2004. She is currently studying for a Ph.D. degree in Photonics from the Royal Institute of Technology KTH in Stockholm, Sweden. Her research interests are in the areas of photonic packet switching and optical networking (especially for PON & OCDMA). Currently she is working on traffic performance issues as well as reliability and fault management aspects.