

E. A. Sergeeva (Inst. of Applied Physics, RAS, Nizhny Novgorod, Russia); D. Teixeira de Silva (IPEN/CNEN-SP, Center for Lasers & Applications, MEO, Sao Paulo, Brazil), delivered seminars in relation with the program contains.

The three directors were especially grateful for the support and assistance of the local organizer, Prof. Gallieno Denardo and the secretary Mrs. Marina de Comelli.

Related link with additional information:

<http://agenda.ictp.trieste.it/agenda/current/fullAgenda.php?email=0&ida=a0260>

Gert Von Bally, Winter School 2003 co-director and ICO Vice-president appointed by OWLS

Announcing ICO/ICTP Award 2003 to Róbert Szipöcs



At an ICO-hosted party during the Winter College, the fourth ICO/ICTP Prize was announced and formally presented at the ICO/ICTP Award ceremony. The award is intended for scientists less than 40 years old who are active in research in optics and have significantly contributed to the promotion of research activities in Optics in their own or another developing

countries. The winner for 2003 is Dr. Róbert Szipöcs, a research scientist currently at the Research Institute for Solid State Physics and Optics, Hungarian Academy of Sciences, Budapest (Hungary).

After completing his MSc. at Technische University of Budapest, he has been working at the Optical Coating Laboratory of the Research Institute for Solid State Physics of the Hungarian Academy of Sciences. Working toward his doctoral degree, he investigated the nonlinear optical behaviour of optical thin film interference filters containing compound semiconductors. During the same period of time, he developed a software for analysis and synthesis of optical interference coatings.

After receiving his university doctoral degree, his research concentrated on the area of development of optical interference coatings used in femtosecond pulse solid state lasers and related fields of optics such as synthesis of graded-index dielectric coatings, computer optimisation of interference coatings, computational physics, interferometry and mode-locked solid state lasers, ultrafast phenomenon and spectroscopy.

In 1993, at the Research Institute for Solid State Physics and Optics, Budapest, Hungary, he developed special dispersive dielectric laser mirrors for femtosecond laser systems in collaboration with researchers at the Technical University of Vienna, Austria. These became known as chirped mirrors. This invention has been awarded by US Patent on "Dispersive dielectric mirror" including applications on mirror-dispersion-controlled Ti:sapphire

laser oscillators. In general, chirped mirrors offer a solution for broadband dispersion control and feedback in femtosecond laser systems. They combine the benefits of a broader high-reflectivity range (as compared to low dispersion, standard quarterwave mirrors) with dispersion control over the reflectivity band. As a consequence, chirped mirror technology makes possible shorter pulse duration and more compact and reliable design in fs lasers. One of the most important applications of chirped mirrors is their use in Kerr-lens mode-locked Ti:sapphire laser oscillators.

In 1995, Dr. Szipöcs founded R&D Lazer-Optika Bt, which develops and offers dispersive dielectric mirrors for different mirror-dispersion-controlled femtosecond pulse laser systems, such as Ti:sapphire oscillators, Cr:LiSAF oscillators, Yb:glass or Nd:glass oscillators, fs chirped pulse amplification systems (CPA) and optical parametric oscillators (OPO-s). In 1997, he founded R&D Ultrafast Lasers Ltd, which develops and offers different femtosecond pulse laser systems, such as mode-locked Ti:sapphire laser oscillators in collaboration with his research institution.

In 1998, a new laboratory for ultrafast laser technique and laser spectroscopy was founded at the Research Institute for Solid State Physics and Optics. Since then, he worked on the scientific and technical development of this laboratory as a project leader (Development of femtosecond pulse laser system by using chirped mirrors for dispersion compensation). Currently, his research interest includes femtosecond nonlinear pulse propagation in microstructure (photonic crystal) optical fibers, femtosecond time resolved spectroscopy and two-photon microscopy.

Dr. Szipöcs has been a visiting scientist at the ICTP, Trieste, Italy, for various periods during the last ten years and delivered various conferences and invited talks.

In 1995, he received the Youth Prize of the Hungarian Academy of Sciences, and in 1996, he was honored with the International Dennis Gábor Award. He is author or co-author of more than 30 scientific papers dealing with applications of special dielectric mirrors in femtosecond lasers and related works. His papers have been cited more than 600 times by independent authors. Additionally, he authored some 70 conference papers including some 10 invited conference lectures.

The ICO/ICTP Award Committee recognized Dr. Róbert Szipöcs's pioneering work in the understanding of the phase behavior of optical thin film devices creating a revolutionary progress in the field of femtosecond pulse lasers and thin film optics. The ICO/ICTP Award Committee has recognized the great quality of his work, mainly developed in his country of origin.

The ICO/ICTP Award Committee consists of Prof. A.A. Friesem of Weizmann Institute, Israel, Chair; Prof. G. Denardo of ICTP, Trieste, Italy; Prof. A. Consortini of University of Florence, Italy and Dr. M. Danailov of Synchrotron Trieste, Italy.

Nominations are now open for the forthcoming ICO/ICTP Award 2004.

Related link and nomination instructions can be found in: <http://www.ico-optics.org/awards.html>.
