## YRA 2010

Every year the Erlangen Graduate School in Advanced Optical Technologies (SAOT) presents the "Young Researcher Award in Advanced Optical Technologies" to a scientist with outstanding contributions in the areas of optics, photonics and optical technologies. The prize money is  $\in$  100,000 to be used for salary, consumables or laboratory equipment. The award winner has the formal status of a guest professor and is expected to make up to eight stays in Erlangen within four years, pursuing research in collaboration with SAOT scientists as well as interacting with the graduate students of SAOT.

The award underlines SAOT's objective to improve interdisciplinary research in development and application of optics and optical technologies, particularly at the interfaces between natural sciences, engineering and medicine. The interdisciplinary research and the educational programme are supported by an international network of distinguished experts. Thus the Young Researcher Award in Optical Technologies strengthens the international networking and provides a platform for the interdisciplinary exchange of innovative scientific ideas.

In a ceremony on 31<sup>st</sup> May 2010 the SAOT Young Researcher Award was awarded for the third time. This year's laureate is Terrence R. Meyer, Ph.D., Assistant Professor in the Department of Mechanical Engineering and Director of the Clean Energy Technologies Program at the Iowa State University. The prize honours the outstanding contributions of Terrence Meyer to laser diagnostics in combustion published in about 40 research papers.

Combustion in practical devices is an unsteady process characterized by turbulence of varying length and times scales. To gain a better understanding of species transport and flame chemistry, as well as for model validation, Meyer has developed novel optical technologies with high spatial and temporal resolution, using ultra shortpulse lasers for coherent anti-Stokes Raman scattering at kHz rates, tunable diode lasers for molecular spectroscopy at ultraviolet and mid-infrared wavelengths at rates of 10's of kHz, and high-power burst-mode lasers for wavelength-agile planar spectroscopy.

Following the Young Researcher Award, six "Student Awards" valued at € 1000 were presented to SAOT doctoral candidates for their innovative published work. One prize was awarded in each six research areas: optical metrology, optical material processing, optics in medicine, optical material and systems, optics in communication and information technologies and computational optics.



Left to right: Professor Leipertz (Coordinator and Director of SAOT), laureate Professor Terrence R. Meyer (Iowa State University) and Professor Grüske (President of the Friedrich-Alexander Universität Erlangen-Nürnberg)



Left to right: Professor Leipertz, Eugen Tatartschuk, Christian Stephan, Azhar Zam, Sascha Engel, Mathias Wohlmuth, Rüdiger Bock, Professor Grüske and Dr. Andreas Bräuer