

Optics in the Land of Morning Calm

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OSK summer meeting 2015. Image credit: Luc Bergé

The Optical Society of Korea [OSK] held its annual meeting from 13-15 July 2015 in Gyeongju, the ancient capital of Korea located in the south of the country. This conference brought together physicists working in optics and laser-matter interaction. While most of participants came from Asia, some travelled from the US and Europe to celebrate both the 25th Anniversary of OSK and the International Year of Light. Presidents and official representatives of many learned societies (The Optical Society – OSA, IEEE, SPIE, EPS, the Japanese Society of Applied Physics) willingly answered the invitation of the OSK managers to address this meeting and debated the future of light in the world and more particularly in Korea.

Korea is clearly becoming a leader in both the fundamental and applied aspects of optics and photonics. Its world leadership, as emphasized by OSA President-Elect Alan Willner, is already visible in the scientific review Optics Express, where Korean contributions are still increasing and dominate US and European submissions in number. Korea is also very active around the new technologies for petawatt-class (PW) lasers and their applications to plasma-based accelerators. In this field Korean researchers already hold some records in laser-driven proton and electron acceleration and they are fully in the race for the next generation of 10 PW lasers.

Many other scientific issues were treated, among which nonlinear optical microscopy for biology and medical

imaging, photonic integrated circuits, realistic 3D imaging, plasmonics and nanophotonics, holographic data storage, optics in wireless communication networks, pumped diode and disk lasers, attosecond science, and stimulated Raman scattering microscopy.

A round table was also organized on the future of light. Dalma Novak, President of the IEEE Photonics Society, emphasized the importance of rapid wireless technologies and the need to increase the links between optics and electronics in information transmission devices. He insisted on the importance of realistic 3D calculations and the ever-increasing use of high-performance scientific computing. Another point of discussion was large-scale PW laser projects (e.g., ELI), which enrich joint efforts on extreme nonlinear optics and plasma physics, and should further improve medical imaging techniques and cancer treatments.

About 450 researchers attended this exciting meeting. Invited attendees enjoyed the great hospitality of the organization committee. As Chair of the Quantum Electronics and Optics Division of EPS, I would like to thank again Professor Yun Chung, President of the Optical Society of Korea, for his kind invitation.

The Land of Morning Calm appears as the right place to be for future meetings in optics between Asia and Europe.