

●● Joint Symposium by OSJ and OSK on Optical Design & Fabrication

Invited V 7월 11일(금) 11:30~12:00 피닉스볼룸 1(A)

University, Industry & Government Collaborations for Optics & Photonics Innovation

Kimio Tatsuno, PhD

Hitachi Ltd., CRL., / OITDA & Tokyo Metropolitan University
OITDA, Sumitomo Building, 1-20-10 Sekiguci Bunkyo-Ku Tokyo, Japan
81-3-5225-6431 e-mail : kimio.tatsuno.aa@hitachi.com

We review and report our analytical results in the technology front of optical industry in Japan as optical recording¹⁾, semiconductor stepper²⁾, fiber communication³⁾, digital camera⁴⁾ and OCT⁵⁾ which are contributing to the improvement of people's higher quality of life and to the industrial economical growth from the aspects of the University, Industry and Government collaborations including international comparison to enhance the progress of sustainable global photonic innovation eco-systems. In the following part, some statistics of remarkable economical growth in east Asia and the global warming issue will be mentioned.

• Biograph

In 1973, he joined Hitachi CRL (Central Research Laboratory) Kokubunji, Tokyo, after receiving his master degree of applied physics from the University of Osaka. He started his research on the "Holographic memory" and involved in the development of optics for the diode laser applications as "Optical disk", "Diode laser interferometer" and "Laser beam printer". From 1986 to 1987, he stayed at Philips Research Lab., Eindhoven as an exchange researcher for the development of optics for "Phase coupled array lasers". Being back to CRL of Hitachi Ltd., he continued his research on the wavelength conversion of diode pumped solid state SHG Lasers and from 1995, he lead the project for the development of diode laser transceiver modules for optical fiber communications.

In 2003, he joined NISTEP (National Institute of Science and Technology Policy) in the Ministry of Education, Science and Technology Japan and involved in the research and politics proposals from the aspects of industry, university and government collaborations for the innovation eco-systems. And in 2007, he joined OITDA (Optoelectronic Industry & Technology Development Association) on leave from Hitachi Ltd., for the planning and promotion of the national photonics project. He is a part time professor at the Tokyo Metropolitan University and a member of JSAP, OSJ, IEICE, OSA, IEEE/LEOS and serving for them as a committee member.

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Summary:

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References:

K. Tatsuno: “Science & Technology Trends – Quarterly Review –”, NISTEP, 1)Vol.12, pp17-29 (2004), 2)Vol.13, pp52-63 (2004), 3)Vol.15, pp50-65 (2005), 4)Vol.18, pp35-44 (2006) and 5)Vol.22, pp11-24 (2007). <http://www.nistep.go.jp/>

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