

JSAP Awards

The 'JSAP Outstanding Achievement Award' recognizes outstanding individual achievements in the field of applied physics. The JSAP Executive Board selects the recipient based on the recommendations of an awards committee appointed by the president of JSAP.

Commemorative talks by the award recipients are scheduled to be given during the Autumn Meeting of the Japan Society of Applied Physics, September 2001.

JSAP Outstanding Achievement Award (Research Accomplishments)

Recipient: *Dr. Izuo Hayashi*, former director, Optoelectronic Technology Research Laboratories
Citation: For his pioneering work on the development of semiconductor lasers and innovations related to optoelectronic integrated circuits



Dr. Izuo Hayashi was born in Tokyo in 1922. He received MS (1946) and PhD degrees in science (1962) from University of Tokyo. From 1955 to 1963, he was an associate professor at Institute for Nuclear Study, University of Tokyo, and was engaged in R&D on electronics for nuclear instrumentations. In 1964, he joined Bell Telephone Laboratories, where he started working on compound semiconductors for optoelectronic devices. Later, he was totally engaged in research of semiconductor lasers, aiming at high temperature operations, in cooperation with M.B. Panish. The continuous operation of GaAlAs/GaAs double heterostructure lasers at room temperature was achieved in 1970. In 1971, he joined Nippon Electric Co. Ltd., where he was responsible for R&D on semiconductor lasers. Highly reliable lasers for optical fiber communication were developed for the first time in cooperation with Y. Nannichi. In 1982, he joined Optoelectronics Joint Research Laboratories (technical director) and later Optoelectronic Technology Research Laboratories (director). He has been responsible for research on basic material technologies aiming at optoelectronic integrated circuits (OEICs). Dr. Hayashi is a fellow of IEEE and a member of the Japan Society of Applied Physics. In 1984 he received the GaAs Symposium Award, in

1988 IEEE David Sarnoff Award, and in 1992 Marconi Fellowships for the achievement of room temperature laser operation and for continued contributions in related fields.

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JSAP Outstanding Achievement Award (Educational Contribution)

Recipient: *Dr. Mamoru Mohri*, Director of the National Museum of Emerging Science and Innovation, NASDA Astronaut

Citation: For his enduring commitment and multifaceted contributions to public education in the field of science in space



Dr. Mamoru Mohri was born in January 29, 1948, in Yoichi, Hokkaido, Japan. A doctorate in Chemistry from Flinders University of South Australia, in 1976. Dr. Mohri joined the Faculty of Engineering of Hokkaido

University, Department of Nuclear Engineering in 1975, where he conducted research on environmental pollution, catalysis, and application of spectroscopy to biomaterials. In 1985, he was selected by the National Space Development Agency of Japan (NASDA) as a payload specialist for the First Material Processing Test Project (Spacelab-J). He was assigned as a prime payload specialist on STS-47, Spacelab-J in 1990 and flew in Endeavor in 1992. He flew again on STS-99 in 2000 as a mission specialist, during while he operated the shuttle radar and mapped more than 47 million miles of the Earth's land surface.

OSJ Awards

The Optical Society of Japan (OSJ), an affiliate of JSAP, also presents awards to individuals who have made significant contributions to the progress of optics and quantum electronics.

Optics/Quantum Electronics Achievement Award

Recipient: *Dr. Masamichi Yamanishi*, professor, Hiroshima University

Citation: For his pioneering and innovative contribution to the study of electrooptic and optical nonlinear effects in quantum wells and quantum-controlled light emitting devices



Dr. Masamichi Yamanishi was born in Osaka, Japan, on January 31, 1941. He received the B. E., M. E., and Ph. D. degrees from the University of Osaka Prefecture, Osaka, Japan, in 1964, 1966, and 1971, respectively. In

1966 he joined the Department of Electrical Engineering, the University of Osaka Prefecture, as a Research Associate. In 1979 he was appointed as an Associate Professor with the Department of Physical Electronics, Hiroshima University, Hiroshima, Japan. In 1983 he was promoted to a Professor in the Department. Since 1998 he has been a professor in the Graduate School of Advanced Sciences of Matter, Hiroshima University, serving as a Dean of the School (1998-2001). He is now a Vice-President of Hiroshima University (June 2001-May 2003). In 1984, 1986, 1987 and 1991 he spent several months as a Visiting Professor at Purdue University, West Lafayette, IN, U.S.A. He has been engaged in research on SAW acoustoelectric devices, acoustic DFB lasers and optical properties of quantum well structures and their device applications. His research interests currently include semiconductor quantum optics and its optical device application. He has written four chapters in four books regarding optical properties of quantum-well structures and their device application. Dr. Yamanishi is a member of the Physical Society of Japan and the Japan Society of Applied Physics, and a fellow of the Institute of Electrical and Electronics Engineers, Inc.

OSJ Excellent Paper Award

Recipient: *Dr. Motonobu Kourogi*, Tokyo Institute of Technology

Citation: M. Kourogi, K. Imai, B. Widyatmoko, T. Shimizu, and M. Ohtsu, "Continuous tuning of an electrically tunable external-cavity semiconductor laser", *Optics Letters*, vol. 25, No. 16, pp. 1165-1167 (2000).

Recipient: *Dr. Ichiro Kuriki*, University of Tokyo and CREST, Japan Science and Technology Corporation*

Citation: I. Kuriki, Y. Oguma, and K. Uchikawa, "Dynamics of asymmetric color matching", *Optical Review*, vol. 7, No. 3, pp. 249-259 (2000).

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