

2011

5th Annual Dasari Lecture

Yukihiro Ozaki, Kwansei Gakuin University

“SERS: Basic principle and its application to biomedical sciences”

Yukihiro (Yuki) Ozaki was born in Sakai, Osaka, Japan in 1949. Yuki graduated from Osaka University in 1973 with a B.S degree in chemistry. He also obtained his M.S (1975) and Ph.D. (1978) in chemistry from Osaka University. After spending two and a half years at National Research Council, Canada as a research associate, he joined the Jikei University School of Medicine in Tokyo in 1981. In 1989 he moved to Kwansei Gakuin University as an associate professor in the Chemistry Department. Currently, he holds a position of professor in the Department of Chemistry, School of Science and Technology. Yuki was Dean of School of Science and Technology at Kwansei Gakuin University from April 2006 to March 2010. He is also Director of the Research Center for Single Molecule Vibrational Spectroscopy at the university.

Yuki's research program has been mainly concerned with the basic studies and applications of far ultraviolet (FUV), infrared (IR), Raman, and near-infrared (NIR) spectroscopy. His spectroscopy research covers a wide range of subjects from the development of new type of instruments such as an ATR-FUV spectrometer, basic studies of physical phenomena such as a study on the mechanism of surface-enhanced Raman scattering to applications involving polymers, nano materials, and biological samples. His research interests also involve the development of spectral analysis methods such as two-dimensional correlation spectroscopy and chemometrics.

Yuki has published more than 200 articles in prestigious international journals and has authored 36 review articles and book chapters. He has also written many spectroscopy books including “Near-Infrared Spectroscopy, Principles, Instruments, Applications” with H. W. Siesler, S. Kawata and H. M. Heise in 2002 (Wiley-VCH), “Two-Dimensional Correlation Spectroscopy”, with Isao Noda in 2004 (John-Wiley & Sons), and “Near-Infrared Spectroscopy in Food Science and Technology” with W. F. McClure and A. A. Christy in 2007 (Wiley-Interscience).

Yuki's contributions in the field of fundamental and applied spectroscopy are numerous and well known. Currently, he is an honorary professor of Jilin University and Changchung Institute of Applied Chemistry, Chinese Academy of Science, and a guest professor of Peking University. Yuki is a fellow of the Society for Applied Spectroscopy. He is an associate Editor of Applied Spectroscopy and a member of the editorial board of the Journal of Raman Spectroscopy, the Journal of Molecular Structure and Vibrational Spectroscopy. Since 2009, he has been the President of Asian NIR Consortium.

Yuki has received many awards including the 1998 Tomas Hirschfeld Award, the 2001 EAS Award for Achievements in Near Infrared Spectroscopy, the

Spectroscopical Society of Japan Award (2002), the 2005 Science and Technology Award of Japanese Government (Ministry of Education, Culture, Sports, Science and Technology), the Gerald Birth Award of International Conference Diffuse Reflectance Spectroscopy, the Japan Society for Analytical Chemistry Award (2008), Gold Medal Award of Wroclaw University, Poland (2009) and Changbai Mountain Friendship Award from Jilin Province, China (2010).