

# The SAS Spectrum Newsletter

The Newsletter of the Society for Applied Spectroscopy



## March, 2009

### TAKESHI HASEGAWA TO RECEIVE 2009 CRAVER AWARD

The Coblenz Society is pleased to announce that Professor Takeshi Hasegawa of Tokyo Institute of Technology has been selected as the recipient of the 2009 Craver Award. In 2006, The Coblenz Society created an award to recognize the efforts of young professional spectroscopists that have made significant contributions in applied analytical vibrational spectroscopy. The Society has named this award for Clara D. Craver in recognition of her pioneering efforts in promoting the practice of infrared vibrational spectroscopy and her many years of service to the Coblenz Society. Further, the Craver Award is the Society's complement of its prestigious 'Coblenz Award' that recognizes young spectroscopists for efforts in fundamental aspects of vibrational spectroscopy. This award is presented to Professor Hasegawa in recognition of his unique creation of a novel spectroscopic technique for analyzing molecular orientation in a polymeric thin film deposited on a solid substrate, which can be carried out on a conventional FT-IR.

Professor Hasegawa is an Associate Professor of Chemistry at Tokyo Institute of Technology. He earned his Ph.D. from Kyoto University in 1995. Prior to becoming an Associate Professor at Tokyo Institute of Technology in 2006, he held positions at Kobe Pharmaceutical University (1993-2002) and Nihon University (2003-2005).

His early study first found that principal-component analysis could be powerful for detection of minute chemical species involved in bulky components. With the principle, he revealed the molecular structure of boundary water molecules at the interface between an ATR prism of silicon and bulk water. Since the thickness of the boundary water layer is very thin less than one nanometer, the infrared spectra of the layer hidden in ATR spectra was not retrieved before his study. Through this study, he clearly presented that chemometrics is useful not only for calibration and classification, but for analytical surface science.

The Craver Award will be presented at the 2009 FACSS Conference to be held October 18 – Oct. 22, 2009 at the Marriott Hotel, Louisville, KY. Professor Hasegawa will present the Coblenz Society's Craver Award Plenary Lecture in Applied Vibrational Spectroscopy and a separate half-day award symposium of six invited presentations will be held following his lecture at this conference.

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### SCIENTIFIC INSTRUMENT MUSEUM ESTABLISHED

A Science Instrument Museum has been established under the guidance of the Chemical Heritage Foundation (CHF), Philadelphia, PA. It has taken 18 years to become a reality. John R. Ferraro, formally Senior Scientist at Argonne National Laboratory, Argonne, IL, had the vision for the museum and proposed the concept in 1990. With the aid of the Society for Applied Spectroscopy (SAS), a committee was established to study the merit and feasibility of the concept. The SAS Committee consisted of members Ed Brame, R. Reiss, Alvin Bober, and R. Jarnutowski with the blessing of SAS President Roy Koirtoyohann. The plan included a display of landmark instruments related to the history of chemistry and spectroscopic instruments. The Museum, which had an Open House in early October, is located at 315 Chestnut Street in Philadelphia, adjacent to the Benjamin Franklin Museum.

Dr. Ferraro is a resident of 58 years at Elmhurst, Illinois. Dr. Ferraro received degrees from Northwestern University (M.S., 1948) and IIT (B.S., 1941; Ph.D., 1954). He is a long-term member of SAS.

### MARCH HISTORICAL EVENTS IN SPECTROSCOPY by Leopold May, Catholic University



**March 1, 1956** The Federation of Spectroscopic Societies, the predecessor to the Society of Applied Spectroscopy, was formed on this day in Pittsburgh, PA.

**March 7, 1792** John F. W. Herschel, who is the inventor of photography on sensitized paper, was born on this day. He introduced the terms, positive & negative for use in photography.

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