

Dr. Akira Inaba received the James J. Christensen Memorial Award from the Calorimetry Conference

Dr. Akira Inaba, a member of the Research Center for Molecular Thermodynamics received the James J. Christensen Memorial Award at the 55th Calorimetry Conference concurrent with the 16th IUPAC Conference on Chemical Thermodynamics, Dalhousie University, Halifax, Nova Scotia, Canada, August 6-11, 2000. As the Chair of the Japan Society of Calorimetry and Thermal Analysis, Sorai introduced him at his award lecture as follows:

It is my great pleasure to introduce to you Dr. Akira Inaba of Osaka University. He was graduated from Osaka university in 1971. After getting the Degree of Doctor of Science, he worked at the National Research Laboratory of Metrology for five years. Akira Inaba is now Associate Professor of the Department of Chemistry at Osaka University and is also an important associate member of our Research Center for Molecular Thermodynamics.

Among a variety of chemical thermodynamic studies achieved by Akira Inaba, the most outstanding contribution is the innovative development and use of adiabatic calorimeters for thermodynamic studies on the monolayers formed at interfaces. In 1984, Akira Inaba started the study on surface adsorbed monolayers with Professor James Morrison at McMaster University when he was a visiting scientist there. After he finished working at McMaster University he tried to determine absolute value of heat capacity of adsorbed monolayers. As one can easily imagine, the heat capacity of such monolayers is very tiny, being typically much less than 1 % of the total heat capacity. The difficulty is not only because of the small amount, but also because of other technical problems. Based on his own ideas, Akira Inaba overcame those difficulties and constructed sophisticated adiabatic calorimeters. By using them he succeeded in determining very accurate and precise heat capacities of a variety of molecular monolayers adsorbed onto solid surfaces such as graphite over the temperature range from 0.3 K to 300 K. His contribution to chemical thermodynamics is not restricted to the conquest of those technical problems. Akira Inaba has found many novel phenomena occurring in the monolayers and given reasonable interpretations to them.

The James Christensen Memorial Award is not only a great honor for Akira Inaba himself, but also a great honor for Japan. As the Chair of the Japan Society of Calorimetry and Thermal Analysis, I would like to deeply appreciate the Calorimetry Conference for granting the James Christensen Memorial Award to Akira Inaba this year, consecutively Professor Tooru Atake last year.

Akira Inaba will present the award lecture under the title of "Two-Dimensional Molecular Solids Formed at Gas-Solid and Solid-Liquid Interfaces".

(Michio Sorai)