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**Report on the International Symposium on New Frontier
of Thermal Studies of Materials, Tokyo Institute of Technology,
Nagatsuta Campus, October 26-27, 1998 and the 34th Japanese Conference on
Calorimetry and Thermal Analysis, Yokohama, October 28-30, 1998**

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Japanese scientists certainly know how to arrange conferences, both for excellent science and for fine social arrangements. We observed this first when attending ICCT-96 in Osaka, and then again during the International Symposium on New Frontier of Thermal Studies of Materials, October 26-27, 1998, and also the 34th Japanese Conference on Calorimetry and Thermal Analysis held in Yokohama, October 28-30, 1998.

The New Frontier of Thermal Studies of Materials meeting attracted about 130 participants, discussing topics ranging from equilibrium thermal properties to metastability, by both experimental and theoretical approaches, including methodology developments. An international meeting, it included participants from all across Japan as well as 18 foreign participants, with 20 plenary lectures and 58 posters. The latter included posters of the plenary lectures, an innovation which, in our opinions, should be considered for all conferences. Although this meeting emphasized thermal properties, as predicted in Professor Inokuchi's opening remarks, at least a many other physical methods were also discussed, indicating the close tie between thermal properties and other properties, such as structure and microstructure, electronic properties, magnetic properties, vibrational degrees of freedom and various related spectroscopies.

Although the meeting included international participation, the range and quality of the Japanese

participation was most impressive. Themes emerging from this meeting included: (1) the importance of microstructure (in surface properties compared with bulk, in metastability and in many physical properties); (2) unusual structures and properties (including smart materials, composites, nanophases, functional materials, disordered materials including glasses); and (3) new methodologies (smaller samples, higher precision and accuracy, optimization of choice of methods and systems to give maximum information for effort). With the international interest in materials science, it was concluded that our community has specialized knowledge in the area of thermal properties of materials that can be used to stimulate worthwhile collaborations with many other types of materials scientists.

The Japan Society of Calorimetry and Thermal Analysis, with about 290 participants at this meeting, is clearly a powerful organization and the scientific level of the meeting is impressive. We both attended several lectures and, although it was difficult to get the details of the oral contributions given in Japanese, it turned out to be possible to get an overview especially when graphical representations of methodology and results were presented. Even without knowing Japanese, it was possible to understand the high level of science and the interest in the work, as evidenced by the lively discussion.

* Svein Stølen and Mary Anne White are now both members of the Japan Society of Calorimetry and Thermal Analysis, and they look forward to hearing about future meetings.

** Mary Anne White hopes to see many members of the JSCTA at the 16th IUPAC Conference on Chemical Thermodynamics, Halifax, Nova Scotia, Canada, August 6-11, 2000. To receive notifications about this conference, please send an email to "ICCT@IS.DA.CA" with your name and email address.

In similar meetings in most other countries, thermal analysis contributions outnumber the calorimetry contributions, but this is not so in Japan. Accurate and precise techniques were applied to a large number of problems, ranging from basic science to applied work, with contributions from universities, government and industry. Furthermore, the number and quality of papers on methodology was impressive.

The poster sessions were also well organized and well attended. Awards for the best poster presentation each day made it necessary to scrutinize the different posters in detail, and the excellent science made voting quite difficult. The JCCTA banquet was first class but, unfortunately, it was the end of the conference for us

since we both had to move on to other tasks the next day (but only after attending the Young Scientist Meeting [despite our ages] with "karaoke" later that evening: a splendid end to the conference).

The efforts of Prof. Atake, Assoc. Prof. Kawaji, Mrs. Nobuko Kaga (the secretary) and the students of the Atake-ken are greatly appreciated. It was a great honour to be invited to these two meetings, and a great pleasure to participate. The arrangements were truly perfect and a number of the details seen during these conferences may be used also in other conferences. Best of all, the level of science was very high, and bodes well for the future of thermodynamics in Japan.