

## Opening Address

Distinguished Guests, Ladies and Gentlemen:

It is indeed a real honor and privilege for me to be given this opportunity to address you on the occasion of the Opening Ceremony of the Joint International Symposium of the 3rd International Symposium on Clathrate Compounds and Molecular Inclusion Phenomena and the 2nd International Symposium on Cyclodextrins.

First of all, on behalf of the organizing committee, I wish to extend a warm welcome to all the participants, in particular our gratitude to each of the attendees who have come long distances from abroad to contribute to this symposium.

Now, at the outset, I would like to trace the origins of the present symposium. As you all know this symposium has two roots, that is, in the past there have been held two international symposia separately and independently in Europe, as explained briefly by the general secretary, Professor T. Iwamoto. This may be due to the difference of the purpose or character of the historical development of the science and technology related to inclusion or clathrate chemistry which has been growing from various different roots. They are, chemistry, biochemistry, physics, biology, mineralogy, pharmacology, applied fields related to agriculture, medicine, chemical industry and so on. Reflecting this characteristic situation the present symposium is held now under the auspices of sixteen Japanese scientific Societies and Associations covering pure and applied science and technology. Here we should express our sincere thanks for their sponsorships.

Such a diverse nature of "Inclusion chemistry" I should say, has gradually and steadily interrelated and matured as a special new face of science, and each branch has been intimately related as "host-guest intermolecular interaction" or "molecular engineering", a kind of soft-nature-chemistry. Thus, this tendency motivated the general and co-operative mutual understanding between scientists working in different fields and led to the present joint symposium.

In opening this symposium I would like to address words of appreciation to the members of the International and Domestic Organizing Committees for their efforts and contributions, in particular to Professors Iwamoto and Tabushi who served on both the domestic and international MIP committees and to Professor T. Nagai occupying the same positions on the CD committees. Furthermore, we should like to express our deepest appreciation for financial support from the Japan World Exposition Commemorative Fund, the Yamada Science Foundation, the Naito Foundation and the Yoshida Foundation for Science and Technology.

At the present time we have registered participants from 19

countries all over the world and the total number of participants amounts to 303 of which 50 are from abroad. The total number of scientific contributed papers, both oral and poster, including plenary and invited, is 142. Both the total numbers of papers and participants are much larger than those of past symposia. I deeply appreciate your enthusiastic participation which, I believe, will lead to an exciting and successful meeting.

Due to the multidisciplinary nature of the subjects treated in this symposium, the scope and subjects are grouped into two parts. In group A the chemistry of various kinds of compound are covered: (1) Cyclodextrins and natural host compounds in solution, (2) Synthetic organic hosts such as crowns, cryptans, cyclophanes, etc. in solution, (3) Organic hosts in crystalline states, (4) Inorganic and metal complex hosts such as hydrates, Zeolites, silica-polyhedra, "Werner-type", "Hofmann-type", etc. and (5) Layered hosts such as graphite, transition metal chalcogenides, layered minerals and so on. In group B various kinds of properties, functions and applications of inclusion or clathrate compounds are the subjects to be discussed: (1) Applications in catalysis, food science, material science, pharmaceuticals, etc., (2) Biomimetic or membranemimetic aspects, (3) Physicochemical aspects, (4) Selectivity and separation effects, (5) Structural stereospecificity and (6) Strategy in synthesis, etc. Surveying the subjects of contributed papers, about one-third are related to the chemistry of crown, cyclophane and biomimetic clathration, one-third to the chemistry of cyclodextrin and the final one-third to the structure and physico-chemical properties of clathrates and intercalated compounds.

Now, I would like to take this opportunity to speak briefly about the recent historical circumstances of inclusion chemistry in Japan. Although the discoveries of chemical compounds, which are now looked upon as clathrate compounds, can be traced back to the last century, the modern science of clathrates may be recognized to have been launched when the crystal structure of  $\beta$ -quinol was determined with X-ray analysis by Professor Powell in 1947. At that time almost no chemists in Japan paid attention to this achievement, except for X-ray crystallographers. However, during the past 20 years the number of chemists interested in this field of research started to grow gradually. In connection with the period of booming growth around 1970 which was brought about by the discovery of crowns, cryptates and related compounds, the chemists working in this field have been increasing year after year. In this situation, the 1st International Symposium of MIP in 1980 motivated the organization of Japanese scientists and they joined together to establish a research group under the support of a Grant-in-Aid for Cooperative Research from the Ministry of Education, Science and Culture, three years ago. This background made it possible to accept the proposal by the International Committees to hold this symposium in Japan. Today, we have about 170 members from the academic area in Japan and about 80 from the industrial circle in Japan, contributing about 83 papers to this symposium.

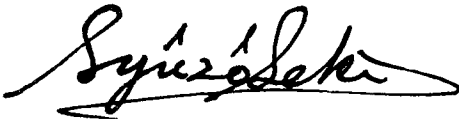
Now, before closing my address, I would like to make a short

comment of my personal wish in connection with the purpose of this symposium. As already mentioned, the fortuitous coincidence of the resolutions of two international organizations led to us holding this joint meeting here in Hoshi University. I know well that the purposes or historical background of the two symposia are different from each other. On the other hand all of you know that almost all kinds of innovations or discoveries are frequently born from the interdisciplinary field through the frank and free exchange of scientific information among people working in neighboring fields. In this respect I really hope that, in the near future, this joint symposium will take the role of a trigger for the amalgamation through the experience and co-operative effort of the participants of this symposium.

Keeping this in mind, on behalf of the attendees, I should like to express our deepest thanks to President T. Kametani of Hoshi University for his help in holding the symposium here.

In closing my address, I do hope that all the participants from different countries and from different special fields of research will utilize this chance for the free exchange of information and for the further development of international co-operation. I, also, do hope that all of you will enjoy this one week, or longer, stay in Japan where you might discover how traditional oriental cultures are co-existing as well as complementary amalgamized with western civilization and also that you will enjoy meeting with your old friends and become acquainted with many, many new friends.

Thank you very much.

A handwritten signature in black ink, appearing to read 'Syuzo Seki', with a long horizontal flourish extending to the right.

Syuzo SEKI  
Chairman of the Organizing  
Committee