

Clathrate Compounds,  
Molecular Inclusion Phenomena,  
and Cyclodextrins

# Clathrate Compounds, Molecular Inclusion Phenomena, and Cyclodextrins

*Proceedings of the Third International Symposium on  
Clathrate Compounds and Molecular Inclusion Phenomena and  
the Second International Symposium on Cyclodextrins,  
Tokyo, Japan, July 23-27, 1984*

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PROCEEDINGS OF THE THIRD INTERNATIONAL SYMPOSIUM ON  
CLATHRATE COMPOUNDS AND MOLECULAR INCLUSION PHENOMENA  
AND THE SECOND INTERNATIONAL SYMPOSIUM ON CYCLODEXTRINS

Tokyo, Japan

23 - 27 July 1984

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and

The 2nd International Symposium on Cyclodextrins,  
July 23-27, 1984, Hoshi University, Tokyo, Japan

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## Preface

The Joint Meeting comprising the 3rd International Symposium on Clathrate Compounds and Molecular Inclusion Phenomena and the 2nd International Symposium on Cyclodextrins was held on 23-27 July, 1984, in Tokyo, Japan. It was organized by the Japan Association for Inclusion Chemistry together with the International Organization Committee, with the auspices of sixteen societies and associations in Japan. This event was the first joint meeting with the hope of unifying the above two symposia.

The program of the symposium consisted of 142 papers, including 14 invited papers. The invited papers and some selected topics were presented verbally, and all the other 118 papers were displayed in poster sessions.

The symposium was held at Hoshi University in Tokyo. Due to the multidisciplinary nature of the subjects treated, the scope and subjects were grouped into two parts. In the first group, the chemistry of cyclodextrins, synthetic organic hosts, inorganic and metal complex hosts and layered hosts were treated. In the second group applications in various fields, biomimetic aspects, physicochemical aspects, selectivity, stereo-specificity and other aspects were discussed. The scientific sessions were carried out in a really vivid atmosphere. The number of participants viz 50 from 19 overseas countries and 253 domestic participants exceeded our expectation.

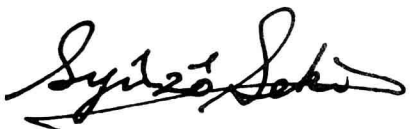
On behalf of the organizing committee we would like to thank all the participants who contributed to the success of the first joint symposium. This symposium was really made possible by generous financial support from the Japan World Exposition Commemorative Fund, the Yamada Science Foundation, the Naito Foundation and the Yoshida Foundation for Science and Technology. We would like to acknowledge these Foundations and also the hospitality given by President T. Kametani of Hoshi University.

Eight invited, 20 review and 69 original papers are printed in this volume of the Proceedings. One half contains the cyclodextrin related papers, and the other half the remaining papers. Each original paper was examined by two referees. At first, the papers of Japanese authors were treated by T. Osa, and those of non-Japanese authors by J. E. D. Davies. Finally the style and language of all the papers were checked by Dr. Davies.

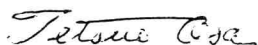
Editorial work was also done by Professors T. Iwamoto, T. Nagai and K. Takemoto, members of the Committee for Publication, and Professor J. L. Atwood, a member of the International Organizing

Committee and Editor-in-Chief of the Journal of Inclusion Phenomena.

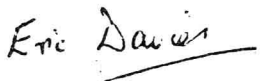
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Syuzo SEKI  
Chairman of the Organizing Committee



Tetsuo OSA  
Chairman of the Publication Committee



J. Eric D. DAVIES  
Member of the International  
Organizing Committee  
Editor-in-Chief of the Journal  
of Inclusion Phenomena



## 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

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, reading 'Syuzo SEKI'. The signature is fluid and cursive, with a long horizontal stroke extending from the end of the name.

Syuzo SEKI  
Chairman of the Organizing  
Committee

*'A gentle guest, a willing host,  
Affection deeply planted -  
It's strange how those we miss the most  
Are those we take for granted.'*

*Sir John Betjeman,*

*'The Hon. Sec.'* (1966)

With grateful acknowledgement to John Murray (Publishers) Ltd.

PROCEEDINGS OF THE THIRD INTERNATIONAL SYMPOSIUM ON  
CLATHRATE COMPOUNDS AND MOLECULAR INCLUSION PHENOMENA

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