

INTERNATIONAL UNION OF PURE
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PHYSICAL AND INORGANIC CHEMISTRY DIVISION

in conjunction with

INTERNATIONAL UNION OF PURE AND APPLIED PHYSICS
NORTHERN TERRITORY UNIVERSITY
AUSTRALIAN ACADEMY OF SCIENCE
ROYAL AUSTRALIAN CHEMICAL INSTITUTE
AUSTRALIAN INSTITUTE OF PHYSICS
N.T. DEPARTMENT OF MINES AND ENERGY

Plenary and selected invited lectures presented at the

**INTERNATIONAL CONFERENCE ON EXCITONIC
PROCESSES IN CONDENSED MATTER (EXCON '94)**

*held in Darwin, Australia
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Conference Editor

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Preface

The idea of holding an **International Conference on Excitonic Processes in Condensed Matter** in Darwin originated in 1987, when I attended the sixth International conference on Dynamical Processes in Excited States of Solids, DPC'87 held in Tsukuba, Japan. It started taking shape in 1991 when I spent a few weeks in Nagoya, working on a project with Noriaki Itoh, who strongly supported my idea of a conference on excitons in Darwin. The year 1994 did not clash with the year of either DPC or that of the International Conference on Luminescence, ICL, and Darwin has probably the best weather on earth in July. The title EXCON was then abbreviated from **EX**citonic **CON**ference. I received encouraging responses from international workers like Heinz Baessler, Katja Lindenberg, William M. Yen, George Bastard, Peter Landsberg, Norman H. March, Atsuo Mtasui, Emmanuel Rashba, D.P. Craig, Alex Blumen and R.M. Hochstrasser and practical help from Doug Hamilton, Chair of ICL'93, who provided me with the diskette of ICL mailing list.

As EXCON'94 was the first international conference of its kind, its organising was an unique experience for me personally. Geographically, Australia is an isolated country in the world, Darwin is an isolated city in Australia; a pseudo-island. The Australian Academy of Science and Australian Institute of Physics were the first to endorse EXCON'94 formally. The first international sponsorship was granted by IUPAC, and then a loan grant from the Australian Commonwealth Government, Department of Industry, Technology and Commerce was approved. The sponsorship from IUPAP was received after more than a year since submitting my application with no interim correspondence.

The first encouragement within the Northern Territory came from its Administrator, the Honourable Austin Asche QC, who wrote, "It is a great tribute to Darwin that an International Conference of this significance is to be held next year", and kindly agreed to hold a reception for the delegates of the conference. The sponsorships from Australian Chemical Institute both Solid State Division and N.T. Branch, N.T. Department of Mines and Energy, Australian New Zealand Solar Energy Society and Royal Commonwealth Society (NT Branch) then followed. The N.T. Tourist Commission and Australian Tourist Commission have been very helpful throughout the preparation for EXCON'94. The overall support by the Northern Territory University is gratefully acknowledged.

The local Organising Committee consisting of scientists from all over Australia advised me on the general issues of the conference, however I could not have done it without the enthusiastic support of the Darwin's Organising Committee, in particular Diane Walter, Anne and John Wellards, Subash Chandra and Jim Carew.

The proceedings of EXCON'94 is being published in two different forms and volumes by two different publishers. IUPAC is publishing the plenary papers and a few invited papers in its **Journal of Pure and Applied Chemistry** in accordance with its sponsorship, and SPIE is publishing all the papers presented at the conference. I am indebted to IUPAC for authorising the inclusion of the plenary papers also in the proceedings being published by SPIE.

EXCON'94 was participated by nearly 100 scientists from 17 countries, and I would like to take this opportunity once again to thank them all. It was very gratifying to see that EXCON'94 has become the foundation of a series of EXCON conferences and EXCON'96 will be held in Chemnitz, Germany.

Jai Singh, Chair EXCON'94

Darwin, 1994