

Preface

This issue of *Pure and Applied Chemistry* contains the texts of the main lectures, including the Rossini Lecture, presented at the Twelfth International Conference on Chemical Thermodynamics held 16-21 August 1992 at Snowbird, Utah, USA. The Conference was held jointly with the 47th Calorimetry Conference under the sponsorship of IUPAC through the Physical Chemistry Division and Commission I.2 on Thermodynamics. The Organizing Committee thanks those institutions and agencies whose generous financial support ensured the success of the Conference:

Brigham Young University
Electric Power Research Institute
Parr Instrument Company
US Department of Energy

The Calorimetry Conference
Monsanto Corporation
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US National Science Foundation

The importance of carefully-made, precise experimental measurements of thermodynamic quantities is as critical today as it has ever been. Data for new substances, reactions, and processes are necessary for developing new materials and procedures in areas ranging from environmental science to electronics and for applications ranging from energy production to biological processes. This current interest in thermodynamics was evident in the Conference program and in the breadth of backgrounds of the participants. The program consisted of 12 plenary, 254 oral, and 165 poster presentations in eleven symposia dealing with theoretical, experimental, and applied thermodynamics in the following areas: biological, electrolyte solutions, fluid phases, industrial environments, macrocycles, methods and instrumentation, nonelectrolyte mixtures, nuclear materials, solids, and surfaces. Registered scientific program participants numbered 471 and the 431 presentations listed in the program were submitted by authors from 39 countries. In addition, registered accompanying persons numbered 141. Abstracts of all 431 presentations are given in the Conference Program book.

The Rossini Lecture was presented by J.S. Rowlinson, Dr. Lee's Professor of Physical Chemistry from Oxford University, U.K. Professor Rowlinson was at Manchester University from 1951 to 1960. He was appointed Professor of Chemical Technology at Imperial College, University of London from 1961 to 1973. His present appointment began at Oxford University in 1974. Honors include his appointment as President of the Faraday Division of the Royal Chemical Society from 1979 to 1981. He was the Royal Society of Chemistry Lennard-Jones Lecturer in 1985 and the Gesellschaft Deutscher Chemiker von Hofmann Lecturer in 1980. He is also a Fellow of the Royal Society of Chemistry and also of the Royal Academy of Engineering. In addition to his many publications, Professor Rowlinson is author, editor, or co-editor of eight books on physical chemistry and thermodynamics. In recognition of his many achievements in and contributions to thermodynamics, IUPAC Commission I.2 has honored Professor Rowlinson as Rossini Lecturer in 1992. The text of his lecture, "Thermodynamics of Inhomogeneous Systems," is included in this issue.



J.S. Rowlinson
1993 Rossini Lecturer

Earl M. Woolley
Conference Editor