

Preface

This issue of Pure and Applied Chemistry contains the texts of the plenary and a number of invited section lectures presented at the Eleventh IUPAC Conference on Chemical Thermodynamics held in Como, Italy, on August 26 to 31, 1990, under the sponsorship of the IUPAC and its Physical Chemistry Division, as well as Commission I.2 on Thermodynamics. The Conference was also sponsored by the Italian Consiglio Nazionale delle Ricerche (CNR), the Società Chimica Italiana (SCI), the Associazione Italiana di Calorimetria e Analisi Termica (AICAT), the Associazione Italiana di Chimica Fisica (AICF), the Polytechnic of Milan and the Universities of Milan, Naples, Pavia and Turin.

The Conference was attended by more than 400 active participants and almost 90 accompanying persons from about 40 countries.

The scientific programme consisted of the Rossini lecture, 8 plenary lectures as well as 62 invited section lectures, 184 oral communications and 218 poster presentations, distributed in the following twelve Sections: 1) Biothermodynamics (including a Minisymposium on Protein Stability in Biotechnology); 2) Solutions; 3) Mixtures, VLE and statistical mechanics; 4) Equations of state, critical and supercritical fluids; 5) Materials for the pharmaceutical, agricultural and food sciences; 6) Thermochemistry of inorganic and organic compounds; 7) Heat capacities and phase transitions; 8) Polymers; 9) Surfaces, interfaces and micellar systems; 10) Environmental thermodynamics; 11) Material science thermodynamics (including new material, metals and alloys); 12) Calorimetry, other experimental techniques in chemical thermodynamics and data processing.

The invited and oral communications were arranged in up to seven parallel sessions and the poster presentations in three sessions. Exhibitions of instruments, databanks, scientific books and journals operated throughout the Conference. A Round Table was devoted to Environmental Problems. The success of the Conference was largely due to the active cooperation of the members of the International Scientific Committee, especially in organizing the programme of each Section.

The editors gratefully acknowledge the collaboration of the authors in preparing their camera-ready manuscripts and apologize for the somewhat unusual delay in the appearance of this issue.

The editors
G. Barone and G. Della Gatta
Chairmen of the Int. Scientific Committee



First Rossini Lecturer (1975)
Frederick D. Rossini

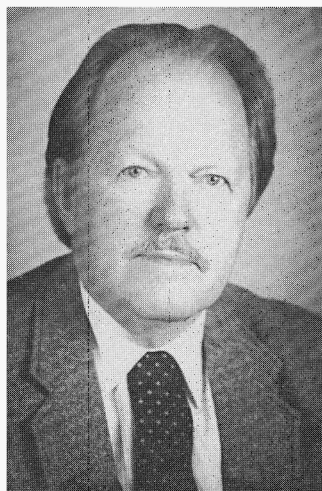


Second Rossini Lecturer (1977)
Henry A. Skinner



Third Rossini Lecturer (1980)
Stig A. Sunner

Professor Sunner died
3 June 1980 before being
able to deliver his lecture
at Merseburg in August 1980



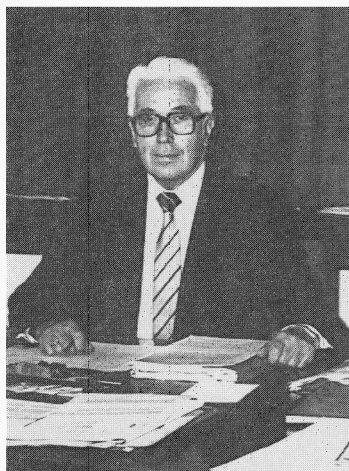
Fourth Rossini Lecturer (1982)
Edgar F. Westrum, Jr.

ROSSINI LECTURES

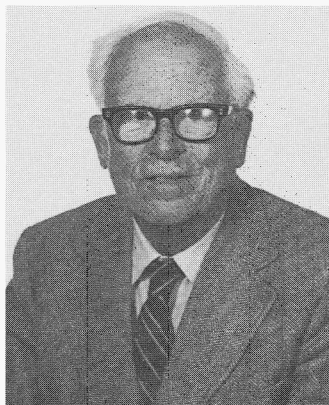
In recognition of the contributions of Prof. F.D. Rossini to the work of IUPAC Commission on Thermodynamics and Thermochemistry during his 39-year membership (1934–1973), the Commission decided, in 1973, to institute a "Rossini Lecture", to be given during the IUPAC International Conferences on Chemical Thermodynamics. The first lecture was given by Prof. Rossini himself at the Fourth Conference held in August 1975 in Montpellier, France. Rossini lecturers are appointed by the Commission on Thermodynamics and the text of these lectures published in *Pure and Applied Chemistry* and, with IUPAC permission, in the *Journal of Chemical Thermodynamics*.



Fifth Rossini Lecturer (1984)
Maxwell L. McGlashan



Sixth Rossini Lecturer (1986)
E. Ulrich Frank



Seventh Rossini Lecturer (1988)
Kenneth S. Pitzer



Eighth Rossini Lecturer (1990)
Gerhard M. Schneider