Preface

This issue of Catalysis Letters contains seventeen representative papers of the X-ray Absorption Fine Structure (XAFS) Symposium on Catalysts and Related Surfaces which was supported by

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The symposium was planned as an international theme-symposium following the Seventh International Conference on XAFS (23–29 August 1992, Kobe). Eighty-five specialists and delegates who have been closely related with XAFS studies on catalysts/catalysis and related surfaces/phenomena, from both Universities and Industrial Research Labs of eleven countries, discussed recent topics and novel results of relevance to the theme "Catalysts and Related Surfaces Characterized by EXAFS (Extended X-ray Absorption Fine Structure) and XANES (X-ray Absorption Near-Edge Structure)" in recognition of the fact that structural information on catalytic materials and surfaces has a growing importance in molecular-level understanding of catalysis and in chemical design of catalyst surfaces and future molecular-machines.

Five invited lectures, eleven general lectures, and seventeen posters were presented in seven sessions focusing on new EXAFS techniques, metal catalysts, metal-oxide catalysts, sulfide catalysts, cluster catalysts, SEXAFS, and theory. A couple of invited lectures are not involved in this issue because a part of the lectures have been published. Not all of the presentation in the symposium but a limited number of papers are issued in Catalysis Letters.

Rapid progress in structural study of catalysts and catalysis has been achieved by means of EXAFS and XANES which are powerful for not only static characterization of almost all kinds of catalytic materials and surfaces but also particularly the in situ analysis under reaction conditions. Development of XAFS has opened up a new area of research. While it was an important goal of the symposium to provide molecular-level pictures of catalysts and catalysis, attention was also directed to the challenges to studies of new XAFS techniques and samples related with industrial processes. The discussion we had in the symposium with a common language of XAFS underscored the desirability of having this kind of international meeting in catalysis research field.

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Yasuhiro Iwasawa