Preface

The term Zodiacal Cloud Sciences comprises the research into the origin, evolution and structure of the interplanetary dust cloud made through observation, theoretical and laboratory work. The zodiacal cloud studies reveal the evolution of small bodies and hence are an interesting features of the physics of the solar system. Observations of dust debris shells around main sequence stars as well as the exploration of the Kuiper belt have raised new attention in this subject. The introduction of new instrumentation for ground-based and space-craft measurements, as well as the implementation of new computational techniques for simulation and modelling such clouds.

The 1997 September meeting in Kobe University was therefore an appropriate moment as summarize these new results in zodiacal cloud science. About 70 scientists from 11 countries attended the meeting. The participants from all 5 continents reported and discussed theoretical calculations, laboratory measurements, observations and space experiments.

The journal Earth, Planets and Space (EPS) kindly devoted a special issue for the studies of zodiacal cloud sciences, as the proceedings of the meeting. This special issue comprises papers of three types, i.e. (1) Observations and modelling of the zodiacal cloud, (2) The origin and dynamic evolution of zodiacal cloud, and (3) Physical processes, including light scattering and emission, in zodiacal cloud. All manuscripts were submitted for review, criticism and approval to two referees and it is a pleasure to thank the following reviewers for their cooperation;

P. Artymowicz  M. Horanyi  R. M. MacQueen  T. Onaka
W. J. Baggaley  M. F. Ingham  T. Matsumoto  W. T. Reach
M. Banazkiewicz  H. Ishimoto  N. Misconi  H. Shibai
D. Clarke  S. Isobe  S. Mukai  H. J. Staude
R. Dumont  P. Jenniskens  Y. Nakagawa  A. Stern
H. Fahr  H. Kimura  R. Nakamura  H. Tanabe
E. Gruen  A. Krivov  A. Natta  F. Verheest
T. Henning  A. C. Levasseur-Regourd  H. Okamoto  I. Williams
S. S. Hong  K. Lumme

We also thank Professor Y. Honkura, Editor-in-Chief of EPS, for his kind consideration in devoting an issue to the proceedings of this conference. Finally we express the hope that the issue will provide a useful reference point for future researches into the nature of the zodiacal cloud and other circumstellar dust clouds.

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(Guest editors of a special issue of EPS)