

# FRONTIERS AND NEW HORIZONS IN AMINO ACID RESEARCH

Editor:

KATSUJI TAKAI

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# FRONTIERS AND NEW HORIZONS IN AMINO ACID RESEARCH

Proceedings of the First Biennial International  
Conference on Amino Acid Research  
Frontiers and New Horizons 1991, Kyoto,  
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Editor:

**Katsuji Takai**



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# FRONTIERS AND NEW HORIZONS IN AMINO ACID RESEARCH

Proceedings of the First Biennial International  
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Frontiers and New Horizons 1991, Kyoto  
1991, Vienna 1991

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## Preface

Since the discovery of twenty amino acids in proteins, amino acid research has spread into virtually every field of sciences, identified one thousand amino acids along their paths in nature, and achieved extensive differentiation far beyond initial concepts. No one at present doubts that the amino acids are the most fundamental bases for a highly ordered multimolecular system in dynamic steady state called life, but, due to rapid, multidirectional development of each amino acid issue, the entirety of their real figures unraveled year to year has been virtually elusive after the monumental publication of "Biochemistry of Amino Acids" by Dr. Meister in 1965.

As we move into the 21st century, it appears relevant to integrate the different researches on the amino acids, thereby providing a newer vista and impetus for future collaborative ventures. We have felt now the time to organize and launch an international conference of interdisciplinary nature to discuss biennially the most recent developments in each of diverse, yet essentially complementary fields of amino acid research. In the first of this biennial conference, we intended to highlight the "frontiers and new horizons of amino acid research", and discuss their roots and coherence in the entirety of life/basic sciences spanning from cosmology to medicine. Amino acids, small peptides, and amino acid residues in proteins were chosen as subjects to coherently feature the aspects of "amino acid sciences" on biological/chemical masses; metabolism and biocatalysis/chemical structure and reactivity; biosignal and transport/configuration and conformation; and homeostasis and regulation/system and information sciences. In fact, it has been premature to have this type of forum in the last few decades, but this proceedings would clearly show that the time was just right to allow a current overview of amino acid research and indicate promising lines of newer approaches towards, eventually, an understanding of life itself.

On this occasion, I would like to express my sincere gratitude to the contributions of the organizing and advisory members, and keynote speakers to materialize this conference and proceedings, and those of voluntary participants who have accepted our concepts and joined with us to provoke interdisciplinary discussions. I am also grateful to the staff of Elsevier Science Publishers for helping in the preparation of this proceedings through to completion. Finally, I would like to conclude by sincerely thanking the Ajinomoto Company Ltd. for the main financial support that made this conference on board.

Katsuji Takai  
Tokyo, 1992

## The First Biennial International Conference on Amino Acid Research. Frontiers and New Horizons 1991

Kyoto International Conference Hall August 13-19, 1991

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