

Preface

Knowledge of the chemistry and biochemistry of vanadium has increased enormously since the early 1980s, particularly that of vanadium(III), (IV), and (V). This led to remarkable developments in the understanding and recognition of the properties of vanadium compounds. A consequence of these new insights has been numerous applications of vanadium complexes ranging from therapeutics to catalysis and from new materials to green chemistry. Many of the more recent advances were presented at the 6th International Vanadium Symposium held 17–19 July 2008 in Lisbon, Portugal.

The conference included 56 oral communications and 52 poster presentations. The following 12 papers are a selection from the oral communications presented. This conference attracted over 100 participants from 27 countries and 4 continents. The inorganic chemistry of vanadium, application of vanadium chemistry in catalysis and organic synthesis, and biological aspects of vanadium chemistry were discussed in invited lectures as well as in poster communications.

The Vanadium Award, a prize first introduced at the 4th International Vanadium Symposium held in 2004 in Szeged, Hungary to recognize an outstanding contributor to the advancement of vanadium science, was awarded in 2008 to Prof. Toshikazu Hirao of the Osaka University, Japan, and his contribution is the first paper presented herein.

The additional contributions that embody this issue are mostly papers covering aspects related to catalytic applications of vanadium compounds, including their use as functional models of vanadium-dependent haloperoxidases. Electron transfer in oxo and non-oxo vanadium complexes, the use of NMR to characterize the complexes, and synthesis of new polyoxovanadates are the subjects of other papers included.

We look forward to the 7th International Vanadium Symposium to be held in Japan in 2010, where additional studies on the role of vanadium in life, the vanadium nutritional essentiality, vanadium toxicity, and vanadium therapy, as well as new contributions to the use of vanadium compounds in catalysis, including “green chemical” industrial applications, will certainly be presented.

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