

## Preface

The 31<sup>st</sup> International Conference on Solution Chemistry (ICSC-31) was held 21–25 August 2009 in Innsbruck, Austria. This conference series covers a wide range of topics related to solution chemistry, such as spectroscopy, thermodynamics, and kinetics to name just a few, addressing experimentalists and theoreticians alike.

Seventeen outstanding plenary and invited lectures were given by renowned scientists. The topics of the plenaries were solution NMR structures of proteins (J. Wüthrich), porous coordination polymers (S. Kitagawa), ab initio-based water potentials for simulation studies (S. Xantheas), and the hydration structures of metal ions in solution (I. Persson). Additionally, 33 oral contributions were presented and two poster sessions were held. A total of 29 countries were represented in this conference. The best poster award was given to Matjaz Boncina for his poster entitled “Thermodynamics of the ion–lysozyme association”. Pierre Turq presented details of the next ICSC meeting to be held in 2011 in La Grande Motte, France.

Eight papers based on lectures presented at the ICSC-31 are included in this issue of *Pure and Applied Chemistry*. The manuscripts cover investigations using different spectroscopic approaches, molecular simulation studies as well as thermodynamic measurements. The systems treated range from pure water and aqueous solution to ionic liquids and solutions containing polyelectrolytes. These contributions feature the major themes of the conference, serve as a representative view of current activities in the field of solution chemistry, and demonstrate that solutions still prove to be challenging targets for contemporary physical and chemical research alike.

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