

Preface

Each year since 1975, the JEEP conference gather scientists and industrials interested in both theoretical and applied aspects of phase equilibria and coming from various fields such as chemistry, material science, environment, pharmaceuticals or process engineering.

For 34 years, this friendly conference has proved that the establishment of phase equilibria is extremely useful for the preparation of materials with reproducible characteristics and properties as well as for processes optimization.

This issue brings together works presented during the XXXV JEEP conference. These investigations concern an extended domain of researches including: the use of the experimental techniques in the determination of phase diagrams (thermal methods, spectroscopy, diffractions, microscopy), the thermodynamic modelling and its coupling with the kinetics approaches, the studies *ab initio* (simulation, modelling), the application of the thermodynamics of heterogeneous equilibria in the synthesis and/or elaboration processes.

On the occasion of the 35th edition of the JEEP, contributions mainly cover three classes of molecules and materials: Organic compounds, Metallic materials and Inorganic compounds such as oxides, ceramics and salts. The presented works gave a better understanding of phase equilibria, which is designed to improve extraction, purification processes, or to control the composition and microstructure of metallic alloys or metal matrix composites, that is of primary concern for the development of applications.

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General chair of XXXV JEEP
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