

Preface

The Eighth International Symposium on Metal-Hydrogen Systems, Fundamentals and Applications, MH2002, was organized in Annecy, France on September 2–6 2002, following previous meetings held in Stuttgart in 1988, Banff in 1990, Uppsala in 1992, Fuji-Yoshida in 1994, Les Diablerets in 1996, Hangzhou in 1998 and Noosa in 2000. In fact, this series of Symposia emerged from a decision taken 16 years ago in Maubuisson, France in 1986, to combine the International Symposium on the Properties and Applications of Metal Hydrides (Geilo, 1977, Colorado Springs, 1980, Toba, 1982, Eilat, 1984, Maubuisson, 1986) and the International Conference on Hydrogen in Metals (Jülich, 1972, Birmingham, 1976, Münster, 1979, Wrocław, 1983, Belfast, 1985).

These well attended international meetings reflect the continuous and long term research efforts of scientists on fundamental as well as on applied aspects of hydrogen in metals. Moreover recently, a renewed interest for using hydrogen as a clean energy vector has grown worldwide. Very important research efforts oriented towards applications are encouraged through national and international programs (energy storage and transportation, fuel cells...). In this context, the MH2002 Symposium brought together 360 participants from 37 countries, the program included 35 invited talks, 64 oral and 304 poster presentations. The 172 papers published in the proceedings cover a broad range of topics from fundamental aspects (thermodynamic properties and phase diagrams, structural, physical properties, electronic structure, hydrogen dynamics, surface and interface effects, reaction kinetics, isotopic effects, new phenomena on thin films, multilayers) to aspects of materials research on new hydrogen absorbers (light weight metallic and non-metallic materials, nanocrystalline, amorphous and composite materials). However, the practical use of some of these materials (carbon nanotubes, alanates...), highly debated at the meeting, remains controversial. A substantial number of presentations were devoted to applications and engineering, particularly in relation with the remarkable success of MH electrodes in the battery industry. Research on fuel cells, hydrogen processing of materials, and to a lesser extent thermal and catalytic applications were also discussed.

A special lecture was given by Gary Sandrock and

Robert C. Bowman, Jr. in memory of Moshe Ron (1925–2001), a very regretted member of the International Steering Committee who contributed, as an early pioneer and all along his fruitful career, to substantial advances in the field of applications and properties of reversible metal hydrides.

We would like to thank the members of the International Steering Committee for their advice on the planning of the Symposium program and for their precious help with the refereeing of the manuscripts.

We would like also to thank all the researchers who were very active and efficient in the refereeing of the manuscripts.

Interdisciplinary symposia on Metal–Hydrogen systems are very stimulating since they bring together scientists working on fundamental aspects, materials research as well as applications, they should contribute to the advances in this field. We are thus looking forward to a fruitful next meeting in Cracow, Poland, in 2004.

The guest editors,

Annick Percheron-Guégan and Michèle Gupta

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