## EDITORIAL

## Sohn International Symposium on 'Advanced processing of metals and materials'



It is a pleasure to be invited to guest edit this special issue of *MPEM*, which reproduces a selection of the best papers presented at the recent Sohn International Symposium. Focusing on the topic of 'Advanced processing of metals and materials', the symposium was held in San Diego, California on 27–31 August 2006 to honour the very distinguished work and lifetime achievements of Professor H.Y. Sohn, renowned for his impact in various fields, processing routes and investigation techniques.

The symposium was based on a novel 'materials life capsule' conceptual philosophy developed by the present author: it was structured around a triangle with corners representing the equally important concepts of **principles**, technologies and industrial practice. These pillars, which closely interact, support various materials related fields, processing routes and investigation techniques that together constitute the materials life capsule which, in itself, closely interacts with the real life.

The symposium was sponsored by TMS as well as a record number of 104 professional societies, organisations, independent publishers and professional journals from all over the world. It was sponsored financially by Ausmelt, Flogen Technologies Inc., Korea Institute of Geoscience and Mineral Resources, Korea Zinc Co. Ltd., LS-Nikko Copper, Outokumpu Technology, Posco, Umicore Precious Metals, Refining, Xstrata Technology.

The symposium drew an overwhelming response from the international professional community. The 530 contributions received from authors and co-authors from more than 80 countries made it the biggest symposium ever held in its class. Papers by primary authors represented the following 50 countries: the USA, Japan, China, Russia, South Korea, Australia, Canada, Turkey, Chile, India, Georgia, Mexico, Brazil, France, South Africa, Finland, Belgium, Germany, Argentina, Austria, Sweden, the UK, Norway, Albania, Egypt, Ukraine, Iran, Peru, Poland, Portugal, Czech Republic, Israel, Italy, Malaysia, The Netherlands, Taiwan, Armenia, Bangladesh, Belarus, Bulgaria, Hungary, Indonesia, Nigeria, Serbia, Slovakia, Slovenia, Spain, Switzerland, Venezuela, Zambia.

The symposium covered a wide range of topics in depth. Based on the three pillars, principles, technologies and industrial practice, the papers were presented in 55 sessions dealing with: non-ferrous high temperature extraction and processing; iron- and steelmaking; aqueous, electrochemical processing and molten salts; nano-, composite, refractory and polymer materials; recycling, recovery and waste treatment. Of special note was the distinctive symposium on 'Legal, management and environmental issues', in which prominent lawyers covered today's hot topics on mergers and acquisitions, intellectual property, patent law, litigation and arbitration; in addition, renowned speakers on industrial management gave a management perspective of today's new reality in the world of metals and materials. This is believed to be the first time full sessions on these issues have been included in a technical programme. The published proceedings extended to a total of nine volumes comprising more than 6000 pages, classified according to the topical areas mentioned above.

After a hard day at work at the symposium the attendees enjoyed numerous social functions in the beach loan in front of the hotel and several entertaining activities in the beautiful bay or in greater San Diego. A highlight was the banquet held on the other side of the Mission bay in the

stylish hall of Bahia Hotel. Attendees were transported there on board the William D. Evans, where the floating banquet reception was held, surrounded by magnificent historical and yet romantic ornaments inside and by breathtaking views of Mission bay.

As the chair and organiser of the symposium, I would like to express my appreciation to the successive president of TMS, Gregory Hildeman and Brajendra Mishra, and the numerous cosponsors of the symposium. I would also like to thank the Directors and staff of FLOGEN Technologies Inc., who not only financially sponsored the symposium but also did the majority of the work, and Me. Migen Dibra for organising the very interesting legal session. Finally, I thank the co-chairs, members of the organising committees, session chairs, and above all the authors and co-authors from 80+ countries.

It is worthwhile to highlight a couple of the hundreds of congratulation messages that capture the entire spirit of the event: 'It was about life, quality, communication, interaction, knowledge, feeling, location and people bonded together in excellence.' and '...so many excellent papers to attend, so many things to do and so many beautiful places to explore...3 days felt like one month...' So probably the theory of relativity has a subjective 'proof' here and this symposium was probably not only a 'materials life capsule' but also a real 'life capsule' concentrated in three and a half days.

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The Proceedings of the Conference have been published by TMS in 9 volumes, edited by F. Kongoli and R. G. Reddy, as 'Advanced Processing of Metals and Materials':

Volume 1 – Thermo and Physicochemical Principles: Nonferrous High Temperature Processing, ISBN: 978-0-87339-634-9,

Volume 2 - Thermo and Physicochemical Principles: Iron and Steel Making, ISBN: 978-0-87339-635-6,

Volume 3 – Thermo and Physicochemical Principles: Special Materials; Aqueous and Electrochemical Processing, ISBN: 978-0-87339-636-3,

Volume 4 – New, Improved and Existing Technologies: Nonferrous Materials Extraction and Processing, ISBN: 978-0-87339-637-0,

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Volume 6 – New, Improved and Existing Technologies: Aqueous and Electrochemical Processing, ISBN: 978-0-87339-639-4,

Volume 7 - Industrial Practice, ISBN: 978-0-87339-640-0,

Volume 8 - International Symposium on Sulfide Smelting 2006, ISBN: 978-0-87339-641-7,

Volume 9 - Legal, Management and Environmental Issues, ISBN: 978-0-87339-642-4

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