

PREFACE

The present proceedings of the 7th International Conference on Processing and Manufacturing of Advanced Materials – THERMEC'2011 which was held during August 1-5, 2011 in Quebec City, Canada, under the co-sponsorship of The Minerals, Metals & Materials Society (TMS), USA. The Conference was also under the international auspices of professional organizations from Japan, Korea, France, Italy, The Netherlands, PR China, India, and Canada. The Conference was intended to bring together the researchers and engineers/technologists working in different aspects of processing, fabrication, structure/property evaluation and applications of both ferrous and non ferrous materials including biomaterials, and smart/intelligent materials. In addition to the contributed papers, the conference committee included in the final program the invited presentations by active researchers from various countries in several topic areas covered at THERMEC'2011.

Internationally known experts from several countries were invited to deliver Plenary/Keynote lectures at THERMEC'2011. Much of the credit of the success of the conference was due to topic coordinators who have devoted their time, expertise and experience in promoting and in general co-ordination of the activities for the organization and operation of the Conference. The coordinators of various session topics have devoted a considerable time and energy in soliciting papers from relevant researchers for presentation at the Conference. The Chairpersons of the different session played important role in conducting the proceedings of the session in a timely and efficient manner and the Committee expresses sincere appreciation for their involvement. The reviewers of the manuscripts, those who by tradition would remain anonymous, have been very helpful in efficiently reviewing the manuscripts, providing valuable comments well within the time allotted to them. The Editors express their sincere and grateful thanks to all reviewers.

Sincere thanks to over 50 students who received STUDENT GRANTS from Laval University and other Universities in USA, Canada, Germany, France, UK, Belgium, The Netherlands, Italy, Spain, Russia, Japan, Korea, PR China, Brazil and India and who assisted in monitoring various sessions during THERMEC and also helping the Committee in successfully staging the distinguished award ceremony at THERMEC2011.

We express sincere thanks to NSF, USA for providing grants to 30 students towards participation at this Conference.

Finally, our sincere thanks Mr Bruno Begin and his staff at Hospitalite Quebec: Convention Management Company for designing the Conference web page and assisting organizers in the preparation of the final Conference program.

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Aerospace Structural Metallic Materials Steels(HSLA/IF/TRIP/Stainless/Bainitic/HNS)	W. Bleck, D. Raabe, J. M. Rodriguez- Ibabe C. Sommitsch, T. Matsuo, A. Wusatowska-Sarnek
Thermomechanical Processing: Steels (John Jonas Honorary Symposium) New Methods in Steel Design Superalloys/ High & Super High Temp. Materials/Heat Resistant Steels Advanced Materials in Biomedical & Bioengineering Applications Degradable Metals for Biomedical Applications Energy Materials	D. Mantovani, M. Niinomi, Thomas Webster, D. Letourneur F. Witte, D. Mantovani, Yufeng Zheng, M.Steiger F.Abe, R.Viswanathan, Xuejie Huang,O.Bouaziz, R.Srinivasan M.Jeandin, B.Mishra, Fuhui Wang, Jung Joong Lee
Surface Engineering/Coatings	R. Taillard, S. Ochiai,Yang, V.Acoff, Zhang Di D.E. Eakins, K. Hokamoto, C.Bolme, R.Montanari, J.J. Yoh, T.Mashimo , P. Knauth, J. Hertz, N. Sammes, T. Mori, G. Q. Sun, Z.P. Guo Y.W. Kim, H. Inui, R. Yang, M. Oehring M. Mahoney, P. Prangnell, R.S. Mishra, Yutaka S. Sato Hidemi Kato, E. Napolitano, Jun Shen, Do Hyang Kim
Composites Dynamic Behaviour of Materials	L. L. Shaw, E. Gaffet, K. Ameyama, Jai Sung Lee, Qing Jiang T.G. Langdon, N. Tsuji, Maria T. Perez-Prado, K. Xia Saiyi Li K. Mizuchi, P. Sittner , A.Imam, H. Hosoda, R. Vaidyanathan K.D. Liss, U. Lienert, T. Sasaki, V. Honkimaki, Kewei Xu,
Fuel Cells & Hydrogen Storage &Battery Intermetallics Friction Stir Processing/Welding Metallic Glasses/ Bulk Metallic Amorphous Materials Nanostructured Materials Severe Plastic Deformation	P. Bocher, R. Loge, Jitai Niu, D. Ferguson A.M. Hodge, Zoe Barber, Feng Pan S. S. Babu, P. Trovalusci, M.Geers D. Brown, Dong Nyung Lee, J. Szpunar, Hirofumi Inoue, Liang Zuo H. K. D. H Bhadeshia, Hidetoshi Fujii, W. S. Chang, Shanben Chen F. Minami, Dongil Kwon, Z. F. Zheng, T.Chandra
Smart/Intelligent Materials	
Neutron Scattering & X-Ray Studies of Advanced Materials Modelling & Simulation/Multiscale Modeling Thin Films Multiscale Modeling of Complex Materials Texture	
Welding & Joining	
Fracture & Mechanical Behaviour	

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Acknowledgements:

The THERMEC Committee expresses sincere thanks for all sponsors listed on website but especially NSF, USA for supporting student participation at THERMEC2011.