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the International Conference on Materials
for Advanced Technologies
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Part 1

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PREFACE

This volume contains the first of two issues of papers presented at Symposium M "Nanoscale Materials and Technology" of the International Conference on Materials for Advanced Technologies (ICMAT 2001) held in Singapore during 1-6 July 2001. The conference was organized by the Materials Research Society (Singapore) and given the success of the event, it will be held on a regular basis. The general aim of ICMAT 2001 was to promote and discuss recent advances in materials and how such research impacts on modern technologies. Around 1400 scientists attended the conference and 16 different Symposia were held in parallel illustrating all the various multidisciplinary topics that is Materials Science.

Symposium M was concerned with Nanoscale Science, and in keeping with the conference spirit, the discussions of the Symposia were broad and interdisciplinary. Topics ranged from specific nano-materials (particularly nanotubes) to ceramic, oxide, polymeric and alloy nano-composites. The theoretical and experimental methods (in particular scanning probe microscopy and synchrotron methods) for characterization and manipulation at the nanometre scale were also discussed in detail. The potential applications of nanoscale materials were mentioned frequently, ranging from sensors to electron confinement to new composites.

Symposium M was kindly sponsored by Applied Materials South East Asia Pte Ltd, Crest Technology Pte Ltd, Philips Analytical APR Singapore Pte Ltd and the National Science and Technology Board. Finally I would like to thank my fellow co-chair Yianhui Ye, and Mr Lim Poh Chong and all the MRS personnel for their professionalism and dedication throughout the conference.

Sean O'Shea
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9th November, 2001.

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