



Preface

The 32nd International Conference on Metallurgical Coatings and Thin Films (ICMCTF) sponsored by the Advanced Surface Engineering Division of the AVS Science and Technology Society was held from May 2 to May 6, 2005 in San Diego, California. An outstanding technical program was presented consisting of 65 technical sessions containing 426 oral and 194 poster presentations. 77 internationally recognized experts presented invited lectures in the various symposia. 686 delegates registered, along with a further 82 representatives of the companies, which exhibited at the Conference. The Plenary Lecture of the Conference entitled “Nano-scale effects in materials: from thin film mechanics to gecko adhesion” was given by Professor Eduard Arzt from the Max Planck Institute für Metals Research, Stuttgart, Germany.

The accepted manuscripts are published in special issues of the archival journals *Surface and Coatings Technology* or *Thin Solid Films*. Papers from Symposium A (Coatings for use at high temperatures), Symposium B (Hard coatings and vapor deposition techniques), Symposium E (Tribology of coatings and thin films), Symposium G (Applications, manufacturing and equipment) and Topical Session TS-2 (Coatings and automotive applications) are being published in *Surface and Coatings Technology*. Papers from Symposium C (Optical thin films), Symposium D (Carbon and nitride materials: synthesis, structure-property relationships), Symposium F (Advanced characterization of coatings and thin films), Symposium H (New horizons in coatings and thin films) and Topical Session TS-1 (The atomistics of thin film growth: compositional and experimental studies) are being published in *Thin Solid Films*. 191 papers were peer reviewed by at least two expert referees and accepted on the basis of technical merit and timeliness of submission.

The organization of a conference and assembly of Proceedings volumes of this magnitude require the dedicated effort of many people, most of whom are volunteers. The General Chair this year was Professor Brian Holloway from the College William and Mary, Department of Applied Science, Williamsburg, Virginia, who was responsible for coordinating all activities related to the Conference. The Executive and Program Committee Members for the 2005 ICMCTF are named in the following pages, and their efforts are gratefully acknowledged. In addition, the generous support of the 41 companies exhibiting at the Conference, also listed separately, is recognized, as are the effort of Bob Finnegan from the American Institute of Physics, Melville, NY, in managing the exhibition.

The Editors would like to offer special thanks to the Program Chair Professor Christian Mitterer from the University of Leoben, Department of Physical Metallurgy and Materials Testing, Leoben, Austria, and all of the Symposia Chairs for assisting in the organization of symposia and technical sessions. We would also like to acknowledge the hundreds of referees for their timely submission of quality reviews.

Finally, on behalf of the entire Conference, we would like to express our appreciation to Phyllis Greene, Conference Manager, for handling local arrangements and ensuring that the Conference ran smoothly in San Diego, and to Mary Gray, Conference Administrator, for processing the abstracts, distributing the manuscripts to referees, and processing the pre-registrations.

Proceedings Editors:

Alan Stewart

Daniel Gall

Jörg Patscheider

Yves Pauleau