



Preface

The 34th International Conference on Metallurgical Coatings and Thin Films (ICMCTF) sponsored by the Advanced Surface Engineering Division (ASED) of the American Vacuum Society (AVS) was held from April 23 to April 27, 2007 in San Diego, California.

The technical program consisted of 74 technical sessions containing 379 oral and 166 poster presentations. The Conference was opened on Monday morning with a Plenary Lecture by *Prof. Gregory Olson* from the Northwestern University, Evanston, IL entitled “Systems Design of Materials”. 91 internationally recognized experts presented invited lectures in the various symposia. In addition, the program included special highlights such as several tutorials, short courses, and Quo Vadimus Forum on “Global Village & Surface Engineering”. More than 800 delegates registered from 40 countries, along with a further 84 representatives of the companies, which exhibited at the Conference.

The winners of the R.F. Bunshah Annual Award and Annual ICMCTF Graduate Student Awards were awarded for the first time, at this Conference. The recipient of the R.F. Bunshah Award was *Dr. Wolf-Dieter Münz*, Emeritus Professor at the Sheffield Hallam University, UK who is recognized for his seminal research and development in high rate magnetron sputtering related technologies and new materials for wear and corrosion resistant, optical, decorative, and functional coatings. The four finalists of the ICMCTF Graduate Student Award selected on the basis of the quality of their written research summaries, resumes, and evaluation letters were *Ms. Edna Cetinorgu* from Tel Aviv University, Israel, *Mr. Brandon Howe* from University of Illinois at Urbana-Champaign, *Mr. Yijun Zhang* from Michigan State University, and *Mr. Chunming Zhou* from Rensselaer Polytechnic Institute at Troy. The winner of the Graduate Student Award was *Mr. Chunming Zhou*.

One of major novelties in 2007 was the electronic submission of manuscripts, which were uploaded in the Elsevier Editorial System (EES). The selection of reviewers and evaluation of manuscripts submitted for publication in the Proceedings volumes were strictly identical to those adopted for manuscripts submitted for publication in international scientific journals as regular papers. As a result, the scientific quality of manuscripts corresponding to oral and poster presentations at the Conference should be equivalent to the quality of regular papers. As has been the practice since 1987, 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 technology), Symposium E (tribology and mechanical behavior of coatings and thin films), Symposium G (applications, manufacturing and equipment), Topical Session TS-1 (coatings for aerospace applications), Topical Session TS-2 (coatings for aerospace applications), Topical Session TS-3 (coatings for fuel cells), and Topical Session TS-4 (nanostructured thin film assemblies and composites) are being published in *Surface and Coatings Technology*. Papers from Symposium C (optical thin films), Symposium D (carbon and nitride materials), Symposium F (advanced materials characterization), and Symposium H (new horizons in coatings and thin films) are being published in *Thin Solid Films*. 222 papers were reviewed by at least two expert reviewers 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 Chairman* this year was *Dr. Andrey Voevodin* from the Air Force Research Laboratory, Wright-Patterson Air Force Base, OH, who was responsible for coordinating all activities related to the Conference. The Executive and Program Committee Members for the 2007 ICMCTF are named in the following pages, and their efforts are gratefully acknowledged. In addition, the generous support of the 43 companies exhibiting at the Conference, also listed separately, is recognized, as are the efforts 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 Chairman*, *Prof. Jochen Schneider* from the RWTH Aachen University, Germany, 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 reviewers for their timely submission of quality reports. Last, but may be most important, we want to express our thanks to all presenters and authors for their contributions.

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 and pre-registrations.

The next ICMCTF will be held in San Diego, California, April 28 to May 2, 2008. The ASED committee has appointed Prof. Jochen Schneider, Aachen University, Germany and Dr. Jörg Patscheider, EMPA Materials Science and Technology Research Institute, Dübendorf, Switzerland as General Chairman and Program Chairman, respectively.

Proceedings Editors

Yves Pauleau
Alan Stewart
Ali Erdemir
Paul Mayrhofer
Aharon Inspektor

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2007 ICMCTF

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