



Preface

ICMCTF 2015 – Preface



The 42nd 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 April 20 to 24, 2015 in San Diego, California.

The week's technical program consisted of 37 technical sessions, which were organized in seven concurrent technical symposia and six topical symposia. The conference opened with a Plenary Lecture by Dr. Eric Chason, Professor of Engineering at Brown University in Providence, Rhode Island, U.S.A., on "Connecting Residual Stress and Thin Film Growth Process: Real-time Experiments and a Kinetic Model". The Exhibition Keynote Lecture was presented by Dr. Jürgen Ramm, Oerlikon Balzers Surface Solutions AG, Liechtenstein on "Synthesis of Oxides by Reactive Cathodic Arc Evaporation: Cathode Surface and Coating Properties."

During the conference week, a well subscribed poster session was attended by a large and appreciative attendee audience. An expansive large two-day interactive industrial exhibition, with more than 50 booths, was held in which companies displayed their most recent developments in vacuum science and plasma-based deposition technologies. In addition to the technical symposia sessions, there were three focused topical sessions, and six specialized short courses offered.

Dr. Péter B. Barna, Professor Emeritus of Technical Physics and Materials Science at the Hungarian Academy of Science, Budapest, Hungary, was the recipient of the ASED R.F. Bunshah Annual Award; he presented an Honorary Lecture entitled "Historical Perspective: 60 Years of Thin Film Research". He received this award to recognize and honor his seminal pioneering contributions to the understanding of nanostructural evolution during thin film nucleation and growth based upon in-situ UHV TEM video imaging. The ASED Annual ICMCTF Graduate Student Awards were presented to Antonio B. Mei (Gold Medal) from the University of Illinois at Urbana-Champaign, Illinois, U.S.A., Christian M. Koller (Silver Medal) from the Vienna University of Technology, Vienna, Austria, and Sebastian Velasco Calderon (Bronze Medal) from the University of Minho–University of Coimbra, Braga, Portugal.

The electronic submission and handling of manuscripts via the Elsevier Editorial System (EES), including the selection of reviewers and evaluation of manuscripts, were identical to the procedures applied to manuscripts submitted as regular contributions for publication in

international scientific journals. Following the tradition practiced since 1987, the accepted manuscripts are published in two archival journals: *Surface and Coatings Technology* and *Thin Solid Films*. Current ICMCTF proceedings are open-access for one year via the Elsevier journals' web sites.

The organization of this conference and the preparation of proceedings volumes would have been impossible without the tremendous efforts and dedication of many individuals, which include: the General Chair, Prof. Claus Rebholz, University of Cyprus, Nicosia, Cyprus, and the Program Chair, Prof. Suneel Kodambaka, University of California, Los-Angeles, California, U.S.A., who oversaw the organization of the conference and the program; the large team of symposia and session chairs that made possible the realization of an exciting technical program; and the support of hundreds of reviewers with their timely submission of quality reports. We express our sincere thanks to all authors and presenters for their contributions. To our sponsors, we acknowledge, appreciate, and thank these companies for their most generous and continuing support.

The 43rd International Conference on Metallurgical Coatings and Thin Films (ICMCTF 2016) will be held in San Diego, California, April 25–29, 2016 with Prof. Suneel Kodambaka, University of California, Los-Angeles, California, U.S.A., as the General Chair and Prof. Christian Mitterer, Montanuniversität Leoben, Leoben, Austria, as the Program Chair.

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25 September 2015



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