



Second Edition

Programme

CAPRI – Italy

21 - 23 September 2016

Organized by



European Association of Material Surfaces

Dear Colleagues,

We have the pleasure to give you a welcome to the Second Edition of the **EUROPEAN SYMPOSIUM ON SURFACE SCIENCE** that takes place in Capri, Italy, from September 21st to 23rd, 2016.

The main objective of the Symposium is to bring together expertise, scientists, professionals and researchers from various areas to present and discuss topics related to Materials and Surfaces Sciences and with the aim to promote improvement of new products and processes.

The Symposium provides a comprehensive overview of the state-of-the-art in materials sciences, surface physics and chemistry, focusing on discussions related to the recent breakthrough and current challenges, while pointing out the prospective interdisciplinary development of the six industrial fields covered by **EMASST**.

The **EUROPEAN SYMPOSIUM ON SURFACE SCIENCE** will be a unique event to encourage an unprecedented international cross-collaboration amongst fundamental and applied surface sciences and industrial world.

The conference will take into consideration various new developments, both from an experimental and computational viewpoint. Special emphasis was given to the application of advanced theoretical and experimental approaches as well as multiscale and multidisciplinary approach. In particular, the presented innovations will be focused on the potential application and to the industrial fallout.

Your contributions cover one of the six following industrial areas such as aeronautical and aerospace, mechanical, energy, electric and electronic, biomedical, chemical.

In these six areas are taken into account contributions on:

- Smart Coatings & Surface Treatments
- Surface Characterization
- Nanotechnology & Nanomaterials

The presentations will be permanently archived in the eLibrary of the EMASST website and they will be easily accessible to the international scientific community.

Please feel free to ask questions to the speakers at the end of each presentation and contribute to the dynamic of the sessions.

Should you need any information, please contact see a member of the organizing team anytime, we will be all happy to help you!

Do not forget to join our Facebook group “EMASST” and to visit our website www.emasst.com to get the latest news and continue networking online all year round.

The Steering Committee

Programme of the first day (21 September 2016)

<p><i>Chairman for the morning session: Dimitrios Kotzias</i></p> <p>9:30 - 10:30 Registration</p> <p>10:30 - 10:45 Opening Ceremony & Welcome Addresses L. MAZZOLA (President of EMASST)</p> <p>10:45 - 11:30 REACH Regulation's Impact on the Aerospace Industry (invited lecture) E. SORVILLO (AkzoNobel)</p> <p>11:30 – 12:00 Coffee break</p>		
<p>12:00 – 12:45 Improvement of service life of advanced thermal barrier coatings by nanostructuring and architecture modification (invited lecture) F. MARRA (University of Rome “La Sapienza”, Dept. Chemical Engineering Materials Environment)</p>	<p><i>SMART COATING & SURFACE TREATMENTS</i></p>	
<p><i>12:45 – 15:00 Lunch</i></p>		
<p><i>Chairman for the afternoon session: Nadja Felde</i></p> <p>15:00 - 15:30 Supercritical Fluid Deposition of silanes on solid surface for biosensing and heterogeneous catalysis applications G. NONGLATON (CEA, LETI, MINATEC Campus. Univ. Grenoble Alpes)</p> <p>15:30 - 16:00 Sol-gel routes in different media to obtain nanostructured, superhydrophobic coatings on copper surfaces F. VERONESI (CNR-ISTEC)</p> <p>16:00 - 16:30 Passive anti-icing systems: icephobic coating for aeronautical applications L. MAZZOLA (CIRA)</p> <p>16:30 - 17:00 Empirical Investigation on the Icing Behavior of Grid Structures in a Lab-scale Icing Wind Tunnel V. VERCILLO (AIRBUS Group Innovations)</p> <p>17:00 - 17:15 Discussion and conclusion of the first day</p>		

Programme of the second day (22 September 2016)

<p><i>Chairman for the morning session: MariaPia Pedefferri</i></p> <p>9:30 - 10:15 Comprehensive Wetting Analysis of Functional Surfaces (invited lecture) L. CORIAND (Fraunhofer Institute for Applied Optics and Precision Engineering)</p> <p>10:15 - 10:45 Advanced Roughness Analysis of Functional Nanostructures for Optical Applications N. FELDE (Fraunhofer Institute for Applied Optics and Precision Engineering)</p> <p>10:45 - 11:15 SAXS Investigation of Surface Fractal Dimension of MnO₂ Pyrolytic Nano compositions L. SKATKOV (PCB "Argo")</p> <p><i>11:15 - 11:45 Coffee break</i></p> <p>11:45 - 12:15 Zeta potential of solid surfaces: a poorly explored, but useful and versatile tool in surface analysis of bulk samples S. FERRARIS (Politecnico di Torino, DISAT)</p> <p>12:15 - 13:00 IPR Management and Technology Transfer at the CNR. Procedures and best practices (invited lecture) A. CUSMA' (CNR - DSCTM)</p>	<p>SURFACE CHARACTERIZATION SESSION</p>
13:00 - 15:00 Lunch	
<p><i>Chairman for the afternoon session: Antonio Cusmà</i></p> <p>15:00 - 15:45 Titanium anodic oxidation: from surface functionalization to corrosion and environmental properties (invited lecture) M. PEDEFERRI (Politecnico di Milano, Department of Chemistry, Materials and Chemical Engineering)</p> <p>15:45 - 16:15 Self-assembled nanoscale films and complexes of the surface active protein Vmh2 A. M. GRAVAGNUOLO (University of Naples "Federico II", Department of Chemical Sciences)</p> <p>16:15 - 16:45 Expanding the spectrum. How in-situ complementary spectroscopies can enhance surface and thin film analyses. M. MANNSBERGER (Thermofischer Scientific)</p> <p>16:45 - 17:00 Discussion and conclusion of the second day</p>	
20:00 social dinner	

Programme of the third day (23 September 2016)

<p><i>Chairman: Luisa Coriand</i></p> <p>9:30 - 10:15 Smart surfaces: self-cleaning titanium dioxide (TiO₂) coatings for depollution purposes (invited lecture) D. KOTZIAS (Ex official EC, Joint Research Centre, IHCP)</p> <p>10:15 - 10:45 Smart Modification of titania for Visible Light Photocatalysts: A Mn²⁺ doping study V. BINAS (University of Crete)</p> <p>10:45 - 11:15 Green, efficient graft modification of multiwalled carbon nanotubes with dye diazonium salts in water A BEN SGHAIER (Université de Tunis El Manar, Faculté des Sciences)</p> <p><i>11:15 – 11:45 Coffee break</i></p> <p>11:45 - 12:15 Transport Properties of Intrinsic and Dirty Graphene with EMC: The Role of Various Scattering Mechanisms M. D. ÖZDEMİR (Aksaray University)</p> <p>12:15 - 12:30 Innovative self-cleaning membrane preparation for water treatment applications A. FIGOLI (CNR – ITM)</p> <p>12:30 - 12:45 Discussion and closing the Symposium</p> <p>13:00 - 13:15 European Symposium on Surface Science AWARD</p>	<p>NANOTECHNOLOGY & NANOMATERIALS</p>
<p><i>15:00 - 17:00 tour at "Villa San Michele"</i></p>	

PRACTICAL INFORMATION

Welcome desk

The Congress welcome desk will be at the meeting on the ground floor.

At the beginning of the Congress we will give you a badge. Please note that wearing the badge is compulsory to access the conference room, coffee breaks.

Presentations

All participants are invited to upload the presentation (.pptx or .pdf format file) in the pc positioned in the congress room.

The participants with oral presentation have 25 minutes for “regular lecture” and 5 minutes for the questions otherwise for “invited lectures” the participants have 40 minutes and 5 minutes for the questions.

Participants can hand deliver the short papers at the symposium or send by e-mail at the following e-mail address: eurosymposium@emasst.com no later than 10th October 2016

The presentations and short papers will be permanently archived in the eLibrary of the EMASST website and they will be easily accessible to the international scientific community.