

PROGRAMME

Wednesday, October 12th 2016 – Workshop Day 1

08.30 – 09.30 Registration

09:30 – 09:45 **Introduction / Welcome**

09.45 – 10.45 **Development of nano-structured intermetallic alloy coatings**

E. Georgiou and J.-P. Celis

Electrodeposition of Palladium-Iron Alloys

M. Baumgärtner

Capacitance enhancement of electrochemically reduced titania nanotubes arrays

Q. Zhang, K. Du, G. Li, C. Yang, and K. Wang

10:45 – 11:00 *Coffee break*

11:00 – 11:30 **Invited talk:**

Conducting polymers: Towards multifunctional smart coatings for metal protection

D. Sazou

11:30 – 12:30 **Electrochemical synthesis of various Ni-Fe alloy nanostructures**

A. Cojocaru, G. Pantazi, D. Balan, M. Enachescu, T. Visan, and L. Anicai

Structural investigation of Ni-Co/Cu multilayered nanowires

S. Zsurzsa, I. Bakonyi, L. Péter, J. Sort, and E. Pellicer

Additive manufacturing and metallization of microdevices for biological soft tissues selective abrasion

R. Bernasconi, F. Cuneo, S. Pané, and L. Magagnin

12:30 – 13:30 *Lunch Break*

13:30 – 14:30 **Synthesis of copper nanowires by applying template-assisted direct and pulse electrodeposition**

E. Rosolymou, S. Spanou, S. Hansal, W. Hansal, and E.A. Pavlatou

AAO template assisted electrodeposition of tin nanowires

H. Kazimierczak, P. Ozga, E. Rosolymou, and E.A. Pavlatou

Electrodeposition of Bismuth Telluride based nanowires for thermoelectric applications

A. Danine, J. Schoenleber, C. Frantz, C. Boulanger, and N. Stein

14:30 – 15:00 *Coffee break*

15:00 – 15:30 **Invited talk:**

Mechanism and properties of anodic and cathodic electrochemical fabrication of hydrophobic surfaces

A. Karantonis

15:30 – 16:30 **Composition depth profile control of nanoscale electrodeposited Ni-Fe alloy films**

K. Neuróhr, A. Csik, K. Vad, I. Bakonyi, and L. Péter

Pulse deposition of copper using additive-containing EnFACE electrolyte

E.M. Dela Pena, and S. Roy

Electrodeposition of Copper-Antimony Alloys

V. Kostov, I. Krastev and Ts. Dobrovolska

16:50 – 17:05 *Break*

17:05 – 18:05 **Electroformed programmable magnetic microdevices**

G. Chatzipirpiridis and S. Pané

The effect of low frequency ultrasound on electroless Ni-B plating and the resultant deposit characteristics

L. Bonin N, Bains, V. Vitry, and A. J. Cobley

Pd nanoparticles on different supports for electrochemical conversion systems

N.R. Elezovic, U. Č. Lačnjevac, P. Zabinski, V.R. Radmilovic, P. Ercius, and N.V. Krstajic

Thursday, October 13th 2016 – Workshop Day 2

09:00 – 10:00 **Electrochemical deposition and characterization of iron-based nanofoams**

K. Berkesi, and E. Hristoforou

Effect of Si content on Al alloy anodizing

B. Zhu, P. Leisner, and C. Zanella

Patterning and template-assisted growth of functional matter by microfluidics

B. Ghimire, D. Amabilino, D. Maspoch, A. deMello, and J. Puigmarti-Luis

10:00 – 10:30 *Coffee break*

10:30 – 11:00 **Invited talk:**

Electrochemical synthesis of micron sized compound semiconductors for enhanced photovoltaic application

S. Tombolato, P. Salomé, A. Malyeyev, D. Colombara, J. de Wild, E.V.C. Robert, S. Sadewasser, and P.J. Dale

11:00 – 12:00 **Assessment of the Corrosion Characteristics of Aluminium-Graphene Composites**

C. Chagarlamudi, S Naher, D Brabazon, D. Culliton, and A. J. Betts

Aluminide coatings on Fe-Cr-Al alloys for high-temperature applications

S. Veskovič Bukudur, M. Bizjak, D. Klobčar, J. Kovač, and B. Karpe

Electrochemical deposition of SnNi/TiO₂ dispersion coatings

M. Leimbach, U. Schmidt, and A. Bund

12:00 – 13:00 *Lunch Break*

13:00 – 14:00 **Electroplating of smooth tool surfaces for nano-scale structuring**

P. T. Tang, D. Minzari, and A. A. Rasmussen

Corrosion stability of Zn-Mn coatings electrodeposited from a deep eutectic solvent

M. Bučko, D. Culliton, A. J. Betts, and J. B. Bajat

Corrosion properties of Ni matrix composite electrodeposits containing either micro- or nano-aluminium particles: a localized approach

M. Lekka, R. Offoiach, and L Fedrizzi

14:00 – 14:30 *Coffee break*

14:30 – 15:30 Presentation SPIRE Association

15:30 – 16:00 **Invited talk:**

Electrochemistry – a versatile tool for the production, detection and characterization of micro- and nanoscale magnetic materials

K. Tschulik

16:00 – 17:00 **CN-free silver plating for electrical applications**

M. Poelman, G. Guilbert, J. Christophe, C. Buess-Herman, M.-G. Olivier

Electrochemical machining (tolerances, advantages and disadvantages)

Z. Pandilov

Enzymatically synthesized polypyrrole as functionalized biosurface

R.-M. Apetrei, A. Datcu, A. Ramanavicius, and G. Cârâc

Friday, October 14th 2016 – Workshop Day 3

09.00 – 10.00 **Localized Electrochemical Measurements in the Investigation of Corrosion at Defects in Coated Aluminum Alloy**

A.C. Bastos, O. V. Karavai, M. L. Zheludkevich, K. A. Yasakau, and M. G. S. Ferreira

Electrodeposition and characterization of electroplated Ni/graphene composite coatings.

N.D. Chronopoulou, D. Vozios, and E.A. Pavlatou

Particle enhanced plasma electrolytic oxidation (PEO) coatings

R. Mann, S. Hansal, and W. E. G. Hansal

10:00 – 10:30 *Coffee break*

10:30 – 11:30 **In-situ diagnostics of protective galvanic coatings**

W. Kautek, T. Nagy, U. Pacher, M. Weimerskirch, M. Pfaffeneder-Kmen, and G. Trettenhahn

Measuring galvanic current by Zero Resistance Ammeter can be misleading when polarization of anode is low: A case study TiN--Carbon Steel Couple

Mustafa Ürgen and Burçak Avcı

Optimisation of corrosion protection of aluminium substrates through benzoxazine based coatings.

M. Poorteman, A. Renaud, C. Arrighi, and M.-G. Olivier

11:30 – 11:45 *Break*

11:45 – 12:25 **Electrodeposition of CdSe by Electrochemical Atomic Layer Deposition**

R. Kowalik, K. Kołczyk, D. Kutyla, and P. Żabiński

One-dimensional nanostructures for small-scale robotics applications

B. Jang, B. J. Nelson, and S. Pané

12:25 – 13:50 *Lunch*

14:00 – 17:00 **MC Meeting (Only MC members)**