

MIICS 2008 SEMINAR PROGRAMME

Thursday 27th March			start	end	duration
Registration			08:00	08:40	00:40
Opening of the seminar	Prof. David Cameron, University of Lappeenranta		08:40	08:50	00:10
	Erkki Karppanen, Rector, Mikkeli University of Applied Sciences		08:50	08:55	00:05
	Juha Kauppinen, Development Manager, Center of Expertise		08:55	09:00	00:05
	Kimmo Mikander, Mayor, City of Mikkeli		09:00	09:10	00:10
1 Basics of Coating and coating technologies					
1.1 Modelling and synthesis of thin film by plasma diagnostics in magnetron sputtering	Prof. J. G. Han, Sung Kyung Kwan University	South Korea	09:10	09:35	00:25
1.2 Nanolayered coatings	Prof. Martin Andritschky, University of Minho	Portugal	09:35	10:00	00:25
Coffee			10:00	10:20	00:20
1.3 Metal-metal eutectic nanocomposites	Dr. Gyorgy Radnoczi, Hungarian Academy of Science	Hungary	10:20	10:45	00:25
1.4 Current Progress and New Results in Characterising the HIPIMS Plasma	Dr. A. Ehasarian, University of Sheffield	United Kingdom	10:45	11:10	00:25
1.5 Pulsed laser deposition	Mr. Turkka Salminen, University of Tampere	Finland	11:10	11:35	00:25
1.6 A New High Rate Magnetron: Characteristics and Applications	Dr. Dennis Teer, Teer Coatings Ltd.	United Kingdom	11:35	12:00	00:25
Lunch			12:00	13:00	01:00
1.7 Nanoscale Multilayer PVD Coatings Deposited by the HIPIMS/UBM Technology Dedicated to Aerospace, Automotive and Biomedical applications	Prof. Papken Hovsepien, University of Sheffield	United Kingdom	13:00	13:25	00:25
1.8 Structural and mechanical properties of AZOY thin films deposited on flexible substrates	Prof. Luis Rebouta, University of Minho	Portugal	13:25	13:50	00:25
2 Tribological coatings					
2.1 Tribology of surfaces	Prof. Kenneth Holmberg, VTT	Finland	13:50	14:15	00:25
2.2 Atomic-scale Tribology: Modeling Tribochemical Reactions and Friction by Quantum Chemical Methods	Dr. Jussi Koskiliinna, University of Uppsala	Sweden	14:15	14:40	00:25
2.3 Recent development of Dymon-iC and MoST coatings	Dr. Xiaoling Teer, Teer Coatings Ltd.	United Kingdom	14:40	15:05	00:25
Coffee			15:05	15:25	00:20

3 Presentations by industrial companies

3.1 Industrial applications of atomic layer deposition	Ms. Nora Isomäki, Beneq Oy	Finland	15:25	15:45	00:20
3.2 Advanced Coating Research by Unique Nano Scratch Testing	Mr. Rob van Beek, ST Instruments	Netherlands	15:45	16:05	00:20
3.3 Surface characterisation methods for thin films and coatings	Mr . Mats Eriksson, Spectral Solutions	Sweden	16:05	16:25	00:20
POST SEMINAR	Seminar Dinner at Tertti Manor. Finnish food and beverage specialties will be served in an old farming house environment.		19:00	24:00+	

Friday 28th March

start end duration

4 Active, functional and nanostructured coatings

4.1 The functional materials programme in Tekes	Dr. Solveig Roschier, Tekes	Finland	08:30	08:55	00:25
4.2 Electrochromic Coatings for Foils with Variable Transmittance	Prof. Claes-Goran Granqvist, University of Uppsala	Sweden	08:55	09:20	00:25
4.3 Functionality of nanostructured surfaces - including self-cleaning and antibacterial properties	Prof. Tapio Mäntylä, University of Tampere	Finland	09:20	09:45	00:25
Coffee			09:45	10:05	00:20

4 Active, functional and nanostructured coatings continued

4.4 Carbon NanoBud (CNBTM) – A Novel Nanomaterial: Synthesis, Structure, Thin Film Field Emission and Transport Properties	Prof. Esko Kauppinen, Helsinki University of Technology	Finland	10:05	10:30	00:25
4.5 Nanotexturing of polymers by cold plasma: switching from sticky to slippery super-hydrophobicity	Dr. Fabio Palumbo, University of Bari	Italy	10:30	10:55	00:25
4.6 Role of plasma surface engineering in NanoBiotechnologies	Dr. Giacomo Ceccone, EU Joint Research Centre, Ispra	Italy	10:55	11:20	00:25
4.7 Deposition of functional coatings on polymers using atmospheric pressure plasma liquid deposition (APPLD)	Dr. Denis Dowling, University College Dublin	Ireland	11:20	11:45	00:25
Lunch			11:45	12:45	01:00

5 Photovoltaic applications

5.1 Photovoltaic Activities in Nordic Countries	Dr. Jarmo Skarp, Arrivac Oy	Finland	12:45	13:10	00:25
5.2 Multilayer coatings for Solar Absorbers	Dr. Massoun Afteh, Savcor Face Oy	Finland	13:10	13:35	00:25
5.3 Optical coatings on photovoltaics	Dr. Ric Shimshock, MLD Technologies	USA	13:35	14:00	00:25

6 Emerging technologies and materials

6.1 Electroactive polymers: principles, applications and challenges	Mr. Vitor Sencadas, University of Minho	Portugal	14:00	14:25	00:25
6.2 Triboplasma – its generation and application for surface modification	Dr. Yukihiro Kusano, Risø Institute	Denmark	14:25	14:50	00:25
Coffee			14:50	15:10	00:20
6.3 Amorphous metal layers	Mr. Erno Soinila, Helsinki University of Technology	Finland	15:10	15:35	00:25
6.4 The degradation of manuscripts and old books, sterilization, consolidation and preservation of papier by plasma process	Dr Raffaella Scopa, Italian Vacuum Association	Italy	15:35	16:00	00:25

7 Decorative coatings

7.1 Interference Colouring of Mg-Alloys by PVD-Coatings and Anodic Oxidation	Dr. Holger Hoche, State Materials Testing Institute, Darmstadt	Germany	16:00	16:25	00:25
7.2 Multilayers for EMI shielding	Mr. Aki Matilainen, Savcor Face Oy	Finland	16:25	16:50	00:25
POST SEMINAR	Reception by the Mayor of Mikkeli in the City Hall		19:00	20:00	
	Visit to Pub Pruuvi. Locally Brewed Beer and Local Jazz.		20:00	24:00+	

Saturday 29th March

		start	end	duration
POST SEMINAR SESSIONS AND ACTIVITIES	<p>After an early hotel breakfast we will have a 45 minutes bus tour to Sahanlahti on the banks of Lake Saimaa, where we shall arrive at 10.00.</p> <p>The morning programme consists of informal indoor and outdoor activities. Voluntary outdoor activities range from cross country skiing to winter fishing on the lake. For indoor discussions an open fire and beverages will be arranged.</p> <p>After a lunch in the manor restaurant we will divide into thematic groups for discussions.</p> <p>The day will be rounded off by a traditional Finnish Smoke Sauna, including the possibility of swimming in the lake.</p> <p>Please note that there is a bus leaving from Sahanlahti -Mikkeli to Helsinki on the 29th of March after the post seminar activities.</p>	9:00	19:00	