

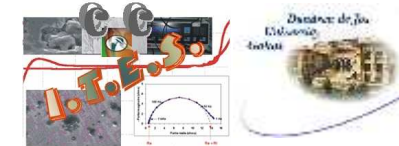


COST D33 - CHEMISTRY

Reference code:

COST-Workshop-D33-01808

WORKSHOP Meeting



Local Organiser

COST D33 EU Project:

Nanoscale Electrochemical and Bioprocesses (Corrosion) at Solid-aqueous Interfaces of Industrial Materials

WG 1:

Development, adaptation and coupling of surface science methods for an improved analysis of the chemical processes occurring at the interfaces between materials and micro-organisms.

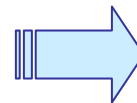
WG1 Leader and Local Organiser: Prof. Dr. Lidia BENEÀ

Period: 6th to 8th November 2008

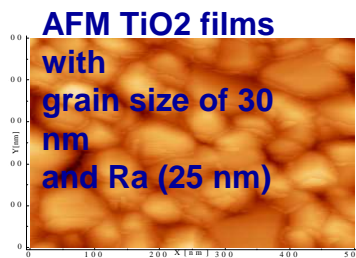
Meeting place:

Palace of National Military Circle

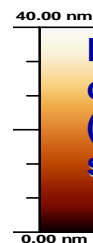
Constantin Mille street, No.1 or Bulevardul Elisabeta nr.2 Bucharest (in the downtown, close by the University of Bucharest, Capsa Hotel, etc).



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AFM TiO₂ films with grain size of 30 nm and Ra (25 nm)

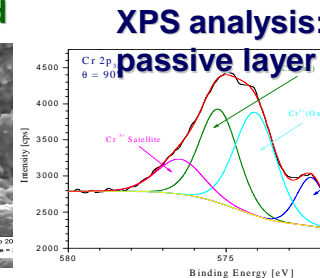


PAMAM G10 dendrimers on colloidal particles (3 µm sulfate latex spheres)



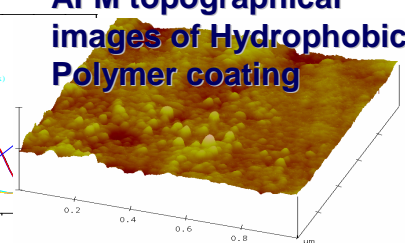
SiC-Ni nanostructured composite coating

20 nm SiC



XPS analysis: passive layer

AFM topographical images of Hydrophobic Polymer coating

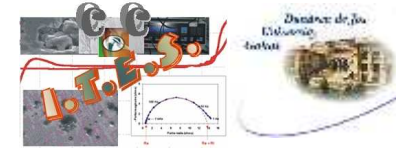




COST D33 - CHEMISTRY

November 6-8, 2008

WORKSHOP Meeting



Local Organiser

Program

**06 of November 2008:
Arrivals**

07 of November 2008:

09h00-09h30 Opening- Welcoming: WG1 coordinator.

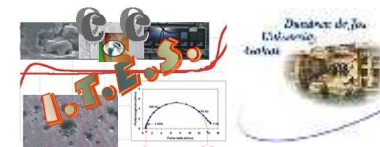
Chair: Prof. Guenter SCHMITT, Prof. Lidia BENEÀ.

09h30-10h30: Invited Speaker: Prof. Pietro CAVALLOTTI:
*Politecnico di Milano - Metallurgical Coatings and Surface
Engineering, Italy.*

Title: Electrodeposition of nanodots for improved interaction with organic substances of surfaces.



WORKSHOP Meeting



Local Organiser

10h30 – 11h00: Dr. Philippe MARCUS:

*Laboratoire de Physico-Chimie des Surfaces CNRS-ENSCP (UMR 7045) Ecole Nationale Supérieure de Chimie de Paris - Université Pierre et Marie Curie Paris, **France**.*

Title: XPS and ToF-SIMS investigation of plasma treated stainless steel surfaces for antifouling properties.

Authors: S. Zanna, A. Seyeux, C. Saulou, M. Mercier-Bonin, B. Despax, P. Raynaud, P. Marcus

11h00-11h15: Coffee break

11h15 – 11h45: Dr. Georg PAPASTAVROU:

*Department of Applied Chemistry, University of Geneva, **Switzerland**.*

Title: Some thoughts about protein adsorption to modified electrodes.

11h45 – 12h00: Drd. Alina-Crina CIUBOTARIU:

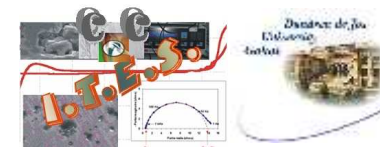
*Dunărea de Jos University of Galati – CC-ITES, **Romania**.*

Title: Combined Atomic Force and Epifluorescence Microscopy for Visualization of Sulphate Reducing Bacteria on SiC / Ni composite coatings.

Authors: Alina Ciubotariu, Lidia Benea, Wolfgang Sand



WORKSHOP Meeting



Local Organiser

12h15-12h30: Dr. Paula COJOCARU:

Politecnico di Milano Chemical Engineering Faculty, Italy.

Title: Comparison of the electrochemical behavior of stainless steels in abiotic and biotic seawater.

12h30 – 12h45: Prof. Guenter SCHMITT:

Institut für Instandhaltung und Korrosionsschutztechnik gGmbH, Iserlohn, Germany.

Title: MIC in Stainless Steel Plumbing Systems for Drinking Water

Authors: Günter Schmitt, Hubertus Schlerkman, Wolfgang Sand, H. Klemp

12h45 – 13h00: Dr. Andrzej KUKLINSKI:

Universität Duisburg-Essen, Biofilm Centre / Aquatische Biotechnologie, Duisburg, Germany.

Title: Recent advances in applying combined AFM/EFM

Authors: Andrzej Kuklinski, Wolfgang Sand.

13h00-15h00: Lunch.



COST D33 - CHEMISTRY

November 6-8, 2008

WORKSHOP Meeting



Local Organiser

Chair: Dr. Philippe MARCUS, Dr. Georg PAPASTAVROU.

15h00 – 15h30: Dr. Luca OTTAVIANO

Università degli Studi dell'Aquila, Italy.

Title: A full set of characterization techniques of surfaces and nanoparticles at the Physics department of the University of L'Aquila.

Authors: L. Ottaviano, P. De Marco, L. Lozzi, M. Passacantando, V. Grossi, S. Santucci.

15h30 – 15h45: Prof. Dr. Geta CARAC:

Dunărea de Jos University of Galati, Romania.

Title: Electrochemical investigations of the fungi behavior in the disinfectants medium.

Authors: Maricica Stoica, Geta Carac

15h45 – 16h15: Invited Speaker: Dr. Fraddy D`SOUSA:

TNO Science and Industry, TNO Laboratory, Nederland.

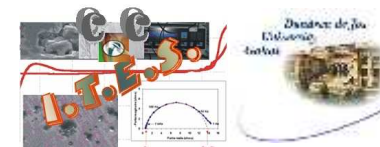
Title: Electrochemical sensing of Biofilm and MIC:



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November 6-8, 2008

WORKSHOP Meeting



Local Organiser

16h15 – 16h30: Prof. Dr. Lidia BENEĂ

Dunărea de Jos University of Galati CC-ITES, Romania.

Title: Chemical and structural factors influencing biofilm formation on material surfaces.

16h30 – 16h45: Coffee break

16h45 – 18h15: ROUND TABLE:

Management aspects.

STSM.

Discussions and proposals for new COST Actions and others Collaborative Projects.

Closing Remarks.

19h00: Dinner

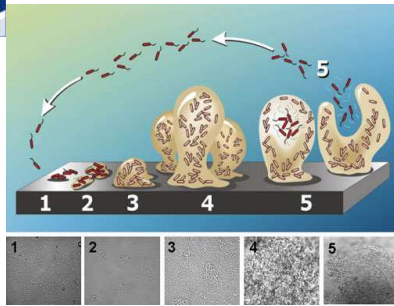
08 of November 2008:

Social: Excursion to Brasov.

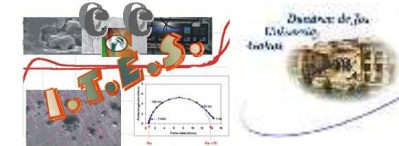
Departures.

Prof. Dr. Lidia BENEĂ

COST D33 Vice-chair, WG 01 coordinator



WORKSHOP Meeting



Local Organiser

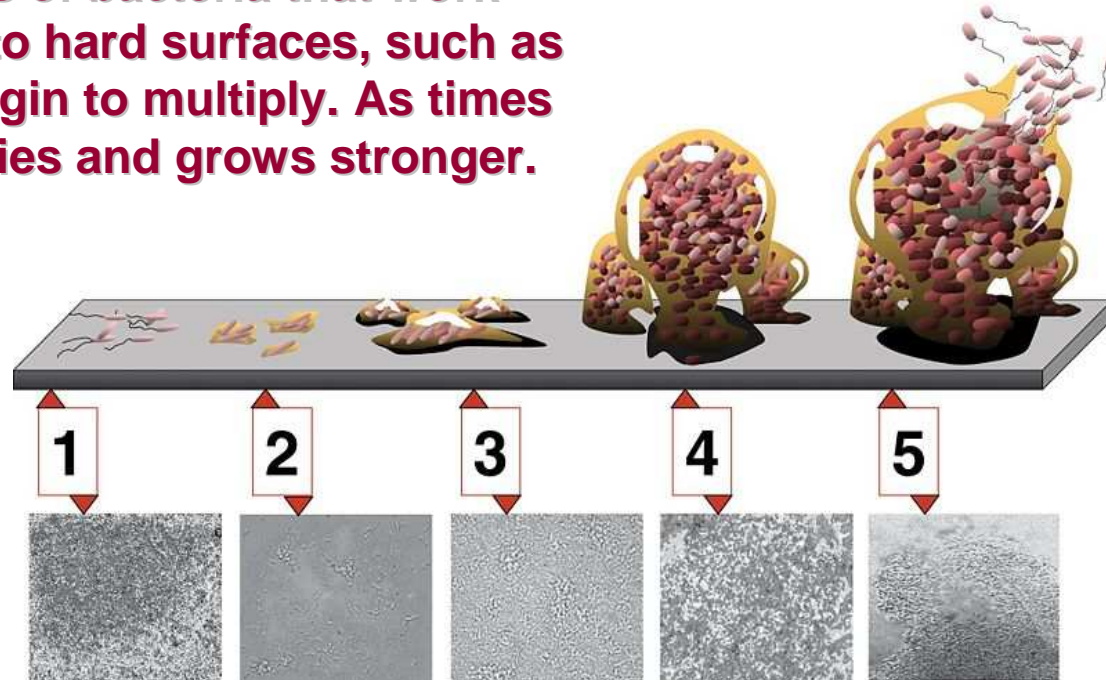
What is Biofilm ?



Biofilm are communities of bacteria that work together. They cling onto hard surfaces, such as water pipe lines, and begin to multiply. As times goes on, biofilm multiplies and grows stronger.

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Biofilm
↕
Biodegradation
↕
Better knowing
for better preventing



5 stages of biofilm development