

# INCOMAM'07- PROGRAMME - ORAL

## Thursday – 6<sup>th</sup> December 2007

08h30-09h30	Registration	
09h30-10h00	Coffee Break	
10h00-10h30	Opening Ceremony	
10h30-11h15	Plenary Talk - "EU 7 <sup>th</sup> Framework Programme, Health and Imaging", Jean-Luc Sannes, EC, Brussels	
11h15-13h00	<b>Parallel Session – Materials Science I</b>	<b>Parallel Session – Life Sciences I</b>
11h15-12h00	(MatSci-InvI) Invited Talk - "Electron microscopy and nanoscience: How low can we go?" Gustaaf Van Tendeloo, Antwerp, Belgium.	(LifeSci-InvI) Invited Talk - "The molecular chaperones: Nanomachines in the protein folding pathway" José Maria Valpuesta, Madrid, Spain.
12h00-12h15	(MatSci-I1) HRTEM observation on TiAlN/Mo multilayers and photocatalytic TiO <sub>2</sub> thin films C.J. Tavares, L.Rebouta, S.M. Marques, J. Rivière, M. Denanot, D. Eyidi	(LifeSci-I1) Ultrastructural characterization of corpus cavernosum of ageing, orchidectomy and diabetes rat experimental models A. Cordeiro, A. Figueiredo, F. Godinho, I. Martins, P. Vendeira, H. Almeida, D.Neves
12h15-12h30	(MatSci-I2) Non stoichiometry effects in SrTiO <sub>3</sub> ceramics assessed by Transmission Electron Microscopy L. Amaral, A. Senos, P. Vilarinho	(LifeSci-I2) Human <i>cumulus oophorus</i> primary culture and superoxide dismutase detection L. Matos, D. Stevenson, F. Gomes, J. Carvalho, H. Almeida
12h30-12h45	(MatSci-I3) TEM investigation of MoSeC films C. Sandu, T. Polcar, A. Cavaleiro	(LifeSci-I3) ACTH induces ERK 1/2 activation in rat adrenal primary cultures A. Rodrigues, A. Gouveia, J. Ferreira, H. Almeida
12h45-13h00	(MatSci-I4) Structure and microstructure of Y-doped Strontium Titanate Ceramics A. Tkach, P. Vilarinho, I. Reaney	(LifeSci-I4) Stereological analysis of mitochondria and smooth endoplasmic reticulum distribution in human oocytes at prophase I A. Luís, E. Rocha, E. Oliveira, J. Silva, A. Barros, M. Sousa
13h00-14h15	Lunch	
14h15-15h00	(P1) Plenary Talk - "HREM of nanoscale materials as a driving force for the TEAM project", Ulrich Dahmmen – Berkeley, USA.	
15h00-16h45	<b>Parallel Session – Materials Science II</b>	<b>Parallel Session – Life Sciences II</b>
15h00-15h45	(MatSci-InvII) Invited Talk - "In situ transmission electron microscopy: Jerky motion of dislocation-grain boundary interactions" Jeff De Hosson, Groningen, Holland.	(LifeSci-InvII) Invited Talk - "From mad cows to neurotic yeast: Novel molecular approaches to understand neurodegeneration" Tiago Fleming Outeiro, Lisbon, Portugal.
15h45-16h00	(MatSci-I1I) Exothermal nanomultilayers A. Ramos, M.T. Vieira, J. Morgiel, J. Grzonka	(LifeSci-I1I) Structure, development and histochemistry of the glandular trichomes of <i>Chamaecrista dentata</i> (Leguminosae) R. Meira, D. Francino, L. Ascensão
16h00-16h15	(MatSci-I12) Ni <sub>3</sub> Ti <sub>3</sub> precipitation during aging of MARES NiTi alloys studied by FEG-SEM F. Neves, A. Cunha, I. Martins, J. Correia, M. Oliveira, E. Gaffet	(LifeSci-I12) The use of SEM and Light Microscopy for the characterization of <i>Hypericum foliosum</i> aerial part as a medicinal plant R. Serrano, P. Ferreira, E. Gomes, O. Silva
16h15-16h30	(MatSci-I13) Characterizing the intermetallic formed during ball attach process P. Pereira, R. Santos, M. Barbosa, C. Almeida	(LifeSci-I13) Genetic and molecular characterization of phospholipid signaling in pollen tubes E. Sousa, R. Malhó
16h30-16h45	(MatSci-I14) Nanocrystalline copper thin films R. Calinas, M.T. Vieira	(LifeSci-I14) Leaf morfoanatomy in <i>Hakea sericeae</i> and <i>H. salicifolia</i> G. Teixeira, A. Monteiro, C. Pepo
16h45-17h15	Coffee Break – Poster Session	
17h15-18h00	(P2) Plenary Talk - "Pathogenesis of lung infectious diseases: The use of histopathology", Michel Huerre – Paris, France.	
18h00-18h15	(MatSci-I15) Electron microscopy study of anisotropic Barium Titanate prepared by hydrothermal method F. Maxim, P. Ferreira, P. Vilarinho	(LifeSci-I15) Detection of MMP-9, MMP-1 and TIMP-1 in the lung of developing mouse after prenatal administration of vitamin A M. Pinto, P. Rodrigues, A. Coelho, C. Gonçalves, V. Bairos
18h15-18h30	(MatSci-I16) The effect of CeO <sub>2</sub> and Yb <sub>2</sub> O <sub>3</sub> additives on the microstructure of SiAlON ceramic cutting tools S. Turan, H. Yurdakul, F. Kara, H. Mandal, A. Kara	(LifeSci-I16) Lung elastic fibres from embryonic to adult birds A. Honório, M. Pinto, C. Gonçalves, V. Bairos
18h30-18h45	(MatSci-I17) Microstructural characterization of thick PZT films on Cu foils deposited by electrophoresis A. Wu, P. Vilarinho, A. Kingon, I. Reaney	(LifeSci-I17) Keratinophilic fungi: A microscopic approach by <i>in vitro</i> hair perforation analysis R. Sabino, C. Verissimo, J. Brandão, C. Alves, P. Alves, H. Parada, L. Rosado
18h45-19h00	(MatSci-I18) In depth analysis of the structure of sputtered tungsten oxynitride coatings: Development of a structural model N. Parreira, D. Galvan, Y. Pei, T. Polcar, J. Hosson, A. Cavaleiro	(LifeSci-I18) Lung glycoconjugates – where and what are they there for? M. Martins, M. Baptista, V. Bairos
19h00-19h15	(MatSci-I19) Morphology and structure of compacted coated powders studied by SEM and TEM F. Simões, B. Trindade	(LifeSci-I19) Management of vesicouretral reflux with immunohistochemistry P. Gameiro, J. Oswald, H. Fritsch
20h30	Congress Dinner	

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## Friday – 7<sup>th</sup> December 2007

09h00-09h45	<b>(P3) Plenary Talk</b> - "The role of microscopy in the diagnosis of red cell disorders", Barbara Bain - London, England.	
09h45-11h00	<b>Parallel Session – Materials Science III</b>	<b>Parallel Session – Life Sciences III</b>
09h45-10h30	<b>(MatSci-InvIII) Invited Talk</b> - "Atomic structure and defect behaviour of nanoparticles through aberration-free STEM, high-resolution TEM and in-situ TEM", Paulo Ferreira, Austin, USA.	<b>(LifeSci-InvIII) Invited Talk</b> - "Connectivity of the Nervous System. How to study it?" Maria Angeles de la Cruz, Salamanca, Spain.
10h30-10h45	<b>(MatSci-III1)</b> <i>In vitro</i> behaviour and surface morphology of modified 316L stainless steel stents J. Nunes, A. Piedade, C. Duarte, M.T. Vieira	<b>(LifeSci-III1)</b> Refractory anaemia with ringed sideroblasts associated with marked thrombocytosis – a study of four cases R. Barreira, R. Ferreira, J. Cortez, P. Gameiro, I Salazar, M. Silveira
10h45-11h00	<b>(MatSci-III2)</b> <i>In vitro</i> bioactivity of PMMA-co-EHA composites filled with SiO <sub>2</sub> -free glass P. Lopes, B. Leite Ferreira, R. Correia, H. Fernandes	<b>(LifeSci-III2)</b> Evaluation of haemathological analyser flags A. Fontes, A. Soares, C. Antunes
11h00-11h30	<b>Coffee Break – Poster Session</b>	
11h30-11h45	<b>(MatSci-III3)</b> Microscopic characterization of the thermal evolution of stainless steel coatings sputter-deposited onto WC particles C.M. Fernandes, A.M.R. Senos, M.T. Vieira	<b>(LifeSci-III3)</b> Brain projections of the paraventricular nucleus of the hypothalamus: a dextrane-antegrade tracing study in the rat V. Cardoso, L. Soares, A. Almeida, F. Ribeiro
11h45-12h00	<b>(MatSci-III4)</b> Effect of temperature in the evolution of Ni/Al nanolayers A. Ramos, S. Simões, R. Calinas, F. Viana	<b>(LifeSci-III4)</b> Characterization of <i>Mycobacterium bovis</i> phagosome L. Jordão, M. Simões, G. Griffiths, E. Anes
12h00-12h15	<b>(MatSci-III5)</b> Nanocrystalline Copper Thin Films annealed at 100°C S. Simões, R. Calinas, P. Ferreira, F. Viana, M.T. Vieira, M. Vieira	<b>(LifeSci-III5)</b> Preliminary study of hepatocyte growth factor (HGF) expression in corpus cavernosum of high-fat diet chronic intake rat model I. Tomada, N. Tomada, P. Vendeira, D. Neves
12h15-12h30	<b>(MatSci-III6)</b> Reinforcement coating on SS 316L and copper powders J. Castanho, M. Matos, M. T. Vieira	<b>(LifeSci-III6)</b> Immunolocalization of histone modifications as a tool to visualize chromatin dynamics in plants. N. Geraldo, R. Abranches
12h30-12h45	<b>(MatSci-III7)</b> Structural and microanalytical studies of CrO <sub>2</sub> thin films on c-sapphire by high resolution electron microscopy methods M.I. Ortiz, P. Sousa, C. Ballesteros, A. Silvestre, L. Cohen, O. Conde	<b>(LifeSci-III7)</b> Colocalization analysis of PPP1 isoforms and two novel targeting subunits in breast carcinoma C. Sousa, A. Vintém, M. Fardilha, O. Silva, E. Silva
12h45-13h00	<b>(MatSci-III8)</b> TEM and SEM in-situ annealing of nanocrystalline copper thin films S. Simões, R. Calinas, P. Ferreira, M. Vieira, F. Viana, M.T. Vieira	<b>(LifeSci-III8)</b> Ultrastructural study of <i>Pirellula</i> sp. OJF20 isolated from the surface of <i>Corallina</i> sp. O. Lage, J. Bondoso, R. Abreu, F. Viana, J. Torres, A. Cunha
13h00-14h15	<b>Lunch</b>	
14h15-14h45	<b>(P4) Plenary Talk</b> – "3D Microscopy: From Micro to Nano and From Bio to Semi", Yuri Rikers – FEI, The Netherlands.	
14h45-16h45	<b>Parallel Session – Materials Science IV</b>	<b>Parallel Session – Life Sciences IV</b>
14h45-15h00	<b>(MatSci-IV1)</b> Processing of alumina powders obtained by detonation synthesis E. Antunes, M. Ferro, A. Lopes	<b>(LifeSci-IV1)</b> Ultrastructure of the effects of pyrrolidine-fused chlorins on the replication of HSV-1 A. Matos, A. Santos, M. Caeiro, M. Faustino, M. Neves, A. Tomé, J. Cavaleiro
15h00-15h15	<b>(MatSci-IV2)</b> Microstructure and optical properties of PZT films S. Rodrigues, A. Khodorov, M. Pereira, M. Gomes	<b>(LifeSci-IV2)</b> Adaptation of ranaviruses from Peneda-Gerês National Park to cell cultures and their characterization A. Matos, M. Caeiro, R. Marschang, T. Papp, C. Soares, M. Marçal, M. Carretero
15h15-15h30	<b>(MatSci-IV3)</b> The importance of SEM-EDS analysis in the study of old mortars composition P. Adriano, A. Silva, M. Veiga, J. Mirão, A. Candeias	<b>(LifeSci-IV3)</b> Prrx1 expression is upregulated upon differentiation in neuronal cells F. Monteiro, S. Rebelo, C. Reguenga, D. Lima
15h30-15h45	<b>(MatSci-IV4)</b> Morphology and mechanical properties of polymeric nanofibers R. Vidinha, D. Botequim, C. Henriques, J. Borges, J. Silva	<b>(LifeSci-IV4)</b> Microscopy and Primary Biliary Cirrhosis Diagnosis R. Bárto, P. Rodrigues, R. Cunha, F. Rodrigues, H. Ribeiro
15h45-16h00	<b>(MatSci-IV5)</b> Estimation of Ge nanocrystals size by Raman, X-rays, and HRTEM techniques S. Pinto, P. Caldelas, A. Rolo, S. Livechev, A. Chahboun, M. Gomes	<b>(LifeSci-IV5)</b> Histological changes and flow cytometry analyses of aluminum genotoxicity in <i>Triticum aestivum</i> S. Silva, E. Rodriguez, J. Loureiro, A. Costa, C. Santos, P. Lopes, O. Carnide, H. Pinto
16h00-16h15	<b>(MatSci-IV6)</b> Porogen effect of bioactive glass on poly(L-lactide) scaffolds: evidences by electron microscopy N. Barroca, A. Silva, M. Fernandes, P. Vilarinho	<b>(LifeSci-IV6)</b> Comparison between microscopy observation and an automatic system for studying the urinary sediment C. Chaves, E. Costa, M. Martins
16h15-16h30	<b>(MatSci-IV7)</b> Nanoscale characterization of hydroxyapatite particles by electron microscopy C. Santos, R. Franke, M. Almeida, M. Costa	<b>(LifeSci-IV7)</b> Infection with virulent <i>Mycobacterium ulcerans</i> compromises the development of an immune response in the draining lymph nodes A. Fraga, E. Torrado, S. Campos, A. Castro, J. Pedrosa
16h30-16h45	<b>(MatSci-IV8)</b> Study of smalt blue from Portuguese mural paintings by SEM-EDX and confocal Synchrotron $\mu$ -XRF A. Candeias, S. Valadas, M. Gil, L. Carvalho, A. Silva, R. Simon, J. Mirão	<b>(LifeSci-IV8)</b> Subcellular localization of a novel alternative splicing of I1IG9 and colocalization with PPP1gamma isoforms C. Sousa, A. Vintém, M. Fardilha, O. Silva, E. Silva
16h45-17h15	<b>Coffee Break</b>	
17h15-17h30	<b>Closing Session</b>	
17h30	<b>General Assembly of SPMicros</b>	

# INCOMAM'07- PROGRAMME – POSTERS

Thursday 6<sup>th</sup> / Friday 7<sup>th</sup> December 2007

THURSDAY (16.45h-17.15h) and FRIDAY (11.00h-11.30h)

## Poster Session – Materials Science

(MatSci-P1) Applications of nuclear techniques and microscopy to surface analysis of materials  
J. Carvalho, A. Reis

(MatSci-P2) Microstructural investigations of superalloy joined with silicon nitride  
O. Tunçkan, D. Turan, S. Turan

(MatSci-P3) Strain path change effect on microstructural evolution of small grain size brass  
N. Sakharova, J. Fernandes

(MatSci-P4) Microstructural investigations of (Ba<sub>1-x</sub>Sr<sub>x</sub>)TiO<sub>3</sub> thin films  
J. Gao, A. Wu, P. Vilarinho, I. Reaney

(MatSci-P5) Surface and interface characteristics of polycrystalline SrTiO<sub>3</sub> films on different substrates  
O. Okhay, A. Wu, P. Vilarinho, I. Reaney

(MatSci-P6) Optical microscopy analysis of mortars from Tagus River 16<sup>th</sup> and 17<sup>th</sup> century fortifications  
T. Guerreiro, A. Silva, P. Adriano, A. Candeias, J. Mirão

(MatSci-P7) SEM analysis of oxidized La-Si sputtered thin films  
J. Oliveira, C. Louro, A. Cavaleiro

(MatSci-P8) Characterization of sputtered shape memory alloy Ni-Ti films by cross-sectional TEM and SEM  
R. Martins, A. Mücklich, N. Schell, R. Silva, K. Mahesh, F. Fernandes

(MatSci-P9) Material flow in friction stir welding  
C. Leitão, R. Leal, D. Rodrigues, A. Loureiro

(MatSci-P10) Rediscovering the materials of Arraiolos historical tapestries: fibre and mordant analysis by SEM-EDX and  $\mu$ -PIXE  
A. Manhita, C. Costa, T. Ferreira, J. Mirão, H. Vargas, I. Ribeiro, I. Seruya, A. Candeias

(MatSci-P11) The role of SEM in the diagnosis of expansive chemical reactions in cement-based building materials  
A. Silva, M. Salta

## Poster Session – Life Sciences

(LifeSci-P1) A microsporidian found in an Amazonian fish: ultrastructural and phylogenetic characterization  
G. Casal, E. Matos, L. Grilo, C. Azevedo

(LifeSci-P2) Ultrastructure of Chloromyxum sp. (Myxozoa) infecting urinary bladder of the marine teleost Menticirrhus americanus (Sciaenidae) in southern Brazil.  
C. Azevedo, G. Casal, P. Garcia, P. Matos, E. Monteiro, E. Matos

(LifeSci-P3) Magnetic properties and size of microscopic pollutant particles in the urban area of Coimbra  
C. Gomes, A. Dinis, A. Rocha, E. Gomes, L. Neves

(LifeSci-P4) Quercus suber infected by Phytophthora cinnamomi. Effects at cellular level of cinnamomin on roots, stem and leaves  
I. Maia, C. Medeira, E. Melo, A. Cravador

(LifeSci-P5) Trichomes morphology and essential oils characterization of field-growing and in vitro propagated plants of Lavandula pedunculata  
M. Zuzarte, A. Dinis, C. Cavaleiro, J. Canhoto, L. Salgueiro

(LifeSci-P6) A Light and Scanning Electron Microscopic study of the pollen of Gnaphalialeae (Asteraceae) from Serra da Estrela  
A. Coutinho, A. Dinis, F. Sales

(LifeSci-P7) The contribution of pollen morphology for phylogenetic inference on three related subgenus of Polygala L. (Polygalaceae)  
S. Castro, P. Silveira, L. Navarro, A. Coutinho

(LifeSci-P8) A Characterisation of the plastid gene tufA in Perkinsus atlanticus  
A. Marques, J. Costa, C. Oliveira, C. Azevedo, L. Grilo

(LifeSci-P9) Helicobacter pylori phage screening  
F. Vale, A. Matos, P. Carvalho, J. Vitor

(LifeSci-P10) Conventional Cytogenetic in Hemato-Oncology  
N. Jerónimo, S. Mendes, C. Moucho

(LifeSci-P11) Comparative ultrastructural study of human corpus cavernosum during ageing  
N. Tomada, R. Oliveira, I. Tomada, P. Vendeira, D. Neves

(LifeSci-P12) Leukemia and complex karyotypes  
P. Olim, E. Cortesão, T. Silva, L. Jorge, C. Mocho, A. Paiva, A. Espadana

(LifeSci-P13) Testing the reliability of anatomical and epidermal characters in grass taxonomy  
M. Cristina, A. Dinis, F. Sales

(LifeSci-P14) The palynological compass: a case study in Viticoideae (Vitex L.)  
C. Cabral, M. Möller, F. Sales

(LifeSci-P15) Evaluating structural differences in cortical bone tissue after demineralization and calcination  
G. Martins, J. Freitas, F. Judas, B. Trindade, H. Figueiredo

(LifeSci-P16) Microglial activation on the dorsal column nuclei in a neuropathic pain model in the rat  
L. Torres, A. Almeida, H. Almeida