# Workshop to honor Prof. Yannis Missirlis

Friday 7<sup>th</sup> July (All Day)

Workshop to honor Prof. Yannis Missirlis

Session I: Mechanics and simulations in biological systems

Chair: A. Sendemir-Urkmez, K. Komvopoulos

Room: Crystal Hall

09:00-09:10

Introduction

09:10-09:40 Invited

Photonic Nano-Sensor Reports Dynamics of Interactions between Single Molecular Ligand or Pathogen and a Live Cell with nm Precision in 3D at >100 Hz

E. Evans, The University of British Columbia & Boston University, USA

09:40-10:10

**Intersection of Nanotechnology and Cell Mechanics** 

K. Komvopoulos, University of California, Berkeley

10:10-10:40

Mechanical loading and cell differentiation

M. Alini, AO Foundation, Switzerland

10:40-11:10 Invited

Dielectric properties and non thermal effects of microwaves on lysozyme studied with molecular dynamics simulations

G. Papadopoulos, University of Thessaly, Greece

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Session II: Tissue and Organ Engineering

Chair: M. Chatzinikolaidou, S. Korossis

Room: Crystal Hall

11:30-12:00

**Development of a Tissue-Engineered Tumor Model** 

A. Mikos, Rice University, USA

12:00-12:20

Engineering Responsive and Biomimetic Hydrogels for Biomedical Therapeutic and Diagnostic Applications (BIOGEL)

C. Kiparissides, CPERI-CERTH, Greece

12:20-12:40

Endothelialisation of Gas Exchange Membranes Coated with TiO2 Nanoparticles for the Development of a Biohybrid Lung

S. Korossis, Hannover Medical School, Germany

12:40-13:00

Biological and mechanical aspects in bone tissue engineering

M. Chatzinikolaidou, University of Crete, Greece

13:00-13:20

Guiding neural cell behaviour in vitro through chemical and mechanical signals

A. Sendemir-Urkmez, Ege University, Turkey

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Session III: Interactions on Functional Bio-Nano-Interphases

Chair: Prof. T. Choli Papadopoulou, Dr. Maria Katsikogianni

Room: Crystal Hall

15:00-15:30

## Prof. Erhan Piskin, Hacettepe University, Turkey

Bacteriophages with or without plasmonic nanoparticles are potential active agents for diagnosis and therapy of bacterial infections/contaminations

15:30-16:00

## Dr. Artemis Stamboulis, University of Birmingham, UK

TRΛ

16:00-16:20

#### Prof. Symeon Agathopoulos, University of Ioannina, Greece

From the macroscopic thermodynamics of bio-interfaces to the nano-aspects of regenerative medicine

16:20-16:40

## Dr. Alexandros Repanas, Martin-Luther-Universität Halle-Wittenberg, Germany

Cell instructive surfaces for implantable devices

16:40-17:00

#### Dr. Maria Katsikogianni, University of Bradford, UK

Next Generation Antimicrobial Devices and Efficacy Testing in the Scope of iPROMEDAI COST Action TD1305

17:00-17:20

Closing Remarks by Prof. Y. Missirlis