

 11^{40}

 $15^{00} - 17^{00}$

Thessaloniki-Greece, August 25-28/2020

Program

	Tuesday 25.08.2020	W e d n e s d a y 2 6 . 0 8 . 2 0 2 0	Thursday 27.08.2020	Friday 28.08.2020
$00^{00} - 11^{00}$	Arrivals	Materials & Structure OO4: M. Spasova, Germany Characterization of nanomaterials using transition electron microscopy OO5: C. Dendrinou, Greece Nano-Theranostics based on magnetic ferrite nanoparticles OO6: M. Katsikini, Greece Application of X-ray absorption fine structure spectroscopies for the study of Fe _{3-x} Mn _x O ₄ nanoparticles	Biomedical constraints O12: G.Litsardakis, Greece Magnetic liposomes as versatile clinical carriers O13: M. Efremova, Germany Magnetite-Gold nanohybrids as ideal platforms for theranostics O14: U. Hofmann, Germany The Blood-Brain-Barrier as target for magnetic nanoparticle imaging and opening	immunotherapy through Nanotechnology
		11 ⁰⁰ - 11 ⁴⁰ Coff	ee Break	
		Magnetism & Properties	Biomedical constraints	Cancer specific aspects
⁴⁰ – 13 ⁰⁰	Registration On Site & Web	007: P. Trohidou, Greece Tuning structure and Magnetic Properties of Nanoparticles for Enhanced Heating Performance 008: U.Wiedwald, Germany Basics of Magnetometry and	O15: C. Spiridopoulou, Greece Cancer nanomedicine: considerations for the in vitro experimental design O16: R. Tzoneva, Bulgaria How cells respond to	O20: S. Spirou, Greece The Radiobiological Basis of Radiation Therapy and Hyperthermia O21: N. Carvou, UK Magnetic Particle Imaging Applications in Cancer

Basics of Magnetometry and How to Apply on Nanoparticles

considerations for the in vitro			
experimental design			
O16: R. Tzoneva, Bulgaria			
How cells respond to			
magnetic field?			
Magnetic hyperthermia for			
cancer treatment			

Applications in Cancer Inflammation, Theranostics, and Cell Tracking O22: T. Samaras, Greece Combinatory, Magnetic or Non-magnetic cancer

modalities?

13⁰⁰ – 15⁰⁰ Lunch Break

O01: M. Angelakeris, Greece	Magnetism & Properties	Poster Session	Poster Session
Magnetic Nanohybrids for Cancer Therapy	O09: T. Feggeler, Germany Introduction to X-Ray	P01-P12	P13-P23
Materials & Structure	Magnetic Circular Dichroism 010: A. S. Kamzin, Russia	5 min flash presentations (5-8 slides)	5 min flash presentations (5-8 slides)
O02: A. Manukyan, Armenia Iron based "Core-Shell" Nanoparticles for Magnetic	Core-Shell and Bi-phasic MNPs for cancer therapy: Structure and properties	5 min questions per poster	5 min questions per poster
Hyperthermia of Cancer Cells O03: Simeonidis, Greece Scaling Up Magnetic Nanoparticles Production	O11: A.Semisalova, Germany Ferromagnetic Resonance: Theory and Applications for Magnetic Nanoparticles	On-site participants may hang their A0 printed posters in Poster Session Room	On-site participants may hang their A0 printed posters in Poster Session Room

Lab Course 01 Lab Course 02 Lab Course 03 Lab Course 04 Young researchers **Young researchers Young researchers Young researchers** Present & Publish Propose & Manage Samples & Biomedicine **Magnetic Hyperthermia** $17^{30} - 19^{30}$ M. Farle, Germany How to make a good G. Brandon, Luxemburg E. Myrovali & K. Kazeli, Greece A.R. Tsiapla, N. Maniotis scientific oral presentation & A. Makridis, Greece H2020 MSCA Individual Hands on C. Bratsas, S. Zapounidou, Fellowships Samples Hands on Greece for biomedical applications Magnetic Particle hyperthermia: for the young researchers How to avoid predatory **Experiment & Evaluation** journals & plan your publication strategy

17⁰⁰ – 17³⁰ Coffee Break



Poster Presentations

Num	Title & Presenting Author
P01	Regional Focus effect on Magnetic Particle Hyperthermia
	E. Myrovali, MagnaCharta, CIRI-AUTH, Thessaloniki Greece
P02	Combinatory magnetothermal and magnetomechanical stress on human breast cell lines
	A. R. Tsiapla, MagnaCharta, CIRI-AUTH, Thessaloniki Greece
P03	In vitro response of normal and cancerous cell lines under magneto-mechanical activation
	A. R. Tsiapla, MagnaCharta, CIRI-AUTH, Thessaloniki Greece
P04	In vitro and in vivo study of magnetic nanoparticles with potential for anti-tumor therapy
	V. Uzunova, Institute of Biophysics and Biomedical Engineering, BAS, 1113 Sofia, Bulgaria
P05	Synthesis and Characterization of MagnetoElectric BiFeO ₃ nanoparticles
	<i>K. Papadopoulos, MagnaCharta, CIRI-AUTH, Thessaloniki Greece</i> Synthesis and characterisation of magnetic bio ceramics nanoparticles for medical applications
P06	<i>K. Kazeli</i> , International Hellenic University, Thessaloniki, Greece
P07	Oxidative stress analysis, haemolytic activity and cytotoxicity of bioactive glass-ceramics nanomaterials,
	<i>K. Kazeli</i> , International Hellenic University, Thessaloniki, Greece
P08	Fe-Fe ₃ O ₄ "Core-Shell" Nanoparticles: Synthesis and Characterization <i>G. Chilingaryan</i> , Institute for
	Physical Research, National Academy of Sciences of Armenia, Ashtarak, Armenia
P09	Fe-Fe ₃ C "Core-Shell" Nanoparticles: Synthesis and Characterization, <i>H. Gyulasaryan</i> , Institute for
- 109	Physical Research, National Academy of Sciences of Armenia, Ashtarak, Armenia
	Novel tissue engineering scaffolds and liposomal formulations loaded with Alkannins/Shikonins for
P10	dermal applications A. S. Arampatzis, A. E. Koletti, Chemical Engineering Department, Aristotle
	University, Thessaloniki-Greece
D 44	An NMR and LC-MS based metabolomics approach to elucidate the mechanism of action of alkannin
P11	and shikonin on breast cancer cell line MCF-7
	A. Nakas , Chemical Engineering Department, Aristotle University, Thessaloniki-Greece Nanostructured permanent magnets: Materials, geopolitical prospects, future challenges & recycling,
P12	<i>G. Sempros</i> , School of Physics, Aristotle University of Thessaloniki-Greece
	Superparamagnetic Splenic Macrophages: Magnetic Characterization and Investigation of Immune
P13	Response by Low-frequency Magnetic Stimulation, N. Tetos , Fakultät für Physik, Universität Duisburg-
	Essen-Germany
P14	Revolutionary green perovskite or perovskite-like solar cells
	L. Theofylaktos, NCSR Demokritos, Athens-Greece
P15	Blood cancer: New insights of Oxidative stress in carcinogenesis
113	I. Tsamesidis, Université de Toulouse, IRD, UPS, Toulouse, 31400, France
P16	Design and construction of 3D-printed magnetic tools for biomedical applications
	P. Kyriazolopoulos , MagnaCharta, CIRI-AUTH, Thessaloniki-Greece CoCrFeMnNi High Entropy Alloy Nanoparticles from the gas phase
P17	I. N. Sahin, Fakultät für Physik, Universität Duisburg-Essen-Germany
	Standardizing magnetic hyperthermia experiment: a protocol for a reliable measurement
P18	A. Makridis, MagnaCharta, CIRI-AUTH, Thessaloniki Greece
D 4.0	A Multiphysics Model for the Hyperthermia Treatment of Residual Bone Tumors Cells Using Magnetic
P19	Scaffolds, <i>M. B. Lodi</i> , Dept. Electr. & Electron. Engin. University of Cagliari, Cagliari Italy
D20	X-ray spectroscopic study of magnetic ferrite nanoparticles for theranostic applications: effect of size
P20	and distribution, F. Pinakidou, School of Physics, Aristotle University of Thessaloniki-Greece
P21	Estimating the effective anisotropy of ferromagnetic nanoparticles through magnetic and calorimetric
	simulations, N. Maniotis, MagnaCharta, CIRI-AUTH, Thessaloniki Greece
P22	Nanoimprint Defined Magnetic Nanoplatelets for Cancer Treatment and Biomedicine
	J. Li, Department of Applied Physics, Eindhoven University of Technology-Netherlands
P23	Magnetic characterization of Fe/Fe ₃ C nanoparticles fabricated by solid state pyrolysis
	E. Papadopoulou, Fakultät für Physik, Universität Duisburg-Essen-Germany