

## LABORATORY EXERCISES OF 1<sup>ST</sup> SEMESTER (ACAD. YEAR 2023-24)

#	Title	Teaching Staff		School/Sector/Laboratory
1.	Bulk polymerization of methyl methacrylate and computational study of chain polymerization	L. Zoumpoulakis	Dr. S. Soulis (LTS)	Chemical Engineering / Materials Science and Engineering / Lab. RNANO
2.	Redox polymerization of acrylonitrile using the solution / precipitation technique	L. Zoumpoulakis	Dr. E. Kanellopoulou (TLS)	
3.	Polymers as adsorptive materials and ion exchangers	L. Zoumpoulakis	Dr. P. Georgiou (LTS)	
4.	Dynamic mechanical analysis (DMA)	E. Kontou	---	Applied Mathematics and Physical Science / Engineering / Lab. Testing Mater.
5.	Differential Scanning Calorimetry (DSC)	A. Kyritsis	Ch. Politidis (Doc.Cand.)	Applied Mathematics and Physical Science / Physics / Lab. Dielectric Spectroscopy
6.	Deep indentation of flat plate	D.Manolakos	A. Lambropoulos (Doc.Cand.)	Mechanical Engineering / Process Technology/ Lab. Processing Technology (Building Ξ)
7.	Rolling	D.Manolakos	I. Papantoniou (Doc.Cand.)	
8.	X-ray diffraction (XRD)	E. Pavlatou	Dr. P. Gyftou (LTS)	Chemical Engineering / Chem. Sciences / Lab. General Chemistry
9.	Characterization of rectifying metal-semiconductor contacts (Schottky diodes). Photovoltaic effect	C. Dervos	Dr. Th. Argyropoulos (LTS)	Electr.&Computer Engineering / Inform. Transm. Systems & Mater. Techn. / Lab. Electrical Materials
10.	Investigating materials microstructure via microscopic techniques	G. Fourlaris	---	Mining & Metal. Engineering / Metallurgy & Mater. Techn. / Lab. Phys. Metallurgy
11.*	Preparation and characterization of ceramic materials	Chr. Argirusis	Dr. P. Pandis	Chemical Engineering / Synthesis and Development of Industrial Processes / Lab. Inorgan. Mater. Technology
12.	Development and Characterization of Hybrid (Inorganic - Organic) Semiconductive Thin Films. Energy Gap Determination by Reflection Spectrum	K. Kollia	---	Chemical Engineering / Chem. Sciences / Lab. General Chemistry
13.	Preparation of porous scaffolds for biological applications with the lyophilization	A. Tsetsekou	I. Kitsou (Doc.Cand.)	Mining & Metal. Engineering / Metallurgy & Mater. Techn. / Lab. Phys. Metallurgy
14.	Polymer Processing and Mechanical Recycling by Extrusion	S. Vouyiouka	Dr. D. Korres (LTS)	Chemical Engineering / Synthesis and Development of Industrial Processes / Lab. Polymer Technology

\* Compulsory selection of this specific Laboratory Exercise by all groups