

PROGRAM

Wednesday 6 July 2022

15:00-16:30	I3D 1 (Dock Six 1) Chair: R. Kargl
15:00-15:30 INVITED (L)	Nanoscribe: An overview from sub-micron and to high speed 3D printing Alexander Legant Nanoscribe GmbH & Co. KG, Germany
15:30-15:45 (L)	3D-printed metasurfaces for potential energy harvesting applications at 2.4 GHz Z. Viskadourakis ¹ , E. Tamiolakis ² , O. Tsilipakos ¹ , A. C. Tasolamprou ¹ , E. N. Economou ^{1,2} and G. Kenanakis ¹ ¹ IESL, FORTH), Greece. ² Physics Department, University of Crete, Greece
15:45-16:00 (V)	HAPTIC Digital 3D printing on textile surfaces for high volume footwear manufacturing T.W. Schmidt, X.S. Jiang, J.Y. Zeng Key Lab for Sport Shoes Upper Materials of Fujian Province, Fujian Huafeng New Material Co.,Ltd., Putian , Fujian, China
16:00-16:15 (L)	Fully printed single-layer functional PCB via digital hybrid printing of polymer and molten metal Z. Khan ¹ , R. Zengerle ^{1,2} , P. Koltay ^{1,2,3} , S. Kartmann ^{1,2} , Z. Shu ^{1,2} ¹ Laboratory for MEMS Applications, IMTEK – Department of Microsystems Engineering, University of Freiburg, Germany ² Hahn-Schickard, Germany ³ Freiburg Center for Interactive Materials and Bioinspired Technologies (FIT), Germany

17:00-18:30	I3D 2 (Dock Six 1) Chair: A. Legant
17:00-17:30 INVITED (L)	Additive manufacturing of biomimetic vascular tissue models R. Kargl ^{1,2} , F. Lackner ¹ , I. Knechtl, ¹ T. Mohan ^{1,2} , J Stana, ³ N. Tsilimparis, ³ K. Stana Kleinschek ¹ ¹ Institute of Chemistry and Technology of Biobased System (IBioSys), Graz University of Technology, Austria ² Laboratory for Characterisation and Processing of Polymers, University of Maribor, Slovenia ³ Department of Vascular Surgery, Ludwig Maximilians University Munich, Germany
17:30-17:45 (L)	Surface texture of biopharmaceutical equipment: Understand the differences between conventional and additive manufacturing techniques Å. Morales-López ¹ , K. Marteleur ² , A. Finne-Wistrand ¹ ¹ KTH Royal Institute of Technology, Department of Fibre and Polymer Technology, School of Engineering Sciences in Chemistry, Biotechnology and Health, Teknikringen, 56-58, SE 10044 Stockholm, Sweden ² Cytiva Björkgatan 30, SE 75184 Uppsala, Sweden
17:45-18:00 (V)	Development of 3D printed ceramic monolithic structures and membranes for gas separation applications E.M. Pechlivani ¹ , G. Kastrinaki ² , C. Zisis ¹ , A. Asimakopoulou ² , D. Koutsonikolas ² , D. Tzouvaras ¹ , E. Kikkinides ³ ¹ Information Technologies Institute, Centre for Research & Technology Hellas, 57001 Thessaloniki, Greece ² Chemical Process & Energy Resources Institute, Centre for Research & Technology Hellas, 57001 Thessaloniki, Greece ³ Department of Chemical Engineering, Aristotle University of Thessaloniki, 54124 Greece
18:00-18:15 (V)	3D Printed Inconel mechanical response related to Volumetric Energy Density E.M Pechlivani ¹ , L. Melidis ² , A.K. Kampouris ³ , K. Katalalos ² , T. Kontodina ¹ , D. Tzouvaras ¹ , A.A. Konstantinidis ³ ¹ Information Technologies Institute, Centre for Research & Technology Hellas, 57001 Thessaloniki, Greece ² Laboratory of Experimental Strength of Materials and Structures, School of Civil Engineering, Faculty of Engineering, Aristotle University of Thessaloniki, 54124 Thessaloniki, Greece ³ Laboratory of Engineering Mechanics, School of Civil Engineering, Faculty of Engineering, Aristotle University of Thessaloniki, 54124 Thessaloniki, Greece

Thursday 7 July 2022

11:00-13:00	I3D 3 3D Bioprinting (Dock Six 2) Chair: I. Zergioti
11:00-11:30 KEYNOTE (V)	3D-Printing and Sustainable Research V. Prasad Shastri Institute for Macromolecular Chemistry, University of Freiburg Stefan-Meier Str. 31, Freiburg, 79104 Germany
11:30-12:00 INVITED (L)	Laser Induced Forward Transfer as an enabling bioprinting technology C. Kryou ¹ , P. Karakaidos ² , A. Hatziapostolou ³ , A. Klinakis ² , and I. Zergioti ¹ ¹ School of Applied Mathematical and Physical Sciences, National Technical University of Athens, Athens, Greece ² Biomedical Research Foundation Academy of Athens, Greece ³ Department of Naval Architecture, School of Engineering, University of West Attica, Greece
12:00-12:30 INVITED (L)	Global health impacts of nanotechnology law: Nanoregulations governing food Dr. Ilise Feitshans JD and ScM and DIR1, Director, ESI SAFERNANO European Scientific Institute, Archamps France AND Research Assistant O'Neill Institute for National and Global Health Law
12:30-12:45 (L)	Biomechanical performances of PCL/HA micro- and macro-porous lattice scaffolds for tissue engineering application produced by LPBF M.L. Gatto ¹ , P. Mengucci ² , M. Furlani ³ , A. Giuliani ³ , E. Santecchia ¹ , S. Spigarelli ¹ ¹ Department DIISM, Polytechnic University of Marche, Italy ² Department SIMAU, Polytechnic University of Marche, Italy ³ Department of Clinical Science, Polytechnic University of Marche, , Italy
12:45-13:00 (L)	Laser bioprinting of cells and tumor organoids for organ-on-chip applications E. Elezoglou ^{1,3} , M. Chliara ¹ , M. Chatzipetrou ¹ , S. Papazoglou ³ , K. Tsilingiri ² , A. Klinakis ² , I. Zergioti ¹ ¹ National Technical University of Athens, School of Applied Mathematical and Physical Sciences, Athens, Greece ² Biomedical Research Foundation of the Academy of Athens, Athens, Greece ³ PhosPrint P.C., Attika Technology Park Lefkippos, Agia Paraskevi, Athens, Greece

POSTER*

* The posters will be presented from Tuesday to Friday during Lunch break

I3D	<p>POSTER AREA Wednesday 6 July (13:00-14:30, 16:30-17:00): Poster Display & Presentations Tuesday 5 July, Thursday 7 July: Poster Display</p>
I3DP-1 (L)	<p>Properties, performance and application of Inconel 718 lattice structures A. Santoni¹, M. Cabibbo¹, M. Mandolini¹, V. Di Pompeo¹, E. Santecchia¹, S. Spigarelli¹ ¹ DIISM, Università Politecnica delle Marche Via Brecce Bianche 12, 60131, Ancona, Italy</p>
I3DP-2 (L)	<p>Reverse Engineering and 3D Printing for Replica Fabrication of a Paleontological Human Skull Emmanouil Tzimtzimis^{a,b}, Dimitrios Tzetzisa^b, Charisios Achillas^{a,c}, Athanasios Athanasiou^d, Andreas Darlas^d, Dionysis Bochtis^a ^a Institute for Bio-Economy and Agri-Technology, Centre for Research & Technology Hellas (CERTH), Volos, Greece ^b Digital Manufacturing and Materials Characterization Laboratory, School of Science and Technology, International Hellenic University, Themi, Greece ^c Department of Supply Chain Management, International Hellenic University, Katerini, Greece ^d Ephorate of Palaeontology and Speleology, Ministry of Culture and Sports, Greece</p>
I3DP-3 (L)	<p>End-to-end procedure for the restoration of an archaeological find using 3D printing technologies N. Papas¹, K. Tsongas¹, D. Karolidis², D. Tzetzis¹, A. Arvanitaki² ¹ Digital Manufacturing and Materials Characterization Laboratory, School of Science and Technology, International Hellenic University, 14km Thessaloniki, 57001 N. Moudania, Greece ² Archeological Museum of Thessaloniki, 6 Manoli Andronikou Street, 546 21 Thessaloniki, Greece</p>
I3DP-4 (L)	<p>Artifacts' digital restoration and their implementation in Tactile Museums by utilizing 3D scanning and 3D Printing S. Koltsakidis^{1,2}, K. Tsongas^{2,3}, E. Kargioti³, D. Tzetzis², C. Achillas¹, N. Moussiopoulos¹ ¹ Laboratory of Heat Transfer and Environmental Engineering, Department of Mechanical Engineering, Aristotle University Thessaloniki, Thessaloniki, Greece ² Digital Manufacturing and Materials Characterization Laboratory, School of Science and Technology, International Hellenic University, Themi, Greece ³ Teloglion Fine Arts Foundation – Aristotle University Thessaloniki, Thessaloniki, Greece</p>
I3DP-5 (L)	<p>Increasing cell viability in 3D Bioprinted tissue A. Papadopoulos, S. Dermenoudis, S. Logothetidis Nanotechnology Lab LTFN, Aristotle University of Thessaloniki, Thessaloniki, Greece</p>
I3DP-6 (V)	<p>Development of a food-waste derived bio-ink for soilless cultivation C. Febo^{1,2}, M. Ciocca¹, P. Lugli¹, and L. Petti^{1,3} ¹ Sensing Technologies Lab, Faculty of Science and Technology, Free University of Bozen-Bolzano, Piazza Università, 1, 39100, Bolzano, Italy ² Smart Materials Lab, Istituto Italiano di Tecnologia, via Morego, 30, 16163, Genova, Italy ³ Competence Centre for Plant Health, Free University of Bozen-Bolzano, Piazzetta Franz Innerhofer, 8, 39100, Bolzano, Italy</p>
I3DP-7 (V)	<p>A portable real-time fiber density measurement system for electrospinning setups A. Evangelidis¹, G. Dobrescu¹, C. Ciobotaru¹, M. Enculescu¹ ¹ National Institute of Materials Physics, Atomiștilor 405A, Măgurele, Romania</p>
I3DP-8 (V)	<p>3D printing of Zirconia ceramics for dental applications E. Garmpi^{1,4}, I. Kitsou¹, P. Angelopoulou¹, E. Kalithinou¹, O. Alexiadou¹, P. Gkomoza¹, E. Roussi¹, S. Koltsakidis², D. Tzetzis², E. Mavropoulis³, C. Andreouli⁴, A. Tsetsekou¹ ¹ School of Mining and Metallurgical Engineering, National Technical University of Athens, 157 80 Zografos, Athens, Greece ² Digital Manufacturing and Materials Characterization Laboratory, School of Science and Technology, International Hellenic University, Themi, Greece ³ Lino3D, 2, Doiranis str, Kallithea, 176 71 Athens, Greece ⁴ MIRTEC S.A., 76 km Athens-Lamia national Road, 32009 Schimatari, Greece</p>
I3DP-9 (V)	<p>Development of nanocrystalline yttria stabilized zirconia feedstock for 3D-printing in dental applications I. Kitsou¹, P. Angelopoulou¹, E. Kalithinou¹, O. Alexiadou¹, E. Roussi¹, P. Gkomoza¹, E. Garmpi^{1,4}, S. Koltsakidis², D. Tzetzis², E. Mavropoulis³, C. Andreouli⁴, A. Tsetsekou¹ ¹ School of Mining and Metallurgical Engineering, National Technical University of Athens, 157 80 Zografos, Athens, Greece ² Digital Manufacturing and Materials Characterization Laboratory, School of Science and Technology, International Hellenic University, Themi, Greece ³ Lino3D, 2, Doiranis str, Kallithea, 176 71 Athens, Greece ⁴ MIRTEC S.A., 76 km Athens-Lamia national Road, 32009 Schimatari, Greece</p>