



Thursday, 26<sup>th</sup> September 2024

**9:00 REGISTRATION**

**9:30 OPENING**

**SESSION 1: Bioprinting and Hydrogels – Chaired by: TBC**

<b>10:00</b>	<b>Keynote 1</b>	E. Engel	TBC
<b>10:45</b>	<b>Invited 1</b>	A. D. Lantada	Bioinspired Design and Manufacturing Strategies for Next Generation Medical Implants: Trends and Challenges
<b>11:15</b>	<b>Talk 1</b>	R. Goyal	Nature-Inspired 3D Printed Nano Cellulose Fiber Reinforced Hierarchical Functional Hydrogel Composites Toward Biomedical Applications
<b>11:30</b>	<b>Talk 2</b>	A. Hernandez	3D Printing of Nanocellulose and Alginate Hydrogels for Biomedical Applications

**11:45 Coffee Break & Poster Session**

**SESSION 2: Ceramics and Bone Tissue Engineering – Chaired by: TBC**

<b>12:15</b>	<b>Invited 2</b>	M. Lasgorceix	TBC
<b>12:45</b>	<b>Talk 3</b>	M. Pita-Vilar	3D Printed $\alpha$ -TCP and Carboxymethyl Cellulose Scaffolds with Enhanced Osteogenic and Mechanical Performance with Application in Bone Tissue Engineering
<b>13:00</b>	<b>Talk 4</b>	R. Martín-Rodríguez	Combining Hydroxyapatite and Conductive Polymers: Advancing Toward 4D Electroactive Scaffolds for Bone Regeneration

**13:15 Lunch & Poster Session**

**SESSION 3: Cartilage and Composites – Chaired by: TBC**

<b>14:30</b>	<b>Keynote 2</b>	D. J. Kelly	TBC
<b>15:15</b>	<b>Invited 3</b>	J. Llorca	3D Printed Bioresorbable Polymers and Polymer Composites for Cartilage and Bone Tissue Engineering Applications
<b>15:45</b>	<b>Talk 5</b>	Y. Liu	Bio-Functional Collagen-Based 3D Printed Poly (Glycerol Sebacate) Scaffold to Enhance Articular Cartilage Repair
<b>16:00</b>	<b>Talk 6</b>	R. Meshram	Material Investigation Towards the Manufacturing of Dissolving 3D Printed Microneedles by Digital Light Processing

**16:15 IMDEA FACILITIES TOUR**

**20:30 CONFERENCE DINNER**



Friday, 27<sup>th</sup> September 2024

**8:30 WELCOME**

**SESSION 4: Smart Designs and Metamaterials – Chaired by: TBC**

**9:00 Keynote 3** A. A. Zadpoor TBC

**9:45 Invited 4** J. Patterson TBC

**10:15 Talk 7** P. Agrawal SONOPRINT: An Acoustic-Assisted Volumetric 3D (Bio)Printer

**10:30 Talk 8** M. Babaei Porosity Role in Biocompatibility of Additive Manufactured BTI21S Scaffolds

**10:45 SESSION 5: Rapid-Fire Presentations**

**11:15 Coffee Break & Poster Session**

**SESSION 6: Ceramics and Bone Tissue Engineering – Chaired by: TBC**

**11:45 Invited 5** D. Grossin TBC

**12:15 Talk 9** L. Aboal-Castro Femtosecond Laser Engraving of 3D Printed Scaffolds for Bone Tissue Regeneration

**12:30 Talk 10** V. Axelrad Tailoring Mechanical and Antimicrobial Properties of 3D-Printed Implant Architectures for Enhanced Orthoregeneration

**12:45 Lunch & Poster Session**

**SESSION 7: Business Innovation in Biofabrication – Chaired by: TBC**

**14:00 Invited 6** 3Dtive S.L. TBC

**14:30 Talk 11** TBC TBC

**14:45 Talk 12** TBC TBC

**15:00 Talk 13** B. Ferrari Additive Manufacturing & Colloids Processing in Biomedicine

**15:15 Talk 14** X. Barceló Development of a Perfused Microfluidic Liver Model Using Bioprinting and Liver-Derived Bioinks

**15:30 AWARDS AND CLOSING CEREMONY**