



Thursday, 26th September 2024

9:00 REGISTRATION

9:30 OPENING

SESSION 1: Bioprinting & Bioinspired Models – Chaired by: J. Ordoño & C. Ureña

10:00	Keynote 1	E. Engel	Extracellular Matrices for Regenerative Medicine and Tumour Models
10:45	Invited 1	A. D. Lantada	Bioinspired Design and Manufacturing Strategies for Next Generation Medical Implants: Trends and Challenges
11:15	Talk 1	A. Hernandez	3D Printing of Nanocellulose and Alginate Hydrogels for Biomedical Applications
11:30	Talk 2	M. Zelaia	Tool for Designing and Continuous Path Planning Vessel-Like Structures in Extrusion-Based Bioprinting

11:45 *Coffee Break & Poster Session*

SESSION 2: Ceramics & Bone Tissue Engineering – Chaired by: P. Navarrete & A. Ferrández

12:15	Invited 2	M. Lasgorceix	3D Printing of Doped Calcium Phosphate Ceramics for Bone Tissue Engineering
12:45	Talk 3	M. Pita-Vilar	3D Printed α -TCP and Carboxymethyl Cellulose Scaffolds with Enhanced Osteogenic and Mechanical Performance with Application in Bone Tissue Engineering
13:00	Talk 4	R. Martín-Rodríguez	Combining Hydroxyapatite and Conductive Polymers: Advancing Toward 4D Electroactive Scaffolds for Bone Regeneration

13:15 *Lunch & Poster Session*

SESSION 3: Smart Designs & Metamaterials – Chaired by: V. Sevostianova & M. Li

14:30	Keynote 2	A. A. Zadpoor	Meta-biomaterials
15:15	Invited 3	J. Patterson	An Overview of the BIOMET4D Project and a Deep Dive into the Cytocompatibility of 3D Printed Magnesium and Zinc
15:45	Talk 5	P. Agrawal	SONOPRINT: An Acoustic-Assisted Volumetric 3D (Bio)Printer
16:00	Talk 6	M. Babaei	Porosity Role in Biocompatibility of Additive Manufactured BTI21S Scaffolds

16:15 *Coffee Break & Poster Session*

16:45 IMDEA FACILITIES TOUR

20:30 CONFERENCE DINNER

Friday, 27th September 2024

8:30 WELCOME

SESSION 4: Ceramics & Bone Tissue Engineering – Chaired by: A. Bouzas & L. Díaz

9:00	Invited 4	D. Grossin	Advancements in Bioceramics: Innovations and Applications in Additive Manufacturing
9:30	Talk 7	L. Aboal-Castro	Femtosecond Laser Engraving of 3D Printed Scaffolds for Bone Tissue Regeneration
9:45	Talk 8	V. Axelrad	Tailoring Mechanical and Antimicrobial Properties of 3D-Printed Implant Architectures for Enhanced Orthoregeneration

10:00 SESSION 5: Rapid-Fire Presentations – Chaired by: V. Sevostianova & J. Ordoño

10:30 *Coffee Break & Poster Session*

SESSION 6: Cartilage & Composites – Chaired by: P. Díaz & L. Doyle

11:00	Keynote 3	D. J. Kelly	Biofabrication and Bioprinting Strategies for Musculoskeletal Tissue Regeneration
11:45	Invited 5	J. Llorca	3D Printed Bioresorbable Polymers and Polymer Composites for Cartilage and Bone Tissue Engineering Applications
12:15	Talk 9	Y. Liu	Bio-Functional Collagen-Based 3D Printed Poly (Glycerol Sebacate) Scaffold to Enhance Articular Cartilage Repair
12:30	Talk 10	R. Meshram	Material Investigation Towards the Manufacturing of Dissolving 3D Printed Microneedles by Digital Light Processing

12:45 *Lunch & Poster Session*

SESSION 7: Business Innovation in Biofabrication – Chaired by: P. Navarrete & P. Díaz

14:00	Invited 6	3Dtive S.L. (W. Solórzano)	The Business of Smiles: How Reverse Engineering and 3D Printing are Shaping Dental Profits
14:30	Talk 11	Viscofan (I. Ateca)	3D Bioprinting with Fibercoll-Flex®: The Fibrillar Collagen Bioink
14:45	Talk 12	Regemat 3D S.L. (S. Micó)	The Next Step in Biofabrication: BMAP® KNEE, a Biomimetic Knee Bioreactor for Osteochondral Regeneration.
15:00	Talk 13	Colfeed4Print (B. Ferrari)	Additive Manufacturing & Colloids Processing in Biomedicine
15:15	Talk 14	Leitat (X. Barceló)	Development of a Perfused Microfluidic Liver Model Using Bioprinting and Liver-Derived Bioinks

15:30 AWARDS AND CLOSING CEREMONY