



Thursday, 26th September 2024

9:00 REGISTRATION

9:30 OPENING

SESSION 1: Bioprinting and Hydrogels – Chaired by: TBC

10:00 Keynote 1 E. Engel TBC

10:45 Invited 1 A. D. Lantada Bioinspired Design and Manufacturing Strategies for Next Generation Medical Implants: Trends and Challenges

11:15 Talk 1 R. Goyal Nature-Inspired 3D Printed Nano Cellulose Fiber Reinforced Hierarchical Functional Hydrogel Composites Toward Biomedical Applications

11:30 Talk 2 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

12:15 Invited 2 M. Lasgorceix TBC

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 and Metamaterials – Chaired by: TBC

14:30 Keynote 2 A. A. Zadpoor TBC

15:15 Invited 3 J. Patterson TBC

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 IMDEA FACILITIES TOUR

20:30 CONFERENCE DINNER



Friday, 27th September 2024

8:30 WELCOME

SESSION 4: Ceramics and Bone Tissue Engineering – Chaired by: TBC

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| 9:00 | Invited 4 | D. Grossin | TBC |
| 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

10:30 Coffee Break & Poster Session

SESSION 6: Cartilage and Composites – Chaired by: TBC

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| 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: TBC

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| 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