

Conference Agenda (ICAM-BM2026)

	Oct. 13, 2026	Oct. 14, 2026	Oct. 15, 2026
Morning (I)	Registration	Plenary talks 2	Plenary talks 4
Morning (II)		Parallel sessions	Parallel sessions
Afternoon (I)	Opening Ceremony & Plenary talks 1	Plenary talks 3	Parallel sessions
Afternoon (II)	Parallel sessions	Parallel sessions	Closing Ceremony
	Banquet		

Tuesday, October 13, 2026						
13:30-13:50	Opening Ceremony (银杏厅 Ginkgo Hall, Building 1)					
13:50-14:10	Group Photo					
14:10-15:55	Plenary Presentations 1: PP1-PP3 (银杏厅 Ginkgo Hall, Building 1)					
15:55-16:15	Tea Break/Poster View/Exhibition (Building 1)					
16:15-18:00 Parallel Sessions	Session 01 (第五会议室 No.5 Meeting Room) BM07-01: Biomanufacturing for Medical Devices, Orthopedics and Clinical Applications	Session 02 (第六会议室 No.6 Meeting Room) AM01-01: Additive Manufacturing with Metallic, Ceramics, Polymer and Composite Materials	Session 03 (西园厅 Xiyuan Hall) BM02-01: Novel Bioinks, Printing Technology and Equipment	Session 04 (第一会议室 No.1 Meeting Room) BM 06-01: Biomanufacturing for Disease Modeling, Cancer Study and Drug Testing	Session 05 (第八会议室 No.8 Meeting Room) AM02-01: New Process, Technology, and Equipment of Additive Manufacturing	Session 06 (中北厅 Zhong Bei Hall) BM04-01: Biomanufacturing for Organoids, Organ-on-chips and Micro-physiological Systems
18:30	Banquet (Ginkgo Hall)					

Wednesday, October 14, 2026							
08:30-10:15	Plenary Presentations 2: PP4-PP6 (银杏厅 Ginkgo Hall)						
10:15-10:35	Tea Break/Poster view/Exhibition (Building 1)						
10:35-12:10 Parallel Sessions	Session 07 (银杏 Ginkgo Hall) BM01-01: Biomanuf., Biomaterials and Tissue Engineering	Session 08 (第五会议室 No.5 Meeting Room) BM07-02: Biomanuf. for Medical Devices, Orthopedics and Clinical Applications	Session 09 (第六会议室 No.6 Meeting Room) AM01-02: Additive Manufacturing with Metallic, Ceramics, Polymer and Composite Materials	Session 10 (西园厅 Xiyuan Hall) BM02-02: Novel Bioinks, Printing Technology and Equipment	Session 11 (第一会议室 No.1 Meeting Room) BM 06-02: Biomanufacturing for Disease Modeling, Cancer Study and Drug Testing	Session 12 (第八会议室 No.8 Meeting Room) AM03-01: Design, Simulation and Monitoring in Additive Manufacturing	Session 13 (中北厅 Zhong Bei Hall) BM07-03: Biomanuf. for Medical Devices, Orthopedics and Clinical Applications
12:10-13:30	Lunch (赏园 Shang Yuan, 东园 Dong Yuan, Building 5)						
13:30-15:15	Plenary Presentations 3: PP7-PP9 (银杏厅 Ginkgo Hall)						
15:15-15:35	Tea Break/Poster view/Exhibition (Building 1)						
15:35-18:00 Parallel Sessions	Session 14 (银杏 Ginkgo Hall) BM01-02 Biomanuf., Biomaterials and Tissue Engineering	Session 15 (第五会议室 No.5 Meeting Room) BM04-02 Biomanuf for Organoids, Organ-on-chips and Micro-physiological Systems	Session 16 (第六会议室 No.6 Meeting Room) AM02-02: New Process, Technology, and Equipment of Additive Manufacturing	Session 17 (西园厅 Xiyuan Hall) BM02-03: Novel Bioinks, Printing Technology and Equipment	Session 18 (第一会议室 No.1 Meeting Room) BM 05-01: Stem Cells, Complex Tissue and Organ Regeneration	Session 19 (第八会议室 No.8 Meeting Room) AM03-02: Design, Simulation and Monitoring in Additive Manufacturing	Session 20 (中北厅 Zhong Bei Hall) BM04-03 Biomanuf for Organoids, Organ-on-chips and Micro-physiological Systems

Thursday, October 15, 2026							
08:30-10:15	Plenary Presentations 4: PP10-PP12 (银杏厅 Ginkgo Hall)						
10:15-10:35	Tea Break/Poster view/Exhibition (Building 1)						
10:35-12:10 Parallel Sessions	Session 21 (银杏 Ginkgo Hall) BM01-03: Biomanuf., Biomaterials and Tissue Engineering	Session 22 (第五会议室 No.5 Meeting Room) BM07-04: Biomanuf. for Medical Devices, Orthopedics and Clinical Applications	Session 23 (第六会议室 No.6 Meeting Room) BM 03-01: Bionic Design, Modeling and Simulation in Biomanuf.	Session 24 (西园厅 Xiyuan Hall) BM02-04: Novel Bioinks, Printing Technology and Equipment	Session 25 (第一会议室 No.1 Meeting Room) BM 05-02: Stem Cells, Complex Tissue and Organ Regeneration	Session 26 (第八会议室 No.8 Meeting Room) BM 08-01: Technology Translation and Industrializat.	Session 27 (中北厅 Zhong Bei Hall) BM09-01: Sensing, Medical Robots, AI and Synthetic Biology in Biomanuf.
12:10-13:30	Lunch (赏园 Shang Yuan, 东园 Dong Yuan, Building 5)						
13:30-15:30 Parallel Sessions	Session 28 (第八会议室 No.8 Meeting Room) BM01-04: Biomanuf., Biomaterials and Tissue Engineering	Session 29 (第五会议室 No.5 Meeting Room) BM07-05: Biomanuf. for Medical Devices, Orthopedics and Clinical Applications	Session 30 (第六会议室 No.6 Meeting Room) BM 03-02: Bionic Design, Modeling and Simulation in Biomanuf.	Session 31 (西园厅 Xiyuan Hall) BM02-05: Novel Bioinks, Printing Technology and Equipment	Session 32 (第一会议室 No.1 Meeting Room) AM03-03: Design, Simulation and Monitoring in Additive Manufacturing	Session 33 (银杏 Ginkgo Hall) BM 08-02: Technology Translation and Industrializat.	Session 34 (中北厅 Zhong Bei Hall) BM09-02: Sensing, Medical Robots, AI and Synthetic Biology in Biomanuf.
15:40-16:00	Closing Ceremony (银杏厅, Ginkgo Hall)						

Technical Program

October 13, 2026

Opening Ceremony

13:30-13:50 Opening Ceremony

(银杏厅 Ginkgo Hall)

Chair: Wei Sun (孙伟)

13:50-14:10 Group Photo

14:10-16:10 Plenary Presentations 1

(银杏厅 Ginkgo Hall)

Chair: Feng Lin (林峰)

14:10-14:45 Plenary Presentation 1-1

Wenhe Liao, Professor, Nanjing University of Science and Technology, China; Perspectives on the Development of Intelligent Additive Manufacturing Technology and Equipment (廖文和 教授, 南京理工大学)

14:45-15:20 Plenary Presentation 1-2

Jianhua Zhang, Professor, Shanghai University, China; High Spatiotemporal Resolution Neural Signal Circuits and System Integration (张建华 教授, 上海大学)

15:20-15:55 Plenary Presentation 1-3

Xin Lin, Professor, Northwestern Polytechnical University, China; Oxide Control Strategies for High-Strength Steel Processed by Laser Powder Bed Fusion (林鑫 教授, 西北工业大学)

15:55-16:15 Tea Break/Poster/Exhibition

Session 01

(第五会议室 No.5 Meeting Room)

SBM07-01: Biomanufacturing for Medical Devices, Orthopedics and Clinical Applications

Co-Chair: Bin Li (李斌), Yuxiao Lai (赖毓霄)

16:15 – 16:35 Keynote

SBM07-01-KP01 - Intervertebral disc regeneration: biomaterials and multimodal mechano-regulation; Bin Li, Suzhou Medical College of Soochow University, China (李斌 苏州大学苏州医学院)

16:35 – 16:55 Keynote

SBM07-01-KP02 - 3D-Printed Bioactive Materials for Bone Regeneration; Yuxiao Lai, Shenzhen Institute of Advanced Technology, Chinese Academy of Sciences, China (赖毓霄, 中国科学院深圳先进技术研究院)

16:55 – 17:15 Keynote

SBM07-01-KP03 - Digital and Intelligent Oral Restoration: Independent Innovative R&D and Global Application; Yuchun Sun, Peking University School and Hospital of Stomatology, China (孙玉春, 北京大学口腔医院)

17:15 – 17:35 **Keynote**

SBM07-01-KP04 - **3D-Printed Antler-Inspired Porous Interfaces Loaded with Deer Antler-Derived Bioactive Substances for Enhanced Implant Osseointegration**; Jincheng Wang, The Second Hospital of Jilin University, China (王金成, 吉林大学白求恩第二医院)

17:35 – 17:45 **Oral**

SBM07-01-OP01 - **3D-Printed Strontium/Zinc-Ion-Doped Calcium Silicate Biomimetic Scaffolds for Bone-Defect Repair: Synergistic Effects of Material Composition and Pore Topology**; Huixin Liang, Nanjing Drum Tower Hospital, China (梁绘昕, 南京鼓楼医院)

17:45 – 17:55 **Oral**

SBM07-01-OP01 - **3D-Printed PVDF/BaTiO₃ Nanocomposites on Titanium Implants as Biomimetic Piezoelectric Scaffolds for Bone Regeneration**; Mehdi Khodaei, K. N. Toosi University of Technology, Iran (Mehdi Khodaei, 伊朗霍梅尼理工大学)

17:55 – 18:05 **Oral**

SBM07-01-OP02 - **Fabrication of a Solar-Assisted Self-Powered BP-WSe₂ Hydrogel Patch for Diabetic Wound Healing**; Xiaohan Ge, Hong Kong Baptist University, China (戈小寒, 香港浸会大学)

Session 02

(第六会议室 No.6 Meeting Room)

SAM01-01: Additive Manufacturing with Metallic, Ceramics, Polymer and Composite Materials

Co-Chair: Xiaoyong Tian (田小永), Yunsong Shi (史云松)

16:15 – 16:35 **Keynote**

SAM01-01-KP01 - **Additive Manufacturing of Multifunctional Continuous Fiber Reinforced Composites**; Xiaoyong Tian, Xi'an Jiaotong University, China (田小永, 西安交通大学)

16:35 – 16:55 **Keynote**

SAM01-01-KP02 - **Additive manufacture of polymer/magnetic composites for medical applications**; Yunsong Shi, Huazhong University of Science and Technology, China (史云松, 华中科技大学)

16:55 – 17:10 **Invited**

SAM01-01-IP01 - **Laser Additive Manufacturing of Titanium/Tantalum Alloys and Their Applications**; Changhui Song, South China University of Technology, China (宋长辉, 华南理工大学)

17:10 – 17:25 **Invited**

SAM01-01-IP02 - **Additive Manufacturing of Titanium-Based Gradient Materials for Aerospace Application**; Xu Cheng, Beihang University, China (程序, 北京航空航天大学)

17:25 – 17:35 **Oral**

SAM01-01-OP01 - **Suppression of cracking and high-strength IN738 alloy fabricated by laser directed energy deposition without preheating**; Zheng Li, Tsinghua University, China (李郑, 清华大学)

17:35 – 17:45 **Oral**

SAM01-01-OP02 - **Precision Shaping of Metals: Innovative Technology and Industrial Applications of Micro/Nano-Scale SLM Metal 3D Printing**; Zhuo Xie, Riton Additive Technology Co., Ltd., China (谢卓, 广州瑞通增材科技有限公司)

17:45 – 17:55 **Oral**

SAM01-01-OP03 - **Study on Process Monitoring, Microcrack Formation, and Elimination Mechanisms in Laser Additive Manufacturing of GH3230 Alloy**; You Wang, Tsinghua University, China (王优, 清华大学)

17:55 – 18:05 **Oral**

SAM01-01-OP04 - **Tailoring α precipitation in additively manufactured metastable- β**

TC18 alloy: A comparative study of direct aging and solution-aging; Yuhang Wang, Yantai Research Institute of Harbin Engineering University, China (王禹涵, 哈尔滨工程大学烟台研究院)

Session 03

(西园厅 Xiyuan Hall)

SBM02-01: Novel Bioinks, Printing Technology and Equipment

Co-Chair: Yeong Wai Yee (杨慧仪), James Armstrong

16:15 – 16:35 **Keynote**

SBM02-01-KP01 - Converging 3D Printed Electronics & Bioprinting towards Bioelectronics-Tissues Interfaces; Yeong Wai Yee, School of Mechanical and Aerospace Engineering, Nanyang Technological University, Singapore (Yeong Wai Yee, 新加坡南洋理工大学)

16:35 – 16:55 **Keynote**

SBM02-01-KP02 - Advances in Acoustic Bioassembly; James Armstrong, University of Bristol, UK (James Armstrong, 英国布里斯托大学)

16:55 – 17:15 **Keynote**

SBM02-01-KP03 - Multiphoton Lithography: Pushing the Boundaries of 3D Printing, Bioprinting, and Throughput; Aleksandr Ovsianikov, Vienna University of Technology, Austria (Aleksandr Ovsianikov, 奥地利维也纳工业大学)

17:15 – 17:35 **Keynote**

SBM02-01-KP04 - Scaffold-Free 3D Cell Printing Using the Kenzan Method for Tissue Regeneration and Clinical Translation; Koichi Nakayama, Saga University, Japan, (Koichi Nakayama, 日本佐贺大学)

17:35 – 17:55 **Keynote**

SBM02-01-KP05 - Bulk Acoustic Wave Bioassembly for Precision Biofabrication of Functional Tissue Constructs; Pu Chen, Wuhan University, China (陈璞, 武汉大学)

17:55 – 18:05 **Oral**

SBM02-01-OP01 - A microneedle substrate-based sutureless engineered cardiac patch for myocardial infarction repair; Zibo Liu, Tsinghua Shenzhen International Graduate School, China (刘子博, 清华大学深圳国际研究生院,)

Session 04

(第一会议室 No.1 Meeting Room)

SBM 06-01: Biomanufacturing for Disease Modeling, Cancer Study and Drug Testing

Co-Chair: Carlos Mota, Huayu Yang (杨华瑜)

16:15 – 16:35 **Keynote**

SBM06-01-KP01 - 3D Kidney Models for Fibrosis Research, Drug Discovery, and Regenerative Medicine; Carlos Mota, Maastricht University, The Netherlands (Carlos Mota 荷兰马斯特里赫特大学)

16:35 – 16:55 **Keynote**

SBM06-01-KP02 - From Scientific Concepts to Industrial Deployment: Translational Practice of Our 3D Bioprinting Technology, Tao Xu, Research Institute of Tsinghua University in Shenzhen, China (徐弢, 深圳清华大学研究院)

16:55 – 17:15 **Keynote**

SBM06-01-KP03 -3D Bioprinted Patient-Derived Tumor Avatars for Individualized Drug

Screening; Huayu Yang, Peking Union Medical College Hospital, Chinese Academy of Medical Sciences, China (杨华瑜, 中国医学科学院北京协和医院)

17:15 – 17:30 **Invited**

SBM06-01-IP01 - Establishment of Patient-Derived Gastric Cancer Organoids and Peripheral Blood Mononuclear Cells Co-culture Model for Personalized Drug Screening; Leping Yan, Sun Yat-sen University, China (严乐平, 中山大学)

17:30 – 17:45 **Invited**

SBM06-01-IP02 - Standardized Tumor Model Construction via an 3D Bioprinting Platform for Drug Screening Applications; Jingqi Hu, TissHUE Bio-manufacturing Technology Co., Ltd., China (胡京奇, 清源泰硕)

17:45 – 18:00 **Invited**

SBM06-01-IP03 - Biohybrid Anti-Pyroptosis Mesenchymal Stem Cell-Camouflaged Nanoparticles for Acute Liver Failure, Jinglin Wang, Nanjing Drum Tower Hospital (王经琳, 南京鼓楼医院)

18:00 – 18:10 **Oral**

SBM06-01-OP01 - Theranostic-Based Tumor Microenvironment Regulation; Guanghai Fei, Southeast University, China (费广海, 东南大学)

Session 05

(第八会议室 No.8 Meeting Room)

SAM02-01: New Process, Technology, and Equipment of Additive Manufacturing

Co-Chair: Bo Song (宋波), Yunfeng Zhang (张云峰)

16:15 – 16:35 **Keynote**

SAM02-01-KP01 - Multiphysics Design and Additive Manufacturing of Metallic Metamaterial Porous Scaffolds for Bone Repair; Bo Song, Huazhong University of Science and Technology, China (宋波, 华中科技大学)

16:35 – 16:55 **Keynote**

SAM02-01-KP02 -Dual-Robot Assisted Additive Manufacturing: Challenges and Solutions for Energy-efficient Path and Trajectory Planning; Yunfeng Zhang, National University of Singapore, Singapore (张云峰, 新加坡国立大学)

16:55 – 17:10 **Invited**

SAM02-01-IP01 - Recent Advances in Cross-Scale Hybrid Laser Precision Processing for Biomedical Materials; Yingchun Guan, Beihang University, China (管迎春, 北京航空航天大学)

17:10 – 17:25 **Invited**

SAM02-01-IP02 - Thermal-field engineering in metal additive manufacturing via liquid-metal-assisted laser powder bed fusion; Xiaoyu Liang, Tsinghua University, China (梁啸宇, 清华大学)

17:25 – 17:40 **Invited**

SAM02-01-IP03 - Laser Scanning Approach for Additive Manufacturing with Metal Powder Sheets; Wenyou Zhang, Xi'an Jiaotong University, China (张文友, 西安交通大学)

17:40 – 17:50 **Oral**

SAM02-01-OP01-3MF 驱动的多材料超声落粉 LPBF: 逐材料参数分配与系统闭环; Zhongyi Zhang, Chongqing Institute of Green and Intelligent Technology, Chinese Academy of Sciences, China (张中一, 中国科学院重庆绿色智能技术研究院,)

17:50 – 18:00 **Oral**

SAM02-01-OP02 - Laser Powder Bed Fusion of Crack-Free Nickel-Copper Multi-Material Structures, Chonghao Wang, Chongqing Institute of Green and Intelligent Technology,

Chinese Academy of Sciences, China (汪翀昊, 中国科学院重庆绿色智能技术研究院)
1800 – 18:10 **Oral**
SAM02-01-OP03 - **Decoding and Suppressing Crystallization during Metallic Glass Additive Manufacturing**; Zerong Yang, Tsinghua University, China (杨泽荣, 清华大学)

Session 06

(中北厅 Zhong Bei Hall)

SBM04-01: Biomanufacturing for Organoids, Organ-on-chips and Micro-physiological Systems

Co-Chair: Qi Gu (顾奇), Zaozao Chen (陈早早)

16:15 – 16:35 **Keynote**

SBM04-01-KP01 - **Multiscale Bioassembly and Fabrication of Physiological Structures**; Qi Gu, Institute of Zoology, Chinese Academy of Sciences, China (顾奇, 中国科学院动物研究所)

16:35 – 16:55 **Keynote**

SBM04-01-KP02 - **Construction of Organs-on-a-Chip based in vitro Physiological Functional Models and Disease Models**; Zaozao Chen, Southeast University, China (陈早早, 东南大学)

16:55 – 17:15 **Keynote**

SBM04-01-KP02 - **Organoid Bioprinting Towards Tissue Assembloids**; Yuan Pang, Tsinghua University, China (庞媛, 清华大学)

17:15 – 17:30 **Invited**

SBM04-01-IP01 - **Vascular microphysiological system**; Xiao Liu, Beihang University, China (刘肖, 北京航空航天大学)

17:30 – 17:45 **Invited**

SBM04-01-IP02 - **Biofabrication of Tumor Immune Microphysiological Systems for Precision Cancer Immunotherapy**; Yanmei Zhang, Beijing Academy of Science and Technology, China (张艳梅, 北京市科学技术研究院)

17:45 – 17:55 **Oral**

SBM04-01-OP01 - **Establishment of physiological and pathological organoids of the human upper and lower airways**; Baofeng Wang, Beijing Tsinghua Changgung Hospital, China (王宝凤, 北京清华长庚医院)

17:55 – 18:05 **Oral**

SBM04-01-OP02 - **3D-Printed Microfluidics for Micro-/Nano-Material Synthesis and Biomedical Applications**; Ming Ma, Shanghai Institute of Ceramics, Chinese Academy of Sciences, China (马明, 中国科学院上海硅酸盐研究所)

18:05 – 18:15 **Oral**

SBM04-02-OP02 - **Personalized Drug Screening Using 3D-Bioprinted Organoids to Guide Postoperative Adjuvant Chemotherapy for Pancreatic Cancer**; Zhendong Liao, Tsinghua University, China (廖振东, 清华大学)

18:30 Banquet

October 14, 2026

Plenary Presentations

8:30-10:30 Plenary Presentations 2
(银杏厅 Ginkgo Hall)
Chair: Zhuo Xiong (熊卓)

8:30-9:05 Plenary Presentation 2-1

Ye-Guang Chen, Professor, Nanchang University, China; Organoid Engineering for Human Physiology and Drug Evaluation (陈晔光 院士, 南昌大学)

9:05-9:40 Plenary Presentation 2-2

Dongdong Gu, Professor, Nanjing University of Aeronautics and Astronautics, China; Bio-inspired additive manufacturing of integral metallic components for functional enhancement, (顾冬冬 教授, 南京航空航天大学)

9:40-10:15 Plenary Presentation 2-3

MinJun Kim, Professor, University of Texas, USA; Bioinspired Manufacturing of Intelligent Medical Microrobots: From Functional Materials to Autonomous Systems, (MinJun Kim 教授, 美国德州大学)

10:15-10:35 Tea Break/Poster/Exhibition

Session 07

(银杏 Ginkgo Hall)

SBM01-01: Biomanuf., Biomaterials and Tissue Engineering

Co-Chair: Hongwei Ouyang (欧阳宏伟), Heungsoo Shin

10:35 – 10:55 Keynote

SBM01-01-KP01 - Assembly and Fabrication of Regenerative Elements for Bone Regeneration; Hongwei Ouyang, Zhejiang University, China (欧阳宏伟, 浙江大学)

10:55 – 11:15 Keynote

SBM01-01-KP02 - Engineering 3D Vascularized Tissues for Regenerative Medicine; Heungsoo Shin, Hanyang University, Korea (Heungsoo Shin, 韩国汉阳大学)

11:15 – 11:30 Invited

SBM01-01-IP01 - Biomimetic Extracellular Matrix Materials for Tissue Regeneration and Repair; Zujian Feng, Nankai University, China (冯祖建, 南开大学)

11:30 – 11:45 Invited

SBM05-01-IP04 -3D Brain-like Constructs for Dementia Recognize Recovery; Yu Song, Tsinghua University, China (宋宇, 清华大学,)

11:45 – 11:55 Oral

SBM01-01-OP01 - Bioadhesive Patch for Sutureless Intestinal Repair; Xiaoqian Li, The Second Affiliated Hospital of Air Force Medical University, China (李晓倩, 中国人民解放军空军军医大学第二附属医院)

11: 55– 12:05 Oral

SBM01-01-OP02 - Nanoengineered extrusion-aligned tract bioprinting enables functional repair of spinal cord injuries; Wenhui Huang, Institute of Zoology, Chinese Academy of Sciences, China (黄文慧, 中国科学院动物研究所)

Session 08

(第五会议室 No.5 Meeting Room)

SBM07-02: Biomanuf. for Medical Devices, Orthopedics and Clinical Applications

Chair: Quanyi Guo (郭全义), Xiaolin Tu (涂小林)

10:35 – 10:55 **Keynote**

SBM07-02-KP01 - Regeneration of Meniscus Cartilage Scaffold by 3D Printing; Quanyi Guo, General Hospital of the People's Liberation Army, China (郭全义 解放军总医院)

10:55 – 11:15 **Keynote**

SBM07-02-KP02 - State-of-the-art: A Concept for the Design of Intelligent Biomaterials in Bone Repair; Xuenong Zou, The First Affiliated Hospital of Sun Yatsen University, China (邹学农, 中山大学附属第一医院)

11:15 – 11:35 **Keynote**

SBM07-02-KP03 - Unlocking the Skeleton's "Sixth Sense": Osteocyte Sensing—Osteoclasts Act First—Coupled with Bone Formation to Achieve the Biomanufacturing of Real Bone Xiaolin Tu, Chongqing Medical University, China (涂小林, 重庆医科大学)

11:35 – 11:55 **Keynote**

SBM07-02-KP04 - 3D-Printed PCL/ACM Composite Scaffolds via Low-Temperature Deposition Manufacturing for Cartilage Regeneration; Jianjun You, Plastic Surgery Hospital, Chinese Academy of Medical Sciences and Peking Union Medical College, China (尤建军, 中国医学科学院整形外科医院)

11:55 – 12:10 **Invited**

SBM07-02-IP 01 - 3D Bioprinted Bone Tissue Engineering Scaffolds and Their Applications ; Boqing Zhang, Sichuan University, China (张勃庆, 四川大学)

Session 09

(第六会议室 No.6 Meeting Room)

SAM01-02: Additive Manufacturing with Metallic, Ceramics, Polymer and Composite Materials

Co-Chair: Di Wang (王迪), Yang Chen (陈旸)

10:35 – 10:55 **Keynote**

SAM01-02-KP01 - Research on Laser Powder Bed Fusion (LPBF) Metal Additive Manufacturing Technology; Di Wang, South China University of Technology, China (王迪, 华南理工大学)

10:55 – 11:15 **Keynote**

SAM01-02-KP02 - R&D and Manufacturing of Metal Additive Manufacturing; Yang Chen, Nanjing University of Science and Technology, China (陈旸, 南京理工大学)

11:15 – 11:30 **Invited**

SAM01-02-IP01 - Cold spray additive manufacturing of TiNbMoB intermetallic by using a pre-alloyed powder mixture followed by hot isostatic pressing; Xiaotao Luo, Xi'an Jiaotong University, China (雒晓涛, 西安交通大学)

11:30 – 11:45 **Invited**

SAM01-02-IP03 - Research on long-life repair technology for dual-laser cladding and forging; Jun Yao, Institute of Engineering Thermophysics, Chinese Academy of Sciences, China (姚俊, 中科院工程热物理所)

11:45 – 11:55 **Oral**

SAM01-02-OP01-Microstructure-Guided Design of Aluminum Alloys for Additive Manufacturing; Qiuju Zheng, Chongqing Institute of Green and Intelligent Technology, Chinese Academy of Sciences, China (郑秋菊, 中国科学院重庆绿色智能技术研究院)

11:55-12:05 **Oral**

SAM01-02-OP02 - Atmosphere-dependent thermal decomposition behavior and kinetics of vat-photopolymerized ceramic core green bodies; Siyu Zhang, Tsinghua University, China (张思宇, 清华大学)

12:05-12:15 **Oral**

SAM01-02-OP03 - Tailoring In Situ Reactions in Laser Powder Bed Fusion of Titanium Matrix Composites, Xinyue Zeng, Chongqing Institute of Green and Intelligent Technology, Chinese Academy of Sciences, China (曾忻悦, 中国科学院重庆绿色智能技术研究院)

Session 10

(西园厅 Xiyuan Hall)

SBM02-02: Novel Bioinks, Printing Technology and Equipment

Co-Chair:Yudong Zheng (郑裕东), Zhengwei You (游正伟)

10:35 – 10:55 **Keynote**

SBM02-02-KP01 - The Design, Preparation and Tissue Repair of Bioelastomers and Implants with the Aid of AI, Yudong Zheng, University of Science and Technology Beijing, China (郑裕东, 北京科技大学)

10:55 – 11:15 **Keynote**

SBM02-02-KP02 - Biomimetic elastomers, 3D printing and their biomedical applications; Zhengwei You, Donghua University, China (游正伟, 东华大学)

11:15 – 11:35 **Keynote**

SBM02-02-KP03 - Structured Bioinks and Subvoxel Bioprinting: SHIFT the Shape of Direct Ink Writing; Liliang Ouyang, Tsinghua University, China (欧阳礼亮, 清华大学)

11:35 – 11:50 **Invited**

SBM02-02-IP01 - Dual-Crosslinked Thermosensitive Hydrogel for Spatiotemporally Sequential Drug Delivery in 3D-Bioprinted Diabetic Wound Dressings; Chunyu Wu, Harbin Institute of Technology, China (吴春亚, 哈尔滨工业大学)

11:50 – 12:00 **Oral**

SBM02-02-OP01 - Synthesis and Applications of Norbornene-Collagen; Kai Guo, Shenyang Institute of Automation, Chinese Academy of Sciences, China (郭凯, 中国科学院沈阳自动化研究所)

Session 11

(第一会议室 No.1 Meeting Room)

SBM 06-02: Biomanufacturing for Disease Modeling, Cancer Study and Drug Testing

Co-Chair:Xin Gao (高新), Bo Zhang(张波)

10:35 – 10:55 **Keynote**

SBM06-02-KP01 - An disruptive surgery technology - in synchronous resection of visible tumor with clearance of ITC (isolated tumor cell) under guidance of molecular fluorescence; Xin Gao, Guangzhou Shiyun Biotechnology Co., Ltd., China(高新, 广州仕鲲生物技术有限公司)

10:55 – 11:15 **Keynote**

SBM06-02-KP02-Medical-Engineering Integration in Urology: Original "Bo" Techniques from Bench to Bedside; Bo Zhang, Tangdu Hospital, Air Force Medical University (Fourth Military Medical University), China (张波, 空军军医大学唐都医院)

11:15 – 11:35 **Keynote**

SBM06-02-KP03-**Embodied Organoids: From Biochips to Swarm Robots**; Liyu Liu, Fudan University, China (刘雳宇, 复旦大学)

11:35 – 11:50 **Invited**

SBM06-02-IP01 - **Bioengineered Vascular Equivalents for In Vitro Disease Modeling**; Ge Gao, Beijing Institute of Technology, China (高戈, 北京理工大学)

11:50 – 12:00 **Oral**

SBM06-02-OP01 - **Engineering soft and perfusable human tissues by mechanically programmable bioprinting for neurovascular disease modeling**; Wanlu Li, Shanghai Jiao Tong University, China (李婉露, 上海交通大学)

12:00 – 12:10 **Oral**

SBM06-02-OP02 - **Spatiotemporally Controlled Delivery of MMP13-Targeting Extracellular Vesicles via a Hierarchical Hydrogel Platform for Disease Modification in Osteoarthritis**; Rui Liu, Shenzhen University, China (刘睿, 深圳大学)

12:10– 12:20 **Oral**

SBM06-02-OP3 - **Multi-Scale Bioprinted Arterial Models Recapitulate Synergistic Microenvironmental Interactions in Vascular Disease**; Qi Li, Hangzhou Normal University, China (李琦, 杭州师范大学)

Session 12

(第八会议室 No.8 Meeting Room)

SAM03-01: Design, Simulation and Monitoring in Additive Manufacturing

Co-Chair: Jerry Fuh (傅盈西), Tingting Liu(刘婷婷)

10:35 – 10:55 **Keynote**

SAM03-01-KP01 - **Smart Manufacturing Assistant: Leveraging Multimodal Large Language Models and Multi-Agent Systems for 3D Printing**; Jerry Fuh, National University of Singapore, Singapore (傅盈西, 新加坡国立大学)

10:55 – 11:15 **Keynote**

SAM03-01-KP02 - **Multifunctional Structure Design and Additive Manufacturing**; Tingting Liu, Nanjing University of Science and Technology, China (刘婷婷, 南京理工大学)

11:15 – 11:30 **Invited**

SAM03-01-IP01 - **Design and Vat Photopolymerization Additive Manufacturing of 3D-Architected SiC-Based High-Temperature Ceramic Metamaterials with Programmable Near-Zero Thermal Expansion**; Qin Lian, Xi'an Jiaotong University, China (连琴, 西安交通大学)

11:30 – 11:45 **Invited**

SAM03-01-IP02 - **AI-based instability-driven curvature fields enable multiscale structure inverse design**; Yuanhao Wu, Huazhong University of Science and Technology, China (吴远昊, 华中科技大学)

11:45 – 11:55 **Oral**

SAM03-01-OP01 - **Bionic Design and Additive Manufacturing of Low-Frequency Broadband Vibration Isolation Structures**; Lei Yang, Huazhong University of Science and Technology, China (杨磊, 华中科技大学)

11:55 – 12:05 **Oral**

SAM03-01-OP02 - **Bionic Metastructures with Superior Compressive Strength and Designable Acoustic Absorption**; Zhengzhi Mu, Jilin University, China (穆正知, 吉林大学)

Session 13

(中北厅 Zhong Bei Hall)

SBM07-03:Biomanuf. for Medical Devices, Orthopedics and Clinical Applications

Co-Chair: Zhiwu Han, Longqiu Li (韩志武, 李隆球)

10:35 – 10:55 **Keynote**

SBM07-03-KP01 - High-Performance Mechanical Sensing: Bionic Theory and Design,

Zhiwu Han, Jilin University, China (韩志武, 吉林大学)

10:55 – 11:15 **Keynote**

SBM07-03-KP02 - Bioinspired Soft Hysteroscopic Robot for Intelligent Diagnosis and Treatment of Uterine Cavity Diseases;

Longqiu Li, Harbin Institute of Technology, China (李隆球, 哈尔滨工业大学)

11:15 – 11:30 **Invited**

SBM07-03-IP01 - Biointegrated Microdevices for Targeted and Responsive Therapy; Rujie Sun, University of Southampton, United Kingdom (孙汝杰, 英国南安普顿大学)

11:30 – 11:45 **Invited**

SBM07-03-IP02 - Magnetic miniature robots for in vivo intervention; Ben Wang, Shenzhen University, China (王奔, 深圳大学)

11:45 – 12:00 **Invited**

SBM07-03-IP03 - Metastructure-Driven Innovation & Translation of Bone Graft Materials and Devices; Chao Wang, Beihang University, China (王超, 北京航空航天大学)

12:00 – 12:15 **Invited**

SBM07-03-IP04 - 4D Printed Self-bending Sodium Alginate Composite Scaffold laden with Nano-spherical Mineralized Collagen for Bone repair; Xiaojie Lian, Taiyuan University of Technology, China (连小洁, 太原理工大学)

12:10-13:30 Lunch

(赏园 Shang Yuan、东园 Dong Yuan, Building 5)

October 14, 2026

Plenary Presentations

13:30-15:15 Plenary Presentations 3

(银杏厅 Ginkgo hall)

Chair: Yong He (贺永)

13:30-14:05 Plenary Presentation 3-1

Zhuo Xiong, Professor, Tsinghua University, China; Exploration and Innovation of Organoid 3D Bioprinting (熊卓 教授, 清华大学)

14:10-14:50 Plenary Presentation 3-2

Chunze Yan, Professor, Huazhong University of Science and Technology, China; Additive manufacturing of continuous fiber reinforced ceramic matrix composites (闫春泽 教授, 华中科技大学)

14:50-15:30 Plenary Presentation 3-3

Will Shu, Professor, University of Strathclyde, UK; 4D Biofabrication for Vascularization (Will Shu 教授, 英国斯特克莱德大学)

15:30-15:50 Tea Break/Poster/Exhibition

Session 14

(银杏厅 Ginkgo Hall)

SBM01-02: Biomanufacturing, Biomaterials and Tissue Engineering

Co-Chair: Yunbing Wang (王云兵), Haobo Pan (潘浩波)

15:50 – 16:10 Keynote

SBM01-02-KP01 - Innovative research and development of minimally invasive interventional devices for heart disease treatment; Yunbing Wang, Sichuan University, China (王云兵, 四川大学)

16:10 – 16:30 Keynote

SBM01-02-KP02 - Advances and Perspectives in Regenerative Biomaterials; Haobo Pan, Shenzhen Institute of Advanced Technology, Chinese Academy of Sciences, China (潘浩波, 中国科学院深圳先进技术研究院)

16:30 – 16:50 Keynote

SBM01-02-KP03 - Nanomaterials-Assisted Engineering of Stem Cells for Brain Injury Repair; Jichuan Qiu, Shandong University, China (仇吉川, 山东大学)

16:50 – 17:10 Keynote

SBM01-02-KP04 - Programming Luminal Tissue Function through Structure–Flow Coupling; Hongzhao Zhou, Zhejiang University, China (周竑钊, 浙江大学)

17:10 – 17:30 Keynote

SBM01-02-KP05 - Biomanufacturing-enabled personalized theranostic drug delivery materials and implantable device construction; Xufeng Niu, Beihang University, China (牛旭锋, 北京航空航天大学)

17:30 – 17:45 Invited

SBM01-02-IP01 - Multiscale manufacturing of Janus membranes for oral tissue regeneration; Xu Zhang, Peking University School and Hospital of Stomatology, China (张

旭, 北京大学口腔医学院)

17:45 – 18:00 **Invited**

SBM01-02-IP02 - **Micro/nano Biomanufacturing**; Liang Ma, Zhejiang University, China (马梁, 浙江大学)

18:00 – 18:10 **Oral**

SBM01-01-OP01 - **Shear-extensional in situ particle-to-fibre transformation (SHIFT) of aligned hydrogel microfibres for muscle tissue engineering**; Dezhi Zhou, Tsinghua University, China (周德志, 清华大学)

Session 15

(第五会议室 No.5 Meeting Room)

SBM04-02: Biomanufacturing for Organoids, Organ-on-chips and Micro-physiological Systems

Co-Chair: Dong Sung Kim, Yanhua Li (李艳华)

15:50 – 16:10 **Keynote**

SBM04-02-KP01 - **Engineering Biophysical Microenvironments to Regulate In Vitro Organogenesis and Morphogenesis**; Dong Sung Kim, POSTECH, Korea (Dong Sung Kim, 韩国浦项科技大学)

16:10 – 16:30 **Keynote**

SBM04-02-KP02 - **Vapor-Phase Additive Fabrication of Ultrathin Transparent Bioelectronic Interfaces via Initiated Chemical Vapor Deposition**; Hyejeong Seong, Korea Institute of Science & Technology, Korea (Hyejeong Seong, 韩国科学技术研究院)

16:30 – 16:50 **Keynote**

SBM04-02-KP03 - **Biomechanics-driven Organ on Chip**; Di Huang, Taiyuan University of Technology, China (黄棣, 太原理工大学)

16:50 – 17:10 **Keynote**

SBM04-02-KP04 - **Neural regulation of pancreatic cancer and islet function**; Zhigang Zhang, Shanghai Cancer Institute, China (张志刚, 上海市肿瘤研究所)

17:10-17:30 **Keynote**

SBM04-02-KP05 - **In vitro generation of hematopoietic cells and bone marrow organoids**; Yanhua Li, Academy of Military Medical Sciences (李艳华, 军事医学研究院)

17:30-17:45 **Invited**

SBM04-02-IP01 - **Cell assembly for biomedical engineering**; Kui Zhou, Nanchang University, China (周奎, 南昌大学)

17:45 – 18:00 **Invited**

SBM04-02-IP02 - **Engineering Organ-on-a-Chip for Disease Modeling and Drug Discovery: A Convergence of Biomaterials, Microfluidics, and Machine Learning**; Zhengkun Chen, Xiamen University, China (陈政锬, 厦门大学)

18:00 – 18:10 **Oral**

SBM04-02-OP01 - **Construction of intestinal organoids by 3D bioprinting**; Jie Huang, Suzhou Institute of Nano-Tech and Nano-Bionics, Chinese Academy of Sciences, China (黄洁, 中国科学院苏州纳米技术与纳米仿生研究所)

Session 16

(第六会议室 No.6 Meeting Room)

SAM02-02: New Process, Technology, and Equipment of Additive Manufacturing

Chair: Kai TANG (汤凯), Chao Wei (韦超)

15:50 – 16:10 **Keynote**

SAM02-02-KP01 - Process Planning of Multi-axis FDM Additive Manufacturing; Kai TANG, Hong Kong University of Science and Technology, China (Kai Tang, 香港科技大学)

16:10 – 16:25 **Invited**

SAM02-02-IP01 - Progress in Multi-Material Laser Powder Bed Additive Manufacturing; Chao Wei, Ningbo Institute of Materials Technology and Engineering, Chinese Academy of Sciences, China (韦超, 中国科学院宁波材料所)

16:25 – 16:40 **Invited**

SAM02-02-IP02 - Multi-material laser powder bed fusion and application in aerospace; Dianzheng Wang, Institute of Engineering Thermophysics, Chinese Academy of Sciences, China (王殿政, 中国科学院工程热物理研究所)

16:40 – 16:55 **Invited**

SAM02-02-IP03 - Research on High-Efficiency Metal Droplet Jetting and Forming Additive Manufacturing Based on Multi-Electrode Arc Melting; Shengyong Pang, Huazhong University of Science and Technology, China (庞盛永, 华中科技大学)

16:55 – 17:10 **Invited**

SAM02-02-IP04 - 3D-Printed Flexible Multi-mode Sensors: From Functional Materials and Bioinspired Structures to Physically Interpretable Pressure-Torsion Decoupling; Yu Long, Guangxi University, China (龙雨, 广西大学)

17:10 – 17:25 **Invited**

SAM02-02-IP05 - The solid-state additive manufacturing of super-light Mg-Li alloys: the control between microstructure and mechanical&corrosion behavior; Mengran Zhou, Tsinghua University, China (周梦然, 清华大学)

17:25 – 17:35 **Oral**

SAM02-02-OP01 - Integrated Process Planning for Consistent Deposition in Robotic Direct Ink Writing; Kai Ren, Zhejiang University, China (任凯, 浙江大学)

17:35 – 17:45 **Oral**

SAM02-02-OP02 - Fabrication Technology of Multifunctional Flexible Sensors via Laser Direct Writing; Li Yang, Hebei University of Technology, China (杨丽, 河北工业大学)

17:45 – 17:55 **Oral**

SAM02-02-OP03 - Multi-Material Laser Powder Bed Fusion: Horizontal and Vertical Interfaces; Qimin Shi, Harbin Engineering University, China (石齐民, 哈尔滨工程大学)

17:55 – 18:05 **Oral**

SAM02-02-OP04 - Periodic Topology-Driven 316L/IN718 Multi-Material Structural Systems for Strength–Toughness Synergy; Dan Yang, Harbin Engineering University, China (杨丹, 哈尔滨工程大学)

18:05 – 18:15 **Oral**

SAM02-02-OP05 - Research Progress in Process and Equipment Intelligence for Metal Powder Bed Fusion Additive Manufacturing; Hongming Chen, Tsinghua University, China (陈泓铭, 清华大学)

Session 17

(西园厅 Xiyuan Hall)

SBM02-03: Novel Bioinks, Printing Technology and Equipment

Co-Chair: Jiankang He (贺健康), Cijun Shuai (帅词俊)

15:50 – 16:10 **Keynote**

SBM02-03-KP01 - Innovation on microscale electrohydrodynamic printing for cellular alignment; Jiankang He, Xi'an Jiaotong University, China (贺健康, 西安交通大学)

16:10 – 16:30 **Keynote**

SBM02-03-KP02 - 高端医疗器械精准制造——生物高分子粉体的球化与打印技术; Cijun Shuai, Jiangxi University of Science and Technology, China (帅词俊, 江西理工大学)

16:30 – 16:50 **Keynote**

SBM02-03-KP03 - Directing Cellular Functions Using Physical and Biochemical Cues; Khoon Lim, University of Sydney, Australia, (Khoon Lim, 澳大利亚悉尼大学)

16:50-17:10 **Keynote**

SBM02-03-KP04 - Microfibers in Particle-Based Hydrogels for Biofabricating Biomaterial Constructs with Dynamic Mechanical Properties and Porosity; Chris Highley, University of Virginia, USA (Chris Highley, 美国弗吉尼亚大学)

17:10 – 17:25 **Invited**

SBM02-03-IP01 - Bionic Design of High-Performance Anti-Reflective Surfaces; Ze Wang, Jilin University, China (王泽, 吉林大学)

17:25 – 17:35 **Oral**

SBM02-03-OP01 - Electrohydrodynamic Printing of Micro/nanofibrous Conductive Cardiac Scaffolds and Their Functions; Qi Lei, Taiyuan University of Technology, China (雷奇, 太原理工大学)

17:35 – 17:45 **Oral**

SBM02-03-OP02 - Gelatinized Microparticle-Embedded Suspension Bath for Bioprinting; Shuai Li, The First Affiliated Hospital, Zhejiang University School of Medicine, China (李帅, 浙江大学医学院附属第一医院)

17:45 – 17:55 **Oral**

SBM02-03-OP03 - Transparentized 3D Bioprinting; Shangting You, University of Science and Technology of China, China (游尚挺, 中国科学技术大学)

17:55 – 18:05 **Oral**

SBM02-03-OP04 - Fabrication of non-spherical microgels via reshaping in shear-extensional flow; Bohan Dou, Tsinghua University, China (窦博瀚, 清华大学)

Session 18

(第一会议室 No.1 Meeting Room)

SBM05-01: Stem Cells, Complex Tissue and Organ Regeneration

Chair/Co-Chair: Zibing Jin (金子兵), Yong He (贺永)

15:50 – 16:10 **Keynote**

SBM05-01-KP01 - Culture of dendritic cells in fibronectin-collagen hydrogel to reconstruct communication of ECM to the adaptive immune system; Jong-Young Kwak, Ajou University, Republic of Korea (Jong-Young Kwak, 韩国亚洲大学)

16:10 – 16:30 **Keynote**

SBM05-01-KP02 - Retinal regeneration with induced pluripotent stem cells; Zibing Jin, Beijing Tongren Hospital, Capital Medical University, China (金子兵, 首都医科大学附属北京同仁医院)

16:30 – 16:50 **Keynote**

SBM05-01-KP03 - **Explorations on 3D printed tissues/organs**; Yong He, Zhejiang University, China (贺永, 浙江大学)

16:50 – 17:10 **Keynote**

SBM05-01-KP04 - **Engineering Functional Human Liver Tissues: From 3D-Bioprinted Bioartificial Organs to Dynamic Disease Models**; Pengyu Huang, Chinese Academy of Medical Sciences & Peking Union Medical College, China (黄鹏羽, 中国医学科学院北京协和医学院)

17:10 – 17:25 **Invited**

SBM05-01-IP01-**The influence of culture dimensions on mesenchymal stem cell differentiation and its mechanisms**, Weijie Peng, Gannan Medical University, China (彭维杰, 赣南医学院)

17:25 – 17:40 **Invited**

SBM05-01-IP02-**3D cultured stem cell delivery system for the treatment of corneal chemical injury**, Yun Feng, Peking University Third Hospital, China (冯云, 北京大学第三医院)

17:40 – 17:55 **Invited**

SBM05-01-IP03 - **Stem Cell Biomanufacturing and Regenerative Medicine**; Leisheng Zhang, Shandong Second Medical University, China (张磊升, 山东第二医科大学)

Session 19

(第八会议室 No.8 Meeting Room)

SAM03-02: Design, Simulation and Monitoring in Additive Manufacturing

Chair: Wentao Yan (闫文韬), Huiliang Wei (韦辉亮)

15:50 – 16:10 **Keynote**

SAM03-02-KP01 - **Intelligent additive manufacturing: from multi-physics modeling to AI-driven prediction and diagnostics**; Wentao Yan, National University of Singapore, Singapore (闫文韬, 新加坡国立大学)

16:10 – 16:30 **Keynote**

SAM03-02-KP02 - **Design and Additive Manufacturing of Integrated Functional Structures for Thermoplastic Composites**; Wei Chen, Beijing Key Laboratory of Power Beam Additive Manufacturing Technology and Equipment, China (陈玮, 高能束流增材制造技术与装备北京市重点实验室)

16:30 – 16:45 **Invited**

SAM03-02-IP01 - **Process monitoring and defect control for laser powder bed fusion**; Huiliang Wei, Nanjing University of Science and Technology, China (韦辉亮, 南京理工大学)

16:45 – 17:00 **Invited**

SAM03-02-IP02 - **Melt pool dynamics in electron beam powder bed fusion: Insights from comparison with laser powder bed fusion**; Chaochao Wu, Fuzhou University, China (吴潮潮, 福州大学)

17:00 – 17:15 **Invited**

SAM03-02-IP03 - **Study on the Microstructure, Properties, and Biocompatibility of Ti-35Nb-15Zr (at. %) Alloy Fabricated by Laser Powder Bed Fusion**; Jun Zhou, Guangxi University, China (周俊, 广西大学)

17:15 – 17:25 **Oral**

SAM03-02-OP01 - **Geometry-Aware GPU Phase-Field Simulation of Polycrystalline Solidification in Additive-Manufacturing Melt Pools**; Hanwei Wang, Institute of Engineering Thermophysics, Chinese Academy of Sciences, China (王汉伟, 中国科学院工程热物理所)

17:25 – 17:35 **Oral**

SAM03-02-OP02 - **Bioinspired 4D Printing of Liquid Crystal Elastomer Materials**; Bingqian Li, Jilin University, China (李冰倩, 吉林大学)

17:35 – 17:45 **Oral**

SAM03-02-OP03 - **Microstructural Evolution and Tribological Performance of Laser-Cladded Multiscale Composite Coatings for Aerospace Titanium Actuating Components**; Jinhan Chen, AVIC Manufacturing Technology Institute, China (陈金瀚, 中国航空制造技术研究院)

17:45 – 17:55 **Oral**

SAM03-02-OP04 - **Injection Printing: Shell-Mold Additive Manufacturing with Injection-Filled Cores**; Ranran Jian, Qingdao University of Science and Technology, China (鉴冉冉, 青岛科技大学)

17:55 – 18:05 **Oral**

SAM03-02-OP05 - **Additive Manufacturing with Metallic, Ceramics, Polymer and Composite Materials**; Fangfeng Li, Yantai Research Institute of Harbin Engineering University, China (李芳烽, 烟台哈尔滨工程大学研究院)

Session 20

(中北厅 Zhong Bei Hall)

SBM04-03: Biomanufacturing for Organoids, Organ-on-chips and Micro-physiological Systems

Co-Chair: Ling Leng (冷冷), Yuanyuan Liu (刘媛媛)

15:50 – 16:10 **Keynote**

SBM04-03-KP01 - **Human Organoids: From Construction to Disease-Oriented Applications**; Ling Leng, Peking Union Medical College Hospital, Chinese Academy of Medical Sciences & Peking Union Medical College, China (冷冷, 中国医学科学院北京协和医院)

16:10 – 16:30 **Keynote**

SBM04-03-KP02 - **Controlled Bioprinting Technology and Its Applications for Organoid-Laden Constructs**; Yuanyuan Liu, Shanghai University, China (刘媛媛, 上海大学)

16:30 – 16:50 **Keynote**

SBM04-03-KP03 - **3D Biomanufacturing and Functional Evaluation of Brain-Mimetic Tissue Models and Brain-on-a-Chip Systems**; Ling Wang, Xi'an Jiaotong University, China (王玲, 西安交通大学)

16:50 – 17:10 **Keynote**

SBM04-03-KP04 - **Microdroplet-engineered organoids and immune microenvironment construction**; Shaohua Ma, Tsinghua Shenzhen International Graduate School, Tsinghua University, China (马少华, 清华大学深圳国际研究生院)

17:10 – 17:20 **Oral**

SBM04-03-OP01 - **A Viscoelastic Suspension Culture Strategy for Standardized Generation of Blood Vessel Organoid-Based Building Blocks for Bioprinting**; Zhaoyu Pan, Xi'an Jiaotong University, China (潘兆宇, 西安交通大学)

17:20 – 17:30 **Oral**

SBM04-03-OP02 - **Hydrogel Material Mediation of Cell Spheroids and Organoids**; Hon Son Ooi, Tsinghua University, China (黄鸿森, 清华大学)

17:30 – 17:40 **Oral**

SBM04-03-OP03 - **A Modular Building-Block Strategy for Scalable Cardiac Assembloid Biofabrication**; Binhan Li, Tsinghua University, China (李彬寒, 清华大学)

17:40 – 17:50 **Oral**

SBM04-03-OP04 - **3D Bioprinted Neural Model for Opioid Neurotoxicity Assessment and Machine Learning-Based Classification**; Kamto Yang, Tsinghua University, China (杨锦途,

清华大学)

17:50 – 18:00 **Oral**

SBM04-03-OP05 - **Oxygen- Enhanced Assembloid- Based Vascularized Intestinal- on- a
- Chip for Radioprotective Drug Evaluation;** Yuting Guo, Tsinghua University, China (郭育
廷, 清华大学)

October 15, 2026

Plenary Presentations

8:30-10:15 Plenary Presentations 4

(银杏厅 Ginkgo Hall)

Chair: Chenzhong Li (李晨钟)

8:30-9:05 Plenary Presentation 4-1

Gong Wang, Professor, Technology and Engineering Center for Space Utilization, Chinese Academy of Sciences, China; Vision on Space Factory, (王功 教授, 中国科学院空间应用工程与技术中心)

9:05-9:40 Plenary Presentation 4-2

Yan Wei: Professor, Fabrication of nanomaterials for multi-modality tumor theragnosis and smart devices via self-assembly and 3D Printing, Tsinghua University, (危岩 教授, 清华大学)

9:40-10:15 Plenary Presentation 4-3

Shoufeng Yang, Professor, Harbin Engineering University, China; From music to sand painting: Multi-material additive manufacturing (杨守峰 教授, 哈尔滨工程大学)

10:15-10:35 Tea Break/Poster/Exhibition

Session 21

(银杏厅 Ginkgo Hall)

SBM01-03: Biomanufacturing, Biomaterials and Tissue Engineering

Co-Chair: Qian Yang (杨倩), Jiajia Xue (薛佳佳)

10:35 – 10:55 **Keynote**

SBM01-03-KP01 - The Canonical and Non-canonical Functions of RNase III Drosha in Neuronal Stress Responses; Qian Yang, Tangdu Hospital, Air Force Medical University (Fourth Military Medical University), China (杨倩, 空军军医大学唐都医院)

10:55 – 11:15 **Keynote**

SBM01-03-KP02 - Deciphering and Reconstructing the Biomechanical Microenvironment of Tissue Fibrosis; Yanan Du, Tsinghua University, China (杜亚楠, 清华大学)

11:15 – 11:35 **Keynote**

SBM01-03-KP03 - Biomedical Polymer Scaffold Materials for Tissue Regeneration; Jiajia Xue, Beijing University of Chemical Technology, China (薛佳佳, 北京化工大学)

11:35 – 11:55 **Keynote**

SBM01-03-KP04 - Bioenergetic-active Materials for Multi-Tissue Regeneration; Yingying Du, Huazhong University of Science and Technology, China (杜莹莹, 华中科技大学)

11:55 – 12:05 **Oral**

SBM01-03-OP01 - From Programmable Architectures to Active Bionic Microenvironments: Multiscale Biofabrication for Neural Repair and Modeling; Hui Zhu, Xi'an Jiaotong University, China (朱卉, 西安交通大学)

12:05 – 12:15 **Oral**

SBM01-03-OP02 - **Multiscale Biofabrication of an In Vitro Blood–Brain Barrier Model with a Spatially Controlled Neural Microenvironment**; Chenyujun Hu, Tsinghua University, China (胡晨钰君, 清华大学)

Session 22

(第五会议室 No.5 Meeting Room)

SBM07-04: Biomanufacturing for Medical Devices, Orthopedics and Clinical Applications

Co-Chair: Yujiang Fan (樊渝江), Changchun Zhou (周长春)

10:35 – 10:55 **Keynote**

SBM07-04-KP01 - **Additive Manufacture of Collagen/polysaccharide Based Biomaterials for Bone and Cartilage Regeneration**; Yujiang Fan, Sichuan University, China (樊渝江, 四川大学)

10:55 – 11:15 **Keynote**

SBM07-04-KP02 - **Innovative Personalized Precision Medical Devices Fabricated by Bioprinting and Its Clinical Translation Application**; Changchun Zhou, Sichuan University, China (周长春, 四川大学)

11:15 – 11:30 **Invited**

SBM07-04-IP01 - **Additive Manufacturing of ECM-Mimetic Bone Scaffolds and Their Bone Regeneration Effects**; Haijian Zhong, Gannan Medical University, China (钟海舰, 赣南医科大学)

11:30 – 11:45 **Invited**

SBM07-04-IP02 - **Osteocyte-Inspired Microenvironment Engineering for hiPSC-MSC-Based 3D Biomanufacturing of Bone Regeneration**; Chengzhu Zhao, Chongqing Medical University, China (赵成珠, 重庆医科大学)

11:45 – 11:55 **Oral**

SBM07-04-OP01 - **Biomimetic printed adhesive microneedle enables a novel strategy for efficient oral mucosal drug delivery**; Zhu Zhou, West China Stomatological Hospital of Sichuan University, China (朱舟, 四川大学华西口腔医院)

11:55 – 12:05 **Oral**

SBM07-04-OP02-**Hydrogel Microsphere-Based Alveolar Models for Toxicity Assessment and Pathogen Infection Studies**; Chang Zhou, Tsinghua University, China (周畅, 清华大学)

Session 23

(第六会议室 No.6 Meeting Room)

SBM 03-01:

Bionic Design, Modeling and Simulation in Biomanuf.

Co-Chair: Deyuan Zhang (张德远), Kelvin Yeung

10:35 – 10:55 **Keynote**

SBM03-01-KP01-**Advances in Bionic Manufacturing of Micro/Nano Structures and Functions**; Deyuan Zhang, Beihang University, China (张德远, 北京航空航天大学)

10:55 – 11:15 **Keynote**

SBM03-01-KP02-Stimuli-Responsive Nanomaterials for Infection-Resistant Orthopaedic Implants: A Precision Biointerface Strategy Beyond Passive Antibacterial Coatings; Kelvin Yeung, The University of Hong Kong, China (Kelvin Yeung, 香港大学)

11:15 – 11:35 **Keynote**

SBM03-01-KP03-Additive Manufacturing as the Enabler of the Dual-Mode Biomimetic Design: Unlocking Mechanobiological Signalling for Bone Regeneration; Antonio Apicella, University of Campania, Italy (Antonio Apicella, 意大利坎帕尼亚大学)

11:35 – 11:50 **Invited**

SBM03-01-IP01-Regulation mechanism of mechanical microenvironment on os-teogenic behavior in porous scaffolds; Lan Li, Nanjing Drum Tower Hospital, China (李澜, 南京鼓楼医院)

11:50 – 12:00 **Oral**

SBM03-01-OP01-Engineering science of LPBF-fabricated patient-specific mandibular implants: Integrating biomechanical design, manufacturing science, and experimental validation; Shengping Zhong, Chinese Academy of Sciences, China (钟昇平, 中国科学院)

12:00 – 12:10 **Oral**

SBM03-01-OP02-Sacrificial Granular Armor: Stress Channeling and Interfacial Dissipation in Biological Nanocomposite Coatings; Yifan He, Nanchang University, China (何依凡, 南昌大学)

Session 24

(西园厅 Xiyuan Hall)

SBM02-04: Novel Bioinks, Printing Technology and Equipment

Co-Chair: Maling Gou (苟马玲), Lin Feng (冯林)

10:35 – 10:55 **Keynote**

SBM02-04-KP01-Bioprinting for Cell Delivery Using Cell-adaptive Hydrogel; Maling Gou, West China Hospital, Sichuan University, China (苟马玲, 四川大学华西医院)

10:55 – 11:15 **Keynote**

SBM02-04-KP02-Physical Field-Driven Biomedical Systems: From Optoelectronic Tweezers to Micro/Nano Robotics; Lin Feng, Beihang University, China (冯林, 北京航空航天大学)

11:15 – 11:35 **Keynote**

SBM02-04-KP03-Organoid based safety evaluation on nanomedicine and nanomaterials; Xiangdong Kong, Zhejiang Sci-Tech University, China (孔祥东, 浙江理工大学)

11:35 – 11:50 **Invited**

SBM02-04-IP01-Microfluidic sorting-based droplet printing; Pengfei Zhang, Beihang University, China (张鹏飞, 北京航空航天大学)

11:50 – 12:05 **Invited**

SBM02-04-IP02-Femtosecond projection two-photon printing technology for biomanufacturing; Jiebo Li, Beihang University, China (李介博, 北京航空航天大学)

12:05 – 12:15 **Oral**

SBM02-04-OP01-Aligned Lubricated Short Nanofibers Enable Cartilage-Mimetic Hydrogels with Mechanical Toughening, Piezoelectric Amplification, and Anisotropic Friction; Yisong Liu, Huazhong University of Science and Technology, China (刘毅松, 华中科技大学)

Session 25

(第一会议室 No.1 Meeting Room)

SBM 05-02:

Stem Cells, Complex Tissue and Organ Regeneration

Co-Chair: Jun Li (李君), Xiaorong Xu (徐晓嵘)

10:35 – 10:55 **Keynote**

SBM05-02-KP01-Liver Failure and Engineering Liver Regeneration; Jun Li , Zhejiang University, China (李君, 浙江大学)

10:55 – 11:15 **Keynote**

SBM05-02-KP02-From Vision to Reality: Strategies for Functional Vascularization in Bioprinted Artificial Organs; Xiaorong Xu , Suzhou Institute for Advanced Research, University of Science and Technology of China, China (徐晓嵘, 中科大苏州高研院)

11:15 – 11:35 **Keynote**

SBM05-02-KP03-Rich-voxel design and high-precision manufacturing technologies for the fabrication of complex biological tissues and organs; Xiongfei Zheng, Shenyang Institute of Automation, CAS, China (郑雄飞, 中国科学院沈阳自动化研究所)

11:35 – 11:50 **Invited**

SBM05-02-IP01-Tissue engineering retina; Wei Wu , General Hospital of the People's Liberation Army, China (吴畏, 301 医院)

Session 26

(第八会议室 No.8 Meeting Room)

SBM 08-01:

Technology Translation and Industrializat.

Co-Chair: Xiaowen Zhao (赵小文) , Yuliang Liu (刘玉亮)

10:35 – 10:55 **Keynote**

SBM08-01-KP01-从医用增材制造监管体系奠基到新质生产力前沿布局, Bin Liu, Medical Device Technical Review and Inspection Center, Dawan Branch, National Medical Products Administration (NMPA), China (刘斌, 国家药品监督管理局医疗器械技术审评检查大湾区分中心)

10:55 – 11:15 **Keynote**

SBM08-01-KP02-From Scientific Concepts to Industrial Deployment: Translational Practice of Our 3D Bioprinting Technology , Tao Xu, Research Institute of Tsinghua University in Shenzhen, China (徐弢, 深圳清华大学研究院)

11:15 – 11:35 **Keynote**

SBM08-01-KP03-Multi-Type Human Skin Chip: Product Development and Application Scenarios, Yuliang Liu, East China Normal University, China (刘玉亮, 华东师范大学)

11:35 – 11:50 **Invited**

SBM08-01-IP01-Research and Clinical Translation of 3D-Printed Personalized Implants: An Additive Manufactured Patient-Matched Cranial Repair System, Xiaowen Zhao, Shenzhen Excellent Technology Co., Ltd., China (赵小文, 深圳市艾科赛龙科技股份有限公司)

11:35 – 11:50 **Invited**

SBM08-01-IP02-Organoid 3D Printing and Physics-Informed Intelligent Sensing: Research and Applications; Ming'en Xu, Hangzhou Dianzi University, China (徐铭恩, 杭州电子科技大学)

11:50 – 12:05 **Invited**

SBM08-01-IP03- AI-Powered Single-Cell In-Situ Manipulation System; Bing Li, Sinboda biotechnology (Zhejiang) Co., Ltd, China (李炳, 辛伯至科技(浙江)有限责任公司)

Session 27

(中北厅 Zhong Bei Hall)

SBM09-01: Sensing, Medical Robots, AI and Synthetic Biology in Biomanuf.

Co-Chair: Liming Bian (边黎明), Feng Xu (徐峰)

10:35 – 10:55 **Keynote**

SBM09-01-KP01-Biometric heterogeneous hydrogels for 3D culture; Liming Bian, South China University of Technology, China (边黎明, 华南理工大学)

10:55 – 11:15 **Keynote**

SBM09-01-KP02-AI for Science at the Medical-Engineering Interface: From Bioprinting to Digital Mechanomedicine; Feng Xu, Xi'an Jiaotong University, China (徐峰, 西安交通大学)

11:15-11:30 **Invited**

SBM09-01-IP01-AI-assisted volumetric bioprinting of full-thickness skin; Maobin Xie, Guangzhou Medical University, China (谢茂彬, 广州医科大学)

11:30-11:40 **Oral**

SBM09-01-OP01-Alginate Hydrogel-Based Novel Oral Contrast Agent Designed for Gastric Computed Tomography Imaging; Xiaoqiang Shang, Nanchang University, China (尚小强, 南昌大学)

11:40-11:50 **Oral**

SBM09-01-OP02-Magnetically guided shape-changing microneedle robot for targeted oral combinatorial drug delivery; Yuyang Zuo, University of Oxford, Oxford, UK (左宇扬, 英国牛津大学)

11:50-12:10 **Oral**

SBM09-01-OP03-Fabrication of Liquid Metal-Hydrogel Integrated Sensors via Suspension Printing and The Multimodal Sensing Detection; Xinpeng Wang, University of Health and Rehabilitation Sciences, China (王新鹏, 康复大学)

12:10-12:20 **Oral**

SBM09-01-OP04-A Blood-Brain Barrier Organ-on-a-Chip with Integrated Electrophysiological Sensing; Daiyao Chen, Xi'an Jiaotong University, China (陈代耀, 西安交通大学)

12:10-13:30 Lunch

(赏园 Shang Yuan、东园 Dong Yuan, Building 5)

Session 28

(第八会议室 No.8 Meeting Room)

SBM01-04:

Biomanuf., Biomaterials and Tissue Engineering

Co-Chair:Lei Yang (杨磊), Ke Yang (杨柯)

13:30 – 13:50 **Keynote**

SBM01-04-KP01-Tuning Injectability and Mechanical-Processing Behavior of Biomedical Materials for Additive Manufacturing; Lei Yang, Hebei University of Technology, China (杨磊, 河北工业大学)

13:50 – 14:10 **Keynote**

SBM01-04-KP02-3D printed Cu-bearing titanium alloy scaffold with multi-biofunctions; Ke Yang, Institute of Metal Research, Chinese Academy of Sciences, China (杨柯, 西安中科院金属所)

14:10 – 14:30 **Keynote**

SBM01-04-KP03-3D Bioprinting Technologies for the Fabrication of Biomimetic Tissue Models; Ting Zhang, Tsinghua University, China (张婷, 清华大学)

14:30 – 14:50 **Keynote**

SBM01-04-KP04-Data- and Physics-Informed Design of Skin Scaffolds for Tailored Drug Delivery; Peng Zhang, Harbin Institute Of Technology, China (张鹏, 哈尔滨工业大学)

14:50 – 15:05 **Invited**

SBM01-04-IP01-Construction of an In Vitro Blood – Brain Barrier Model with Controlled Spatial Positioning of Neurons; Lei Zhang, Tsinghua University, China (张磊, 清华大学)

15:05 – 15:20 **Invited**

SBM01-04-IP02-Fabrication of Elastin-based Biomaterials for Versatile Applications; Zhongwei Guo, Zhengzhou University, China (郭钟伟, 郑州大学)

15:20 – 15:30 **Oral**

SBM01-04-OP01-Engineering Macro-Scale Injury-Resistant Biliary Trees in Decellularized Liver Scaffolds; Shiwen Ma, The First Affiliated Hospital, Zhejiang University School of Medicine, China (马诗雯, 浙江大学医学院附属第一医院)

15:30 – 15:40 **Oral**

SBM01-04-OP03-Intelligent Design and Precision Fabrication of Mechanically Adaptive Structures for Tissue Regeneration; Liya Zhu, Nanjing Normal University, China (朱莉娅, 南京师范大学)

Session 29

(第五会议室 No.5 Meeting Room)

SBM07-05:

Biomanuf. for Medical Devices, Orthopedics and Clinical Applications

Chair: Peng Wen (温鹏), Wei Rong (容威)

13:30 -13:50 Keynote

SBM07-05-KP01-Additively Manufactured Biodegradable Metal Implants for Bone Defect Repair; Peng Wen, Tsinghua University, China (温鹏, 清华大学)

13:50-14:05 Invited

SBM07-05-IP01-Innovation and application of key technologies for high-quality wound repair; Jun Deng, Third Military Medical University, China (邓君, 中国人民解放军陆军军医大学)

14:05-14:20 Invited

SBM07-05-IP02-The Application and Challenges of 3D Printing in Spinal Tumors; Wei Rong, Beijing Tsinghua Changgung Hospital, China (容威, 清华长庚医院)

14:20-14:35 Invited

SBM07-05-IP03-Development-Inspired Osteocyte-Derived Acellular Matrix Bioink for 3D-Printed In Situ Bone Regeneration; Jiafeng Chen, Chongqing Medical University, China (陈嘉峰, 重庆医科大学)

14:35 – 14:45 Oral

SBM07-05-OP01-A BioLiving Periosteum Evokes Centripetal Regeneration in Challenging Bone Defects; Yang Shi, Stomatology Hospital, Zhejiang University School of Medicine, China (史洋, 浙江大学医学院附属口腔医院)

14:45 – 14:55 Oral

SBM07-05-OP02-Deployable 3D-Printed Vascular Stent with Surface-Catalysed Endogenous Nitric Oxide Generation; Kun Zhou, The University of Sydney, Australia (周琨, 澳大利亚悉尼大学)

14:55 – 15:05 Oral

SBM07-05-OP03-MS-encapsulated porous microparticle eye drops for autoimmune dry eye disease treatment in NOD mice; Taige Chen, Shenzhen University, China (陈泰格, 深圳大学)

15:05 – 15:15 Oral

SBM07-05-OP04-3D printing programmed diagnostic and therapeutic bioactive “all-in-one” microspheres with multistimuli responsiveness for cartilage regeneration; Feifei Zhou, Zhejiang University, China (周飞飞, 浙江大学)

15:15 – 15:25 Oral

SBM07-05-OP05-Robotic arm-Assisted In Situ Bioprinting Platform for Personalized and Precision Treatment of Deep Load-Bearing Bone Defects; Chenmin Wang, Shenzhen Institute of Advanced Technology, Chinese Academy of Sciences, China (王陈旻, 中国科学院深圳先进技术研究院)

Session 30

(第六会议室 No.6 Meeting Room)

SBM03-02:

Bionic Design, Modeling and Simulation in Biomanuf.

Co-Chair: Huawei Chen (陈华伟), Jie Liu(刘杰)

13:30 – 13:50 **Keynote**

SBM03-02-KP01-Bioinspired Surface and Miniature Smart System for Precision

Medicine, Huawei Chen, Beihang University, China (陈华伟, 北京航空航天大学)

13:50 – 14:10 **Keynote**

SBM03-01-KP02 - The construction and application of complex tumor organ-on-a-chip; Jie

Liu, Sun Yat-sen University, China (刘杰, 中山大学)

14:10 – 14:25 **Invited**

SBM03-02-IP01-仿生功能表面模板微纳制造技术, Shichao Niu, Jilin University, China
(牛士超, 吉林大学)

14:25 – 14:40 **Invited**

SBM03-02-IP02-Engineering Highly Aligned Cardiac Tissues via Hydrogel Remodeling in 3D-Printed Microfibrous Architectures; Mao Mao, Xi'an Jiaotong University, China (毛茅, 西安交通大学)

14:40 – 14:55 **Invited**

SBM03-02-IP03-Research on the Design and Manufacturing of Bioinspired Robots with locomotion intelligence; Kunyang Wang, Jilin University, China (王坤阳, 吉林大学)

14:55 – 15:10 **Invited**

SBM03-01-IP04-Myocardium-Vasculature Conformal 3D Printing Strategy; Yongcong Fang, Tsinghua University, China (方永聪, 清华大学)

15:10 – 15:20 **Oral**

SBM03-02-OP01-Bioinspired Micro/Nanostructured Surfaces for Purely Physical Antibacterial and Immunomodulatory Applications; Rujian Jiang, Shandong First Medical University, Shandong Academy Of Medical Sciences, China (蒋如剑, 山东第一医科大学)

15:20 – 15:30 **Oral**

SBM03-02-OP02-Visual Servo-Based Robotic 3D Printing on Moving Surfaces with Real-Time Trajectory Adaptation; Jianping Shi, Nanjing Normal University, China (施建平, 南京师范大学)

Session 31

(西园厅 Xiyuan Hall)

SBM02-05: Novel Bioinks, Printing Technology and Equipment

Co-Chair:Jie Na (那洁), Ximu Zhang (张曦木)

13:30 – 13:50 **Keynote**

SBM02-05-KP01-Engineering Vascularized and Immunized Organoids for Regenerative Medicine; Jie Na, Tsinghua University, China (那洁, 清华大学)

13:50 – 14:10 **Keynote**

SBM01-05-KP02-Extracts from Chinese giant salamander mucus promote periodontal regeneration; Ximu Zhang, Chongqing Medical University, China (张曦木, 重庆医科大学)

14:10 – 14:30 **Keynote**

SBM01-05-KP03 - An in situ hydrogel bioink induces self-aggregation of human cells for in vitro and in vivo tissue modeling; Sangjin Lee, University of Hong Kong, China (Sangjin Lee, 香港大学)

14:30 – 14:45 **Invited**

SBM02-05-IP01-Engineered coacervates as emerging liquid biomaterials; Pengchao Zhao, South China University of Technology, China (赵鹏超, 华南理工大学)

14:45 – 15:00 **Invited**

SBM02-05-IP02-Engineering Microgels for Advanced Biomedical Applications; Guosheng Tang, Guangzhou Medical University, China (唐国胜, 广州医科大学)

15:00 – 15:10 **Oral**

SBM02-05-OP01-Development of Human-like Skin Materials and Investigation of the 3D Printing Process; Zhen Wang, Yanshan University, China (王真, 燕山大学)

15:10 – 15:20 **Oral**

SBM02-05-OP02-Engineering microporous silk-tropoelastin bioresins through protein self-assembly for light-based biofabrication; Anh Hien Tran, University of Sydney, Australia (Anh Hien Tran, 澳大利亚悉尼大学)

15:20 – 15:30 **Oral**

SBM02-05-OP03-Toward High-Performance Neural Electrode Interfaces through Surface Modification; Linze Li, Fuzhou University, China (李霖泽, 福州大学)

Session 32

(第一会议室 No.1 Meeting Room)

SAM03-03: Design, Simulation and Monitoring in Additive Manufacturing

Chair: Kun Li (李坤), Gaoqiang Chen (陈高强)

13:30 – 13:50 **Keynote**

SAM03-03-KP01 - Data-Driven Additive Manufacturing Technology for Lightweight High-Strength Metals: Research and Prospects; Kun Li, Chongqing University, China (李坤, 重庆大学)

13:50 – 14:05 **Invited**

SAM03-03-IP1 - A computational fluid dynamic model for thermal-mechanical-flow coupled process during Additive Friction Stir Deposition; Gaoqiang Chen, Tsinghua University, China (陈高强, 清华大学)

14:05 – 14:20 **Invited**

SAM03-03-IP02-Physics-AI Foundation Models for Advanced Manufacturing; Xuyang Chen,

Institute of Engineering Thermophysics, Chinese Academy of Sciences, China (陈旭阳, 中科院工程热物理所)

14:20 – 14:30 **Oral**

SAM03-03-OP01 - **Liquid Metal Hot Pool Assisted Low-Stress Directed Energy Deposition;** Jichang Xie, Tsinghua University, China (谢继昌, 清华大学)

14:30 – 14:40 **Oral**

SAM03-03-OP02 - **PCS-FNO: A PDE-Coupled Dual-Domain Fourier Neural Operator for Small-Data Multiphysics Simulation;** Wenbo Zhou, Institute of Mechanics, Chinese Academy of Sciences, China (周文波, 中国科学院力学研究所)

14:40 – 14:50 **Oral**

SAM03-03-OP03 - **Quantitative Investigation of Aluminum Evaporation and Composition Evolution in TiAl Alloy during Electron Beam Powder Bed Fusion;** Cheng Lian, Fuzhou University, China (练铨, 福州大学)

14:50 – 15:00 **Oral**

SAM03-03-OP04 - **Programming Reaction – Transport Coupling to Overcome the Activity-Permeance Trade-Off in SiC Catalytic Membranes;** Rongkun Jiang, Nanjing Tech University, China (江荣坤, 南京工业大学)

15:00 – 15:10 **Oral**

SAM03-03-OP05 - **3D Printing of Cordierite Ceramics for Ceramic-Metal Multi-Material Integration;** Mindi Zhang, Harbin Engineering University, China (张敏迪, 哈尔滨工程大学)

15:10 – 15:20 **Oral**

SAM03-03-OP08 - **Spatiotemporal continuous neural operator for real-time temperature field prediction in laser directed energy deposition;** Zhuohan Cao, Tsinghua University, China (曹倬菡, 清华大学)

15:20 – 15:30 **Oral**

SAM03-03-OP09 - **Intelligent Process Monitoring and Quality Assessment for Laser Powder Bed Fusion: From Multi-Source Sensing to State Prediction;** Yingjie Zhang, South China University of Technology, China (张英杰, 华南理工大学)

Session 33

(银杏 Ginkgo Hall)

SBM08-02:Technology Translation and Industrializat.

Co-Chair: Xiaofeng Chen (陈晓峰), Nan Yang(杨楠)

13:30 – 13:50 **Keynote**

SBM08-02-KP01-**Research and Clinical Application of the New Generation of Bioactive Glasses;** Xiaofeng Chen, South China University of Technology, China (陈晓峰, 华南理工大学)

13:50 – 14:10 **Keynote**

SBM08-02-KP02-**资本视角下生物制造的技术转化与投资机遇 Capital Perspectives on Technological Translation and Investment Opportunities in Biomanufacturing;** Nan Yang, Ginkgo Capital Management Co., Ltd., China (杨楠, 银杏资本)

14:10 – 14:25 **Invited**

SBM08-02-IP01-**Promoting the Translation of Medical Device Innovations Through Proof of Concept;** Hu Cai, Shaanxi Medical Products Administration, China (蔡虎, 陕西省药品监督管理局)

14:25 – 14:40 **Invited**

SBM08-02-IP02-**Concept validation and development of medical 3D printing;** Jiahe Liang,

Tangdu Hospital, Air Force Medical University, China (梁嘉赫, 唐都医院)

14:40 – 14:55 **Invited**

SBM08-02-IP03-Research on the Application of Curdlan Ink Materials in Cartilage Tissue Engineering; Ling Ding, Northwest Normal University, China (丁玲, 西北师范大学)

14:55 – 15:40 **Roundtable Forum 圆桌论坛**

Moderator 主持人: 杨楠 Nan Yang

Invited Panelist 特邀嘉宾:

贺晓光 Xiaoguang He, 冯亮 Liang Feng, 陈晓峰 Xiaofeng Chen, 梁嘉赫 Jiahe Liang, 蔡虎 Hu Cai, 刘玉亮 Yuliang Liu, 李炳 Bing Li.

Session 34

(中北厅 Zhong Bei Hall)

SBM09-02: Sensing, Medical Robots, AI and Synthetic Biology in Biomanuf.

Co-chair: Chenzhong Li (李晨钟), Qing Cai (蔡晴)

13:30 – 13:50 **Keynote**

SBM09-02-KP01-3D Acoustic Printing of Microelectrode for in vivo Brain-Computer Interface; Chenzhong Li, Chinese University of Hong Kong, Shenzhen China (李晨钟, 香港中文大学)

13:50 – 14:10 **Keynote**

SBM09-02-KP02-Piezoelectrical biomaterials designed for enhanced bone and cartilage regeneration; Qing Cai, Beijing University of Chemical Technology (蔡晴, 北京化工大学)

14:10 – 14:30 **Keynote**

SBM09-02-KP03-Fusion by Design, Precision by Intelligence: Bioinspired Cage Manufacturing and AI-Assisted Placement for Spinal Fusion; Bo Liao, Tangdu Hospital, Air Force Medical University, China (廖博, 唐都医院)

14:30 – 14:45 **Invited**

SBM09-02-IP01-Fabrication and Control of Magnetically Actuated Micro- and Nanorobots for Biomedical Applications; U Kei Cheang, Southern University of Science and Technology, China (U Kei Cheang, 南方科技大学)

14:45 – 15:00 **Invited**

SBM09-02-IP02-Exploring advanced manufacturing techniques for flexible sensing structures toward biomedical applications; Xiao Li, Xi'an Jiaotong University, China (李骁, 西安交通大学)

15:00 – 15:15 **Invited**

SBM09-02-IP01-In situ Printing of Imperceptible Skin Bioelectronic Interface for Physiological Monitoring and Gesture Recognition; Wenyu Wang, Hong Kong University of Science and Technology (Guangzhou), China (王文宇, 香港科技大学(广州))

15:15 – 15:25 **Oral**

SBM09-02-OP01-3D Hydrogel-Fiber Organic Electrochemical Transistor Networks as Bioelectronic Scaffolds for Future Neural Interfaces; Yan Li, The Hong Kong University of Science and Technology (Guangzhou), China (李延, 香港科技大学(广州))

15:25 – 15:35 **Oral**

SBM09-02-OP02-Self-Powered Thermogalvanic Gel E-skins for Human Full-Domain Perception; Hulin Zhang, Taiyuan University of Technology, China (张虎林, 太原理工大学)

15:40-16:00 Closing Ceremony (银杏 Ginkgo Hall)

Poster Presentation List

	ID	Title	Name	Affiliate
1	30	Near-Infrared-Responsive Microneedle Delivery of Kaempferia parviflora-Derived Extracellular Vesicles for Antioxidant and Anti-Inflammatory Wound Repair	李子跃	深圳大学
2	40	Solvent-free extrusion-based 3D printing of citrate-derived elastomers	高子力	西湖大学
3	46	3D Bioprinted Microgel-based Hydrogel for Vascularized Tissue Engineering and Immune Tolerance	王新环	中国科学院动物研究所
4	48	Three-Dimensional Culture of Primary Hepatocytes in a Single-Cell Layer by Indirect Co-culture of Fibroblasts	HUE VY AN TRAN	Ajou University
5	52	Microfluidic and Phase Separation-Based Fabrication of Nanozyme Microsphere Eye Drops for Corneal Alkali Burn Treatment	张馨雨	深圳大学
6	61	Degradation Mechanisms of Pure Ta and Mo Protective Coatings in High-Temperature Liquid Tin for Additive Manufacturing	罗海光	清华大学
7	69	Cryopreservative Bioink Enables Direct Bioprinting of Adherent Cells	赵喜源	中国科学院动物研究所
8	70	Electron Beam-Laser Hybrid Manufacturing of Crack-Free γ' -Strengthened Superalloy	焦沫涵	清华大学
9	79	3D Bioprinting of Living Bone Grafts Using Human iPSC-MSCs and Rabbit Bone-Derived dECM for Segmental Bone Defect Repair	王刘庆	重庆医科大学
10	80	Microstructure Evolution and Silicide Characteristics of Nb-Si High-Temperature Alloys Fabricated by Different Processing Routes	韦林良	清华大学
11	82	Dynamic Investigation of Immune Cell Recruitment in Response to Porphyromonas gingivalis Biofilms Using a Gingival-Vascular Interface-on-a-Chip	胡纯卓	重庆医科大学附属口腔医院（重庆市口腔医院）
12	89	Ultrasound responsive microneedles for sequential antibacterial and immune	俞祺	深圳大学

		regulation in keratitis treatment		
13	95	Toward a Stable Forming Interface in Liquid Metal-assisted Laser Powder Bed Fusion: Material Compatibility, Thermal Uniformity and Level Accuracy of the Forming Vat System	曾敬	清华大学
14	109	A microneedle substrate-based sutureless engineered cardiac patch for myocardial infarction repair	刘子博	清华大学深圳国际研究生院
15	120	3D-printed Multimodal Flexible Sensor with Bionic Lily Structure for Physics-Explainable Decoupling of Pressure and Torsion	赵弘煊	广西大学

Guidelines for Presentations

ICAM-BM2026

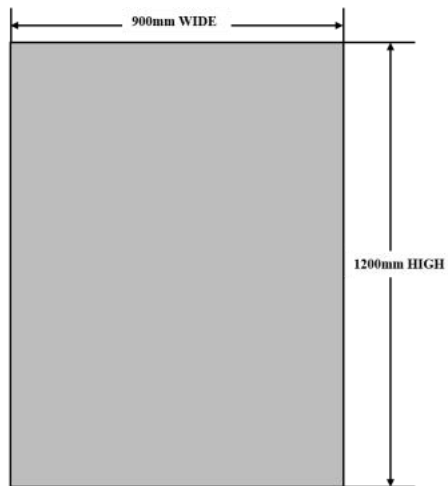
Preparation for Oral Presentation

1. Plenary talks: Presentation time: **35 minutes**, including Q/A.
 2. Keynote talks: Presentation time: **20 minutes**, including Q/A.
 3. Invited talks: Presentation time: **15 minutes**, including Q/A.
 4. General oral presentations: **10 minutes**, including Q/A.
- ◆ Presentation language: English Presentation is recommended. **The PPT is required in English version.**
 - ◆ Presentations format: Microsoft PowerPoint.
 - ◆ Screen size: **16:9** - 银杏厅 Gingko hall、金缘厅 Jin Yuan、Room 1/5/6/7/8;
4:3 - 中北 Zhong Bei、西园 Xi Yuan、Room 3
 - ◆ Computers onsite will be available. Personal computers are allowed.

Instructions for Poster Presentation

Posters must be prepared in English. The poster presentations will be held at Building No.1 in Beijing Xijiao Hotel. **Poster set-up will begin from 8:00am - 12:00pm on Oct. 13, 2026.** Double sided adhesive will be provided on each poster board. **Teardown** will occur following the last session on **Oct. 15, 2026.**

- ◆ Poster Format: Size of the poster should not be larger than **900mm WIDE×1200mm HIGH.**



- ◆ Poster Structure: Your poster should preferably contain the following elements: **Title, Author(s) & Institution(s) (Positioned at the Top), Introduction, Methods, Results, & Discussion, and Conclusions**, Images and/or Graphs are strongly encouraged.
- ◆ Posters will be viewed during the entire meeting, and your presence is recommended during lunches and coffee breaks for discussion with those who are interested in viewing your poster.

General Information

Conference Venue

The independent conference center has 22 meeting rooms with different styles, which can accommodate from 10 to 500 people. It is suitable for any types of conferences and business events. Ginkgo hall can accommodate 500 people, which combines classical and gorgeous styles together, and is equipped with separate sound room and stage lightings.

Transportation

The Xi Jiao Hotel (http://www.xijiao-hotel.com.cn/en_US/) is located in Zhongguancun High-tech Development Zone, convenient to many universities including Tsinghua University and Peking University. This Beijing hotel has more than 400 guest rooms ranging from single rooms to suites equipped with satellite TVs, international direct dial telephones, Internet access and mini bars. On-site dining outlets serve Chinese, Japanese and Korean dishes. For business travelers, this Beijing hotel provides a business center and various well-equipped conference rooms. In terms of relaxation, guests can burn calories at the gym, pay a visit to the spa or go bowling.

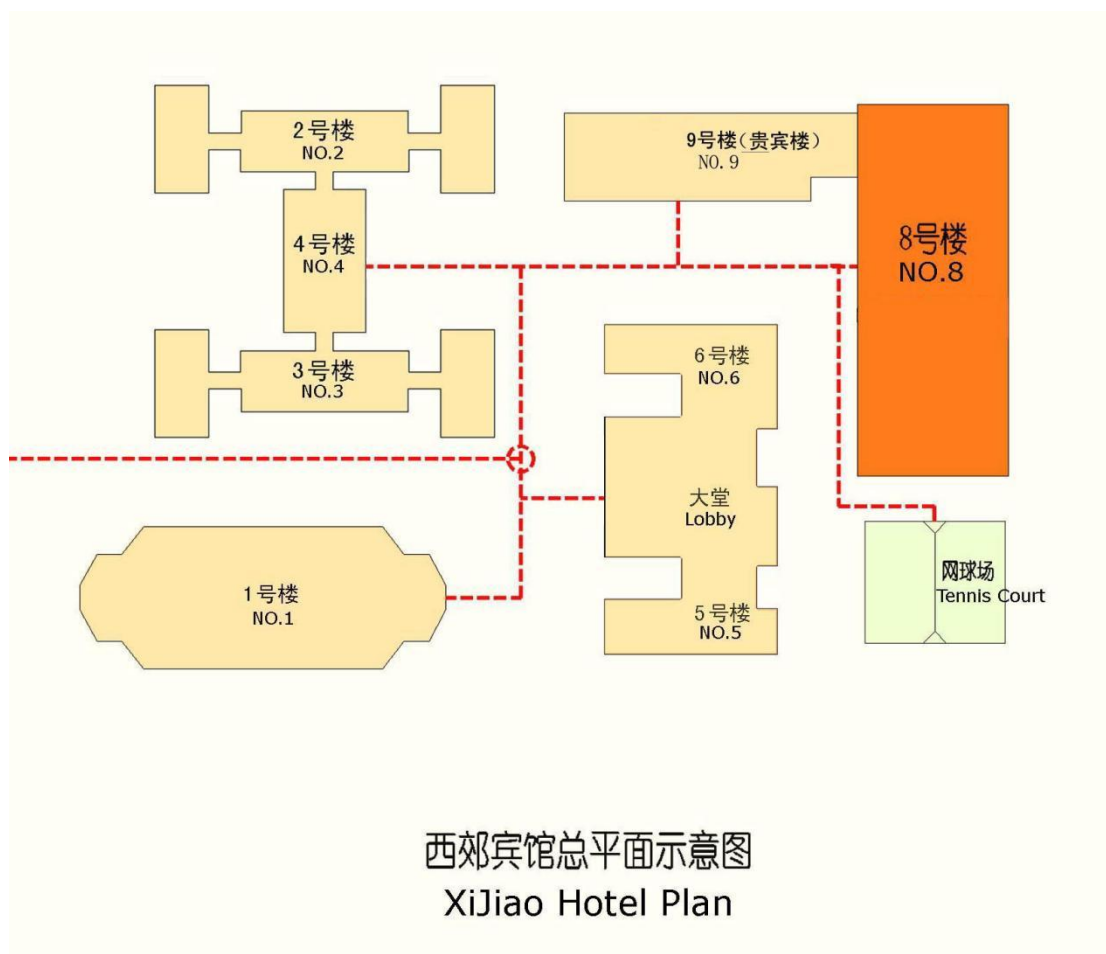
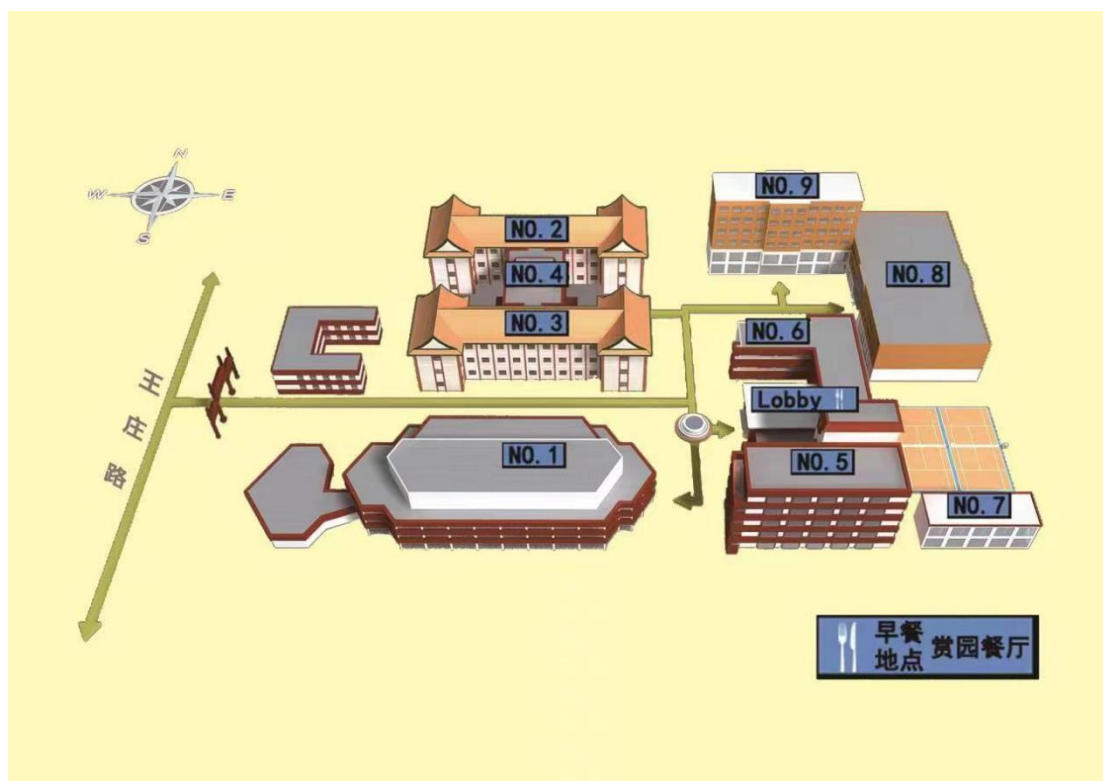
Distance:

- Capital airport (30km)
- Beijing Railway Station (20km)
- Beijing West Railway Station (16km)
- Beijing North Railway Station (8km)
- Beijing South Railway Station (19km)

Methods to go:

- 1) Taxi: around 1 hour from the airport, 150RMB
师傅，请带我去北京西郊宾馆（北京市海淀区五道口王庄路），谢谢！
- 2) Subway: Line13 at Wudaokou station.
- 3) Shuffle Bus from airport: at Tsinghua Science Park station.

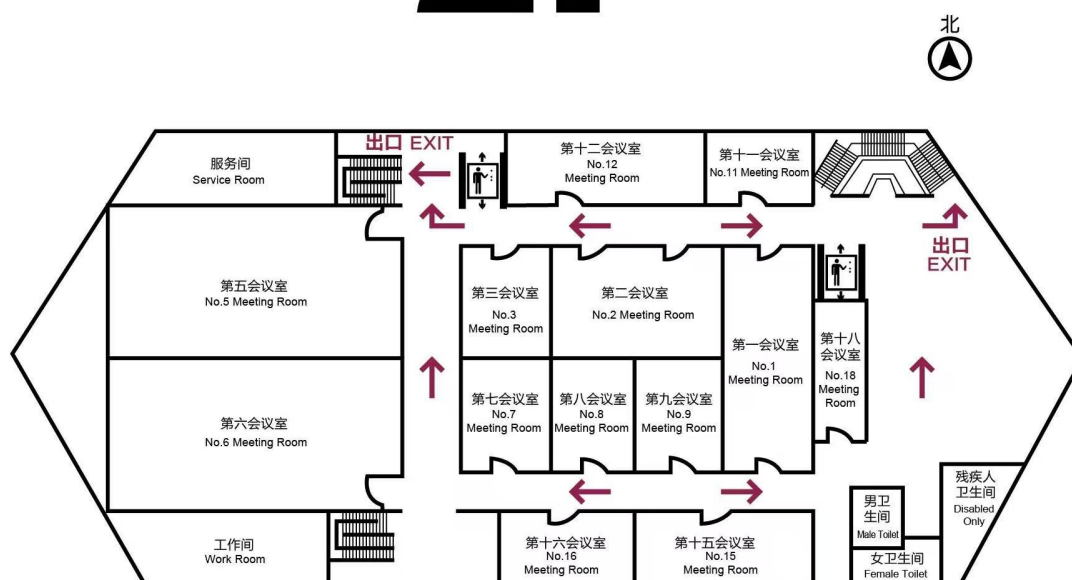




安全疏散图

Safety Evacuation Plan

2F



→ 疏散方向

Evacuation direction

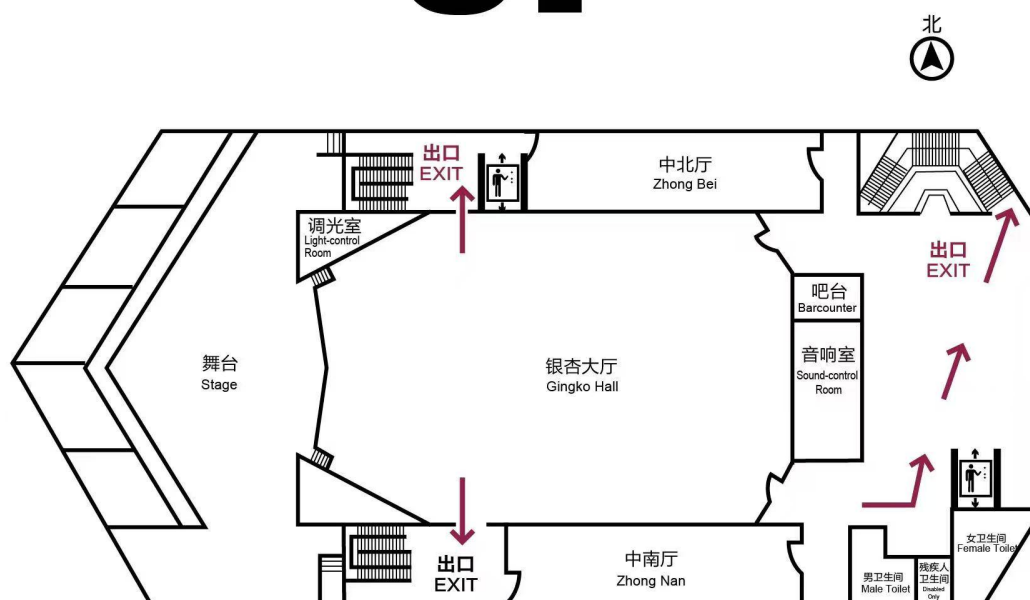
× 如遇火警，切勿乘坐电梯疏散

In case of fire, please do not take the elevator.

安全疏散图

Safety Evacuation Plan

3F



→ 疏散方向

Evacuation direction

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