Day 0: 16th May 2016

Time	Programme
1700-1900 (120 mins)	**REGISTRATION**
	Welcome reception Venue: Nanyang Executive Centre, NTU Singapore

Day 1: 17th May 2016

Time	Programme	Speaker
0800-0900 (60 mins)	Arrival and Registration	
0900-0920 (20 mins)	Arrival of Guest-of-Honour (GOH), Minister – Mr S Iswaran	
0920-0930 (10 mins)	Welcome Address by **Prof. Bertil Andersson** *President, Nanyang Technological University, Singapore*	
0930-0940 (10 mins)	Speech by **Mr S Iswaran**, *Ministry of Trade and Industry (Industry)*	
0940-0955 (15 mins)	Official Launch of Singapore Centre for 3D Printing	
0955-1015 (20 mins)	Prize Award Ceremony for Singapore International 3D Printing Competitions 2016	
Concurrent Sessions – Start of conference		
1015-1055 (40 mins)	**Keynote Lecture 1:** Perspectives and Trends in Additive Manufacturing	**Prof. David Lee Bourell** *Professor, The University of Texas at Austin, USA*
1055-1110 (15 mins)	**TEA BREAK & NETWORKING SESSION**	

	Concurrent Sessions and Exhibition		
	Session Chair: Dr Chen Songlin *Venue1 (Auditorium)*	***Session Chair:*** Assistant Professor Moon Seung-Ki *Venue 2 (LT1)*	***Session Chair:*** Assistant Professor Zhou Kun *Venue 3 (LT2)*
1110-1130 (20 mins)	**Applications and Industry** Rapid Tooling for Metal Injection Moulding Process **Invited Speaker:** **Altaf Khurram** *Mechanical Engineering Department, Universiti Teknologi Petronas, Malaysia*	**Equipment and New Techniques** Electron Beam Melting of Gamma-Titanium Aluminide for Next Generation Aero-Engine Components **Invited Speaker:** **Mohammad Ashfaq** *King Saud University, Saudi Arabia*	**Measurement Science and Methods** New Network based Finite Element Method for Stereolithography Process Analysis **Invited Speaker:** **Cunico Marlon Wesley Machado** *University of São Paulo, Brazil*
1130-1150 (20 mins)	**Measurement Science and Methods** Water Absorption and Mechanical Properties Evaluation of Surface Modified ABS Printing Parts **Invited Speaker:** **Leite Marco** *IDMEC, Instituto Superior Técnico, Universidade de Lisboa, Lisboa, Portugal*	**Materials** Recent Researches on High-Performance Ceramics Fabricated by Selective Laser Sintering (SLS) **Invited Speaker:** **Wu Jia-Min** *School of Materials Science and Engineering, Huazhong University of Science and Technology, China*	**Equipment and New Techniques** New Additive Manufacturing Technology Based on Selective Metal-Polymer Composite Formation **Invited Speaker:** **Cunico Marlon Wesley Machado** *University of São Paulo, Brazil*

1150-1205 (15 mins)	**Applications and Industry** Application of Polyjet Technology in Additive Manufacturing of Personalised Nail Art **Lu Zhen** *Singapore Centre for 3D Printing, Nanyang Technological University, Singapore*	**Materials** Rheology and Printability of Engineered Cementitious Composites-A Literature Review **Weng Yiwei** *Singapore Centre for 3D Printing, Nanyang Technological University, Singapore*	**Design** Characterisation of Micro-Lattices Fabricated by Selective Laser Melting **Sing Swee Leong** *Singapore Centre for 3D Printing, Nanyang Technological University, Singapore*
1205-1220 (15 mins)	**Applications and Industry** The Preparation of Calcia-Based Ceramic Slurry for Rapid Manufacturing Hollow Turbine Blade Based on Stereolithography **Lu Zhongliang** *Xi'an Jiaotong University, China*	**Materials** Selective Laser Sintering of Polypropylene Feed Spacers for Spiral Wound Membrane Modules **Tan Wen See** *Singapore Centre for 3D Printing, Nanyang Technological University, Singapore*	**Design** Transient Electrowetting on Dielectric for Activating Droplet in Bioprinting Applications **Vo Quoc** *Singapore Centre for 3D Printing, Nanyang Technological University, Singapore*
	Concurrent Sessions and Exhibition		
	Session Chair: Dr Chen Songlin *Venue1 (Auditorium)*	***Session Chair:*** Assistant Professor Moon Seung-Ki *Venue 2 (LT1)*	***Session Chair:*** Assistant Professor Zhou Kun *Venue 3 (LT2)*
1220-1235 (15 mins)	**Equipment and New Techniques** Adaptive Layer Height during DLP Materials Processing **Pedersen David Bue** *Department of Mechanical Engineering, Technical University of Denmark, Denmark*	**Measurement Science and Methods** Controlling Polymer Digital Material Composition with Layering **Shukri Bin Abdul Jalil** *Singapore Centre for 3D Printing, Nanyang Technological University, Singapore*	**Materials** A Preliminary Study of 3D Printability of Alginate Hydrogel and Effect of Graphene Oxide for 3D Biofabrication **Li Huijun** *Singapore Centre for 3D Printing, Nanyang Technological University, Singapore*
1235-1250 (15 mins)	**Equipment and New Techniques** A Self-Peeling Vat for Improved Release Capabilities during DLP Materials Processing **Pedersen David Bue** *Department of Mechanical Engineering, Technical University of Denmark, Denmark*	**Software and Data Processing** Unified Storage File Format for Additive Manufacturing **Felix Baumann** *University of Stuttgart, Germany*	**Materials** Comparative Study on Tribological Behaviour of TI-6AL-4V and CoCr Samples Additively Manufactured with Electron Beam Melting **Toh Wei Quan** *Singapore Centre for 3D Printing, Nanyang Technological University, Singapore*
1250-1305 (15 mins)	**Materials** Properties of 3D Printable Concrete **Paul Suvash Chandra** *Singapore Centre for 3D Printing, Nanyang Technological University, Singapore*	**Applications and Industry** Additive Manufacturing for Active Electronic Components : A Review **N Saengchairat** *Singapore Centre for 3D Printing, Nanyang Technological University, Singapore*	**Measurement Science and Methods** Effects of Speed Function and Focus Offset on Selective Electron Beam Melting of Stainless Steel 316L **Jing Wei** *Singapore Centre for 3D Printing, Nanyang Technological University, Singapore*

1305-1400 (55 mins)	**LUNCH & NETWORKING SESSION**		
1400-1440 (40 mins)	**Keynote Lecture 2:** AM Format	**Prof. Alain Bernard** *Professor, Ecole Centrale de Nantes, France*	
1440-1500 (20 mins)	**Lecture 1:** Metal Additive Manufacturing with SLM Solutions' multi-lasers technology.	**Mr Jeffrey Chew** *SLM Solutions*	
	Concurrent Sessions and Exhibition		
	Session Chair: Associate Professor Li Hua *Venue1 (Auditorium)*	***Session Chair:*** Assistant Professor David Fan *Venue 2 (LT1)*	***Session Chair:*** Assistant Professor Lau Gih Keong *Venue 3 (LT2)*
1500-1515 (15 mins)	**Applications and Industry** Effect of Alumina-Based Fiber on The Mid-Temperature Strength of Integral Ceramic Mold for Casting Hollow Turbine Blade **Tian Guoqiang** *Xi'an Jiaotong University, China*	**Materials** Preliminary Investigation on Selective Laser Melting of Pure Tin **Yap Chor Yen** *Singapore Centre for 3D Printing, Nanyang Technological University, Singapore*	**Applications and Industry** The Disruptive Evolution of 3D Printing **Panda Biranchi Narayan** *Singapore Centre for 3D Printing, Nanyang Technological University, Singapore*
1515-1530 (15 mins)	**Applications and Industry** Convective Heat Transfer Performance of Staggered Heat Sink Arrays Fabricated by Selective Laser Melting **Wong Kin Keong** *Singapore Centre for 3D Printing, Nanyang Technological University, Singapore*	**Materials** Synthesis of A Conductive Polymer for Potential Use in Printing Prosthetic Hands Using FDM Technique **Zhong Shaohong** *Raffles Science Institute, Raffles Institution, Singapore*	**Materials** Effect of Energy Density on Density and Microstructure for Selective Laser Melted Stainless Steel 316L **Sun Zhongji** *Singapore Centre for 3D Printing, Nanyang Technological University, Singapore*
1530-1550 (20 mins)	**TEA BREAK & NETWORKING SESSION**		
	Concurrent Sessions and Exhibition		
	Session Chair: Associate Professor Li Hua *Venue1 (Auditorium)*	***Session Chair:*** Assistant Professor David Fan *Venue 2 (LT1)*	***Session Chair:*** Assistant Professor Lau Gih Keong *Venue 3 (LT2)*
1550-1605 (15 mins)	**Applications and Industry** Structural, Mechanical and Invitro Study on Pulsed Laser Deposition of Hydroxyapatite on Additive Manufactured Substrate **Kuppuswamy Hariharan** *CEG Campus, Anna University, Chennai, India*	**Materials** Potential of Cold Spray as Additive Manufacturing for TI-6AL-4V **Tan Adrian Wei-Yee** *Rolls-Royce@ NTU Corporate Lab, Nanyang Technological University, Singapore*	**Design** Quantifying Mechanical Properties of Material Extrusion Fabricated Lattice Structures based on Semi-Rigid Joint Frame Formulation **Park Sang-in** *The Woodruff School of Mechanical Engineering, Georgia institute of Technology, Atlanta Georgia, USA*

	Concurrent Sessions and Exhibition		
	Session Chair: Associate Professor Li Hua *Venue1 (Auditorium)*	***Session Chair:*** Assistant Professor David Fan *Venue 2 (LT1)*	***Session Chair:*** Assistant Professor Lau Gih Keong *Venue 3 (LT2)*
1605-1620 (15 mins)	**Applications and Industry** Haptic - 3D Additive Manufacturing in the Sports Industry **Schmidt Thomas** *Huafeng Textile Group, China*	**Materials** Laser Melting Of Cu Based Powder Shape Memory Alloys: Inert Gas Pressure And Scanning Pattern Effect On Transformation Temperature And Ultimate Strength **Jorge Ramos-Grez** *Mechanical and Metallurgical Engineering Department, Pontificia Universidad Catolica de Chile, Chile*	**Design** Study on Curling Due to Part Distortion in Additive Manufactured Thin Feature **Manivannan Sugavaneswaran** *CEG Campus, Anna University, Chennai, India*
1620-1635 (15 mins)	**Applications and Industry** Investigation of the Mechanical Properties of 3D Printed Compliant Mechanisms **Pham Minh Tuan** *Singapore Centre for 3D Printing, Nanyang Technological University, Singapore*	**Materials** Additive Manufacturing of ZnO Thin Film for Micro Size UV Photodetector **Du Hejun** *Singapore Institute of Manufacturing Technology, Singapore*	**Design** A Strategy to Locally Optimise the Material Composition of AM Construction Elements **Craveiro Flavio** *CIAUD, Faculty of Architecture, University of Lisbon, Portugal*
1635–1650 (15mins)	**Applications and Industry** Wind Tunnel Testing of a Joined-Wing Aircraft Model with Additive Manufactured Components **Teo Zhen Wei** *Singapore Centre for 3D Printing, Nanyang Technological University, Singapore*	**Measurement Science and Methods** Finite Element Analysis of Temperature Field in Selective Laser Melting Process **Tan Peng Fei** *Singapore Centre for 3D Printing, Nanyang Technological University, Singapore*	**Materials** Design, Fabrication and Evaluation of PCL/Graphene Scaffolds for Bone Regeneration **Wang Weiguang** *University of Manchester, UK*
1650-1705 (15 mins)	**Applications and Industry** Embedding Electronics in Printing Ultem 9085 Quadcopter **Keane Phillip** *Singapore Centre for 3D Printing, Nanyang Technological University, Singapore*	**Materials** Fabrication of Samaria Doped Ceria Thin Film on Porous Substrate by Slurry Spin Coating **Lee Tsung-Han** *Singapore Centre for 3D Printing, Nanyang Technological University, Singapore*	**Design** Kinematic Pair Design for 3D Printing of Micro Mettalic Robotic Mechanisms **Chen Yonghua** *The University of Hong Kong, Hong Kong*

	Concurrent Sessions and Exhibition		
	Session Chair: Associate Professor Li Hua *Venue1 (Auditorium)*	***Session Chair:*** Assistant Professor David Fan *Venue 2 (LT1)*	***Session Chair:*** Assistant Professor Lau Gih Keong *Venue 3 (LT2)*
1705-1720 (15 mins)	**Applications and Industry** Application of 3D Printed Medical Aid for Paediatric Cancer Patients **Peh Zhen Kai** *Singapore Centre for 3D Printing, Nanyang Technological University, Singapore*	**Materials** A Review of 3D Printable Construction Materials and Applications **Lu Bing** *Singapore Centre for 3D Printing, Nanyang Technological University, Singapore*	**Design** Cross Entropy for Weight Minimization of a Compressive Strut **Malekjafarian Abdollah** *University College Dublin, Ireland*
1720-1735 (15 mins)	**Applications and Industry** Failure Mode Analysis of Kagome Lattice Structures **Gautam Rinoj** *Singapore Centre for 3D Printing, Nanyang Technological University, Singapore*	**Measurement Science and Methods** Multi-Scale Modeling of Additive Manufacturing Process **Chandra Shubham** *Singapore Centre for 3D Printing, Nanyang Technological University, Singapore*	**Applications and Industry** Fabricating Patient-Customizable Tubular Scaffolds from Biodegradable Polymer **Tan Yu Jun** *Singapore Centre for 3D Printing, Nanyang Technological University, Singapore*
1735	**CLOSING**		

Day 2: 18th May 2016

Time	Programme	Speaker
0900-0940 (40 mins)	**Keynote Lecture 3:** Functional and Responsive Materials in 3D Printing	**Prof. Shlomo Magdassi** *Professor, The Hebrew University of Jerusalem, State of Israel*
0940-1020 (40 mins)	**Keynote Lecture 4:** Design for Additive Manufacturing	**Prof. David Rosen** *Professor, Georgia Institute of Technology, USA*
1020-1040 (20 mins)	**TEA BREAK & NETWORKING SESSION**	
	Concurrent Session and Exhibition	

Session Chair: *Nanyang* Assistant Professor Kim Young-Jin *Venue1 (Auditorium)*	***Session Chair:*** Assistant Professor Li Peifeng *Venue 2 (LT1)*	***Session Chair:*** Assistant Professor Zhou Yufeng *Venue 3 (LT2)*
1040-1100 (20 mins) **Applications and Industry** Status of Standardization for Additive Manufacturing **Invited Speaker:** **Zhou Wei** *Singapore Centre for 3D Printing, Nanyang Technological University, Singapore*	1040-1100 (20 mins) **Materials** Simulating the Dynamic Deformation Behaviour of Selective Laser Melted Stainless Steel Microlattice Structures **Invited Speaker:** **Li Peifeng** *Singapore Centre for 3D Printing, Nanyang Technological University, Singapore*	1040-1100 (20 mins) **Materials** Near-Surface Properties of Stainless Steels Repaired by Alloy 625 Using Laser Direct Energy Deposition **Invited Speaker:** **J.Y. Hascoet/ Surendar Marya** *Ecole Centrale Nantes*
1100-1120 (20 mins) **Applications and Industry** Challenges and Opportunities in Overcoming Barriers to Sustainable Additive Manufacturing Adoption by Industry **Invited Speaker:** **Wong David** *Nanyang Polytechnic, Singapore*	1100-1120 (20 mins) **Materials** Preliminary Study on Solvent Effect in Fiber Fabrication in Near-Field Electrospinning **Invited Speaker:** **Koomsap Pisut** *Industrial & Manufacturing Engineering, Asian Institute of Technology, Thailand*	1100-1120 (20 mins) **Equipment and New Techniques** The Influence of Preheating on Laser Beam Melting **Invited Speaker:** **Merkel Markus** *Aalen University of Applied Sciences, Germany*
1120-1135 (15 mins) **Materials** Selective Laser Melting of Aluminium Metal Matrix Composites **Sercombe Tim** *The University of Western Australia, Australia*	1120-1135 (15 mins) **Measurement Science and Methods** Real Time Monitoring of Exposure Controlled Projection Lithography **Jariwala Amit** *Georgia Institute of Technology, Georgia, USA*	1120-1135 (15 mins) **Materials** Bioceramic Composite Scaffolds for Tissue Engineering **Blaker Jonny** *University of Manchester, UK*

	Concurrent Session and Exhibition		
	Session Chair: *Nanyang* Assistant Professor Kim Young-Jin *Venue1 (Auditorium)*	***Session Chair:*** Assistant Professor Li Peifeng *Venue 2 (LT1)*	***Session Chair:*** Assistant Professor Zhou Yufeng *Venue 3 (LT2)*
1135-1150 (15 mins)	**Measurement Science and Methods** A Model of Parallel Kinematics for Machine Calibration **Pedersen David Bue** *Department of Mechanical University, Technical University of Denmark, Denmark*	**Applications and Industry** A Study of the State-Of-The-Art Printed Passive Electronic Components Through Fully Additive Manufacturing Methods **Tan Hong Wei** *Singapore Centre for 3D Printing, Nanyang Technological University, Singapore*	**Materials** A Preliminary Study on The Extrusion Resolution of Pluronic F127 for Bioprinting 260 Thermo-Responsive Hydrogel Constructs **Ratima Suntornnond** *Singapore Centre for 3D Printing, Nanyang Technological University, Singapore*
1150-1205 (15 mins)	**Materials** State of the Art Review on Selective Laser Melting of Stainless Steel for Future Applications in the Marine Industry **Wu Wenjin** *Singapore Centre for 3D Printing, Nanyang Technological University, Singapore*	**Measurement Science and Methods** Understanding the Link Between Process Parameters, Microstructure and Mechanical Properties of Laser Sintered PA12 Parts through X-Ray Computed Tomography **Pavan Michele** *Materialise NV, Leuven, Belgium*	**Applications and Industry** Topology Optimization and Structure Partition for Additive Manufacturing: A Literature Review **Xu Feifei** *Singapore Centre for 3D Printing, Nanyang Technological University, Singapore*
1205-1220 (15 mins)	**Equipment and New Techniques** Review of Multi-Material in Additive Manufacturing **Tan Jie Lun** *Singapore Centre for 3D Printing, Nanyang Technological University, Singapore*	**Measurement Science and Methods** 3D Printing Structures that Exhibit Torsions **Noh Kyoung-Seok** *Gwangju Institute of Science and Technology, Gwangju, South Korea*	**Applications and Industry** 3D Printing of Anatomy Bio-Models for Medical Education **Tan Heang Kuan Joel** *Singapore Centre for 3D Printing, Nanyang Technological University, Singapore*
1220-1235 (15 mins)	**Applications and Industry** Investigation of Quasi Static Indentation on 3D Printed Honeycomb Based Truncated-Pyramid Square Structure **Dikshit Vishwesh** *Singapore Centre for 3D Printing, Nanyang Technological University, Singapore*	**Measurement Science and Methods** Dissipative Particle Dynamics Study of Ultraviolet Ink Agglomeration in 3D Inkjet Printing **Aphinyan Suphanat** *Singapore Centre for 3D Printing, Nanyang Technological University, Singapore*	**Applications and Industry** Encapsulation of Human Umbilical Vein Endothelial Cells within Gelma Fibers with Controlled Diameter for Vascular Tissue Engineering **Liew Wen Loon Andy** *Singapore Centre for 3D Printing, Nanyang Technological University, Singapore*

	Concurrent Session and Exhibition		
	Session Chair: *Nanyang* Assistant Professor Kim Young-Jin *Venue1 (Auditorium)*	***Session Chair:*** Assistant Professor Li Peifeng *Venue 2 (LT1)*	***Session Chair:*** Assistant Professor Zhou Yufeng *Venue 3 (LT2)*
1235-1250 (15 mins)	**Applications and Industry** Out of Plane Compressive Strength Of 3D Printed Vertical Pillar Based Core Structure **Dikshit Vishwesh** *Singapore Centre for 3D Printing, Nanyang Technological University, Singapore*	**Materials** 3D Printed Materials for High Torque Applications: Challenges and Potential **Goh Guo Dong** *Singapore Centre for 3D Printing, Nanyang Technological University, Singapore*	**Design** A Perspective on 3D Printed Membrane: Direct/Indirect Fabrication Methods via Direct Laser Writing **Lee Jian-Yuan** *Singapore Centre for 3D Printing, Nanyang Technological University, Singapore*
1300-1400 (60 mins)	**LUNCH & NETWORKING SESSION**		
1400-1440 (40 mins)	**Keynote Lecture 5:** Potentials and Challenges in 3D Concrete Printing	**Prof. Theo Salet** *Professor, Eindhoven University of Technology, Netherlands*	
	Concurrent session and Exhibition		
	Session Chair: Nanyang Assistant Professor Tran Anh Tuan *Venue1 (Auditorium)*	***Session Chair:*** Nanyang Assistant Professor Kim Young-Jin *Venue 2 (LT1)*	***Session Chair:*** Associate Professor Liu Yong *Venue 3 (LT2)*
1440-1455 (15 mins)	**Materials** Hydrothermal Synthesis of Hydroxyapatite Whiskers for Biomedical Applications **Dong Zhili** *School Materials Science and Engineering, Nanyang Technological University, Singapore*	**Measurement Science and Methods** X-Ray CT Assessment of Porosity in AlSi10Mg Parts Fabricated by Selective Laser Melting **Cai Xingfang** *Singapore Centre for 3D Printing, Nanyang Technological University, Singapore*	**Materials** Microvalve Bioprinting of Cellular Droplets with High Resolution and Consistency **Ng Wei Long** *Singapore Centre for 3D Printing, Nanyang Technological University, Singapore*
1455-1510 (15 mins)	**Materials** Additive Manufacturing of Conductive 3D Structure **Cooperstein Ido** *Casali Center for Applied Chemistry, Institute of Chemistry and Center for Nanoscience and Nanothechnology, The Hebrew University of Jerusalem, Jerusalem, Israel*	**Measurement Science and Methods** Review of the Fatigue Performance of Stainless Steel 316l Parts Manufactured by Selective Laser Melting **Zhang Meng** *Singapore Centre for 3D Printing, Nanyang Technological University, Singapore*	**Materials** Effects of Laser Processing on Nickel Oxide – Yttria Stabilized Zirconia **Tan Hong Yi Kenneth** *Singapore Centre for 3D Printing, Nanyang Technological University, Singapore*

	Concurrent session and Exhibition		
	Session Chair: Nanyang Assistant Professor Tran Anh Tuan *Venue1 (Auditorium)*	***Session Chair:*** Nanyang Assistant Professor Kim Young-Jin *Venue 2 (LT1)*	***Session Chair:*** Associate Professor Liu Yong *Venue 3 (LT2)*
1510-1525 (15 mins)	**Design** Multidisciplinary Design Optimization for Additive Manufactured Customised Products **Yao Xiling** *Singapore Centre for 3D Printing, Nanyang Technological University, Singapore*	**Materials** Geometrical-Based Characterisation of Complex TI-6AL-4V Parts Fabricated by Selective Electron Beam Melting **Kok Yihong** *Singapore Centre for 3D Printing, Nanyang Technological University, Singapore*	**Materials** Curing Behaviour and Characteristics of Shape Memory Polymers by UV Based 3D Printing **Choong Yu Ying Clarrisa** *Singapore Centre for 3D Printing, Nanyang Technological University, Singapore*
1525-1540 (15 mins)	**Materials** Control of Residual Stress in Single-Track Electron Beam Melting of Ti6Al4V by Finite Element Modeling **Vastola Guglielmo** *A*STAR Institute of High Performance Computing, Singapore*	**Measurement Science and Methods** Evaluation of 3D Scanner Using Elimination and Multi Criteria Decision Making (MCDM) Method **Ahmad Khairyanto Bin Ratmin** *Singapore Centre for 3D Printing, Nanyang Technological University, Singapore*	**Design** Functionally Graded Material by Selective Laser Melting **Choy Sing Ying** *Singapore Centre for 3D Printing, Nanyang Technological University, Singaporera*
1540-1555 (20 mins)	**TEABREAK & NETWORKING SESSION**		
	Concurrent Sessions		
	Session Chair: Nanyang Assistant Professor Tran Anh Tuan *Venue1 (Auditorium)*	***Session Chair:*** Nanyang Assistant Professor Kim Young-Jin *Venue 2 (LT1)*	***Session Chair:*** Associate Professor Liu Yong *Venue 3 (LT2)*
1555-1610 (15 mins)	**Applications and Industry** Additive Manufacturing of Unmanned Aerial Vehicles: Current Status, Recent Advances and Future Perspectives **Govdeli Yunus** *Singapore Centre for 3D Printing, Nanyang Technological University, Singapore*	**Materials** Further Analysis in Microstructure Evolution, Texture, Mechanical Properties and Fracture Behavior Of TI-6AL-4V Fabricated by Selective Laser Melting **Do Dang Khoa** *Singapore Centre for 3D Printing, Nanyang Technological University, Singapore*	**Design** User-Centered Design for Additive Manufacturing as a Customization Strategy **Ko Hyunwoong** *Singapore Centre for 3D Printing, Nanyang Technological University, Singapore*

	Concurrent Sessions		
	Session Chair: Nanyang Assistant Professor Tran Anh Tuan *Venue1 (Auditorium)*	***Session Chair:*** Nanyang Assistant Professor Kim Young-Jin *Venue 2 (LT1)*	***Session Chair:*** Associate Professor Liu Yong *Venue 3 (LT2)*
1610-1625 (15 mins)	**Materials** Selective Laser Melting of Spodumene: An Exploratory Study **Gan Mingxuan** *Singapore Centre for 3D Printing, Nanyang Technological University, Singapore*	**Equipment and New Techniques** Current Challenges and Future Perspectives of 3D Concrete Printing **Tay Yiwei Daniel** *Singapore Centre for 3D Printing, Nanyang Technological University, Singapore*	**Equipment and New Techniques** Sub-Micron Additive Manufacturing of Carbon Materials for Environmental Sensors by Femtosecond-Laser-Based Direct Laser Writing **Nguyen Trong Nghia** *Singapore Centre for 3D Printing, Nanyang Technological University, Singapore*
1625-1640 (15 mins)	**Equipment and New Techniques** Preliminary Investigation of 4D Printing Technology for Deployable UAV Development **Teoh Ee Mei Joanne** *Singapore Centre for 3D Printing, Nanyang Technological University, Singapore*	**Design** 3D Printing of Microfluidic Sensor for Soft Robots: A Preliminary Study in Design and Fabrication **Goh Guo Liang** *Singapore Centre for 3D Printing, Nanyang Technological University, Singapore*	**Equipment and New Techniques** Fabrication of Complex Hydrogel Structure via Free-Form Bioprinting: A Review **Tan Yong Sheng Edgar** *Singapore Centre for 3D Printing, Nanyang Technological University, Singapore*
1640-1655 (15 mins)	**Software and Data Processing** Degradable vs. non-degradable bone fixation implants: A computational study **Altamimi Abdulsalam** *Mechanical, Aerospace and Civil Engineering, The University of Manchester, UK*	**Measurement Science and Methods** Effect of Inert Gas Flow Velocity and Unidirectional Scanning on the Formation of Spattered Powder During Selective Laser Melting **Ahmad Bin Anwar** *Singapore Centre for 3D Printing, Nanyang Technological University, Singapore*	**Applications and Industry** Bioprinting for Cardiovascular Tissue Engineering **Lee Jia Min** *Singapore Centre for 3D Printing, Nanyang Technological University, Singapore*
1655-1715 (20 mins)	**Lecture 2:** Laser Metal Deposition: Innovative 3D Printing Technology for High-Value Industrial Applications		**Mr Frederic Le Moullec** *BeAM Machines*
1715-1755 (40 mins)	**POSTER PRESENTATION**		
1755	**CLOSING**		

Day 3: 19th May 2016

Time	Programme		Speaker
0900-0940 (40 mins)	**Keynote Lecture 6:** Emerging Trends in Reverse Engineering		**Prof. Bopaya Bidanda** *Professor, University of Pittsburgh, USA*
0940-1020 (40 mins)	**Keynote Lecture 7:** Medicine 4.0: The Role of Additive Manufacturing		**Prof. Paulo Bartolo** *Professor, University of Manchester, UK*
1020-1040 (20 mins)	**TEA BREAK & NETWORKING SESSION**		
	Concurrent Session and Exhibition		
	Session Chair: Associate Professor Sunil Chandrakant Joshi *Venue1 (Auditorium)*	***Session Chair:*** Associate Professor Zhang Yilei *Venue 2 (LT1)*	***Session Chair:*** Associate Professor Sridhar Idapalapati *Venue 3 (LT2)*
1040-1100 (20 mins)	**Equipment and New Techniques** High Power Multi-Laser Selective Laser Melting Technology **Invited Speaker:** **Stefan Ritt** *SLM Solutions*	**Materials** Laser additive manufacturing of light-weight Al-based aerospace components: An integration of structure, material and process **Invited Speaker:** **Gu Dong Dong** *Nanjing University of Aeronautics and Astronautics (NUAA)*	**Measurement Sciences and Methods** Studies on Effect of Area-Filling Pattern on Residual Stress Evolution in Weld-Deposition Based Additive Manufacturing **M Naveenkumar** *Indian Institute of Technology Hyderabad*
1100-1115 (15 mins)	**Materials** Dynamic Mechanical Behaviours and Thermal Decomposition of Laser Sintered Polyurethane Incorporated with MWCNTs **Yuan Shangqin** *Singapore Centre for 3D Printing, Nanyang Technological University, Singapore*	**Materials** Fabrication of Titanium Lattice Structures by Selective Laser Melting for Osteochondral Tissue Regeneration **Wang Shuai** *Singapore Centre for 3D Printing, Nanyang Technological University, Singapore*	**Equipment and New Techniques** Experimental Investigation on Fracture Resistance Behavior of Additive Manufactured Multi Material Structure with Corrugated Interface **Vijayanand Rajendra Boopathy** *CEG Anna University, Chennai, India*
1115-1130 (15 mins)	**Materials** Identifying New Process Parameters for Preparing Poly-caprolactone Powder with a Solution Spraying Technique **Phattanaphibul Thittikorn** *Department of Industrial Engineering, Kasetsart University, Thailand*	**Materials** Selective Laser Melting of Nickel Titanium Shape Memory Alloy **Khoo Zhong Xun** *Singapore Centre for 3D Printing, Nanyang Technological University, Singapore*	**Equipment and New Techniques** Particle Accumulation in Microchannel and its Reduction by Surface Acoustic Wave (SAW) **Sriphutkiat Yannapol** *Singapore Centre for 3D Printing, Nanyang Technological University, Singapore*

	Concurrent session and Exhibition		
	Session Chair: Associate Professor Sunil Chandrakant Joshi *Venue1 (Auditorium)*	***Session Chair:*** Associate Professor Zhang Yilei *Venue 2 (LT1)*	***Session Chair:*** Associate Professor Sridhar Idapalapati *Venue 3 (LT2)*
1130-1145 (15 mins)	**Applications and Industry** Inkjet Printed Stretchable Electrodes for Tunable Focus Lens **Shrestha Milan** *Singapore Centre for 3D Printing, Nanyang Technological University, Singapore*	**Materials** Selective Laser Melting of Copper Based Alloy on Steel: A Preliminary Study **Tey Cher Fu** *Singapore Centre for 3D Printing, Nanyang Technological University, Singapore*	**Equipment and New Techniques** Robotic 3D Printing for Building and Construction **Lim Jian Hui** *Singapore Centre for 3D Printing, Nanyang Technological University, Singapore*
1145-1200 (15mins)	**Equipment and New Techniques** Additive Manufacturing of Metal Nanowires for Transparent Electrodes by Femtosecond-Laser-Based Direct Laser Writing **Le Dinh Truong Son** *Singapore Centre for 3D Printing, Nanyang Technological University, Singapore*	**Measurement Science and Methods** Benchmarking of Material Jetting Process: Process Capability Study **Yap Yee Ling** *Singapore Centre for 3D Printing, Nanyang Technological University, Singapore*	**Materials** Characterization of Thermoplastic Polyurethane Powders to Determine Laser Sintering Processability **Verbelen Leander** *Department of Chemical Engineering, KU Leuven; Department of Mechanical Engineering, KU Leuven, Belgium*
1200-1215 (15 mins)	**Materials** The Effect of Laser Power and Scanning Speed on The Density of Selective Laser Melting Fabricated AL-CNT Composites **Du Zhenglin** *Singapore Centre for 3D Printing, Nanyang Technological University, Singapore*	**Design** Influence of the Geometric Factor for the Width of the Contour Scan in Selective Laser Melting **Ahn Il Hyuk** *Singapore Centre for 3D Printing, Nanyang Technological University, Singapore*	**Materials** 3D Printed Electronic Tracks for Bio-Integrated Free-Form Devices **Shweta Agarwala** *Singapore Centre for 3D Printing, Nanyang Technological University, Singapore*
1215-1255 (40 mins)	**Keynote Lecture 8:** Material Characterisation and Mechanical Properties of Metallic AM Systems	**Prof. John Lewandowski** *Professor,* *Case Western Reserve University, USA*	
1255-1355 (60 mins)	**LUNCH & NETWORKING SESSION**		
1355-1455 (60mins)	**Lab Tour at SC3DP Future of Manufacturing Lab 1 (FoM1 Lab)** **To be continued….**		

Day 3: 19th May 2016 - CONFERENCE BANQUET	
1630-1700 (30mins)	**Meet up point at NEC carpark to board the coach to Marina Bay Sands**
1700-1745 (45mins)	**Depart to Conference Banquet Venue at Marina Bay Sands**
1745-1830 (45mins)	**Arrival of Guest and Reception at Marina Bay Sands**
1830-1900 (30mins)	**Guests to be seated down**
1900 -2100	**CONFERENCE BANQUET** Venue: Marina Bay Sands, Singapore Function Room Name: Roselle Junior Ballroom, Level 4