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5th International Conference on

3D Printing Technology and Innovations

May 18-19, 2020
Berlin, Germany



SCIENTIFIC PROGRAM

DAY 1
Monday, 18th May

08:30-09:00 **Registrations**

09:00-09:30 **Introduction**

09:30-09:50 COFFEE BREAK

09:50-11:50 Meeting Hall 01

KEYNOTE LECTURES

11:50-13:10

MEETING HALL 01	MEETING HALL 02
Talks On: Advances in 3D Printing & Additive Manufacturing Technology	**Talks On: Applications of 3D Printing in Health Care & Medicine**
Stereolithography	Bio printing tissues and organs
Powder bed and inkjet head 3D printing	Anatomical models for surgical preparation
Laminated object manufacturing	Customized implants and prostheses
Digital light processing	Drug delivery devices and dosage forms
Selective laser melting	Bone repair

13:10-13:15 GROUP PHOTO

13:15-14:00 LUNCH BREAK

14:00-16:00

MEETING HALL 01	MEETING HALL 02
Talks On: 3D Bio printing	**Talks On: Innovations in 3D Printing**
3D Bioprinting of Tissues and Organs	3D Printed Food
Skin 3D Bioprinting	3D Printed shoes
3D bioprinting of Neural stem	3D Printed organs
3D bioprinting of Cell-Laden Microcarriers	3D Printing Redefining Air travel
3D bioprinting of human chondrocytes	Consumer 3D Printing
Bioprinting of 3D hydrogel	

16:00-16:20 COFFEE BREAK

MEETING HALL 01 (16:20-17:00)	MEETING HALL 01 (17:00-18:00)
Young Researchers	**Workshop**

DAY 2
Tuesday, 19th May

09:00-10:30 Meeting Hall 01 — **KEYNOTE LECTURES**

10:30-10:50 COFFEE BREAK

10:50-12:50

MEETING HALL 01	MEETING HALL 02
Talks On: 3D Printing & Beyond: 4D Printing	**Talks On:** 3D Printing Technology Impact on Manufacturing Industry
Fiber Architecture	Material cost savings
Hydro-reactive Polymers/Hydrogels	Improvement to incremental cost calculations
Cellulose Composites	Strategy transformation
Thermo-reactive Polymers/Hydrogels	
Digital Shape-Memory Polymers	
Stress Relaxation	

12:50-13:35 LUNCH BREAK

13:35-15:55

MEETING HALL 01	MEETING HALL 02
Talks On: 3D Printing Materials	**Talks On:** 3D printing in Biomaterials
Plastics (polyactic acid, acrylonitrile butadiene styrene, polyvinyl alcohol plastic	Tissue engineering
Powders (polyamide, alumide, multicolour)	3D Bio plotting

15:55-16:15 COFFEE BREAK

MEETING HALL 01 (16:15-17:00)	MEETING HALL 01 (17:00-18:00)
Poster Presentations	Workshop

PAST AFFILIATES

PAST AFFILIATES

Miroslav Piska
Brno University of Technology, Czech Republic

Soshu Kirihara
Osaka University, Japan

José L Ocaña
UPM Laser Centre - Polytechnic University of Madrid, Spain

Jean-Marc Frances
Elkem Silicones, France

Lombardi Mariangela
Politecnico di Torino, Italy

Srdjan Milenkovic
IMDEA Materials Institute, Spain

A Errachid
UMR 5280-Institut des Sciences Analytiques, CNRS, Université de Lyon, France

Martin Hannibal
University of Southern Denmark, Denmark

Andrew J Kobets
Children's Hospital at Montefiore, USA

Konrad Gruber
Wrocław University of Science & Technology, Poland

Patrycja Szymczyk
Wrocław University of Science & Technology, Poland

Marina Cabrini
University of Bergamo, Italy

Teresa Russo
Institute of Polymers, Composites and Biomaterials - CNR, Italy

Maredi E
University of Bologna, Italy

Katrin Buckova
Brno University of Technology, Czech Republic

Arnautov A
NUST "MISiS", Russia

Krzysztof Kanawka
Blue Dot Solutions, Poland

Sahar Sultan
Stockholm University, Sweden

Seong-Woo Woo
Reliability Association of Korea, South Korea

Farhang Momeni
University of Michigan-Ann Arbor, USA

Berlin Attractions



Glimpses of 3D Printing Technology CONFERENCES









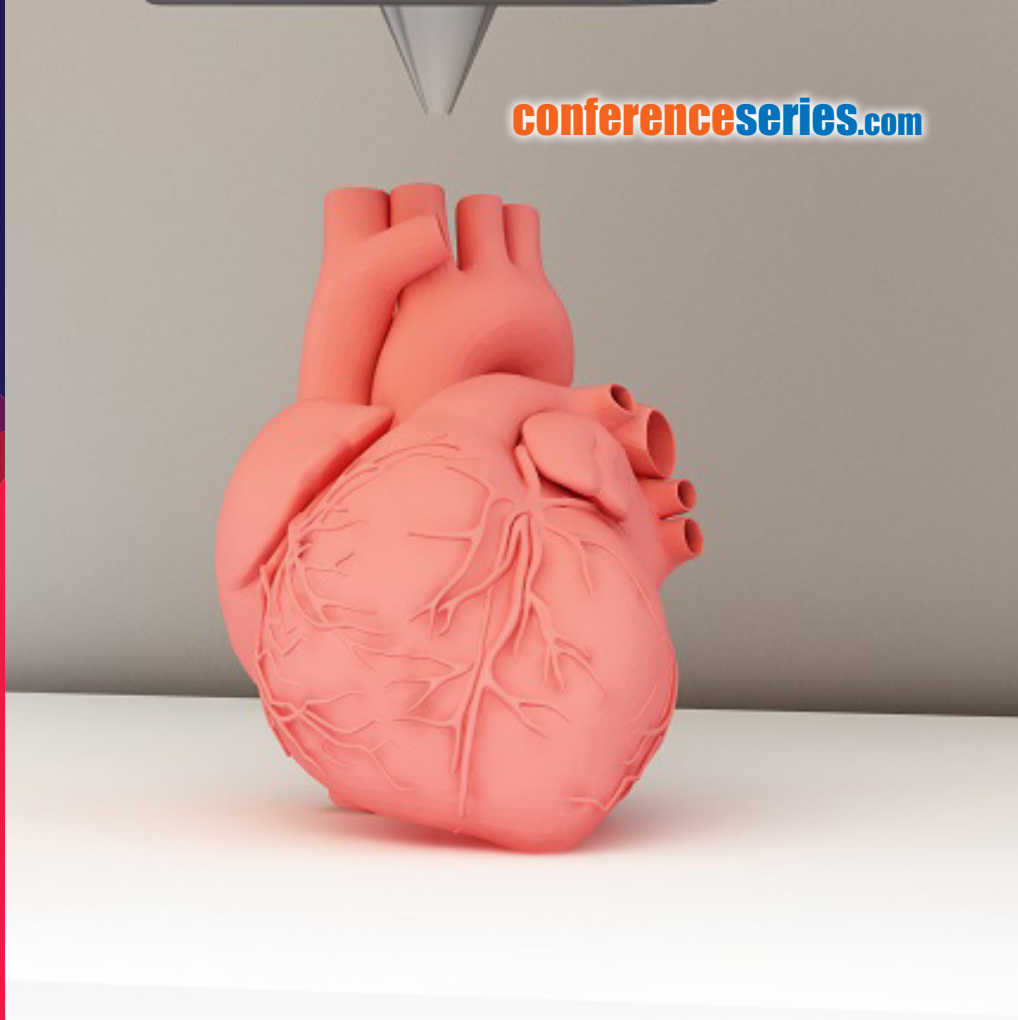








Scientific Program



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3rd International Conference on

3D Printing Technology and Innovations

March 25-26, 2019 | Rome, Italy

UK: Conference Series LLC Ltd
47 Churchfield Road, London, W3 6AY
Toll Free: +0-800-014-8923

DAY-1

March 25, 2019

Meeting Hall: **Appia 1+2**

Registrations

Opening Ceremony

KEYNOTE FORUM

Introduction
Title: Advanced knee implants for the third millenium
Miroslav Piska and Katrin Buckova, Brno University of Technology, Czech Republic
Title: Stereolithographic additive manufacturing of ceramic components
Soshu Kirihara, Osaka University, Japan

GROUP PHOTO

Networking & Refreshments @ Foyer

Title: Integrated analysis and quality control of laser-based additive manufacturing processes
José L Ocaña, UPM Laser Centre - Polytechnic University of Madrid, Spain

Sessions: Advances in 3D Printing & Additive Manufacturing Technology | Innovations in 3D Printing | Design for 3D Printing | 3D Printing Materials | Benefits of 3D Printing and Technology | Future Technology in 3D Printing | Challenges in 3D Printing | 3D printing in Biomaterials | Clinical applications of 3D Printing Innovations | Applications of 3D Printing in healthcare & medicine | Nano 3D Printing

Chair: José L Ocaña, UPM Laser Centre - Polytechnic University of Madrid, Spain
Co-Chair: Miroslav Piska, Brno University of Technology, Czech Republic

INTRODUCTION

Title: Development of Al alloys for additive manufacturing
Srdjan Milenkovic, IMDEA Materials Institute, Spain
Title: A 3D-printed automated sample storage unit for sporadic sampling in innaccessible aquatic environment
A Errachid, UMR 5280-Institut des Sciences Analytiques, CNRS, Université de Lyon, France
Title: Additive manufacturing in the manufacturing industry – use, developments, & potentials
Martin Hannibal, University of Southern Denmark, Denmark

Lunch Break @ Hotel Restaurants

Title: Virtual modeling, stereolithography, and intraoperative CT guidance for the optimization of sagittal synostosis reconstruction
Andrew J Kobets, Children's Hospital at Montefiore, USA

Title: The methodology of selective laser melting process development
Konrad Gruber, Wrocław University of Science & Technology, Poland
Title: Additive manufacturing of porous structures for medical applications
Patrycja Szymczyk, Wrocław University of Science & Technology, Poland
Title: Corrosion behavior of metallic alloys obtained by additive manufacturing
Marina Cabrini, University of Bergamo, Italy

Networking & Refreshments @ Foyer

Title: Multifuncional materials and additive manufacturing for healthcare
Teresa Russo, Institute of Polymers, Composites and Biomaterials - CNR, Italy
Title: The use of 3D models in the pre-operative evaluation of the treatment of the foot congenital flat foot
Maredi E, University of Bologna, Italy

Panel Discussion

DAY-2

March 26, 2019
Meeting Hall: **Appia 1+2**

KEYNOTE FORUM

Title: Additive manufacturing for health care & soft robotic applications using silicone elastomers
Jean-Marc Frances, Elkem Silicones, France
Title: Strategic developments and future prospects of metal additive manufacturing
Lombardi Mariangela, Politecnico di Torino, Italy

Networking & Refreshments @ Foyer

POSTER PRESENTATIONS 11:35 – 12:00 @ FOYER

Poster Judge: Lombardi Mariangela, Politecnico di Torino, Italy

Sessions: 3D Printing Industries | 3D Image Processing and Visualization | 3D printing technology and innovations | Metal 3D Printing | Polymers in 3d printing | 3D Bio printing | Lasers in 3D Printing in Manufacturing Industry | 3D Printing of Supply Chain Management | Tissue and Organ Printing | 3D Printing Technology Impact on Manufacturing Industry

Chair: Miroslav Piska, Brno University of Technology, Czech Republic
Co-Chair: José L Ocaña, UPM Laser Centre - Polytechnic University of Madrid, Spain

INTRODUCTION

Title: Selective laser melting of aluminum matrix composites with ceramic fillers
Arnautov A, NUST "MISiS", Russia
Title: Use of additive manufacturing technology for fabrication of lattice structures via SLS method in "Alumide"
Krzysztof Kanawka, Blue Dot Solutions, Poland

Lunch Break @ Hotel Restaurants

Title: 3D printed porous bioscaffolds based on cellulose nanocrystals
Sahar Sultan, Stockholm University, Sweden
Title: Reliability design of mechanical systems subject to repetitive stresses
Seong-Woo Woo, Reliability Association of Korea, South Korea

VIDEO PRESENTATION

Title: 4D printers: integration of multi-material additive manufacturing with intelligent heads to predict the fourth dimension
Farhang Momeni, University of Michigan-Ann Arbor, USA

Networking & Refreshments @ Foyer

PANEL DISCUSSION

Awards & Closing Ceremony

Bookmark your Dates

5th International Conference on

3D Printing Technology and Innovations

May 18-19, 2020 Berlin, Germany

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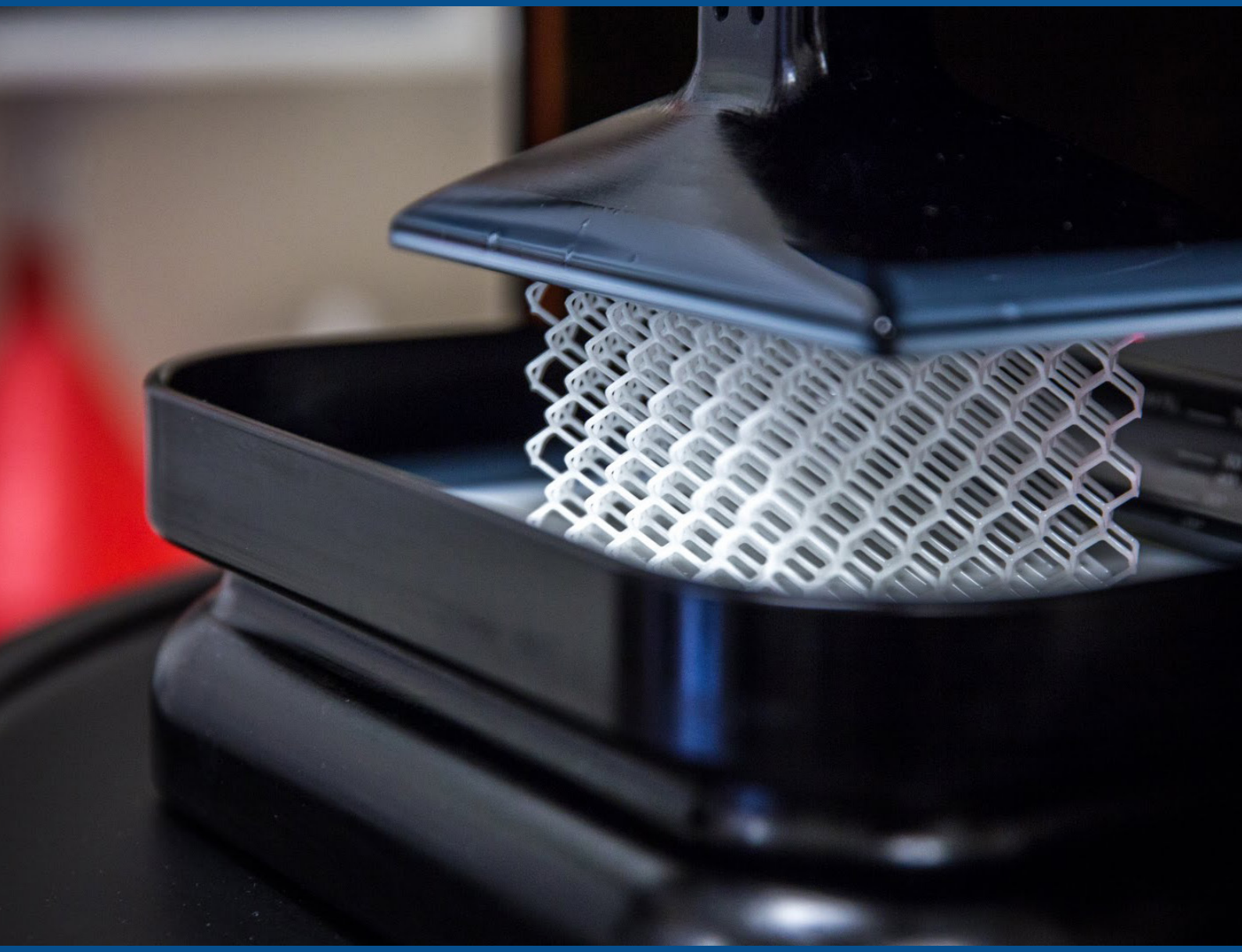
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1572nd Conference

Scientific Program

2nd International Conference on

3D PRINTING TECHNOLOGY AND INNOVATIONS

March 19-20, 2018 | London, UK



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Registrations

Bleriot 1

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Opening Ceremony

Keynote Forum

Introduction

Title: What is inside AM fabricated parts? the nature of residual stresses and shape distortion
Alexander V Manzhirov, Ishlinsky Institute for Problems in Mechanics - RAS, Russia

Title: Iodonium based photoinitiators: Towards simplified photocurable formulations
Frederic Dumur, Aix Marseille University, France

Group photo

Networking and Refreshments Break

Title: Robocasting of dense ceramic parts
Gremillard Laurent, MATEIS (UMR CNRS 5510), France

Sessions: Advances in 3D Printing & Additive Manufacturing Technology | Innovations in 3D Printing | Design for 3D Printing | 3D Printing Materials | Benefits of 3D Printing and Technology | Future Technology in 3D Printing | Challenges in 3D Printing | 3D printing in Biomaterials | Clinical applications of 3D Printing Innovations | Applications of 3D Printing in healthcare & medicine

Session Chair: Alexander V. Manzhirov, Ishlinsky Institute for Problems in Mechanics - RAS, Russia
Session Co-Chair: Lin Li, The University of Manchester, UK

Session Introduction

Title: Cost reduction activity
Yasunori Ota, Value Engineering Trainer, Japan

Title: 3D printer applications for developing robotics
Ikuo Yamamoto, Nagasaki University, Japan

Title: Functionally graded materials obtained by additive manufacturing technology
Devi K Kalla, Metropolitan State University of Denver, USA

Lunch Break

Title: The fabrication of grinding wheels with 3-dimensional controllable abrasives arrangement using Stereolithography Apparatus method
Xipeng Xu, Huaqiao University, China

Title: How far we can go to print a jet engine? The beauty of a 3D printed micro jet engine
Pinlian Han, South University Of Science And Technology, China

Title: Yield stress agent for silicone 3D printing
Edwin Joffrey Courtial, ICBMS, Claude Bernard University Lyon 1, France

Title: Research progress in additive manufacturing of ceramics and some related applications
Jia Min Wu, Huazhong University of Science and Technology, China

Title: Two-photon polymerization: A femtosecond laser-based technology for additive manufacturing in life sciences and microoptics
Sonke Steenhusen, Fraunhofer Institute for Silicate Research ISC, Germany

Title: 3D Printing and nanocomposite gels as a new challenge in tissue repair and regeneration
Teresa Russo, National Research Council, Italy

Title: Additive manufacturing of metal-ceramic metamaterials for RF communications
Daniel S Engstrom, Loughborough University, UK

Networking and Refreshments Break

Title: Biologically acitve and mechanically improved composite core-shell hydrogel for 3D bioprinting
J Yang, University of Nottingham, UK

Title: Design principles for structural components and functional devices
Frank Schubert, Chemnitz University of Technology, Germany
Title: Discrete element simulation of radial heat transfer in powder bed of 3D printing
Yuanqiang Tan, Huaqiao University, China
Title: Implementation of entry-level bioprinters for biotechnological applications
Josefine Morgenstern, Karlsruhe Institute of Technology (KIT), Germany
Title: Modern methods of additive manufacturing for biomedical products
Patrycja Szymczyk, Wroclaw University of Science & Technology, Poland
Title: The Application of 3D printing in micro AD biogas technology
Guy Blanch, LEAP Micro AD Ltd, UK

Panel Discussion

Day 2 March 20, 2018

Hall - Bleriot 1

Keynote Forum

Title: Heat and mass flows in laser metal deposition additive manufacturing
Lin Li, The University of Manchester, UK
Title: New generation of the cutting tools when the AM (Additive Manufacturing) technology is used
Miroslav Zetek, University of West Bohemia, Czech Republic

Sessions: 3D Printing Technology Impact on Manufacturing Industry | 3D Image Processing and Visualization | 3D printing technology and innovations | Metal 3D Printing | Polymers in 3d printing | 3D Bio printing | Lasers in 3D Printing in Manufacturing Industry | 3D Printing of Supply Chain Management | Tissue and Organ Printing

Session Chair: Lin Li, The University of Manchester, UK
Session Co-Chair: Alexander V Manzhirov, Ishlinsky Institute for Problems in Mechanics - RAS, Russia

Session Introduction

Title: Advanced materials and technologies in aviation industry
Tomasz Kurzynowski, Wroclaw University of Science & Technology, Poland
Title: Selective laser melting of a new medium manganese steel alloy for automotive industry
Bernd Schob, Chemnitz University of Technology, Germany
Title: Selective laser melting of a new tailored aluminium alloy (SilmaAl® AlSi7Mg0.6) for aerospace industry
Camilo Zopp, Chemnitz University of Technology, Germany
Title: How our noses could change if we lived on Mars Transhumanist speculations
Marta Flisykowska, Academy of Fine Arts, Poland

Networking and Refreshments Break

Special Session on Multiscale Additive Manufacturing

Title: Multiscale additive manufacturing
Geoffrey Mitchell, CDRSP-IPL, Portugal
Title: Multiscale additive manufacturing for tissue engineering
Nuno Alves, CDRSP-IPL, Portugal
Title: Multiscale additive manufacturing for aerospace and tooling applications
Artur Mateus, CDRSP-IPL, Portugal
Title: Biomanufacturing at multiple scales
Wenhui Song, UCL Centre for Nanotechnology and Regenerative Medicine, UK

Lunch Break

YRF Presentations

Title: Investigation on the effect of processing parameters on 3D printed structures
Chao Zhu, University of Manchester, UK
Title: Sandwich panel with lattice core for aircraft anti-ice system made by Selective Laser Melting
Sara Varetti, Polytechnic University of Turin, Italy

Title: Investigation of the mechanical properties of Hot-Melt extruded filaments for pharmaceutical applications of FDM
Jehad Nasereddin, University of East Anglia, UK
Title: Cell characterization methods for use in 3D bioprinting process development
Sarah Gretzinger, Karlsruhe Institute of Technology (KIT), Germany
Title: Micro-structures fabricated by SLA 3D printing to enhance the electrochemical effects of supercapacitors
Jiun-Hong Liu, Chung Yuan Christian University, Taiwan
Title: Freeform-FDM process development using natural fibre reinforced biopolymers
Mohamed Aburaia, University of Applied Sciences Technikum Wien, Austria

Networking and Refreshments Break

Title: Shape matters: Benefits of 3D printing for the design of packed-bed reactors
Jennie von Seckendorff, Technical University of Munich, Germany
Title: Using digital image corelation in assessment of anisotropy of strength properties of 3D printed specimens
Katarzyna Czwakiel, Cracow University of Technology, Poland
Title: 3D printed cellulose nanocrystals based hydrogel scaffolds for biomedical applications
Sahar Sultan, Stockholm University, Sweden
Title: An investigation into the quasi-static response of 316L gyroid structures manufactured using selective laser melting
Shuai Ma, Chongqing University, China

Poster Presentation 16:50-17:50 @ Foyer

Poster Judge: Alexander V Manzhirov, Ishlinsky Institute for Problems in Mechanics - RAS, Russia

3DP-01	**Title: The development of computer aided tools for the formulation design of FDM 3D printed polypills** **Salman Rahman**, University of East Anglia, UK
3DP-02	**Title: Platinum-based metallopolymers for 3d printing applications** **Sam Hsien-Yi Hsu**, City University of Hong Kong, Hong Kong
3DP-03	**Title: Additive manufacturing for heterogeneous catalysis: New challenges in material and process development** **Theresa Ludwig**, Technical University of Munich, Germany
3DP-04	**Title: Finite element simulation of sonotrode for ultrasonic additive manufacturing on dynamic performance** **Changcai Cui**, Huaqiao University, China
3DP-05	**Title: Protecting diamond abrasive from been corroded in the vitrified bond wheel manufactured by 3D printing** **Jing Lu**, Huaqiao University, China
3DP-06	**Title: 3D Printing to biodiesel production by photocatalysis** **Lorena Hernandez Afonso**, University of La Laguna, Spain
3DP-07	**Title: SLA-3D printed electrolytes for solid oxide fuel cells** **Lorena Hernandez Afonso**, University of La Laguna, Spain
3DP-08	**Title: Distribution of the metal powder particles in the dispenser platform its influence on the printing quality** **Ivana Zetkova**, University of West Bohemia, Czech Republic
3DP-09	**Title: High resolution DEM building with SAR interferometry and high resolution optical image** **Omar Hadj Sahraoui**, Algerian Space Agency, Algeria

Panel Discussion

Awards & Closing Ceremony

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Scientific Program

International Conference on

3D PRINTING TECHNOLOGY AND INNOVATIONS

July 05-06, 2017 | Frankfurt, Germany



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Day 1 | July 05, 2017

08:30-09:30 Registrations

Odenwald

conferenceseries.com **09:30-09:55** **Opening Ceremony**

Keynote Forum

09:55-10:00 **Introduction**

10:00-10:40 **Title: 3D printing as a practical pharmaceutical manufacturing method**
Clive Roberts, University of Nottingham, UK

Networking & Refreshment Break 10:40-11:00 @ Foyer

11:00-11:40 **Title: Blending patient-specific instruments with surgical navigation**
Randy E Ellis, Queen's University, Canada

11:40-12:20 **Title: Additive Manufacturing of Medical Products**
Bogdan Dybała, Wroclaw University of Science and Technology, Poland

Group Photo

Sessions:
3D Printing: Additive Manufacturing Technology & Market| 3D Design | 3D Bioprinting | 3D Printing in Medicine | 3D Biomaterials | Supply Chain Management | 3D Printing Industries | 3D Printing in Orthopaedics and Traumatology

Session Chair: Clive Roberts, University of Nottingham, UK

Session Introduction

12:20-12:50 **Title: The GeSiM BioScaffolder 3.1 – A 3D bioprinter not only for bioprinting**
Frank-Ulrich Gast, GeSiM mbH, Germany

12:50-13:20 **Title: Integrated structural health monitoring by 3D printed metallic structures**
Lincy Pyl, Vrije Universiteit Brussel, Belgium

Lunch Break 13:20-14:10 @ Gaumenfreund Resturant

14:10-14:40 **Title: Oxygen concentration and conversion distributions in a layer-by-layer UV-cured film used as a simplified model of a 3D UV inkjet printing system**
Kentaro Takiame, Kanazawa University, Japan

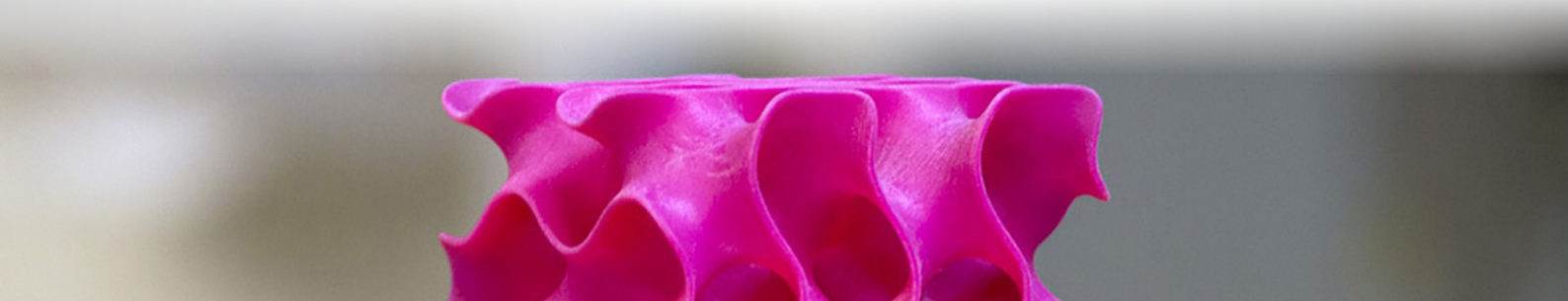
14:40-15:10 **Title: Full multi-axis motion control of a tool tip for metal 3D printing**
Haeseong Jee, Hongik University, South Korea

15:10-15:40 **Title: Materials development using additive manufacturing technologies**
Tomasz Kurzynowski, Wrocław University of Science & Technology, Poland

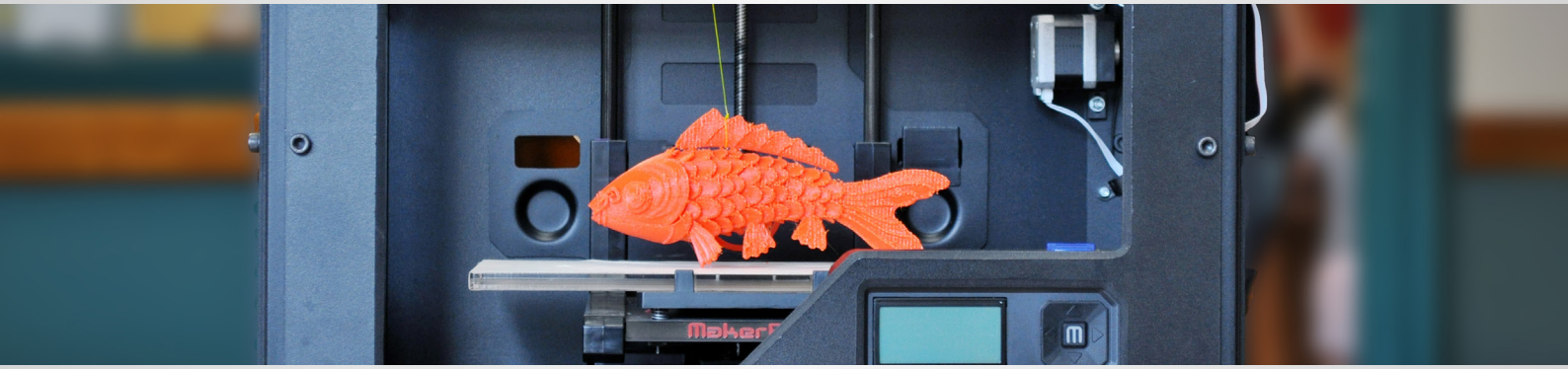
15:40-16:10 **Title: Mandibular reconstrucions using 3D technologies**
Kamila Kołodziejczyk, Wroclaw Medical University, Poland

Panel Discussion

Networking & Refreshment Break 16:10-16:30 @ Foyer



Day 2 | July 06, 2017	
Odenwald	
Sessions: **3D Printing: Innovations | Polymers in 3D Printing | 3D Materials | 3D Organ Printing | Radiation oncology Future Technology | Impact on Manufacturing Industry**	
Session Chair: Randy E Ellis, Queen's University, Canada	
	Session Introduction
10:00-10:30	**Title: Design and fabrication of a porous cast using additive manufacturing** **Keun Park,** Seoul National University of Science and Technology, South Korea
10:30-11:00	**Title: Material development for Rapid Prototyping for futur medical application** **Wolfdietrich Meyer,** Fraunhofer Institute for Applied Polymer Research, Germany
	Panel Discussion
	Networking & Refreshment Break 11:00-11:20 @ Foyer
11:20-11:50	**Title: 3D-printing technology for physical simulation of petal-type space mirror deployment** **V. I. Bujakas,** P. N. Lebedev Physical Institute of Russian Academy of Science, Russia
	Young Researchers Forum
11:50-12:20	**Title: Development of economic DLP and resin based 3D printing system for micro fabrication of fine resolution** **Shweta Thapa,** Rutgers School of Mechanical & Aerospace Engineering, USA
12:20-12:50	**Title: Process chain for fabrication of external maxillofacial prosthesis using additive manufacturing** **Nneile Nkholise,** Central University of Technology, South Africa
12:50-13:20	**Title: Cardiovascular tissue engineering using 3D printing technology** **Narutoshi Hibino,** The Johns Hopkins Hospital, USA
	Lunch Break 13:20-14:10@ Gaumenfreund Resturant
14:10-14:40	**Title: Progress towards metal additive manufacturing standardization** **Mohsen Seifi,** ASTM International, USA
14:40-15:10	**Title: 3D printing of drug delivery systems by laser sintering** **Gean V Salmoria,** Federal University of Santa Catarina, Brazil
15:10-15:40	**Title: Re-programmable sequential folding/unfolding in 3D printed structures** **Wei Min Huang,** Nanyang Technological University, Singapore
	Panel Discussion
	Closing Ceremony
	Networking & Coffee 15:40-16:00 @ Foyer



Bookmark your dates

2nd International Conference on

3D Printing Technology and Innovations

March 19-20, 2018 London, UK