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Scientific Program

4th International Conference on

INNOVATIVE AND SMART MATERIALS

NOVEMBER 19-20, 2018 | OSAKA, JAPAN



SMART MATERIALS 2018

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Scientific Program

Registrations
08:30-09:30

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Opening Ceremony
09:30-09:55

Day 1: November 19, 2018

Conference Hall

Keynote Forum

Introduction 09:55-10:00

10:00-10:40
Title: In pursuit of the holy grail of lab-on-a-chip technology – from silicon and glass micromachining to 3D printing
Wojciech Piotr Bula, University of Tokyo, Japan

10:40-11:20
Title: Novel mesh based on nano bacterial cellulose and poly (lactide-co-glycolide) composite
Chen Lai, Shenzhen Institute Peking University, China

Networking Break 11:20-11:50 @ Prefunction Area

Session Introduction

Classification of Smart Materials | Smart Structures and Materials | Smart Materials using Nano-technology | Robotics and Future | Shape Memory Alloys | Automation and Impact

Session Chair: Daniel Li, North-western University, Illinois

11:50-12:20
Title: Multiple damage detection in frames using wavelet transforms
Jalal Akbari , University of Malayer, Iran

12:20-12:50
Title: Advances in 3D Printing in Biomaterials for Orthopaedic Applications
Daniel Li, North-western University, Illinois

Lunch Break 13:10-14:10

Properties and Characterization of Smart Materials | Smart Materials in Medical Sciences | Actuators and Sensors as Smart Materials | Smart Textiles in Clothing | Smart Materials in Global Market | Applications of Smart Materials

Session Chair: Jalal Akbari , University of Malayer, Iran

Session Introduction

14:00-14:30
Title: Microstructural and crystallographic characterization of spark plasma sintered Ti-Zr and Ti-Ta based alloys
Bamidele L Bayode, University of Johannesburg, South Arica

14:30-15:00
Title: Efficiency in additive manufacturing processes
Juan Carlos Cruz-Robles, University of Manchester, USA

Networking Break 15:00-15:30 @ Prefunction Area

15:30-16:00 **Title: Robotics and few of the newest technologies you know and how can it be helpful for the future and us**

Vilkov Aleksandr, Super OX LLC, Japan

16:00-16:30 **Title: Tapping the unlimited energy**

Shivam Nigam, Hindustan Zinc, India

Day 1 Concludes

Day 2: November 20, 2018

Hall Name

Keynote Forum

10:00-10:40 **Title: Slow Positron facility (SPOT)**

Dan Cohen, Informatix, Israel

10:40-11:20 **Title: The emergence of artificial intelligence: Machine learning-based recognition and treatment approach: a case study of clinical data**

Moloud Abdar, The University of Aizu, Japan

Networking Break 11:20-11:50 @ Prefunction Area

Session Introduction

Future Scope of Smart Materials |Carbon Fibre Reinforced Concrete (CFRC)| Smart Combat Suits | Self-healing Hydro-gels | Electrostrictive Polymers for Energy Harvesting | Sun Exposure Monitoring Sensor

Session Chair: Wojciech Piotr Bula, University of Tokyo, Japan

11:50-12:20 **Title: Superior Thermomechanical and Electrical Conductivity of Reduced Graphene Oxide Reinforced Polyaniline Based Nano Composite**

Abhishek K. Pathak, CSIR-National Physical Laboratory, India

12:20-12:50 **Title: Can robotic units become sentient?**

Sahas Gelli, Greenwood High International School, India

SPEAKER SLOTS AVAILABLE

Lunch Break 12:50-14:00 @ Restaurant

Poster Presentations @ 14:00-16:00

Poster Judges:

14:00-14:30 **Title: Novel mesh based on nano bacterial cellulose and poly (lactide-co-glycolide) composite**

Chen Lai, Shenzhen Institute Peking University, China

14:30-15:00 **Title: Highly thermal stable conducting pyroprotien fibers**

Hyoung-Joon Jin, Inha University, Korea

SLOTS AVAILABLE

SLOTS AVAILABLE

Panel Discussions

Awards & Closing Ceremony