

2<sup>nd</sup> Edition of International Conference on  
**MATERIALS SCIENCE AND  
ENGINEERING**

**MARCH 28 -30, 2022 | Hybrid Event**

Join In Person at Singapore or Virtually from  
Home or Work



**TENTATIVE PROGRAM**

## KEYNOTE PRESENTATIONS (IN-PERSON)

---

Title: Predictive modeling sheds useful light on burn-in testing (BIT): Brief review and recent extension

**Ephraim Suhir, Portland State University, United States**

## KEYNOTE PRESENTATIONS (VIRTUAL)

---

Title: Geometrical impact on magnetic properties of mesoscopic scale thick nickel thin films

**Jean Ebothe, Université de Reims Champagne Ardenne, France**

Title: Continuous casting of copper wire

**Zakaria Bomerzoug, University of Biskra, Algeria**

## ORAL PRESENTATION (IN-PERSON)

---

Title: An integrated multiscale structural integrity approach to predicting damage and failure in advanced steels under fatigue/creep/oxidation

**Kamran Nikbin, Imperial College, United Kingdom**

Title: Additive manufacturing of advanced ceramics: the art of the possible

**Bala Vaidhyanathan, Loughborough University, United Kingdom**

Title: Physical and chemical properties of optoelectronic materials with sphalerite and wurtzite structure

**Valery Vassiliev, Lomonosov Moscow State University, Russian Federation**

Title: The tribological performance of gas turbine lubricants

**Jake Airey, Rolls-Royce, Singapore**

Title: Numerical investigation of energy tunnel lining ground heat exchangers in a mountain environment

**Chenglin Li, Southeast University, China**

Title: Investigation on the thermal performance of phc energy pile backfilled with phase change material

**Ziming Cao, Southeast University, China**

Title: Antireflective, transparent, water-resistant, and antibacterial zn-doped silicon oxide thin films for touch-screen based display applications

**Soon-Gil Yoon, Chungnam National University, Republic of Korea**

Title: Influence of temperature on oxygen adsorption/desorption properties of ti-co-re and zr-co-re non-evaporable getter materials

**A Durga Prasada Rao, Andhra University, India**

Title: Significant effect of film thickness on morphology and third-order optical nonlinearities of cd1-xznxo semiconductor nanostructures for optoelectronics

**Raghavendra Bairy, N.M.A.M. Institute of Technology, India**

Title: Management of cadmium containing materials in the environment to protect human health and ecosystem

**Shamim Al Mamun, Mawlana Bhashani Science and Technology University, Bangladesh**

Title: Moroccan phosphogypsum valorisation in road application

**Chaimaa Diouri Ayad, Cedoc EHTP/ office chérifien des phosphates du Maroc, Morocco**

Title: Recent development in NaCa(AG):sm<sup>3+</sup> (where AG = BO<sub>3</sub><sup>-3</sup>, PO<sub>4</sub><sup>-3</sup> and SO<sub>4</sub><sup>-2</sup>) nanophosphors-applications for solid state lightning

**Leelakrishna, University of Johannesburg, South Africa**

Title: Response of blocks using waste plastic

**Sadaqat Ullah Khan, The NED University of Engineering & Technology, Pakistan**

*Oral Presentation (In-Person) slots are available*

---

## ORAL PRESENTATION (VIRTUAL)

---

Title: Recognizing the potential of 4d printing

**Thorsten Pretsch, Fraunhofer IAP, Germany**

Title: Improving the reliability design of mechanical systems such as refrigerator

**Seongwoo Woo, Ethiopian Technical University, Ethiopia**

Title: Fatigue behavior of polychloroprene rubber (cr) with tungsten nano-particles considering stress triaxiality based on semi-empirical and machine learning models

**Joeun Choi, Sogang University, Republic of Korea**

Title: Office based addiction treatment in a safety net system

**Praveen Kumar Saxena, Tech Next Lab Pvt Ltd, India**

Title: Cryogenic treatment: evolution for polymeric materials

**Swamini Chopra, Maharashtra Institute of Technology, India**

Title: Enhanced spin wave coupling between spin torque nano oscillators

**Nikhil Kumar C S, Indian Institute of Technology Bombay, India**

Title: Ultrasonic sonic spray deposition of mesoporous tungsten oxide films for electrochromic application

**Chi-Ping Li, National United University, Taiwan**

Title: A novel combined approach to simultaneous nanostructured conducting polymer carbonization and carbon nanotube/metal oxide nanowire growth

**Selcuk Poyraz, Adiyaman University, Turkey**

Title: Influence of material choice on the resistance of the hot asphalt mix to high temperatures

**Mouncif Sarroukh, EHTP, Morocco**

*Oral Presentation (Virtual) slots are available*

---

## POSTER PRESENTATION (IN-PERSON)

---

Title: Study on mechanical properties of copper alloy (cuni2sicr) layered on nickel aluminum bronze (nab) by using direct energy deposition

**Changliang Yao, Korea Maritime and Ocean University, Republic of Korea**

Title: Additive manufacturing of aluminum porous material with closed cell using foaming agent and directed energy depositio

**Do-Sik Shim, Korea Maritime and Ocean University, Republic of Korea**

*Poster Presentation (In-Person) slots are available*

---

## POSTER PRESENTATION (VIRTUAL)

---

Title: The separation of emulsified water/oil mixtures through adsorption on plasma-treated polyethylene powder

**Asma Abdulkareem, Qatar University, Qatar**

*Poster Presentation (Virtual) slots are available*

---



## QUERIES? CONTACT

+1 (702) 988-2320

or

**Email:** [materials@magnusconference.com](mailto:materials@magnusconference.com)

## REGISTER TODAY AND GET THE MEETING ID TO JOIN

<https://magnusconferences.com/materials-science/register>

**For more details,**

**visit:** <https://magnusconferences.com/materials-science/>

