## **Poster Presentations**

1. Water vapor corrosion of environmental barrier coating produced by electrophoretic deposition

Ahmet Hilmi Paksoy, The University of Manchester, United Kingdom

2. Evaluation of mechanical behavior of bimodal microstructure of Al2O3-YSZ-CNT plasma sprayed coatings

Alok Bhadauria, Indian Institute of Technology, Kanpur, India

- 3. Reactions of rare earth hafnates and zirconates with silicate melts of different basicity Andrew R. Ericks, University of California, Santa Barbara, USA
- 4. Modified bond coat by EB PVD for TBC

Andrii Marynskyi, Paton Turbine Technologies, Ukraine

5. Debye-Larmor high enthalpy cascade plasma gun technology to apply ceramic coatings for the turbine industry

Armando Salito, Gulhfi Consulting AG, Switzerland

6. Determination of interface fracture energy of YSZ coating by modified clamped beam bending

Ashwini Kumar Mishra, Indian Institute of Technology Bombay, India

7. TUBA Nova - A novel industrial EB-PVD coater platform for state-of-the-art TBCs and multi-layer coatings

Carsten Deus, VON ARDENNE GmbH, Germany

- 8. Investigating the microstructure of as-sprayed high-crystalline Yb2Si2O7 environmental barrier coating (EBC) deposited by atmospheric plasma spray (APS) Christian Moreau, Concordia University, Canada
- 9. Microstructure modification of EB-pvd gadolinium zirconate thermal barrier coatings and the effect on their resistance against siliceous CMAS melts
  Christoph Mikulla, German Aerospace Center (DLR), Germany
- 10. Thermal Environmental Barrier Coatings (TEBCs), and their deposits-induced degradation and Its mitigation

Christopher Louzon, Brown University, USA

11. Synthesis of multi component rare-earth silicate systems for T/EBC application: Study of their high temperature interactions with CMAS

Cynthia Yanel Guijosa Garcia, German Aerospace Center (DLR), Germany

- 12. **Environmental barrier coatings deposited by suspension plasma spraying**Dapeng Zhou, Forschungszentrum Jülich GmbH, Germany
- 13. Understanding garnet phase stability in Gd/Y/Yb-CMAS systems and influences on multiphase T/EBC-CMAS interactions

Eeshani Paresh Godbole, University of Minnesota, USA

14. Mechanical properties of Yb2Si2O7 coatings prepared using electrophoretic deposition

Esma Yilmaz, University of Manchester, United Kingdom

15. Ytterbium silicate environmental barrier coatings prepared by a novel slurry sprayingreactive sintering technique

Gauri Waghmare, Indian Institute of Technology Bombay, India

16. Environmental Barrier Coatings (EBC) based on Rare Earth Silicates for the protection of aircraft engines components: Optimization of process parameters and characterization

Giulia Di Iorio, Sapienza University of Rome, Italy

- 17. Effect of thermal spray processing and powder morphology on environmental barrier coatings (EBCs) performance under high temperature water vapor conditions
  Gopal Dwivedi, Stony Brook University, Center for Thermal Spray Research, USA
- 18. Multicomponent equimolar "high entropy" oxides with fluorite/pyrochlore structure for thermal barrier application

Harshad Uday Gandhe, Indian Institute of Technology Bombay, India

- 19. Concepts for enhancing the life of environmental coatings systems Jeroen Deijkers, University of Virginia, USA
- 20. **Coatings for increased efficiency in compression ignition engines**John Saputo, Stony Brook University, Center for Thermal Spray Research, USA
- 21. A coupled thermal and mechanical analysis of sintering in thermal barrier coatings under gradient exposure

John Saputo, Stony Brook University, Center for Thermal Spray Research, USA

22. Effects of EB-PVD microstrural features on CMAS infiltration of Yttria-rich zirconia coatings

Juan Gomez, Pratt & Whitney, USA

23. Thermochemical stability of high entropy rare earth oxide (HERO) coatings for refractory alloys

Kristyn Ardrey, University of Virginia, USA

- 24. Intrinsic and extrinsic failure of thermal barrier coatings and thermal conductivity evolution under adverse environments: Towards an integrated modeling Kuiying Chen, National Research Council Cana, Canada
- 25. Novel multicomponent equiatomic pyrochlores for future thermal barrier coatings Maren Lepple, DECHEMA-Forschungsinstitut, Germany
- 26. Spatially resolved characterization of thermally grown oxides using time-domain thermoreflectance

Milena Milich, University of Virginia, USA

- 27. **Advanced suspensions for plasma sprayed thermal barrier coatings** Richard Trache, Treibacher Industrie AG, Austria
- 28. Study of an atmospheric plasma torch operating under 1 kW of power for the local deposition of YSZ thermal barrier coatings

Sandra Segondy, Chimie ParisTech, PSL Research University, France

29. Simultaneous residual stress mapping of topcoat and TGO in APS TBC using combined micro-raman-PL spectroscopy

Srikanth Batna, Indian Institute of Technology Bombay, India

30. Evaluation of next generation rare-earth silicate EBC coatings obtained from electrofused powders

Stéphane Raffy, Saint-Gobain, France

Lessons learned in design and characterization of EBC spray powders
 Ursa Pirnat, Treibacher Ind. AG, Austria

32. A comparative study of phase evolution in YSZ powders, pellets and free-standing air plasma sprayed thermal barrier coatings

Vikram Hastak, Indian Institute of Technology Bombay, India

- 33. SiC-based/EBC Coating systems investigated by LASAT (LAser Shock Adhesion Test) Vincent Guipont, MINES Paris PSL / Centre des Matériaux (CNRS 7633), France
- 34. Non-destructively capturing CMAS degradation of EB-PVD thermal barrier coatings through 3D confocal Raman renderings
  Zachary Stein, University of Central Florida, USA
- 35. The utilization of laser thermal testing with thermographic measurement for TBC lifetime performance evaluation
  Zdeněk Veselý, University of West Bohemia, Czech Republic