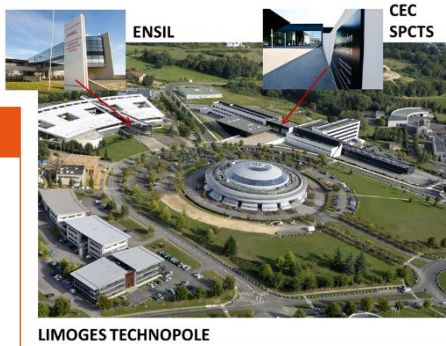


Location / Info:



For more information

Lech PAWŁOWSKI
 University of Limoges
 SPCTS, Centre Européen de la
 Céramique
 12 rue Atlantis
 87068 LIMOGES CEDEX – FRANCE
 Tel. (+33) 587 50 24 12
lech.pawlowski@unilim.fr

LIMOGES TECHNOPOLE

RIPT - 8th edition

Visit in the laboratory of thermal spraying:
 For the participants who were initially registered

Conference Sessions:

- 1) Spray process & coatings
- 2) Cold spray
- 3) Solution & suspension spraying
- 4) Characterisation of coatings
- 5) Applications of coatings
- 6) Biomaterials
- 7) Modeling, diagnostics and process control

Original contributions include: thermal spraying; recent developments on suspensions and solutions; spray feedstock: powders, suspensions, solutions; functional and nanostructural coatings; analysis of spray processes; sprayed coatings characterizations (microstructural, optical, mechanical, physical, chemical...); recent methods such as suspension spray and cold spray; post spray treatments; environmental aspects of thermal spraying will be particularly of interest during this 8th edition.

Conference fees to be paid on line using our website:

<http://www.unilim.fr/ript/registration/>

(1 day / 2 days):	NON ETSA	ETSA members
Students:	60 € / 130 €	40 € / 100 €
Academics:	230 € / 400 €	190 € / 350 €
Industry:	260 € / 450 €	210 € / 400 €
Exhibitors:	550 €	500 €
Gala dinner:	50 €	40 €

« Les Rencontres Internationales sur la Projection Thermique »

The fifth and last announcement:
 see you at the 8th edition of the RIPT !
 6-8 December 2017, in Limoges, France



CENTRE EUROPÉEN DE LA CERAMIQUE
LIMOGES, FRANCE

Partners:



How to reach Limoges:



<http://www.unilim.fr/ript>



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VUORISTO P.	Professor, Tampere University of Technology, Finland
WIELAGE B.	Professor, TU Chemnitz, Germany

Visits of thermal spray laboratories: December 6th, 2017

For the participants who were initially registered

Conference Sessions: December 7th & 8th, 2017

- 1) *Spray process & coatings*
- 2) *Cold spray*
- 3) *Solution & suspension spraying*
- 4) *Characterisation of coatings*
- 5) *Applications of coatings*
- 6) *Biomaterials*
- 7) *Modeling, diagnostics and process control*

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Invited and plenary lectures will be given by:

ARASA	Carina	Elsevier, Amsterdam / The Hague	The Netherlands
BAKAN	Emine	Forschungszentrum Jülich GmbH	Germany
BERNDT	Christopher	University of Swinburne	Australia
BOLELLI	Giovanni	University of Modena and Reggio Emilia	Italy
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JORDAN	Eric	University of Connecticut	USA
KIILAKOSKI	Jarkko	Tampere University of Technology	Finland
KILLINGER	Andreas	University of Stuttgart	Germany
KLASSEN	Thomas	Helmut Schmidt University	Germany
KLEMENT	Uta	Chalmers University of Technology	Sweden
LATKA	Leszek	Wroclaw University of Technology	Poland
LI	Hua	Ningbo Institute of Mat. Sci. Eng.	China
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MATEJCEK	Jiri	Institute of Plasma Physics, Prague	Czechia
MAUER	Georg	FZ Jülich	Germany
MAUREL	Vincent	MINES ParisTech, UMR CNRS 7633	France
SANCHEZ	Enrique	Instituto de Tecnología Cerámica	Spain
SOKOLOWSKI	Pawel	Wroclaw University of Technology	Poland
TULUI	Mario	CSM, Rome	Italy
VUORISTO	Petri	Tampere University of Technology	Finland

Conference articles:

Papers presented within the auspices of the 8th RIPT conference (invited, oral and poster contributions) will be published after normal peer-review process in “*Surface and Coatings Technology*”, an international journal devoted to the science and application of advanced surface treatments for improvement of material properties.

The articles must go beyond the technical recipe format and gain new understanding and insight based on detailed characterization of coatings and processes. Experimental papers should provide complete information on the process parameters and an appropriate microstructural characterization.

Manuscripts must be written in good English and should contain adequate / up-to-date references, formatted according to the guide-for-authors document.

Further details about journal can be found on-line:

<http://ees.elsevier.com/surfcoat>



Welcome!

08h00, registration desk open (entry hall).

We sincerely welcome you to the 8th RIPT conference and hope that you will enjoy this event. Please contact us at the registration desk if you have any questions, suggestions that you would like to share with us during this event, or to inform us of your plans. We will do our best to help you!

13h00 – 14h00: lunch break

Amphitheatre #4:

14h00, plenary lecture given by **Petri Vuoristo**,
“Alternative coating materials in thermal spraying for sustainability and eco-efficiency”.

15h00, plenary lecture given by **Carina Cid Arasa**,
“The publishing cycle in a digital area and the new trends in the of Surface and Coatings Technology”.

18h30, ESTER Technopole (1, avenue Ester):
“Welcome cocktail”,
an event courtesy of AVRUL.

09h00 – 12h00 visits of the thermal spray laboratories
For persons who are registered

In charge / contact persons: Lech Pawłowski, Alain Denoirjean

Room TD #4 :

10h00 – 12h00,
Meeting: ETSA Board of Directors

13h00 – 14h00: lunch break

*For further details, please go on-line at www.unilim.fr/ript
and refer to the available documents.*



Registration form for the 8th RIPT

6-8 December 2017, Limoges

Please use the registration on the website:
<http://www.unilim.fr/ript/registration/>

Otherwise, please fill in this form and return it to the registration desk during your visit.

*Title (Prof, Dr, Ms, Mrs, Mr) _____

*First name _____

*Last name / Surname _____

*Job title _____

*Organization _____

*Address _____

*City _____ Postal code _____

*Country _____

Phone _____ Fax _____

*E-mail _____

*Total sum paid: _____ €

- Oral /Invited contribution
- Poster presentation
- Technical exhibition
- Participant

Your comments (if any):

Amphitheatre #4

08h00: Opening ceremony. *Welcome words from the representatives from the Municipality, University of Limoges, and SPCTS laboratory*

08h30: Plenary lecture by **Thomas KLASSEN:** “Cold Spraying for Additive Manufacturing and Repair”

Amphitheatre #3

Spray process – session 1

Chairman: Christopher Berndt

- **09h00:** “Replacing critical materials in thermal spray coatings – current status, research trends and challenges” by Giovanni Bolelli (**invited**)
- **09h30:** “The effect of feedstock powder treatment/processing on the microstructure, quality and performance of thermally sprayed titanium based composite coating” by Salman Asma
- **09h50:** “Materials and Processing Factors Influencing Stress Evolution and Mechanical Properties of Plasma Sprayed Coatings” by Jiri Matejcek (**invited**)
- **10h40 – 11h20:** Coffee break

Spray process – session 2

Chairman: Giovanni Bolelli

- **11h20:** “Challenges for Thermal Spray: What do we do next?” by Christopher Berndt (**invited**)
- **11h50:** “Control of the porosity of plasma-sprayed coatings for low thermal conductivity microstructures” by V. Fournier
- **12h10:** “Microstructural features and phase compositions of APS-sprayed coatings of the Al₂O₃-TiO₂ system” by L. Berger
- **12h30:** “Investigation of porosity in suspension plasma sprayed YSZ coatings by use of NMR cryoporometry and X-ray microscopy” by Uta Klement (**invited**)

Amphitheatre #4

Cold spray – session 1

Chairman: Chaoyue Chen

- **09h00:** “Deposition efficiency prediction via machine learning in Cold Spray” by Sergi Dosta (**invited**)
- **09h30:** “Cu-W functionally graded material by cold spray for plasma facing components” by Aurelie Quet
- **09h50:** “Residual stresses in cold spray coatings by in-situ curvature measurements” by Raphaelle Bernardie
- **10h10:** “The possibility of TiO₂ nanopowder deposition onto metallic substrate by low pressure cold spraying” by M. Winnicki
- **10h40 – 11h20:** Coffee break

Cold spray – session 2

Chairman: Sergi Dosta

- **11h20:** “Cold Gas Spraying of Titanium Aluminide (TiAl) Alloys for Jet Engine Applications” by Emine Bakan (**invited**)
- **11h50:** “Study the effects of post-spray heat treatment on nano-structured cermet Ti-WC coatings obtained by high pressure cold spray process” by Gobinda Saha

Room TD #3

Solution & suspension spraying – session 1

Chairman: Enrique Sanchez

- **09h00:** “HVOF Spraying of Suspensions and Solution Precursors” by Andreas Killinger (**invited**)
- **09h30:** “Influence of HVSPFS hardware components on Titanium dioxide coatings” by M. Blum
- **09h50:** “Influence of suspension properties on HVSPFS oxide-carbide ceramic coatings” by Andreas Förg
- **10h10:** “Novel function-dependent coating architectures and superior performance through powder-suspension hybrid spraying” by Shrikant Joshi (**invited**)
- **10h40 – 11h20:** Coffee break

Solution & suspension spraying – session 2

Chairman: Andreas Killinger

- **11h20:** “Suspension plasma spraying to obtain bioactive glass coatings. Post-deposition treatment needed?” by Enrique Sanchez (**invited**)
- **11h50:** “Effects of solution concentration and spraying parameters on thermal barrier coatings obtained by SPPS process” by Pablo Carpio
- **12h10:** “Biocompatible Coatings by Axial Suspension Plasma Spraying” by Nicolaie Markocsan
- **12h30:** “Comparison of selected mechanical properties of plasma sprayed coatings made by APS and SPS” by L. Latka (**invited**)

Room TD #4

Characterisation of coatings – session 1

Chairman: Catalin Constantinescu

- **09h00:** “Microstructural defects in thermally sprayed coatings – their origin, causes, influences and methods for their prevention” by Petri Vuoristo (**invited**)
- **09h30:** “Laser cladding of Fe-Cu metal matrix composites reinforced by cermet inclusions for dry friction applications at ambient and elevated temperatures” by Igor Smurov
- **09h50:** “Solution Precursor Plasma Spray, Challenges of Porous vs. Dense Coatings” by Eric JORDAN (**invited**)
- **10h40 – 11h20:** Coffee break

Characterisation of coatings – session 2

Chairman: Radek Musalek

- **11h20:** “Stellite 6 hardfacing coatings applied by HVOF and GMAW hot wire cladding: microstructure features influencing the wear and corrosion performance” by Carlos Lima (**invited**)
- **11h50:** “Microstructural Investigation and characterization of HVOLF thermal spray in narrow and complex area” by Rohit Upadhyaya
- **12h10:** “Mechanical properties of alumina-zirconia-silica ceramic coatings after surface heat treatment” by Jan Medricky
- **12h30:** “A methodology to investigate mechanical properties of metallic substrate coated by ceramic” by Vincent Maurel (**invited**)

Amphitheatre #4

15h00: Opening – afternoon sessions

Amphitheatre #3

Spray process – session 3

Chairman: Petri Vuoristo

- **15h30:** “Assessment of interface strength and mechanical behaviour of various ceramic coatings involving laser shock experiments” by Vincent Guipont (**invited**)
- **16h00:** “Ultrasonic Cavitation Erosion of Vacuum Plasma sprayed Yttria Stabilized Zirconia Coatings” by Yan Wang
- **16h20:** “Cavitation erosion and corrosion behavior of HVOF/HVAF sprayed WC-based coatings” by I. Hulka
- **16h40:** “Suspension detonation spraying” by A. Shtertser
- **17h00:** “Non-contact residual stress analysis method in the nanometric range by laser made hole drilling and SLM based beam conditioning on ceramic coatings” by V. Martínez-García
- **17h20:** “Comparison of Microstructure and Oxidation Behavior of CoNiCrAlY Coatings Produced by APS, SAPS, D-Gun, HVOF and CGDS Techniques” by Yasin Ozgurluk
- **17h40 – 17h50:** Coffee break

Spray process – session 4

Chairman: Alain Denoirjean

- **17h50:** “Cascaded Arc Technology in the Thermal Spray Industry” by B. Distler (**invited**)
- **18h20:** “Performance and failure of plasma sprayed mullite-barium-magnesium-alumino-silicate environmental barrier coatings subjected to thermal cyclic loading” by L. Celko
- **18h40:** “Novel manufacturing technology of ceramic inner coatings on CFRP tubes” by Septimiu Popa

Amphitheatre #4

Cold spray – session 3

Chairwoman: Emine Bakan

- **15h30:** “On the heat coating build-up and heat accumulation in cold spray process” by Chaoyue Chen (**invited**)
- **16h00:** “Tribological and high-temperature mechanical characterization of cold sprayed Stellite coatings” by Lidia Baiamonte
- **16h20:** “Fatigue crack propagation in cantilever bending of cold sprayed metallic coatings” by Jan Cizek
- **16h40:** “Influence of machining and ball-burnishing on micro-structure and residual stress distribution of stainless steel coatings produced by cold spray and laser cladding” by Cedric Courbon
- **17h00:** “Preparation and characterization of Ni-coated Fe-Si-Al soft magnetic composites via cold spraying” by Xinliang Xie
- **17h40 – 17h50:** Coffee break

Biomaterials – session 1

Chairwoman: Ghislaine Bertrand

- **17h50:** “Characteristics of adsorption of polysaccharides and distinctive bacterial colonization and their influence on electrochemical behaviors of arc sprayed aluminum coatings” by Hua Li
- **18h20:** “Plasma-sprayed antimicrobial coatings from ultrafine composite powders” by K. Bilewska

Room TD #3

Solution & suspension spraying – session 3

Chairman: Leszek Łatka

- **15h30:** “Development of metal oxides semiconductors films by SPSS for functional applications” by Hanlin Liao (**invited**)
- **16h00:** “TBCs of New Compositon Subjected to Icelandic Volcanic Ash: Processing, Testing and Characterization” by Satyapal Mahade
- **16h20:** “Development of coatings with a arc DC plasma torch in pulsed mode with current modulation, synchronized with an inkjet drop-on-demand nozzle” by Fabrice Mavier
- **16h40:** “Effect of feedstock and thermal spraying variables on the performance of solution precursor plasma sprayed bio-active glass coatings” by Eugeni Cañas
- **17h00** “Phase Transformations and Post-Spray Heat Treatment of a Suspension High Velocity Oxy-Fuel (SHVOF) Sprayed Delta-Theta Alumina Suspension” by T. Owoseni
- **17h20:** “Suspension Flame Sprayed Metal Doped Calcium Phosphate Coatings with Antibacterial Properties for Infection Prophylaxis” by Andreas Killinger
- **17h40 – 17h50:** Coffee break

Modeling – session 1

Chairman: Pierre Fauchais

- **17h50:** “Conditions for Nucleation and Growth in the Substrate Boundary Layer at Plasma Spray-Physical Vapor Deposition” by Georg Mauer (**invited**)
- **18h20:** “Numerical Investigation of Nozzle Geometry on the Gas and Particle Dynamics of Suspension High Velocity Oxy Fuel Thermal Spray” by Sunil Chandha
- **18h40:** “Numerical study on the effect of nozzle divergence angle on particle distribution and particle velocity in cold spraying” by Chirag Singhal

Room TD #4

Characterisation of coatings – session 3

Chairman: Carlos Lima

- **15h30:** “Characterizing the micro-impact fatigue behaviour of APS and HVOF-sprayed ceramic coatings” by J. Kiilakoski (**invited**)
- **16h00:** “The influence of heat treatment of the properties of HVOF sprayed super-alloy coatings” by Sarka Houdkova
- **16h20:** “Characterization and properties of titanium coatings deposited by Very Low Pressure Plasma Spray” by Xiujuan Fan
- **16h40:** “Evaluation of Oxidation and Thermal Cyclic Behavior of YSZ, Gd₂Zr₂O₇ and YSZ/Gd₂Zr₂O₇ TBCs” by Kadir Mert Doleker
- **17h00:** “Investigation of durability and phase stability of conventional YSZ coating with high porosity content and multilayer Mullite-YSZ/YSZ coating after high temperature exposure” by David Jech
- **17h20:** “Comparative study of thermal spray (Ti,Mo)(C,N)-Ni coatings” by Paolo Sassatelli
- **17h40 – 17h50:** Coffee break

Applications of coatings – session 1

Chairman: Thomas Lampke

- **17h50:** “Wear protective coatings for wind turbine rolling bearings” by Mario Tului (**invited**)
- **18h20:** “Deposition of refractory metal coatings by detonation spraying” by V. Ulianitsky
- **18h40:** “Suspension HVOF Sprayed Rare Earth Oxide Ceramics Coatings with Robust Self-Cleaning Surfaces” by Mingwen Bai

Main Entrance Hall

19h00: Poster session (all topics)

- 1. 19h00:** "The influence of cold spray process on the polymer structure" by Aleksandra Małachowska
- 2. 19h00:** "Analysis of depth of remelting during laser remelting of thermally sprayed coatings using an infrared camera" by Milan Honner
- 3. 19h00:** "APS deposition of Hydroxyapatite targets for use in PAPVD coating of orthopaedic components" by Daniela Jaramillo
- 4. 19h00:** "Modelling of phenomena occurring in plasma jet during solution precursor plasma spraying of yttria-stabilized zirconia coatings" by P. Carpio
- 5. 19h00:** "The application of ultrasonic waves to support suspension injection in Suspension Plasma Spray process" by Paweł Sokołowski
- 6. 19h00:** "The influence of suspension properties on Suspension Plasma Spray process efficiency, stability and repeatability" by Paweł Sokołowski
- 7. 19h00:** "Influence of the preparation route of zirconia yttria powder on the behavior in SPS" by Sandrine Lucas
- 8. 19h00:** "Influence of powder feedstock preparation on nano-TiC added WC-Co coatings" by Hanna Myalska
- 9. 19h00:** "Effect of yttria-stabilized zirconia content on mechanical and biological properties of bioactive glass coatings manufactured by thermal spraying" by O. Rojas
- 10. 19h00:** "Influence of bond coat treatment on lifetime in suspension plasma sprayed thermal barrier coatings" by Nicolaie Markocsan
- 11. 19h00:** "Effect of Composition and Microstructure on the Erosion behavior of Plasma Sprayed Thermal Barrier Coatings" by Satyapal Mahade
- 12. 19h00:** "A study of high temperature frictional behaviour of Ti(Al,O)/Al₂O₃ composite coating" by Asma Salman
- 13. 19h00:** "Industrial trials of a Ti(Al,O)/Al₂O₃ composite coating on a dummy block used in aluminium extrusion" by Asma Salman
- 14. 19h00:** "Comparison of erosion characteristics of HVOF sprayed nano-Cr₃C₂-NiCr coatings for High Temperature Applications" by Rohit Upadhyaya
- 15. 19h00:** "Investigation of Tribological Properties and characterization of AISI 301 and AISI 420 stainless steels coatings" by Rassim Younes
- 16. 19h00:** "Solution precursor plasma spraying of ZnO nano-structured coatings for gas sensor applications" by R. Candidato
- 17. 19h00:** "Microstructural study of suspension plasma sprayed hydroxyapatite coatings", S. Kowalski
- 18. 19h00:** "Microstructure and Mechanical Properties of Cold Sprayed Cr₃C₂-Ni₂₀Cr Coatings" by A. Goral
- 19. 19h00:** "Microstructural characterization and insulation properties of the different DCL TBC's systems based on Sm2Zr2O7 and 8YSZ" Sebastian Jucha
- 20. 19h00:** "Corrosion mechanism of HVOF thermal sprayed WC-CoCr coatings in acidic chloride media", J.A. Picas
- 21. 19h00:** "The influence of yttrium on oxidation resistance of new Co-(Ni)-Al-W superalloys dedicated to bond-coat deposition", Damian Migas
- 22. 19h00:** "Breakdown of the continuum approach in Plasma Spray-Physical Vapor Deposition plasma flow model" by Gilles Mariaux
- 23. 19h00:** "Biocompatible Coatings for Medical Devices Using Plasma Spraying" C. Demian
- 24. 19h00:** "Deposition of environmentally friendly WC based cermets coatings by thermal spray techniques", M. Bazyaran
- 25. 19h00:** "Investigation of micro-arc oxidation treatment on selective laser melting Ti6Al4V surfaces" by Xingchen Yan
- 26. 19h00:** "Field electron emission experiments with cold sprayed Cu-SiC cermet coatings" M. Winnicki
- 27. 19h00:** "Tests of tribological properties of HVOF-sprayed WCCoCr carbide coatings of ultra-fine powders with a view to applying them to sliding rings of mechanical seals" A. Iwaniak
- 28. 19h00:** "The influence of feedstock powders on microstructure and basic properties of NiCr-Cr₃C₂ coatings" K. Szymański
- 29. 19h00:** "Microstructural characterization of additive manufactured NiCrAlY coating", G. Moskal
- 30. 19h00:** "The influence of stand-off distance on columnar microstructure formation with high-enthalpy WSP-H plasma torch" T. Tesar
- 31. 19h00:** "Numerical study of deposition process of metal particles on PA6 substrate with cold spray method" by A. Małachowska

Amphitheatre #4

Amphitheatre #3

Spray process – session 5

Chairman: Georg Mauer

- **09h00:** “Effect of Substrate Topography on the Morphology and Interface Bonding Formation of Plasma Sprayed NiCr Splats” by Chanj-Jiu Li (**invited**)
- **09h30:** “High Temperature Corrosion Mechanisms of HVOF-Sprayed Ni-Based Coatings Exposed to Alkali-Sulphate and Chloride Mixture Environments” by Esmaeil Sadeghimeresht
- **09h50:** “Evaluation of thermal cycling behaviour of pre-oxides plasma-sprayed thermal barrier coatings with various MCrAlX bond-coats” by K. Slámečka
- **10h10:** “A Comparative Study of the Oxidation Kinetics and Thermal Insulation Properties of Thermal Barrier Coatings (TBCs)” by Abdullah Cahit Karaoglanli
- **10h30:** “Role of Chemistry on Behavior of Various Ni-based HVOF-Sprayed Coatings in Simulated Boiler Environments” by Elie Guerin
- **10h50 – 11h10:** Coffee break

Spray process – session 6

Chairwoman: Uta Klement

- **11h10:** “Determination of mechanic and caloric properties of thermal spray coatings” by Thomas Grund
- **11h40:** “Wettability behavior of wear resistant thermally sprayed coatings” by Pavel Komarov
- **12h00:** “High Temperature Erosion/Corrosion of HVOF-Sprayed Ni-based Coatings” by Esmaeil Sadeghimeresht
- **12h20:** “The influence of ESD process on microstructure and mechanical properties of HVOF sprayed WC-Co coating” by W. Żórawski

Amphitheatre #4

Solution & suspension spraying – session 4

Chairman: J. Kiilakoski

- **09h00:** “Preparation of Multiphase Coatings with Hybrid Water-Stabilized Plasma Torch using Liquid Spraying Route” by Radek Musalek (**invited**)
- **09h30:** “Microstructure and properties of nanostructured YSZ coating manufactured by axial suspension plasma spraying under low pressure” by Cheng Song
- **09h50:** “Solid evidences proving the role of anatase content in TiO₂ photocatalytic coatings by suspension plasma spraying” by P. Vu
- **10h10:** “Investigation of the Influence of Suspension Atomization in the HVFS process” by M. Plachetta
- **11h00 – 11h10:** Coffee break

Solution & suspension spraying – session 5

Chairwoman: Sarka Houdkova

- **11h10:** “The dependences between grain size and mechanical properties of powder and suspension plasma sprayed zirconia coatings” by Paweł Sokółowski (**invited**)
- **11h40:** “Effect of plasma jet enthalpy & velocity on the microstructure of suspension plasma-sprayed coatings” by A Dolmaire
- **12h00:** “Preparation of aqueous, highly concentrated suspension feedstocks of Y-TZP/Al₂O₃/SiC for suspension plasma spraying” by Enrique Sanchez Vilches
- **12h20:** “Effect of acid roots of precursor solutes on microstructure, preferential oriented growth and contact angle of metal oxide films via solution precursor plasma spray” by Zexin Yu

Room TD #3

Cold spray – session 4

Chairman: Thomas Klassen

- **09h00:** “A microstructural and tribological study of Aluminum-Alumina cold sprayed composite” by Yamina Mebdoua (**invited**)
- **09h30:** “Microstructure and Mechanical Properties of Cold Sprayed Ti555 Coatings” by Jaroslaw Sienicki
- **09h50:** “Crystal lattice strain analysis of nanostructured cermet Al₂O₃-Ni(Cr) particles during high-energy mechanical alloying process” by Gobinda Saha
- **10h10:** “Characterizations of cold-sprayed particles-reinforced Cu₆₀Zn₄₀ alloy composites - from microstructures to tribological and corrosion behaviours” by Chunjie Huang
- **10h50 – 11h10:** Coffee break

Modeling – session 2

Chairwoman: H  l  ne Ageorges

- **11h10:** “Suspension and solution plasma spraying evolution since the beginning of the millennium” by P. Fauchais (**invited**)
- **11h40:** “Numerical simulation of composite coating formation and growth during cold spraying of powder blends” by A. Sova
- **12h00:** “Simulation of crack propagation in plasma-sprayed alumina coatings using discrete element method”, Y. Mebdoua

Room TD #4

Biomaterials – session 2

Chairman: Hua Li

- **09h00:** “Effect of the precursor on the microstructure of the plasma sprayed hydroxyapatite coatings: powders for APS versus suspension chemistry for RF-SPS” by Marine Chambard
- **09h30:** “Fabrication of porous glasses powders infiltrated with zirconia for use as raw material for orthopedic prostheses” by O. Rojas
- **9h50:** “Bioactivity analysis of hydroxyapatite coatings obtained from biowaste by HVOF- and APS-processes” by G.A. Clavijo-Mejia
- **10h50 – 11h10:** Coffee break

Applications of coatings – session 2

Chairman: Eric Jordan

- **11h10:** “Microstructure and wear resistance of AlCoCrFeNiTi high entropy alloy coatings produced by atmospheric plasma spraying” by Thomas Lampke (**invited**)
- **11h40:** “Ceramic coatings applied by thermal spraying process for tribological applications at high temperatures. Influence of the powders scale and the layers arrangement” by Ivan David Franco
- **12h00:** “Microstructure and tribological properties of the suspension plasma sprayed YSZ/h-BN composite coating” by Yongli Zhao
- **12h20:** “Evolution of Mechanical Properties of Yttria-Stabilized Zirconia Coatings Deposited by Suspension Plasma Spraying” by M. Gizynski