

30th Cold Spray Club Meeting: April 26th, 2024

Historical building of Universitat de Barcelona (Aula Magna). C/ Gran Via de les Corts Catalanes 585, 08007 Barcelona

Agenda

8:50 Introduction (Sergi Dosta, Francesco Delloro)

Session 1: New materials

9:20 Sergi Dosta, SDT/Universitat de Barcelona, Spain: Novel intermetallic coatings produced by Cold Gas Spray

9:40 Markus Brotsack, Impact Innovations, Germany: Niobium alloy C-103 for high-performance space applications – using Cold Spray Additive Manufacturing (CSAM)

10:00 Steven Camilleri, Spee3D, Australia: Corrosion behaviour of high performance cold sprayed maritime alloys

10:20 Siyuan Ruan, Trinity College Dublin, Ireland: Revolutionizing Materials in Additive Manufacturing: Exploring Copper-Graphene Composites with Cold Spray Technique

Coffee break 10:40 – 11:10

Session 2: New applications

11:10 Julio Villafuerte, CenterLine, Canada: Practical Implementation of Helium-Nitrogen In-Line Gas Mixing for Enhanced Cold Spray Performance and Cost Optimization

11:30 Mustafa Yahiaoui, CRITT TJFU, France: A novel approach to assist transient liquid phase brazing by cold spray coating

11:50 Sudip Kundua, Amsterdam University of Applied Sciences, The Netherlands: Study of failure mechanism of Aluminum 6061- T6 cold spray repairs towards the development of a qualified cold spray repair methodology

12:10 Bertrand Jodoin, University of Ottawa, Canada

Lunch 12:30 – 14:00

Session 3: New developments

14:00 Ludovic Vitu, UTBM, France: Multi-material joining process using cold spray and laser texturing

14:20 S. Koufis, Delft University of Technology, The Netherlands: Monitoring the Cold Spray Process: Real-time particle velocity and deposition quality monitoring through airborne acoustic emission analysis

14:40 Javier Sánchez, CPT, Spain: Contribution to green hydrogen production cost reduction by cold gas spray additive manufacturing

15:00 Ferdy Townen, Titomic Europe, The Netherlands: Medium Pressure Cold Spray developments at Titomic

Coffee break 15:20 – 15:50

Session 4: Modeling

15:50 Ali Dolatabadi, University of Toronto, Canada: Modeling Cold Spray Additive Manufacturing: A Comprehensive Multiscale Approach

16:10 Alain Reiser, KTH Royal Institute of Technology, Sweden: Many-particle impact bonding with quantitative single-particle experiments

16:30 – 17:10 Open discussion led by Klaas Rozema (Titomic Europe)

17:10 – 18:30 Ibericos & Spanish wine tasting