

Special Interest Seminar

Competitive & Sustainable Powder Metallurgy Industry

17 October, 2018
Bilbao, Spain



Special Interest Seminar animated by Didier Zimmermann, Director Central CLC Innovation Hub

Registration & Welcome to the event (8h00)

Criticality and Circularity in the Powder Industry (8h30 - 10h00)

Due to their scarce availability and associated supply risk, certain elements are nowadays considered critical. Criticality will be addressed with classical methodologies for which availability and economic importance prevail, but also with thermodynamic rarity for which the energy costs required to produce raw and advanced materials is also considered. This will lead to discussion on circular designs and ways to create value whilst securing supply chains.

What are critical raw materials?

Luis Tercero Espinoza (Fraunhofer ISI)

Thermodynamics of powder production

Abel Ortega Bielsa (Fundación CIRCE)

On criticality and circular design

David Peck (TU Delft)



Towards CRM-free Powder Materials (10h45 - 12h15)

Representing around 6B\$ in 2017, the Powder Metallurgy market will further grow in the upcoming years (anticipated annual rate up to 6%). This trend will be illustrated with the expected development roadmap of the sector and supported by an overall presentation of the powder market. We will also introduce new tools and technologies that shall boost competitiveness in the sector while reducing dependency on critical elements.

Roadmap for powder metallurgy
Jesper Vang (Swerea)

Aspects of raw material availability and use: a powders producer perspective
Sven Bengtsson (Höganäs AB)

Substitution of WC-Co in mining components by using two novel processing technologies
Iñigo Agote (Tecnalia)



Recycling in the Powder Industry (14h15 - 15h45)

Current design approaches lead to waste, loss of value and loss of resources. With raising concerns of supply and growing environmental concerns, recycling has become imperative. To capture the greatest profit, the valorization of co-products and wastes should ideally lead to high added-value products, *i.e.* upcycling schemes. Herein, we will present projects and strategies that are meeting the challenge.

Title waiting for confirmation
Carl-Johan Maderud (Sandvik)

Turning Titanium scraps into high-value powder
Neill McDonald (MetaFensch – IRT M2P)

Tungsten powders from scrap recycling
Kurylak Witold (Instytut Metali Niezelaznych)



Instytut
Metali Niezelaznych
Gliwice

Service Offers supported by EIT RawMaterials (16h30 - 18h00)

Beyond conventional innovation, EIT RawMaterials supports the development of new services, both in the private and the educational sector. In this context, we will present several projects:

PoSe. Powder technology piloting service for secondary raw materials
Tomi Lindroos (VTT)

PM-Life. Life-long learning in powder metallurgy
Lionel Aboussouan (EPMA)

LILIAM. Life-long learning in additive manufacturing
Marco Grasso (Politecnico di Milano), Elena Lopez (Fraunhofer), Jacky Lecomte (SIRRIS),
Bianca Maria Colosimo (Politecnico di Milano)



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