



Industrial Workshop

“Surface engineering for clean energy solutions”

September 1, 2026 | 10:30 – 15:00 | Panorama Saal | Trade Fair Erfurt, Germany

organized by Ulf Seyfert, VON ARDENNE GmbH, Germany

Energy is the key to prosperity and development in the growing world. Surface engineering techniques such as coatings, treatments and functionalization are enabling the development of more efficient, resilient and cost-effective solutions for the energy sector. Surface properties and interactions of materials are tackling the challenges of the energy transition towards renewable and sustainable sources, energy storages, converters, distribution networks and mobility applications.

Contents

Potential of PVD coatings for the ramp-up of the Hydrogen Economy (#321)

L. Dobrenizki¹, A.E.K. Biglou¹, S. Malmberg¹, N. Weineck¹, F. Kessler¹, B. Mayerhöfer¹ | Siemens Energy Global GmbH & Co. KG, Erlangen, Germany

Industrial thin film coatings for hydrogen applications (#185)

S. Tervakangas¹, H. Riedl², P. Rückeshäuser², K. Böbel³ | Oerlikon Balzers Coating Finland Oy, Espoo, Finland

Barrier coatings for operation under hydrogen atmospheres in combination with low friction properties (#195)

P. M. Reinders¹, A. Hieke¹, T. Hurkmans¹ | Ionbond – IHI Group, Venlo, Netherlands

PVD Coatings for Electrolyzer Electrodes: from Dense Protective Films to Porous Catalytic Layers (#551)

S. Ekeröth^{1, 2}, U. Helmersson^{1, 2}, J. Ekspong¹, R. P. Viloan¹ | Ionautics AB, Linköping, Sweden

In-operando electrochemical impedance spectroscopy (EIS) study of different PVD coatings and materials for bipolar plates during PEM water electrolysis single cell testing (#438)

L. Mendizabal¹, A. Villamayor¹, O. Hernandez¹ | Tekniker, Plasma Coating Technology Department, Eibar, Spain



Lunch Break

A Scalable and Safe Roll-to-Roll Process for the Industrial Production of Lithium Metal Anodes by PVD (#412)

N. Rivolta¹, P. Roquiny¹, H. Wiame¹, J. Schotsaert¹, E. A. Morrisson¹, D. Vanhove¹ | AGC Glass Europe, AGC Plasma, Gosselies, Belgium

Homogeneous Titanium Coatings for Integrated Solar-to-Hydrogen Generation by CdTe-based Photovoltaics (#451)

D. A.L. Loch¹, A. Kindvall², I. Rimmaudo², A. W. Oniszczyk³, R. Arndt², U. Heydenreich¹ | Trumpf Hüttinger GmbH & Co. KG, Freiburg, Germany

Inhibiting Oxygen Incorporation During Large-Area Sputter Deposition of Phosphorus-Doped Amorphous Silicon (#553)

V. Linß¹, J. Baumann¹, T. Dietsch¹, U. Graupner¹, E. Schneiderlöchner¹ | VON ARDENNE GmbH, Dresden, Germany

Development of ceramic coatings for the fusion energy industry (#312)

T. Sgrilli¹, P. McCarthy¹, V. Bellido-Gonzalez¹, A. Azzopardi¹, R. Brown¹, L. Maroto-Diaz¹, D. Monaghan¹, H. Gardner², J. Wade-Zhu², E. Curtis², J. Pickles³, M. Jackson³, S. Irukuvarghula³, S. Levine³ | Gencoa Ltd., Liverpool, United Kingdom

Plasma Surface Engineering to Enhance Material Compatibility in Aqueous Electrode Processing for Eco-Friendly Manufacturing of Li-ion Batteries (#525)

D. Müller^{1, 3}, C. Vandenabeele^{1, 2}, H. Tonnoir³, T. Pham Thanh², E. Haye¹, N. Job³, S. Lucas^{2, 1} | Innovative Coating Solutions, Gembloux, Belgium

More Details you can find here:

⇒ [Online Program of Industrial Workshop & PSE2026](#)

Additional Highlights

- ⇒ [Industrial Exhibition of Coating Technologies and Suppliers](#)
- ⇒ [Three Sessions of Coating Technologies for Energy Applications \(18, 22, 25\)](#) on Wednesday, September 2, 2026
- ⇒ [Guided Tours and Silent Forum “ALD Technologies for Energy Applications”](#) on Wednesday, September 2, 2026