

Umberto Pasqual LAVERDURA - CV

Umberto Pasqual Laverdura, PhD, is Junior Researcher at the Energy Technologies and Renewable Sources Department of ENEA, the Italian National Agency for New Technologies, Energy and Sustainable Economic Development.

Currently, his main research fields are R&D on Sorption Enhanced Processes (SEP) with focus on Sorption Enhanced Gasification, Catalysis for CO₂ valorization and Dry Reforming, CO₂ accelerated mineralization on industrial waste, CCUS system integration in HtA industries, and chemical plasma exploitation in eFuels production.

He works in different European and national projects as: "Gasification Integrated with CO₂ capture and storage - GICO Project WP2-3-4-5" and Marie-Curie Rise Project "Chemistry of Platinum Group Metals- CHemPGM", and the PNRR project "ECCSELLENT - Development of ECCSEL - R.I. Italian facilities: user access, services and long-term sustainability" and on WP3 "Sviluppo di Tecnologie CCS per l'efficientamento dell'industria HtA e il raggiungimento degli obiettivi Net-Zero" in the frame of the National Project PTR-2025-2027 "Energy efficiency of industrial products and processes". He is ENEA representative in the Joint Program on CCS of the European Energy Research Alliance and Italian representative in the IEA-IETS SubTask 24 and 25.

He is a cotutor of PhD students. He is author of more than 20 papers in International Journals and Conference Proceedings.