Wandercleiton Cardoso

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Academic background

2023

Dottorato di Ricerca in Chemical, Materials and Process Engineering

Machine Learning Applications in the Steel Production Industry

Università degli Studi di Genova - Genova – IT

2012

Master in Materials and Metallurgy Engineering

Effects of niobium on microstructure and corrosion resistance of one duplex stainless steel

Federal Institute of Espírito Santo – BRA

2009

Laurea Magistrale in Materials and Metallurgy Engineering

Characterization of heat recovery coke and its impact on blast furnace control

University of Vila Velha - BRA

Academic Experience

2024 - Ongoing

Fellow Research

Consiglio Nazionale delle Ricerche - IT

Production of films for application in fuel cells

2023 - 2024

Fellow Research

Università degli Studi di Genova - IT

Production of green methanol from seawater

2019 - 2023

Doctoral Research

Università degli Studi di Genova - IT

Machine Learning Applications

Language skills

English, Italian and Portuguese

Proficient

Industrial Experience

2022 - 2023
Technical Project Manager
Liz Italiana - IT

2011 - 2019
Project Manager
Vale - Global Company

2001 - 2010
Technical Project Manager
ArcelorMittal - Global Company

Research Interests

Key areas of interest include advanced materials characterization techniques such as electrochemical impedance spectroscopy (EIS), X-ray diffraction (XRD), scanning electron microscopy (SEM), high-resolution transmission electron microscopy (HRTEM) and spectroscopy such as XPS and Raman. These techniques are used to evaluate the microstructural, chemical and electrochemical properties of ceramic and metallic materials.

Other interests include the development of sintering processes and the thermal and dilatometric analysis of materials. Computer simulations using tools such as SolidWorks, MATLAB, Aspen Plus and Thermo-Calc are also an essential part of his work and enable the modeling and optimization of complex systems.

In addition, he is intensively involved in the development of sustainable fuels such as methanol and green hydrogen and promotes technological progress for the energy transition and industrial sustainability