

23 de MARZO de 2023

16.00 h, Sala de Grados  
Edificio Torres Quevedo, Campus  
Río Ebro

## DEFENSA DE TESIS DOCTORAL

“Development of high-temperature  
electrolyzers:  
Search for new efficient electrodes and design  
of advanced microtubular electrolyzers”



**Miguel Ángel Morales-Zapata**

The overall scope is the development of new air electrode materials for advanced high-temperature microtubular electrolyzers. It is divided in two parts: First, an analysis of Pr- and Gd-doped ceria an its application as air electrodes in symmetrical cells. The second part is focused on the fabrication, electrochemical characterization of microtubular single-cells, and the study of stability and degradation phenomena under reversible solid oxide cell operation.

### Link:

For people interested in attending the online dissertation, please send an email to [malaguna@unizar.es](mailto:malaguna@unizar.es)