

# Research Field: ASTROBIOLOGY AND GEOBIOLOGY Focused Field: PRESERVATION OF BIOSIGNATURES



#### **SHORT BIO**

I am a geobiologist with over two decades of experience exploring extreme environments to advance the search for life beyond Earth. My academic journey began with a focus on Neoproterozoic and Cambrian paleobiology during my graduate and doctoral studies. Over time, my research expanded to encompass astrobiology, astrogeology, paleobiology, subsurface microbiology, Quaternary geology, and orebody biogeochemistry.

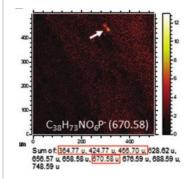
I have conducted research at leading international institutions, including the Centro de Astrobiología (Spain), the British Geological Survey (UK), and Luleå University of Technology (Sweden). I currently serve as an Associate Professor at the State Key Laboratory of Lunar and Planetary Sciences, Macau University of Science and Technology, following my appointment as Chair of the Origin of Life at the University of Grenoble, France.

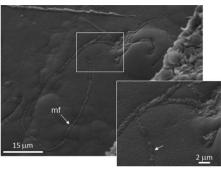
Ass. Prof.



# DAVID FERNANDEZ REMOLAR

**PhD:** Paleontology - Complutense University of Madrid (SP) **Degree:** Geology - Complutense University of Madrid (SP)





Biosignatures formed by underground ancient microbes – Fernandez-Remolar et al., 2021

## **KEY PUBLICATIONS** (first author)

Fernandez-Remolar, D.C., et al., 2025.

The Role of Reducing and Acidic Hydrothermal Fluids in Forming Chloride Deposits in Terra Sirenum, Mars. **JGR Fernandez-Remolar**, D.C., et al., 2021

Unveiling microbial preservation under hyperacidic and oxidizing conditions in the Neogene Rio Tinto deposits. **Sci Rep Fernandez-Remolar**, D.C, et al. 2005.

The Rio Tinto Basin, Spain: Mineralogy, sedimentary geobiology, and implications for interpretation of outcrop rocks at Meridiani Planum. **EPSL** 

#### PROFESSIONAL EXPERIENCE

**2019** Macau University of Science and Technology, Macao (China) – Ass. Prof.

2018 University of Grenoble (FR) – Chair Origin of Life Researcher

2017 Luleå University of Technology (SE) – Senior Researcher

**2008** Center of Astrobiology (SP) – Associate Researcher

**2004** Center of Astrobiology (SP) – Assistant Researcher

### **GRANTS**

FDCT - 2024-2027 - Co-Investigator

火星地質與輻射環境及其對生命信號保存的研究

MOST – 2022-2027 – Co-Principal Investigator

火星的宜居环境与生命信号探索研究 (Research on the habitable environments and biosignatures of Mars).

FDTC - 2020-2022 - Principal Investigator

Multidisciplinary search for biosignatures in ancient earthly evaporites as a proxy to find molecular evidence of primitive life on Mars

