



Domain Ambassador for catalysis

What:

Chemical Engineering, in particular Catalysis, can design the new circular economy based on powerful scientific models. While Open Science Tools for using data are being developed (catalysis informatics), data sharing is incipient and significant community level activities do not exist. My main goal is, thus, to break the ground and make data sharing a community practice. This will be achieved by: (i) raising awareness on open science and FAIR data in young researchers and established researchers; (ii) developing key guidelines for FAIR data sharing in catalysis; (iii) setting the ground for a data sharing framework in catalysis.

Who:

Pedro Mendes, assistant professor at Universidade de Lisboa (Portugal).

Biography:

Pedro is an assistant professor at Universidade de Lisboa (Portugal). His research mainly aims at

- understanding how catalysts work via mathematical models (catalysis informatics) and
- designing sustainable processes by combining key knowledge at all scales (multi-scale modelling).

He enjoys collaborative work with other scientists (e.g. he founded the Young European Catalysis Network) and to take part in initiatives aiming at transforming academia, like this ambassadorship.

Scientific Domain:

Catalysis

Your Domain specific Engagement:

Moderation of the “Chemistry Europe Data Day” organized by ChemistryOpen journal (of Wiley-VCH) on 18/10/2022. The discussion of the current open science practices in chemistry led to concrete actions on how to further promote data and knowledge sharing within our community. Widespread use of electronic laboratory notebooks is deemed to be central.

Your Promotion and Networking:

National:

- Developed and instructed the workshop on Open Data in Catalysis: “Open Data Crash Course”, at Técnico, Universidade de Lisboa (Portugal) on 03/06/2022.

International:

- Catalyzed the first community curator in Chemistry/Catalysis at fairsharing.org (Daniel Costa, PhD student at Técnico)
- Co-developed the presentation of RDA/EOSC ambassadors at ACUM2022 (<https://acum.unitbv.ro/>)

[Pedro and his activities](#) are also featured on the RDA website.

Your Connection to RDA WG/IG or CoP:

Pedro is co-developing the RDA disciplinary page on chemistry. Interested in telling your open data story regarding your chemical data? Reach Pedro via pedro.f.mendes@tecnico.ulisboa.pt.

He is active in the following WG/IG:

- Chemistry Research Data IG
- Early Career and Engagement IG

Your Outputs:

“Open Data Crash Course for Catalysis”, Zenodo, <https://doi.org/10.5281/zenodo.6606551>

Country:

Portugal

EOSC FUTURE FUNDING PLATFORM