

## UniSysCat Online Colloquium

Dr. Inês A. Cardoso Pereira

Universidade Nova de Lisboa

Start Time: Wednesday, June 24, 2020 05:00 pm

End Time: Wednesday, June 24, 2020 06:00 pm

Online

### Biocatalysis of H<sub>2</sub> production and CO<sub>2</sub> reduction

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We have been studying anaerobic bacteria and their enzymes as biocatalysts for H<sub>2</sub> production and the reversible reduction of CO<sub>2</sub> to formate. Using whole cell studies we have identified highly active bacteria in H<sub>2</sub> production as well as CO<sub>2</sub> reduction. We have characterized the enzymes involved, a NiFeSe-hydrogenase and W-formate dehydrogenase, and produced variants with improved properties. The O<sub>2</sub> stability and robustness of these enzymes has also been exploited in the development of efficient semi-synthetic photo- and electrocatalytic systems.

This colloquium will take place online. More information coming soon.

Prof. Maria Andrea Mroginski + Dr. Ingo Zebger (TU Berlin)

Organizer