

Research outputs

Innovative pathways in CO₂ conversion to chemicals and fuels: Emerging transfer hydrogenation versus traditional hydrogenation

Rouse, N. V., Fernandez Martin, C., McCue, A. & Biscaya Semedo Pereira da Graca, I., 23 Jan 2025, (E-pub ahead of print) *Encyclopedia of Renewable Energy Engineering*. Elsevier

The role of the activation heating source on the carbon capture performance of two new adsorbents produced from household-mixed-plastic waste

Dan, E., McCue, A., Dionisi, D. & Fernandez Martin, C. (Corresponding Author), 30 Nov 2024, In: *Journal of CO₂ Utilization*. 89, 13 p., 102950.

Paving the way to transfer hydrogenation of CO₂ with bio-derived glycerol over Ni supported zeolite catalysts

Rouse, N. V., Fernandez Martin, C., McCue, A. & Biscaya Semedo Pereira da Graca, I. (Corresponding Author), 25 Nov 2024, In: *Applied Catalysis A: General*. 687, 19 p., 119971.

Towards low-cost and sustainable activated carbon production: influence of microwave activation time on yield and CO₂ uptake of PET-derived adsorbents

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Household Mixed Plastic Waste Derived Adsorbents for CO₂ Capture: A Feasibility Study

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Greener carbon capture using microwave heating for the development of cellulose-based adsorbents

Biti, S., McCue, A., Dionisi, D., Biscaya Semedo Pereira da Graca, I. & Fernandez Martin, C. (Corresponding Author), 15 Feb 2024, In: *Fuel*. 358, Part B, 11 p., 130246.

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Effect of feed concentration and residence time on anaerobic fermentation in CSTR and SBR to produce short-chain organic acids

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Transfer hydrogenation of carbon dioxide with bio-derived glycerol over zeolite-based catalysts

Rouse, N. V. (Speaker), Fernandez Martin, C., McCue, A. & Biscaya Semedo Pereira da Graca, I., Sept 2023.

Sustainable microcrystalline cellulose-based activated carbons for a greener carbon capture at post-combustion conditions

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Activities

Transfer hydrogenation of carbon dioxide with bio-derived glycerol over zeolite-based catalysts

Rouse, N. V. (Speaker), Fernandez Martin, C. (Author), McCue, A. (Author) & Biscaya Semedo Pereira da Graca, I. (Author)

Sept 2023

Energies (Journal)

Fernandez Martin, C. (Peer Review)
1 Sept 2022 → ...

Processes (Journal)

Fernandez Martin, C. (Peer Review)
Oct 2020 → Jul 2021

Environment and Biodiversity (Organisational unit)

Fernandez Martin, C. (Member)
2020 → ...

Centre for Energy Transition (Organisational unit)

Fernandez Martin, C. (Member)
2019 → ...

Supervision of Rutherford Fellow: Dr Ghulam Hussain

Fernandez Martin, C. (Supervisor)
Jun 2018 → Mar 2019

Supervision of Rutherford Fellow: Dr Heriberto Diaz-Velazquez

Fernandez Martin, C. (Supervisor)
Jun 2018 → Mar 2019

Supervision of Rutherford Fellow: Dr Yu Liu

Fernandez Martin, C. (Supervisor)
Jun 2018 → Mar 2019

Chemical Engineering Journal (Journal)

Fernandez Martin, C. (Peer Review)
May 2018

Supervision of Rutherford Fellow: Dr Osiry Hernandez-Silva

Fernandez Martin, C. (Supervisor)
May 2018 → Feb 2019

Polytechnic University of Valencia

Fernandez Martin, C. (Visiting Lecturer) & Catala-Civera, J. M. (Collaborator)
1 May 2017 → 15 Jul 2017

The Promising Application of Microwaves in Carbon Capture and Storage

Fernandez Martin, C. (Author)
10 Oct 2016

Energies (Journal)

Fernandez Martin, C. (Peer Review)
2016 → 2018

Chemical Engineering and Materials Research Group (Organisational unit)

Fernandez Martin, C. (Member)
1 Jan 2015 → Feb 2019

UK Carbon Capture and Storage Research Centre (UKCCSRC) (External organisation)

Fernandez Martin, C. (Member)

1 Jan 2015

Scottish Carbon Capture and Storage (SCCS) (External organisation)

Fernandez Martin, C. (Member)

Jan 2013

University of South Carolina

Fernandez Martin, C. (Visiting Researcher), Ebner, A. (Collaborator) & Ritter, J. (Collaborator)

1 Sept 2010 → 23 Dec 2010

University of Liverpool

Fernandez Martin, C. (Visiting Researcher) & Cooper, A. I. (Collaborator)

1 Jun 2009 → 30 Jul 2009