SELECTED PUBLICATIONS

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Catalysis for CO_2 conversion to introduce renewable energy in the value chain of chemical industries, G. Centi, E. A. Quadrelli, S. Perthoner, ENERGY ENVIRON. SCI., 6, 1711–1731(2013)

Gender Parity and Non-Discriminatory Evaluation at CNRS, Louise Jalowiecki-Duhamel, Hazar Guesmi, Jean-François Guillemoles, Myrtil L. Kahn , Paola Nava, François Ozanam, Elsje Alessandra Quadrelli, Arnaud Travert (White paper) (2021) https://hal.science/hal-03311372

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An anthropocene-framed transdisciplinary dialog at the chemistry-energy nexus, M. Prévot et al. CHEM. SCIENCE 2024,15, 9054-9086

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IRCELYON - CNRS

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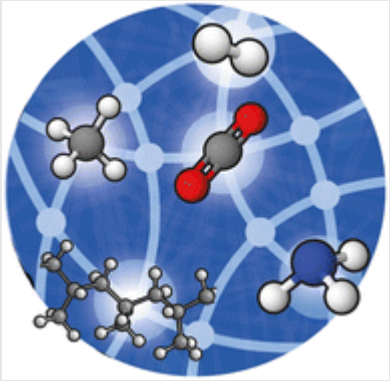
ABSTRACT

The nitrogen cycle, and ammonia production specifically offer a privileged entry point to discuss the role of catalysis, current scenarios for the energy transition and the importance of planetary boundaries framework to shape a Sustainable Planet and Society [1].



The discussion of the nitrogen cycle from this point of view will offer a perspective on catalysis scenarios adapted to the energy transition and more largely to the Anthropocene epoch, leading to the introduction of the “situated green chemistries” framework [2] which attempts to combine chemistry, systems analysis and social sciences.

[1] Mathieu S. Prévot, Valeria Finelli, Xavier Carrier, Gabriele Deplano, Margherita Cavallo, Elsje Alessandra Quadrelli, Juliette Michel, Marie-Hélène Pietraru, Clément Camp,Giulia Forghieri, Anna Gagliardi,Sebastian Seidel, Antoine Missemer, Bertrand Reuillard, Barbara Centrella, Silvia Bordiga, María Grace Salamanca González, Vincent Artero, Keanu V. A. Birkelbach, Niklas von Wolff. **Chem. Sci.**, 2024,15, 9054-9086

[2] (a) “What is « Sustainable Green Chemistry » Through systems thinking?” GREEN CHEMISTRY GORDON CONFERENCE, Lecture, Casteldefels (Spain), 28 July, 2022; (b) in French subtitled https://www.youtube.com/watch?v=gpDhpgy2U9g (c) manuscript in preparation.

DR. ALESSANDRA QUADRELLI

Alessandra Quadrelli is director of research in chemistry from the French National Centre for Scientific Research, CNRS, at the IRCELYON laboratories.

Her research focuses on materials for CO_2 reduction.

Concurrently, Alessandra is proposing the “Situated Green Chemistries” framework to explore transdisciplinary definition of sustainable chemistry.

Inspired by Donna Haraway’s “situated knowledges” concept in science and technology studies and feminist epistemologies, the framework proposes several other possible chemistries, built from perspectives under-represented in the current academic arena, to help address present challenges and shape more diverse scenarios of sustainable futures.

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