

# Taming multifaceted Ni catalysts: An academic fascination

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Jueves, 16 de enero 2025

11:30h

Sala de grados del Edif. Físicas (Facultad Ciencias)

**CICLO CONFERENCIAS ISQCH 2025**

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**Abstract:** The recent years have witnessed a renaissance in the general area of Ni-catalyzed reactions. The popularity of these processes is mainly attributed to the unique features of nickel when compared to its  $d^{10}$  congeners, and the promiscuity of nickel to participate in multiple redox manifolds. Our research group has contributed to the general area of nickel catalysis for the valorization of chemical feedstocks as a vehicle to rapidly and reliably generate added-value compounds. Among these, we have shown the ability to incorporating carbon dioxide ( $\text{CO}_2$ ) into organic skeletons or catalytic techniques that make use of simple (un)saturated hydrocarbons or native functionality to build up molecular complexity from simple precursors. These methods are characterized by their simplicity, and wide substrate scope



<https://iciq.org/research-group/prof-ruben-martin/overview/>

**CV:** Ruben Martin was born in Barcelona in 1976. He received his Ph.D in 2003 at the Universitat de Barcelona with Prof. Antoni Riera, working on the total synthesis of glycosidases inhibitors. In January 2004 he moved to the Max-Planck-Institut für Kohlenforschung as a Humboldt postdoctoral fellow with Prof. Alois Fürstner, where he worked on the application of novel iron catalysts for cross-coupling and Alder-ene type reactions. In May 2005 he undertook further postdoctoral studies at the Massachusetts Institute of Technology as a MEC postdoctoral fellow with Prof. Stephen L. Buchwald where he developed new synthetic strategies for metal-catalyzed C-C and C-N bond-forming reactions. In September 2008 he joined the ICIQ as a group leader. He was promoted to Associate Professor in July 2013, and few months later he became ICREA (Catalan Institution of Research and Advanced Studies) Research Professor