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KEYNOTE FORUM | DAY 1

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## Efficient catalytic systems from our group for the stereoselective formation of C-H, C-B and C-C bonds

Our research interests encompass the design of efficient stereoselective catalysts for transformations of interest, and the study of their use to prepare products of biological or pharmaceutical relevance. Crucial aspects of this work include the modular design of the catalytic systems; use of versatile synthetic procedures (organic and inorganic transformations, or supramolecular processes); incorporation of regulation mechanisms for the geometry of the active-site; and

computational study of their catalytic cycles (through collaborations). The application of our catalytic systems in rhodium- and iridium-mediated hydrogenative transformations, hydroformulations, metal carbene C-H insertions and alkyne hydroboration's will be discussed.

### Biography

Anton Vidal graduated in Chemical Engineering at the "Institut Químic de Sarrià" in 1987 and completed his Ph.D. on the synthesis of new heterocycles at the same institution in 1992 with Prof. P. Victory. Throughout the two post-doctoral appointments that followed (at the University of Cambridge 1993-1994 with Prof. J.K.M. Sanders and the University of Barcelona 1995-1999 with Prof. M.A. Pericàs), he studied topical and diverse areas of chemistry such as Molecular Recognition, Supramolecular Chemistry and aspects of Enantioselective Catalysis. He had the opportunity to complement his academic background with the industrial



### Anton Vidal

Institute of Chemical Research  
Research (ICIQ), Spain

experience gained during his tenure in a number of research departments at Bayer-AG (Leverkusen 1999–2003). Following the appointment as ICREA Research Professor (Catalan Institution for Research and Advanced Studies), he started his independent research activities as a Group Leader at the ICIQ in September 2003.

[avidal@iciq.cat](mailto:avidal@iciq.cat)