

## Enrique Espinosa (short CV)



Enrique got his *Licenciatura* (equivalent to Bachelor and Master degrees) in Physics at the University of Barcelona in 1987. After a first period working as teacher in high schools and in private companies, he started his PhD on experimental electron density studies at the *Institut de Ciència de Materials de Barcelona (CSIC)* (Spain) in collaboration with the laboratory of crystallography of Nancy (France) (supervisors Profs. Elies Molins and Claude Lecomte). He defended his PhD in 1994 at the University of Barcelona. Then, he spent the next two years (1995-96) in a postdoctoral position at the laboratory of crystallography of Nancy under the supervision of Prof. Claude Lecomte. He continued to work in the same laboratory during 1997, with a non-permanent lecturer position, teaching at the Faculties of Sciences and Pharmacy of Nancy. In 1998, he came back to the *Institut de Ciència de Materials de Barcelona (CSIC)* with a research contract. In September 1999, he moved to Dijon (France) to work as crystallographer in a molecular chemistry laboratory at the University of Bourgogne, where he got a permanent position of associated professor in chemical crystallography in 2002. In 2005, he defended his *Habilitation* in this domain at the University of Bourgogne. In 2006, he left Dijon to move again to Nancy, where he got a permanent position of professor of physics in the laboratory of crystallography of Nancy. In 2011, he got the position of full professor in crystallography in the same laboratory, where he is still working.

Enrique has served as vice-dean of the Faculty of Sciences and Technologies of Nancy during the period 2013-23, in charge of the scientific domains of physics, chemistry, geological sciences and mechanics. Since 01/01/2024 is the director of the Laboratory of Crystallography, Magnetic Resonance and Modelling (CRM2) in Nancy.

In research, Enrique is mainly interested in interatomic and intermolecular interactions, focusing on molecular assembly and molecular organisation in space, within the field of crystal engineering and in the framework of the structure-properties relationship. With this aim, he has developed his research in the study of factors influencing hydrogen bonding and sigma-hole interactions, from intra- and inter-molecular effects. The topological analyses of the electron density, the electrostatic potential and the Laplacian of the electron density, as well as the topographic analysis of the electric field lines in space are main tools in his research.

He has published 160 papers with more than 11600 citations and h-index = 43 (Google Scholar). He has delivered more than 50 lectures at invited conferences and seminars.