



Instituto Universitario de Investigación  
**Biocomputación y Física  
de Sistemas Complejos**  
Universidad Zaragoza

## Marta M<sup>a</sup> Martínez

Graduated in chemistry with a PhD in biochemistry. She did a postdoctoral stay in Germany which allowed her to train in the technique of X-ray crystallography applied to macromolecules. Since 2019, she is part of the BIFI governance team, being co-coordinator of Scientific and Outreach Events of the institute. She is also co-responsible for the biophysics research group 'Flavoenzymes: Mechanisms of Action and Biotechnology'.



### Researcher profile

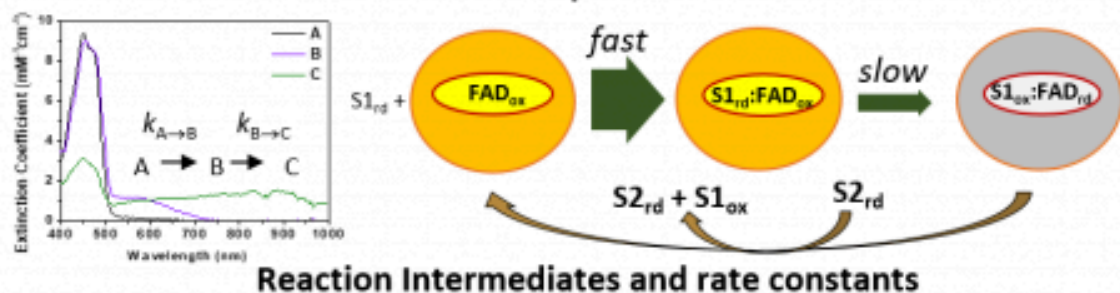
She is an R3 researcher. Marta researches on the molecular functioning of biological processes in flavoenzyme-dependent systems. To do so, she uses biophysical techniques and X-ray crystallography to understand their three-dimensional structure at the atomic level.

### Importance of her research

Flavoproteins present in cyanobacteria are crucial in photosynthesis. Each advance provides key information on the catalytic mechanisms in vital processes. These proteins are essential for the survival of pathogens. Furthermore, the application of flavoenzymes in bioreactors could be of great importance in the transition to cleaner and more sustainable chemistry.



#### Oxidoreductases and oxidases: kinetic parameters and reaction mechanisms



Reaction Intermediates and rate constants

#### Flavin biosynthesis and channelling to client-apoprotein

