Nombre: María José Hernáiz Gómez-Dégano
Email: mjhernai@ucm.es
Teléfono de contacto: 913941820
Posición y cargo: Catedrática de Química Orgánica y Química Farmacéutica
Grupo de Investigación: Directora del Grupo de Investigación Biotransformaciones **(BTG)**
Docencia: Grado en Farmacia y Máster de Biotecnología Industrial y Ambiental.
Área de Conocimiento: Química Orgánica
SCOPUS: 6602722542 **ORCID:** 0000-0003-3897-1104 **Researcher ID**: H-5281-2015
Web: https://www.linkedin.com/in/maría-josé-hernáiz-gómez-dégano-72a318133

Biography: Prof. Dra. María J. Hernáiz received her B.Sc. (1992) and Ph.D. (1996) in Pharmacy from the University Complutense of Madrid (UCM). Then, she received a Marie Curie postdoctoral fellowship from the EU to carry on her research in the Department of Chemistry at the University of Warwick (England) (1997-1999) to work on the chemoenzymatic synthesis of glycostructures with therapeutic interest. In 1999, she moved to the Department of Medicinal Chemistry at the University of Iowa (USA) as postdoctoral research associate (1999-2000) and worked on the molecular recognition of carbohydrates involved in different diseases. Later, she joined the Center for Chemical Research CIQ-CSIC (Spain) with a Marie Curie Return I3P contract from the EU where she continued working on the field of carbohydrate chemistry. In 2002, she was appointed associated Professor in the Department of Organic and Pharmaceutical Chemistry at the UCM and since 2018 is full professor in Organic and Medicinal Chemistry. In addition, she is the director of the Biotransformations Group. She has published more than 100 scientific papers, reviews, and books chapters in these fields and more than 100 communications to National and International Congresses, including 35 oral communications. Member of the Executive Board of the Spanish Society of Biotechnology (SEBiot) and the European Federation of Biotechnology (EFB).

Research Interests:

1. Chemoenzymatic synthesis of carbohydrates and carbohydrate derivatives with industrial applications in sustainable conditions.
2. Chemoenzymatic synthesis of multivalent carbohydrates (glycodendrimers, neoglycoproteins,) glycopolymers, glyconanoparticles and glyconanotubes) as new tool for different diseases.
3. Study of molecular recognition events unravelling the molecular basis of the recognition between glycans and their receptors using different techniques (surface plasmon resonance, isothermal titration calorimetry, molecular modeling and NMR).
4. Biocatalytic reactions in green solvents (solvent derived from biomass, ionic liquids and deep eutectic solvents).
5. Development of new methods to perform sustainable chemical reactions by mechanochemistry.