

## ULTRASONIC ENERGY FOR PROTEOMICS: WHEN, WHERE AND HOW

**J. D. Nunes-Miranda**<sup>(1)</sup>, **M. Larginho**<sup>(2)</sup>, **H. M. Santos**<sup>(3)</sup>, **E. Oliveira**<sup>(3)</sup>, **C. Nuñez**<sup>(3)</sup>, **J. Fernandez-Lodeiro**<sup>(1)</sup>, **M. Diniz**<sup>(3)</sup>, **G. Igrejas**<sup>(4,5)</sup>, **C. Lodeiro**<sup>(1)</sup>, **J. C. Mejuto**<sup>(1)</sup>, **J. L. Capelo**<sup>(1)</sup>.

<sup>(1)</sup> Physical Chemistry Department, Science Faculty, University of Vigo at Ourense Campus, E-32004 Ourense, Spain.

<sup>(2)</sup> CIGMH/DCV, Faculdade de Ciências y Tecnologia / UNL.

<sup>(3)</sup> REQUIMTE, Departamento de Química, Centro de Química Fina e Biotecnologia, CQFB, Faculdade de Ciências e Tecnologia, FCT, Universidade Nova de Lisboa, UNL, Quinta da Torre, 2829-516 Monte de Caparica, Portugal.

<sup>(4)</sup> Department of Genetics and Biotechnology, University of Trás-os-Montes and Alto Douro, Vila Real, Portugal.

<sup>(5)</sup> Institute for Biotechnology and Bioengineering, Centre of Genomics and Biotechnology, University of Trás-os-Montes and Alto Douro, Vila Real, Portugal.

The use of ultrasonic energy as a tool to speed up proteomics workflows relying on mass spectrometry has gained momentum between the proteomics community. The present work is addressed to present the most recent applications of this tool developed in the Bioscope group ([www.bioscopegroup.org](http://www.bioscopegroup.org)) in quantitative and qualitative proteomics, emphasizing when, where and how ultrasonic energy should be applied.