


# Movilidad iónica y Espectrometría de Masas con fuentes de ionización ESI/MALDI: un escenario para afrontar nuevos retos

 **Timeline** | 01/2022 to 12/2022

 **Budget** | 861,803.41 €

 **ICIQ People** | [Noemí Cabello](#)

 **High Resolution Mass Spectrometry Unit**

 **Call** | [Equipamiento Científico-Técnico 2021](#)

## SUMMARY

The objective of this project is to acquire an ESI/MALDI dual source mass spectrometer, with a high performance laser, ion mobility trap and QqTOF tandem analyser that has to be compatible with the coldspray ionization source already present in the Mass Spectrometry Unit of the ICIQ. There is only a mass spectrometer in Spain with similar characteristics; in addition, when coupled to the coldspray ionization source, it will become a singular unit, unique in Spain. This combination will allow to gain insight about reactions mechanisms involving labile intermediates, and to separate isomeric ions. Biomolecules will be analysed to obtain data on their conformation at low temperature and will be compared with results obtained by electrospray. With this equipment we will provide the scientific community with a powerful tool that, in addition, has the possibility to generate images by MALDI incorporating ionic mobility, a rare combination that offers new possibilities in the analysis of materials, supported catalysts and tissues, avoiding matrix interferences in an application that does not allow chromatographic separations. The requested equipment with its unique configuration will be a tool able to give high added value to both public and private research at a national and international level.



## WORK PLAN

Acciones	Mes											
	1	2	3	4	5	6	7	8	9	10	11	
A1 Estudio de los equipos disponibles en el mercado	█											
A2 Escritura del concurso público		█										
A3 Publicación y resolución del concurso público			█	█	█	█	█	█				
A4 Tiempo de entrega del equipo							█	█	█			
A5 Adecuación del espacio de laboratorio e instalaciones								█	█			
A6 Instalación del equipo										█		
A7 Formación del personal a cargo del equipo											█	
A8 Redacción del formulario de acceso al equipo por parte de los usuarios y redacción de la documentación con la información para los usuarios acerca de las posibilidades del equipo												█
A9 Puesta en marcha del servicio												█