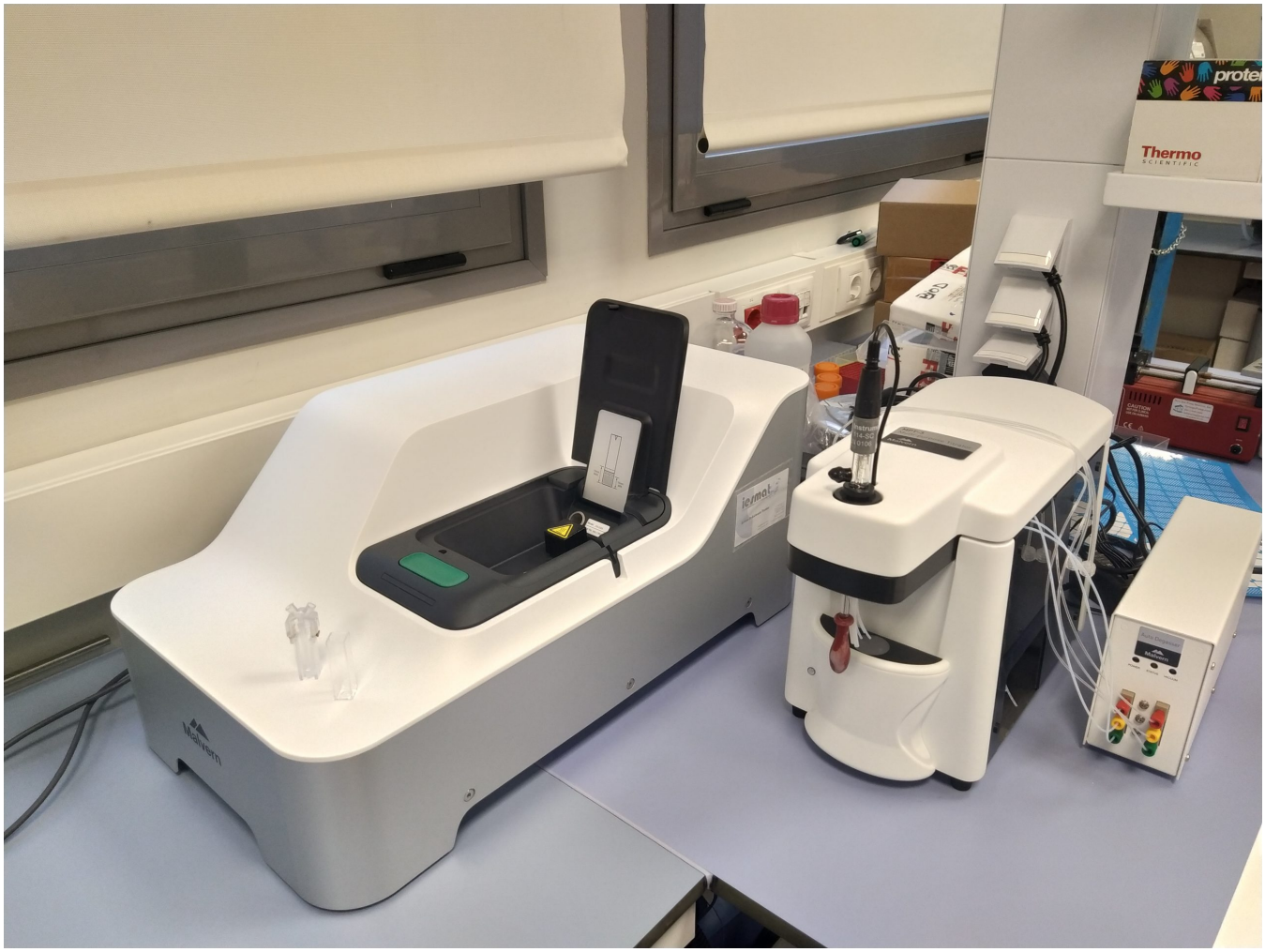
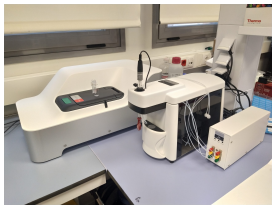
Nanomaterial profiling using DLS

Nanomaterial profiling using Dynamic Light Scattering (DLS) The service includes basic training on using the apparatus.





Contact information

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Technological Offers type

Technological scientific services

Research and innovation areas

- Bioeconomy, Biotechnology and Food Systems
- Science For Engineering and Architecture

ODS

Available from: 2022

Where?

Center for Biomedical Technology

Keywords: | DLS | Measurement | nanoparticles | Z-potential

Description of the services offered

Nanomaterial profiling using Dynamic Light Scattering (DLS) The service includes basic training on using the apparatus.

Needs requested and applications

Measurement of the size, concentration and surface load of nanomaterials scattered in colloidal solutions. These materials are being used for diagnostic therapies in ophthalmologic and systemic diseases, and also for hyperthermia anti-tumour therapies based on optical and magnetic nanoparticles. Studies on nanoparticle biofunctionalisation, screening and in-vitro detection.

Sector or area of application

Health, Biomedicine, Renewable Energy, Materials.

Differential skills

High resolution particle size measurement. Measurement of very small samples (3 microlitres). Simultaneous measurement of size and Zeta potential. Includes autotitrator to measure the pH effect. The equipment is easy to handle and has a hugely intuitive user interface. Support and training from technical and scientific staff.

Equipment description

Concentration, hydrodynamic diameter and Zeta potential of colloidal dilutions measuring equipment.

Request for service

Send a request by e-mail, containing a memorandum including a summary of the aims of the research, the experiment design, the estimated equipment usage time, the desired time line, justification of the user¿s skills, and justification of obtaining the necessary financial resources to carry out the experiment. The memorandum should be accompanied by approval from an Ethics Committee officer, in the event that this is necessary.
The feasibility of the requests and their organisational timing will be assessed by a commission chaired by the TC service scientific officer, Miguel Holgado Bolaños, head of the Photonic and Biophotonic Optics Group (GOFB) at the Biomedical Technology Centre (BTC).