DESIGN AND CONSTRUCTION OF AN X-Y-Z MOTORIZED HEAD TO PERFORM DEEP-UV RAMAN FROM -30 TO -5 ºC (CORaHE)

The Idea is to develop an automated Cold Raman Head sensor for Deep-UV Raman spectroscopy, with X-Y-Z micrometric resolution, to operate in the range -30 to -5 ºC.

It could have applications in analysing Ice-core climate records, Snow and Permafrost, Organic compounds and Hydrated minerals, as well as, in the field of Low-temperature molecular electronics, Frozen Food, Protection from Ice or Future Robotic Missions to Icy Worlds.

Our project is coordinated by the University of the Basque Country (UPV/EHU, Leioa, Spain) and the partners are the Basque Centre for Climate Change (BC3, Leioa, Spain) and the SME company Probtech Innovations S.L. (PTI, Sopela, Spain).

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