## ***RIS Internship Master thesis opportunities***

## ***Acad. year 2023/24***

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| Host institution name | MATENERCAT GROUP INCAR-CSIC |
| Host institution field | Materials science |
| Tentative topic of the master thesis | Design and synthesis of nanomaterials for new generation of batteries |
| Short description (several sentences) | The beneficiary will join the usual routines carried out in the research group about the design and production of materials with a great diversity of chemical, structural, morphological and porous properties, as well as the use of a wide variety of materials characterization techniques available both in the research group lab and in the INCAR-CSIC center. Special attention will be paid to training in the field of materials design, physicochemical characterization and electrochemical applications. Concepts such as sustainability will be taken into account both from the point of view of the precursors used and in the synthesis process itself. The materials will be tested in different electrochemical devices related to renewable and sustainable energies. |
| Key words | Aerogels, batteries, energy, sustainability, materials |
| Please select if applicable | Laboratory work in both fields: materials science and electrochemistry  Literature overview |
| Preferred educational background of the intern | chemistry / environmental engineering |
| We accept | International students / National students / EIT Labelled students / SinREM/ Amir / Emerald / TimRex |
| Chose tentative months (Internship related to MSC thesis in 2023/24 should be e accomplished between October 2023 and latest May 2024) | January 2024 (full scholarship)  February 2024 (full scholarship)  March 2024 (full scholarship)  April 2024 full scholarship)  May 2024 (full scholarship) |
| Industrial supervisor | Prof. Dr. Ana Arenillas  Contact e-mail: [ana.arenillas@csic.es](mailto:ana.arenillas@csic.es) |