The Nanotechnology on Surfaces and Plasma group from the Institute of Materials Science of Seville is offering a Ph.D. student position within the FET-Open project "SOUNDofICE"

The objective of the SOUNDofICE project is to develop a smart, energy-efficient, environmentally safe and autonomously operated de-icing procedure based on surface acoustic transducers integrated over large area substrates. This will be achieved through the surface microengineering of systems capable of exciting acoustic waves onto a variety of materials and that may incorporate anti-icing layers and SAW sensors, allowing operation according to predefined feedback algorithms. The final use of this technology will be to protect aircraft wings, aerogenerator blades and solar cell surfaces from ice at adverse weather conditions.

We require:

- A Degree in Physics, Chemistry, Engineering or related discipline.
- A Master degree in Physics, Chemistry, Materials Science or related discipline.
- A good academic record.
- Good communication skills in English.

We offer:

- A 3-year contract culminating in a Ph.D. degree.
- International environment.
- Access to a wide network of national and international collaborators.
- A constantly learning environment with participation in conferences, workshops, and international training events.
- Flexible working hours.

Your tasks will be:

- The fabrication of anti-icing surfaces using state-of-the-art nanotechnology methods.
- The characterization and test of those surfaces by advanced methods.
- The development of proof-of-concept and prototypes of this technology.

If you need more information, please do not hesitate to contact soundofice@icmse.csic.es with you inquiries.

If you are interested, please send to soundofice@icmse.csic.es, in either English or Spanish:

- A short motivation letter.
- A full CV.
- A copy of your academic records.

Deadline: 15th September 2021