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# PROCESS FOR THE PREPARATION OF HIERARCHICALLY MESO AND MACROPOROUS STRUCTURED MATERIALS

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Researchers at CIC energiGUNE have developed a hierarchical graphitized carbon foam having interconnected microporous structure, at least about 90 % of the total volume, with ordered mesoporous walls, with a pore size varying from 2 to 50 nm, as well as the process for the synthesis of a variety of bimodal porous organic polymer and/or inorganic metal oxide materials.

The process for making this graphitized carbon foam involves a simple and easy preparation with fewer steps at low temperatures, which provides a foam with improved thermal properties, that allows its easy implementation in a large-scale industrial production.

### **ADDED VALUE**

- > High specific surface area.
- Low density and high porosity.
- Sood mechanical stability.
- > High electrical conductivity.
- > High thermal conductivity.

## **APPLICATION OF THE TECHNOLOGY**

- Thermal energy storage applications
- > Electrical energy storage applications
- Heat exchanger-heat sinks
- > Microelectronics

## LICENSING CONTACT

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