POSTDOCTORAL POSITION, SYSTEMS ENGINEERING AND TECHNOLOGY TRANSFER, THERMAL

Company Description

CIC Energigune is a Cooperative Research Centre founded in 2007 with its headquarters in the Basque Country. Created thanks to the investments of the Basque Government and several leading companies in the energy sector, it aspires to become a true international leader in the field of energy and contribute to the industrial competitiveness of Basque companies.

Information

Deadline: 2019-10-21
Country: Basque Country
Category: Business
Province: Alava

Company

CIC energiGUNE

Main functions, requisites & benefits

Main functions

CIC energiGUNE is looking for an experienced Post-doctoral Researcher to incorporate in the group of systems engineering and technology transfer in the thermal energy storage (TES) area. The research will be focused on modelling, designing and testing of a lab-scale thermal energy storage prototype, based on innovative latent heat storage technology for industrial processes. The final objective of the research is the development of advanced models and systems that can be implemented in a real industrial application. The research work will include the identification and selection of commercial PCM materials suitable for the application, the development of numerical models for a packed bed configuration, combining phase change in both the PCM and the heat transfer fluid and finally, the design, construction and testing of a lab-scale prototype, aimed to validate and improve the models and technology. The research will be developed in the frame of an industrial project so there will be opportunities to work close to the real application. The candidate will have the chance to work in a multidisciplinary environment composed by chemists, physicists and engineers, having the possibility to extend his/her knowledge approaching the research under different points of view. Job function

Development and/or identification of materials (PCM) for thermal energy storage in industrial processes.
Experimental characterization and behavioural understanding of such materials.
Modelling of the system performance.
Design, construction and testing of lab-scale prototypes.
Collaboration in project proposals writing to obtain funding from institutions and industrial sources.
Supervise graduate/master students.

Requisites

Qualification requirements
Engineering degree with 2-5 years industrial experience.
PhD in Engineering will be valuable.
Experience in fluid dynamics modelling and prototypes testing at a relevant scale.
Experience on materials synthesis and characterization will be valuable.
A team player who can collaborate with other groups, technological centers, and industries.
Excellent verbal and written communication skills in English.

Benefits