

## Escuela Superior de Ingeniería

Av. de la Universidad de Cádiz, 10 11519 Puerto Real (Cádiz) España

## Fully-funded PhD scholarship on Design of wind-towers for passive ventilation

We are currently looking for candidates for a fully-funded PhD scholarship on design of passive ventilation and air conditioning devices. These devices have been used for natural ventilation during millennia, and are seeing a revival as the world seeks to move to more sustainable ways of living. This scholarship provides the opportunity to develop advanced theoretical and numerical tools for the design of these towers and to devise new strategies to improve their efficiency.

The successful candidate will join the research team involved in the project design of wind-towers for passive refrigeration, funded by the Junta de Andalucía through the Emergia program. He/she will conduct the PhD research work in the Mathematical Engineering group at the School of Engineering at UCA under the supervision of Dr. Rodolfo Ostilla Mónico. The candidate is expected to collaborate actively with researchers from other participating universities and will benefit from local and national supercomputing resources.

**Profile:** Candidates must have a strong background in Fluid Mechanics and Applied Mathematics. They are expected to hold a Master's degree in Aerospace Engineering, Mechanical Engineering, Mathematics, Physics or an equivalent degree. Previous experience in Scientific Computing will be highly valued. The PhD will be conducted in English due to the international scope of the project. Knowledge of Spanish is desirable but not indispensable.

Conditions: Fully funded PhD position for EU nationals and overseas. The scholarship includes tuition fees, stipend of 16 971€/yr the first year, up to 4 years, and funds for short-term research stays abroad. The candidate is expected to join UCA during the first semester of the 2022–2023 academic year. The university is based in Cádiz, the four-millennial city on the west coast of Andalusia, which features a vast historical heritage in close connection with its natural environment.

**Applications:** Applications must be submitted, prior registration, through the website

https://oficinavirtual.uca.es/oficinaVirtual/EntradaOficinaVirtual?procedimiento=310

Call name DISEÑO DE TORRES DE VIENTO PARA LA REFRIGERACIÓN PASIVA.

Deadline: Tuesday 12th July, 2022.

For further information or assistance through the application process do not hesitate to contact Dr. Rodolfo Ostilla Mónico (rodolfo.ostilla@uca.es).