

The University of Aruba, in collaboration with KU Leuven (Belgium), and facilitated with funding from the European Development Fund (EDF), is seeking to expand its research and teaching capacity in bio-environmental engineering, technology, engineering, informatics, and data sciences. In 2019 the curriculum of the new academic bachelor in sciences, technology and engineering and mathematics (STEM) opened its doors and will graduate its first bachelors in 2022. This three-year program consists of a 180 European credits program with a focus on sustainable development in small island states. A 90 credit master program will start in 2022. For this new STEM sciences program, the University of Aruba has started with the education and research training of the new academic staff needed to provide this program and is looking for a PhD student for the project **Development of a food dryer powered by solar energy** in the position of:

JUNIOR RESEARCHER (1,0 fte)

In the framework of a European funded project, SISSTEM, the Faculty of Arts & Sciences at the University of Aruba and the Department of Mechanical Engineering at the University of Leuven are currently looking for an outstanding PhD student (Junior Researcher) to study the development of a sustainable food dryer powered by solar energy in Aruba, and assist with the startup of a Bachelor in Small Island Solutions in Sciences, Technology, Engineering, and Mathematics (SISSTEM). The PhD student needs to be familiar with or show great interest in the challenges of small island states.

More concretely, the PhD aims at developing a sustainable drying installation for the drying of fish. To make it sustainable, the dryer is powered solely by solar energy. To overcome the intermittent presence of solar power, a thermal energy storage system will also be designed to overcome the moments when solar radiation is not or only limited available (e.g. during the night or cloudy periods). The PhD both involves experimental measurements and numerical modeling to optimize the entire drying installation.

We are looking for a highly motivated and scientifically excellent candidate in mechanical engineering with a problem-solving attitude to work in a collegial environment pervaded with intellectual rigor. Strong communication skills complemented with innovative and analytical thinking are important assets. Applicants must hold an MSc in a related field including Engineering Technology or Mechanical Engineering of an accredited university, have an affinity with sustainable development through sciences and engineering, and have the ambition to contribute to sustainable development. Candidates should at least have a Master's degree with distinction or a Master's degree with a scientific publication in an international peer-reviewed journal. The individual we are looking for will spend time at the University of Aruba and the Department of Mechanical Engineering of the KU Leuven. The successful applicant is expected to assist with teaching and mentoring of students, and therefore should be fluent in English.

Candidates will be registered as research students of KU Leuven and receive excellent educational training and coaching as well as research training and supervision by both KU Leuven (Department of Mechanical Engineering: <https://www.mech.kuleuven.be/en>) and the University of Aruba (<https://www.ua.aw/sisstem/>). The University of Aruba will offer you an exciting new opportunity for a four-year contract, on the condition that the research proposal is approved in the first year. The contract provides an attractive benefits package including APFA pension, additional health insurance, and a competitive wage. After successful completion of the PhD program, junior researchers are eligible for senior academic positions in the program.

Interested? Visit our website and submit your motivation letter (max. 1 page), resume (max. 2 pages), a scientific achievements track-record (max. 2 pages), PDF-scans of your diplomas and transcripts of academic records, and attestation of the level of English. Before **Monday, June 15, 2020**, through our career portal: <https://careers.portal.ua.aw> for the specific PhD project you are interested in.

If you need further information regarding the position, please contact us at stem@ua.aw and/or prof. Maarten Vanierschot, +32 16301072, maarten.vanierschot@kuleuven.be. One (or more) job interviews, a medical exam, an assessment test and a certificate of good conduct are in accordance with our rules of application and a standard part of our recruitment and selection procedure.

Candidates with a demonstrated strong affinity for Aruba and the Caribbean and for challenges in small island states are strongly encouraged to apply.