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 Life cycle analysis for a more sustainable food chain on Aruba 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 Biosystems at the University of Leuven are currently looking for an outstanding PhD student (Junior Researcher) to study the sustainability of the agri-food chain 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.

The PhD trajectory starts with an important data inventory step regarding typical food consumption patterns of local people and tourists. For that purpose, the PhD candidate should seek collaboration with local shops and hotels, including some affiliated with cruise ship companies. From this, a first, qualitative description concerning volumes, distances, and time frames of food chains underlying these food consumption patterns will be built. In a second phase, a comparison with other potential dietary patterns (for example as proposed in Nature, 2014, Vol. 515, 518+) will be made and a case-study will be selected. Criteria for selection will be the relevance of the food product to the Aruban community, and culture and/or to Aruban tourists, the volume being used, and the nutritional value. In a third phase, a detailed environmental life cycle analysis will be conducted, including a data collection inventory step, and different scenarios will be compared. Where relevant for the selected case-study, we will include issues of food waste of buffets and food overconsumption, as these are main drivers for the environmental footprint of our food habits (Agricultural Systems, 2017, Vol. 153, 190-200). Finally, hot spots for improvement will be identified.

During all the research phases, the PhD candidate should continue the collaboration with local shops and hotels to ensure that identified hotspots would also include potential realistic options for life cycle management, in view of making life and tourism at Aruba a more sustainable option. In the longer term, the results of this PhD trajectory could contribute to a shift from “grow-and-satisfy” tourism to “engage-and-value” tourism for Aruba (International Journal of Hospitality and Tourist Administration, 2017, Vol. 18, 41-60).
We are looking for a highly motivated and scientifically excellent candidate in food chain analysis with a pragmatic problem-solving attitude to work in a collegial environment pervaded with intellectual rigor. Strong communication and collaborative skills complemented with analytical thinking are important assets. Applicants must hold an MSc in a related field including Bioscience Engineering, Agricultural Sciences, Food Sciences or Environmental Sciences 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 Biosystems of the KU Leuven. The successful applicant is expected to assist with teaching and mentoring of students.

Candidates will be registered as a doctoral student of KU Leuven and receive excellent educational training and coaching as well as research training and supervision by both KU Leuven (Department of Biosystems: https://www.biw.kuleuven.be/biosyst/english) 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 Wednesday, April 1, 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. Annemie Geeraerd, phone: +32 16320591, annemie.geeraerd@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.