IHE Delft is the largest international graduate water education facility in the world and is based in Delft, The Netherlands. The mission of IHE Delft is to work in partnership to strengthen capacity in the water sector, to achieve global sustainable development. IHE Delft has a permanent staff of 220 of which more than 140 are academics from all over the world, while about 250 guest lecturers from academia and industry contribute to our educational programmes. Each year 750 professionals (including about 200 new MSc students per year) from all over the world attend various water-related courses at IHE Delft. The Institute has an international staff & student community with English as the working language.

The overall thrust of the Water Supply Sanitation and Environmental Engineering Department is urbanization as one of the dominant global processes. Although urbanization offers enormous opportunities for socio-economic development, it also presents major challenges for the equitable and sustainable development of drinking water and sanitation infrastructure and services. Within this context the Water Supply Sanitation and Environmental Engineering Department helps to build the necessary human resources and higher education and research capacities through postgraduate education, training, research and other capacity building activities in the fields of water supply, sanitation and resource recovery. The department consists of three chair groups, namely, Sanitary Engineering, Water Supply Engineering, and Pollution Prevention and Resource Recovery, each headed by a professor. The department intends to recruit a:

**Post-doc “Wastewater Treatment for Reuse in Industry and Agriculture”**

**1 FTE/ 38 hours**

**Job Description**

The WSSEE department aims to contribute to the global goal of providing safe drinking water and sanitation to all in an environmentally sustainable way. The department has three chair groups, of which in particular the PPRR (Pollution Prevention and Resource Recovery) chair group focusses on recycling & reusing all resources (water, energy and waste streams).

**POLLUTION PREVENTION AND RESOURCE RECOVERY CHAIR GROUP**

The core contributes to research and innovation for the application of environmental technologies in the framework of the water-energy-food nexus to support circular economies in developing countries and countries-in-transition. The focal point is the conversion of organic (liquid) waste into new resources. Developing a circular economy requires technologies with an overall positive impact on the environment that do not consume but produce energy. Furthermore, more efficient technologies and management schemes to reclaim water and nutrients for hygienically safe application in agriculture are crucial to fight worldwide water scarcity and to increase food production.

The research of the chair group has a technology focus, for waste (water) treatment and resource recovery and comprises four research lines: (i) waste-to-energy technologies (anaerobic digestion, thermal conversion to produce biochar) and other technologies to generate added-value products from waste, (ii) biochar for energy, water and gas filtration, (iii) algae photo-bioreactors for photosynthesis-based waste conversion and resource production and (iv) ponds and constructed wetlands.
The research of the chair group considers the context of the water-energy-food nexus and the need for integrated planning of wastewater reuse schemes in a variety of social, economic and governance conditions.

Requirements
- PhD in Environmental Engineering or related field, on a topic related to water treatment technologies.
- Interest in wastewater reuse, especially the health-related aspects.
- Interest to develop his/her skills in education.
- Practical experience with (waste)water treatment and/or reuse projects in the MENA region is a pre.

Activities of the post-doc for a period of 12 months:
- Develop an educational package on ‘wastewater treatment for reuse in agriculture and industry’, consisting of lecture notes, power points and video lectures.
- Preparing a manuscript to be published as review paper on ‘wastewater treatment for reuse in agriculture and industry’ in a high-ranking international journal.
- To offer support to educational activities of the chair group, particularly laboratory sessions.
- To travel to Jordan to offer training/consultancy within the context of the SCARCE/desalination project.
- To offer support to ongoing projects of the chair group, particularly those in the Middle East and the IMETE Erasmus+ programme.

Terms of employment
IHE Delft offers an attractive, multiple choice employee benefits scheme, year-end bonus and generous pension scheme. The appointment implies entry into the Netherlands' Civil Service Pension Fund (ABP). We also offer 31 days’ leave based on a 38 hours working week.

Information and application
Additional information can be obtained from: Dr. Peter van der Steen, from the Sanitation and Environmental Engineering Department (T: +31 15 215 1775 / E: p.vandersteen@un-ihe.org ).

Applications in English, including curriculum vitae, statement of teaching and research interests and motivation letter (as one PDF file with your family name as the filename), should be sent to IHE Delft, attn. Human Resource Management (E: recruitment@un-ihe.org ), PO Box 3015, 2601 DA Delft, The Netherlands, stating: 21-WSSEE-02.

The deadline for applications is 30 March 2021

Reactions from staffing agencies and other third parties are not appreciated.