Unlimited Perspectives for Waste/Wastewater Valorization Alleviation of Climate Change For Sustainable Society

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Abstract:

By 2030, it is expected that over 550 million people will face water scarcity in Islamic world. Many countries don't have enough clean water due to serious pollution problems. Governmental and private sector are required to raise the public's awareness of the water scarcity problems as well as the protection of water recourses from pollution. Moreover, they have to support the role of scientific research to develop new affordable technologies for domestic wastewater treatment for reuse in irrigation purposes and establish a well-coordinated information system to support decision makers for making an effective water resources management on an environmentally sound basis. The building of a sustainable society will require reduction of dependency on fossil fuels and lowering of the amount of pollution that is generated. Solid waste valorization and industrial wastewater treatment is an area in which these two goals are addressed simultaneously. As a result, we have been a paradigm shift recently, from disposing of waste to using it. The H₂ production from solid waste/industrial wastewater is an innovative and promising option from environmental and economic point of view. This is great challenge for practical applications in the region.



Biography:

My research of interest lies in the wastewater treatment technologies and waste into energy. I have got my Ph-D from Wageningen University, the Netherlands. I have published 201 papers in peer reviewed international journals (SCI journals, H-index Scopus 46, citations 7232), 22 book chapters published by outstanding publishers. I'm a principal investigator for several international and national research projects. I have received nine national and international AWARDS and four patents. I supervised 35 Ph-D and 10 MSc students, in the wastewater treatment technologies/solid waste valorization and my student has got the best Ph-D thesis in environmental engineering from supreme council universities.