



TISTA PRASAI JOSHI

Asia & Pacific

Environmental Microbiology

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Dr. Prasai Joshi's work is dedicated to creating more environmentally friendly and economic techniques for water treatment, through the development of novel metal oxide adsorbents that can remove harmful organic and inorganic arsenic compounds efficiently from water. Her work has had a significant impact on public awareness and accountability of drinking water suppliers in Kathmandu.

Organic arsenic-based compounds are extensively used as feed additives in poultry farming, and upon entering the environment, these compounds tend to transform into more toxic inorganic arsenic through microbial activity, which can spread to surface and ground water sources and cause serious harm to human health. Dr. Prasai Joshi has made significant contributions to understanding the interactions of the organic arsenic compounds with iron- and manganese-based adsorbents in order to optimize the adsorbents' efficiency and prevent the arsenic compounds from reaching the environment. She has a registered patent in China for her novel method of treating organic arsenic-containing wastewater.

Dr. Prasai Joshi was born in Nepal. She received her PhD in Environmental Engineering in 2017 from the University of the Chinese Academy of Sciences, for which she was awarded a medal by the President of Nepal. Her work has been published in many leading international and national journals, and she also writes about science awareness in Nepal. Dr. Prasai Joshi actively mentors post-graduate students (the majority of them women) and lectures at universities. She has served as a member of several governmental committees in Nepal dedicated to public and environmental health, and is engaged in promoting drinking water quality in Nepal through public lectures and demonstrations. Dr. Prasai Joshi also organizes environmental awareness campaigns which are particularly focused on women and school teachers in remote mountainous areas of Nepal.

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Because of this Award and the international recognition, I am more confident, accountable, and motivated to continue my research activities in order to achieve my goals. It will inspire many younger ladies in this region to achieve more in the advancement of sciences.

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