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Born in Bangladesh (1952), Abul Hussam, is now a Professor of Chemistry and the Director for the Center for Clean Water and Sustainable Technologies (CCWST) in the Department of Chemistry and Biochemistry at George Mason University, Virginia, USA. He finished his early education in Kushtia, Bangladesh (1970) and then graduated in Chemistry (B.Sc. Honours 1975 and M.Sc. 1976) from University of Dhaka, Bangladesh. Dr. Hussam earned his Ph.D. in Analytical Chemistry from University of Pittsburgh, Pennsylvania in 1982. He then obtained his postdoctoral training on Separation Chemistry from the Chemistry Department of University of Minnesota and then moved to George Mason University in 1985. He was also a visiting research scholar at Georgetown University and in Case Western Reserve University.

Professor Hussam's research areas include electroanalytical chemistry, environmental chemistry, and chemistry in organized media. His early scientific work was centered on electrochemistry in non-aqueous media, spectroscopic (NMR and FTIR) characterization of hydrogen bonded water, and diffusion behavior of micelles and microemulsions. Professor Hussam later developed computer controlled instruments such as electrochemical analyzer, automated titration system, and high precision headspace gas chromatographs for the study of fluid phase chemistry in complex media including the study of the environment. This later research allowed him to develop measurement and mitigation techniques for toxic arsenic species in groundwater.

Professor Hussam has published and presented over 100 scientific papers in international journals, proceedings, and books. His present research on the measurement of trace arsenic, aquatic chemistry of arsenic in groundwater, and the development of a simple arsenic filters has been recognized through international publications and accolades. His work is now described in chemistry and engineering text books and cited as one of the most significant contributions in water purification technologies.

Professor Hussam was awarded one of the highest engineering prizes known as the 2007 Grainger Challenge Prize for Sustainability from the US National Academy of Engineering (NAE) for the SONO arsenic filter which is now used by thousands of people in the affected areas of Bangladesh, Nepal, and India. He was recognized by the TIME Magazine, Global Heroes of the Environment 2007 Award, the Outstanding American by Choice Award by US Citizenship and Immigrations Services in 2008, the Distinguished Alumni Award for *"creativity, leadership, and accomplishments"* by the Department of Chemistry, University of Pittsburgh, the Honorary Doctorate of Science (D.Sc.) by Dhaka University in 2009, and many more.

Professor Hussam is a passionate educator who loves to teach chemistry (quantitative chemical analysis, instrumental analysis, electroanalytical chemistry and the theory of analytical processes) at undergraduate and graduate levels. In collaboration with others he has established an environmental research initiative in Bangladesh and actively engaged in educating public on the nature of present and future environmental problems. He is on the editorial board of the Journal of Environmental Science and Health and an active peer reviewer of numerous international journals and research organizations. Professor Hussam believes intensive, advanced and massive developments of science and technology education are the only means to lift out of poverty.

http://www.nae.edu/nae/grainger.nsf/weblinks/MKEZ-6XYR4U?OpenDocument.