



Abul Hussam (PhD, 1982) Born in Bangladesh (1952), Abul Hussam is now a Professor in the department of Chemistry and Biochemistry at George Mason University, Virginia, (since 1985).

Dr. Hussam finished his early education from Kushtia, Bangladesh (1970). He graduated in Chemistry (B.Sc. Honours 1975 and M.Sc. 1976) from the University of Dhaka and earned his Ph.D. in Analytical Chemistry from University of Pittsburgh, (1982). He then obtained his postdoctoral training at the Chemistry Department of the University of Minnesota and he was a visiting research fellow at Georgetown University and Case Western Reserve University. His research areas involve 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 the diffusion behavior of micelles and microemulsions. Dr. Hussam later developed computer controlled instruments such as an electrochemical analyzer, automated titration system, and a high precision headspace gas chromatograph 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. The arsenic filter resulting from his research is now used by thousands of people in the affected areas of Bangladesh. In collaboration with his brothers, Dr. Abul K. M. Munir and Prof. Abul Barkat, he has established an initiative for environmental research in Bangladesh and actively engaged in educating public on the nature of present and future environmental problems. Dr. Hussam was awarded the prestigious Grainger Challenge Prize for Sustainability (2007) from the US National Academy of Engineering for the development and deployment of a novel water filter to remove toxic arsenic species from groundwater.