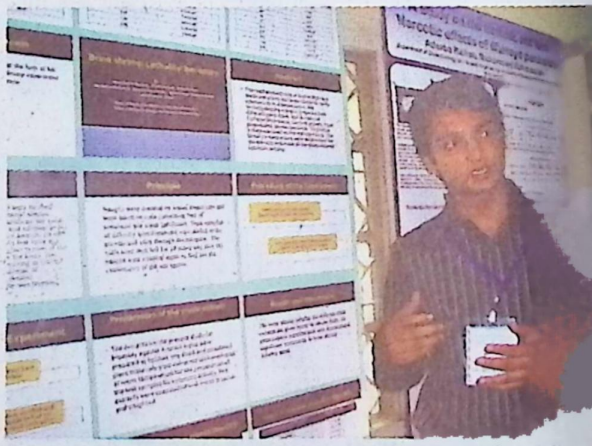
Research on Life Science at UODA

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The Department of Biotechnology and Genetic Engineering, Molecular Medicine and Bioinformatics and the Department of Pharmacy are jointly doing some research work at UODA. It is really difficult for doing some world-class research in a developing country like Bangladesh but it is true that our Bangladeshi researchers from both public and private Universities and research Institutions have carried out some excellent research.

At UODA, every year the "Bioscientist Club" arranges an excellent scientific poster exhibition. In 2010, they also arranged an excellent poster exhibition where different projects were demonstrated through outstanding poster presentations. About 70 research posters were demonstrated during the exhibition.





All of these papers were highly appreciated by the visitors. But the Environmental Biotechnology section was totally different from others. Two papers were presented under this section. One was about our very common "Arsenic Problem in Bangladesh" and another one was "The way we are polluting water and making our life vulnerable". Both of these were different than others in the sense that we are still fighting to overcome these problems. The research on arsenic contamination revealed that arsenic is present in the ground water of at least 57 districts out of the 64 districts of Bangladesh. The Bangladesh government has done a commendable job in marking every tube-well red, which pump out arsenic contaminated ground water. However, the question of irrigation with arsenic contaminated groundwater remains a thorny issue. The same source of arsenic water may be used for irrigation as well as for drinking, but while the tube-wells supplying drinking water have been marked red, the pumps supplying groundwater for irrigation remain unmarked.

As a result, arsenic contaminated groundwater is leading to arsenic build-up in soil wherever such irrigation takes place. Researchers have previously demonstrated presence of arsenic in paddy when paddy was irrigated with arsenic contaminated groundwater. Now researchers at UODA have found significant amount of arsenic in many winter crops like cauliflower, cabbage, radish and mustard. The presence of arsenic in these crops when irrigated with arsenic contaminated groundwater is much higher than is acceptable as per WHO standards. It may be pointed out that such vegetables are not confined to the areas where they are grown but are sold and distributed throughout Bangladesh. As a result, the total population of the country remains vulnerable to arsenic exposure. Researchers at the University of Development Alternative also observed significantly lower IQ levels and lower