



Guest lecture on “ Graphene Based hybrid Nano Materials for H₂O Treatment”

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| Topic : | Guest Lecture on “ Graphene based hybrid Nano Materials for H ₂ O Treatment” for the students of BBA, MBA I and III by Mr. Vimlesh Chandra, Assistant Professor, KMIT Sultanpur |
| Date of event : | September 19, 2012 |
| Aim of the Event | “Water, the essential element on which all life depends, has become global garbage cans”. This is true in its entirety. Water pollution is a major problem in the global context. It has been suggested that it is the leading worldwide cause of deaths and diseases, and that it accounts for the deaths of more than 14,000 people daily. To discuss health issues and to find solution to this problem, RDIAS organized this lecture for Management Students. |
| Description of the event | <p>To start with, let’s know more about the speaker who, has Research experience in Chemical synthesis of Graphene and its composite, Fabrication of metals, oxide, polymer and spintronic devices and so on.., is a subject matter expert of chemical sciences.</p> <p>The speaker started the session by lending insight on the problem related to water caused by change in water biologically/ chemically/ physically. He addressed some major problems and crises such as :</p> <ul style="list-style-type: none">➤ Japan Nuclear incidents - Radioactive element➤ Mexico Oil spell 2010➤ Bangladesh – arsenic contamination |

The speaker discussed the term, Arsenic, which is notoriously poisonous to multicellular life, although a few species of bacteria are able to use arsenic compounds as respiratory metabolites. Arsenic contamination of groundwater is a problem that affects millions of people across the world.

Sir, then spoke of, new discovery; Graphene which got nobel prize in 2010 is carbon based sheet which is environment friendly which is the perfect water filter.

With an ever-increasing strain on the world's water supplies, water filtration is one of the hottest (and most valuable) topics at the moment — and by the sound of it, if graphene oxide really is completely impermeable to everything except water, this new filter would make clean water out of anything. However, while answering questions of students at the end of the session, he said that currently there is no solution to rid water which is contaminated by arsenic which lies on the surface of pacific ocean.

We are sure that this informative session would have exposed students to some new concepts related to water pollution.