

Seminar 2018-19

1. Seminar on **Metal Pollution in Aquatic Environment: Are we losing our favoured dish from the platter?** Organized by Dept. Of Zoology, BGC

Speaker: Dr. Suman Bhasan Chakraborty, Dept. of Zoology, University of Calcutta

The lecture emphasized on heavy metal contamination of water sources that has emerged as a major global environmental concern, threatening both aquatic ecosystems and human health. Fish is a staple food in the diets of many regions in the world; hence, both the type and concentration of metals accumulated and transferred from contaminated water sources to fish must be determined and assessed.

2. Seminar on **Fundamentals of Immunology: SOCS3 dictates the transition of divergent time-phased events in granulocyte TNF- α signaling**

Speaker: Dr. Bhola Nath Paul, Ex-Professor & Senior Principal Scientist, Head, Immunobiology Division, CSIR-Indian Institute of Toxicology Research, Lucknow, Organized By Dept. Of Zoology, BGC

No. of participants=53

Date.23.2.2019

Tumor-necrosis factor- α (TNF- α)-driven nuclear factor- κ B (NF- κ B) activation and apoptosis are opposing pathways; the growing recognition of these conflicting roles of TNF- α is perplexing. The lecture showed inflammation and apoptosis are time-phased events following TNF- α signaling and that emergence of suppressor of cytokine signaling 3 (SOCS3) expression limits the ongoing NF- κ B activation and promotes apoptosis; further, it suggested an altered view of how inflammatory diseases are initiated and sustained. As apoptosis is associated with SOCS3 abundance, the lecture suggested that these divergent TNF- α -driven events are time-phased, interconnected, opposing control mechanisms and one of the central features through which the immune system resolves pulmonary inflammation. Dysregulation may initiate mucosal inflammation, thus changing the landscape of asthma therapy.



