

Project title: Physicochemical characterisation of aerosol and source apportionment in mid-Brahmaputra plain in Assam: A modelling approach

PI: Dr Raza R Hoque, Associate Professor, Dept of Environmental Sc., Tezpur University, Tezpur, Assam, PIN 784028 (Email: rrr@tezu.ernet.in)

Institution: Tezpur University, Tezpur (www.tezu.ernet.in)

Abstract:

The project aims to characterise aerosol and rainwater of mid-Brahmaputra plain region of Assam. Aerosol for the whole year cycle will be analysed for metals, carbon (OC/EC/WSOC) and major ions. Similarly, rainwater of the regions will be chemically characterised for major ions, metals and carbon. A modelling approach will be adopted viz., PCA and CMB for the source apportionment of aerosol. It will also be explored how aerosol constituents affect the rainwater quality. Spatial and temporal trend of physical and chemical characteristics of aerosol will have a focus in the study as anthropogenic activities have a characteristic seasonality in the region. Also, aerosol impact could also have a seasonal trend in determining the rainwater chemistry.