

Panel 1

Climate Change and Use of Chemicals: Adaptation and Mitigation Measures for Minimizing the Emerging Environmental and Health Issues

Of the many emerging issues of climate change, little attention seems to have been given to its resulting impact on chemicals so abundantly and widely used in agriculture, industry and households.

Characteristics, behavior, transport/distribution, and toxicity of chemicals are likely to bring about changes in the principal environmental parameters such as temperature, precipitation and salinity. Whereas, increase in temperatures would cause increased volatility of chemicals, directly and adversely affecting the air quality, increase in precipitation would have similar impact on water bodies due to increased run offs carrying chemicals both from air, agricultural land and open waste dumps. Similarly, there would also be a likely increase both in land salinity and chemical load of water bodies with increased evaporation due to increasing temperatures and low precipitation.

Vulnerable species and vulnerable population are likely to suffer the most due to the impact of climate change described above.

Climate changes are evident in Asia. As indicated by a number of studies, the developing countries would be more severely affected, especially in South Asia, due to agriculture dependent economy, mostly poor and rural population, lack of resources, technical know-how and awareness. There is a dire need to raise, among others, the consequences of climate change related to chemicals, to understand emerging national and regional issues, to undertake relevant research work and in the light of the same, to strategize adaptation and mitigation measures for sustained economy as well as for minimizing the environmental and health impacts in South Asian region. This technical session invites abstracts followed by papers analyzing some of the pertinent issues explained above.

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