

## Interactive Discussion on “Clear Understanding of Hazy Skies”

During onset of winters, Fog when combines with smoke / various other air pollutants gives rise to a serious environmental challenge viz., Smog / Hazy skies.

To have in-depth understanding of the cause of severe air pollution in Delhi, an interactive discussion on “**Clear Understanding of Hazy Skies**” was held by J&K Pollution Control Committee in collaboration with Indian National Young Academy of Science at Conference Hall, JKPCC Jammu on 19-12-2023.

Guest speaker, **Prof. Sachin S. Gunthe**, Coordinator, Center for Atmospheric & Climate Sciences and Professor of Earth System, Science in Civil Engineering, IIT Madras, Chennai gave a detailed overview of the various underlying sources that contribute to hazy skies as secondary pollutants besides well-known primitive sources of pollution viz., stubble burning and vehicular emissions.

Prof. Gunthe briefed gathering that Smog is formed due to presence of Smoke ( $\text{SO}_2$ ) and fog (humidity) in air whereas haze is the result of tiny particles / droplets in air including dust and particulate matter which may be sourced from natural activities like wildfires and dust storms. He emphasized that presence of higher humidity and trapping of aerosol particles with favourable conditions for making hazy skies are prevalent in Urban areas due to higher rate of nighttime surface cooling.

Prof. Gunthe revealed that major causes of haze formation in Delhi, *inter alia*, includes metal pickling and plastic burning, livestock and fertilizer use (Agricultural activities). Presence of chlorides have a significant role in elevated levels of  $\text{PM}_{2.5}$  in the NCR region.

