

National Mineral Awards – 2007

Geo-Environmental Studies relating to mining, urban, industrial, coastal and desert management for sustainable development

Dr. V. M. Choubey, Scientist 'F' Wadia Institute of Himalayan Geology, Dehradun has undertaken studies to characterize the behavior of sub-surface radon migration in relation to various geoenvironmental conditions in the Himalayan region.

His work on western part of the Lesser and Higher Himalayas has shown that the deep seated fault planes facilitate easy escape of radon from the earth's interior to the surface. Comparative study of radon measurements by him in spring waters before and after the Chamoli earthquake has shown that radon concentrations enhanced substantially after the earthquake in the worst affected areas around Rudraprayag and Chamoli. Exceptionally high values are present in few springs of the Bhilangana valley in the proximity of mega Himalayan thrust system. Radon concentration studies carried out by Dr. Choubey across landslide profiles are significance in landslide hazard assessment and mitigation.

Dr. Choubey has identified three different clusters of high radon values in densely populated Doon Valley that are related to tectonic features and associated uranium mineralization.

In recognition of his innovative research on radon emanations related to the complex thrust tectonics in various parts of Himalayas and its societal impact, National Mineral Award - 2007 is conferred upon Dr. V. M. Choubey.