

CALL FOR PAPERS

Registered participants are requested to submit an extended abstract (template in Word) through EasyChair (<https://aachnbgu.aaccrs.org/#abstract>) or to aachnbgu2018@gmail.com by Oct 15, 2022. Participants are requested to write "Abstract for AAC-2022, «ParticipantID»" (The Participant ID will be assigned during registration through E-mail) in the subject line while sending the extended abstracts by E-mail. It is proposed to bring out proceedings of the Conference. Acceptance notification will be communicated to authors by Oct 20, 2022, with a request to submit the soft copy of the final abstract in camera-ready form by Oct 31, 2022. AAC-2022 will endeavor to give preference to papers that deal with new advancements, applications and developments in the aforesaid areas. All papers submitted for presentation in the Conference must be original and should not have been presented elsewhere. All papers will be subjected to review and decisions will be conveyed to the authors accordingly. Selected conference papers will be published in International/National Journals. *Procedure to publish the research papers will be communicated later (<http://aachnbgu.aaccrs.org/>).

Accommodation:

There are many hotels (including budget hotels) and lodges are available at Srinagar Garhwal. Please visit for accommodation (<https://aachnbgu.aaccrs.org/#accommodation>). Apart from this, the AAC-2022 organising committee will also arrange shared accommodation at the Garhwal Mondal Vikas Nigam and University Guest House against a minimum payment on a first come first serve basis. Interested delegates may send their request to: aachnbgu2018@gmail.com



REGISTRATION FEES

The following Conference registration fees* is payable by different categories of delegates:

Indian Delegates: Rs. 3500

Students: Rs. 2000

Foreign Delegates: USD 250

*Procedure to pay the registration fee will be communicated later on website (<https://aachnbgu.aaccrs.org/#registration>)

FIELD TRIP

A two-day visit to Shri Badrinath Ji Temple after the conference may be planned to display the different geographical features on the route. Badrinath (altitude 3133 m) is 200 kms from Srinagar and it takes around 8 hrs. by bus to reach there. Those who are interested in field trip are requested to indicate it on the registration form clearly and send an additional fee of 2000.00 per person towards the field trip (this includes transport, lodging and boarding cost). Interested delegates may send their request to: aachnbgu2018@gmail.com

IMPORTANT DATES

Abstract submission deadline	Oct 15, 2022
Abstract acceptance notification	Oct 20, 2022
Registration deadline	Oct 25, 2022
Conference dates	Nov 4-6, 2022

2nd International Conference

on

AEROSOLS, AIR QUALITY, AND CLIMATE CHANGE (AAC-2022) OVER HIMALAYAN REGION OF UTTARAKHAND

हिमालयी क्षेत्र उत्तराखण्ड के
एयरोसोल, वायु गुणवत्ता और जलवायु परिवर्तन
पर अन्तर्राष्ट्रीय संगोष्ठी



Organised by

Department of Physics and Internal
Quality Assurance Cell (IQAC)
HNB Garhwal University
(A Central University)
Srinagar Garhwal, Uttarakhand

4-6 November, 2022

Patron Vice Chancellor, HNB GARHWAL UNIVERSITY SRINAGAR (GARHWAL)

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ABOUT THE CONFERENCE

The conference will offer three days of plenary lectures, contributed papers in the form of platform and poster presentations and exhibition of different products and systems related to aerosol science and technology and allied areas.

SCOPE OF THE CONFERENCE

The conference will focus on the latest developments in air quality and aerosol science as well as the insights that the community has gained in recent years with regard to the impacts of aerosols on human health and climate change, including the following broad areas:

Advancement in Basic, Applied Sciences, Engineering, Social Sciences & Humanities (Multidisciplinary-All Streams)

(i) Nuclear, Radioactive aerosols, Nano-aerosols and Material Synthesis (ii) Basic scientific research (iii) Fundamental, investigative research, theoretical or experimental, to advance knowledge without a specifically envisaged practical applications (iv) Critically thinking about issues confronting them and develop solutions that are informed not only by math, science and engineering, but by humanities and social sciences as well; to implement those solutions effectively within real social contexts; and to evaluate them in humanistic as well as technical terms. (v) Problem-solving, innovation and development of products and processes.

Physical and chemical characteristics of atmospheric aerosols

Sub topics: (i) Studies of the physical and chemical of aerosol properties and its behavior into the atmosphere. (ii)Formation of particles from nanometer and micrometer dimensions in size, classification and measurement of transport and deposition properties, (iii) Aerosol-cloud interactions in-situ and laboratory measurement and(iv) overview of the aerosol study in the Himalayan region Uttarakhand.

Optical and Radiative Characterization of atmospheric Aerosols

Sub topics: (i) Columnar optical depth and near-surface mass concentration of aerosols (ii) Role of air mass trajectories on aerosols

Study of aerosols by various Remote Sensing Techniques

Sub topics: (i) Remote sensing via satellite, surface and airborne instrumentation measurements of aerosols (ii) Spatial and temporal coverage for validation of numerical models of aerosol production, dispersion and deposition (iii) Testing the fidelity of air quality, weather and climate models and (iv) Possibilities of the research through Aerosol remote sensing in Himalayan region Uttarakhand

Impact of Aerosol on human Health

Sub topics: (i) Role of pollution in the air borne deceases i.e asthma increase. (ii) Link between asthma and pollution (iii) Role play by the aerosols from the role play by the precursor gases near the traffic source.

Impact of aerosol on agriculture

Sub topics: (i) Emission of primary pollutants as sulphur dioxide, nitrogen oxide and particulates into the atmosphere. (ii) Effect of primary pollutants in urban areas close to the large point sources. (iii) Secondary pollutants include tropospheric (ground level) ozone, by subsequent chemical reactions in the atmosphere (iv) The reactions leading to ozone formation from primary pollutants by high temperature and light intensities.

Impact of aerosols on climate over Himalayan region

(i) Observations i.e Moderate Resolution Imaging Spectroradiometer, Cloud-Aerosol Lidar with Orthogonal Polarization etc (ii) Biomass burning and BC/OC emission (iii) Aerosol radiative forcing during biomass burning period (iv) its implications to Himalayan glaciers

Aerosol System over High Altitude Himalayas from observations and modeling and their possible effects of glaciers and radiation budget.

(i) Aerosol abundance over High altitudes Himalayas (ii) The large spatial and temporal heterogeneity of the aerosol properties and climate-impact assessment of aerosols (iii) Regional trends and discussion on the potential climate implications

Role of Aerosols on Water-Energy Resources and Development of Hydropower in Uttarakhand

(i) Water Resources overview; (ii) Regional issues, potentials, availability, utilization & development of hydropower; (iii) Springs, glaciers, snowmelting and water budgeting; (iv) Water management: rain water harvesting, water pollution, conservation, planning & policies; (v) Hydropower potential in Uttarakhand- opportunities & challenges.

CONVENER

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