ANNEXURE\_EE4\_QS\_AIB\_PROGRAMS

### **AMITY INSTITUTE OF BIOTECHNOLOGY (AIB)**

### Director: Prof. Vinay Sharma

The courses are run in Amity Institute of Biotechnology on climate science and/or environmental sustainability.

- EVS001; Environmental Sciences
  - o Core module syllabus for environmental studies for undergraduate courses of all branches of higher education, prescribed by University Grant Commission (UGC) is running for all UG programs across Amity University Rajasthan.
- AUR offers the following courses as electives and for minor track:
  - o BTB734; Fundamentals of Carbon Footprints
  - o MSB 334; Carbon Credits and Trading

The faculty of AIB supervises PhD students also and the research outcomes are published in peer reviewed journals.

### The faculty members with the specialization in Environmental Sciences in AIB:

**Dr. Era Upadhyay** is currently working as Associate Professor at Amity University Rajasthan, Jaipur. She acquired Doctorate in Botany with specialization in Environmental Sciences from Aligarh Muslim University, Aligarh. Her research interests include analysis of biochemical & morphological features of plants, soil characteristics, and impact of soil properties on plants; and currently she is engaged with Monitoring and Modeling of Air Quality, Data Analysis, Risk Assessment, Occupational Safety and Health research. During the last four years, she has contributed mainly on global isuues related to health. She has published 05 book chapters and more than 51 research papers in peer reviewed and refereed journals including Nature, Nature Medicine, Nature Human Behavior, Lancet etc. Dr Era is also working on some novel concepts related to air pollution and herbal medicine and published 04 patents. (https://scholar.google.com/citations?user=Usm1PLIAAAAJ&hl=en)

**Dr. Manishita Das Mukherji** is presently serving as Associate Professor at Amity University Rajasthan, Jaipur, India. She holds a PhD degree in Environmental Sciences from Sardar Patel University, Gujarat. She has an experience of over 17 years in teaching and research. Her areas of research interest include Wastewater heavy metal remediation, ecological studies of natural wetlands and emerging water pollutants. She is a Senior Member of Asia-Pacific Chemical, Biological & Environmental Engineering Society (APCBEES), Hong Kong. Apart from this, she is also actively associated with prestigious professional bodies like ISCA, IACSIT, Singapore. She has to her credit 54 publications in peer-reviewed journals, books, and conference proceedings. She is the editorial board member of journals of national and

international repute. She has worked and is working as a reviewer of journals with reputed publication houses such as Willey, Taylor & Francis, Elsevier Springer.

(https://scholar.google.com/citations?user=2-tRR oAAAAJ&hl=en)

ANNEXURE\_EE4\_QS\_ACOAST\_PROGRAMS

## CENTRE FOR OCEAN-ATMOSPHERIC SCIENCE & TECHNOLOGY (COAST)

Director: Prof. P.V.S. Raju

The courses are running in ACOAST on climate science and/or environmental sustainability.

Amity University Rajasthan provide *post-graduation programme leading to MSc in Atmospheric and Environmental Science*. The objective of the programme to promote interdisciplinary research in cutting-edge science & technology and public services. It encompasses numerical modeling of atmosphere and ocean, monsoon studies, high impact severe weather forecasting, air pollution, landair-sea interaction, and climate change to understand its physical and social consequences. The programme will also develop a strong research and capacity building in the area of atmospheric and climate science.

In addition, the University also provide minor track degree in Climate Science for under graduate students

### Research Centre with a specific focus on environmental sustainability

The Amity Centre for Ocean-Atmospheric Sciences and Technology (ACOAST) was established with a view to developing manpower in Weather and Climate Sciences. Environmental monitoring and analysis, The Centre is equipped with high performance computational resources for the running Numerical Weather Prediction models for weather and climate systems, understand the physics and dynamics of weather extremes like severe thunderstorms, tropical cyclones, flood, landslide, drought, Monsoon System and its variability, Oceanography, coupled Systems, Disaster Management & Mitigation etc are the aspects of interest.

The highly qualified faculty not only teach in graduate and postgraduate programmes but also undertakes the cutting-edge research on climate science. *The faculty of the Centre supervises PhD and MS student and the research outcome had been published in peer reviewed journals*. The Environmental Monitoring facility established at ACOAST for continuous monitoring of black carbon concentration and Aerosol concentration. The centre also engaged in outreach activity on community science programme air quality for school children in Jaipur.



# AMITY UNIVERSITY —— RAJASTHAN——

### **Environmental Monitoring Facility**



Sky Radiometer Aethalometer



### **Community Science Programme on Air Quality**









### Community Science Programme on Air Quality

On the occasion of the Community Science Programme on Air Quality and the Launch of the E-Learning Portal on 24 December, 2022 Shri Shyam Vidhyapeeth Senior Secondary School, Chandwaji

Clean air begins with me











https://www.earthwatchindia.org/elearning/air-quality-home

Citizen Science | Experiential Learning







#### **Dedicated FTE staff of the Research Centre**

**Prof. (Dr) P.V.S. Raju** is currently working as a Professor and Director at Centre for Ocean Atmospheric Science and Technology, Amity University Rajasthan. He has over 25 years of research and teaching experience in the field of Atmospheric Science. He holds a PhD from IIT Delhi, and M.Tech., M.Sc., from Andhra University. He has awarded CSIR-SRF; Junior Associate, ICTP, Italy. His research interest includes Regional Weather & Climate Modeling and Diagnostic Studies; Monsoon Dynamics and its Variability. He has published more than 50 research papers in peer-reviewed journals. (https://scholar.google.co.in/citations?user=L9WAoaMAAAAJ&hl=en).

**Dr. Shatrughan Singh,** an Assistant Professor at the ACOAST, has completed his Ph.D. in Earth and Atmospheric Sciences from Mississippi State University, USA. His Ph.D. research investigated dissolved organic matter (DOM) characteristics in diverse aquatic ecosystems while exploring the role of hydrological and climatological changes. His current research interest focuses on investigating ecohydrological changes, both in terms of quality and quantity, in freshwater ecosystems inevitably pertinent to humans, especially considering climate change scenarios. His future research interests target to offer meaningful solutions in addressing water quality-related issues in freshwater ecosystems while utilizing modern tools and techniques and advanced data analytics. More details on his research activities can be found on his Google profile here (<a href="https://scholar.google.co.in/citations?user=AXoHQAIAAAAJ&hl=en&authuser=2">https://scholar.google.co.in/citations?user=AXoHQAIAAAAJ&hl=en&authuser=2</a>).