

S-CNC NEWS LETTER

Seto Inland Sea Carbon-Neutral Research Center

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着任のご挨拶

PATRA Prabir Kumar 特任教授
(サステナビリティ部門) より着任のご挨拶をいただきました。

It is a great honor for me to join the Seto Inland Sea Carbon Neutral Research Centre (S-CNC). I am truly excited to become part of such a dynamic and multi-faceted organization, where the Sustainability Division, Blue Innovation Division, and Green Innovation Division are working in close cooperation to address some of the most pressing environmental challenges of our time.

Drawing on my experience in atmospheric and oceanic sciences, I look forward to contributing to the Centre's interdisciplinary efforts and to learning alongside my new colleagues. I am eager to work together to advance science and create solutions that will lead us toward a sustainable and resilient future by implementing new technologies.

Materials flow across the land, ocean and atmosphere interfaces which have evolved to a natural equilibrium over the millions of years. However, planet Earth's equilibrium comes under threat when excessive exploration and use of natural resources are exercised. Use of fossil fuels for mechanization and removal of forests for urban or agricultural settlements are couple examples that are causing wide spread air pollution and increase of greenhouse gases in atmosphere.

Greenhouse gases and air pollutants

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research field: Atmospheric and Oceanic Sciences

Research keywords:

Atmospheric modelling and measurement



Research Outline

Research Background

Prabir Patra is a researcher of greenhouse gases in the atmosphere, and their emissions and removals on the Earth's surface. His research focuses on three major greenhouse gases, namely, carbon dioxide (CO₂), methane (CH₄) and nitrous oxide (N₂O), which are the main causes of global climate change and emitted predominantly due to human activity. His recent research interests also include air pollutants in the industrial and agricultural areas – major concerns for human health and sustainable economic development.

Research Content

Prabir works on development of global and regional chemistry-transport models for simulations of greenhouse gases and air pollutant species. Using models his research collaborators aim to estimate regional emissions and removals that are caused by natural or human activities toward supporting policy development for sustainable ecosystem, agriculture and urban actions. He has led or co-led several projects in Japan from JAMSTEC, Yokohama and RIHN, Kyoto. He is a member of several of Japanese and international science steering committees, such as the Global Carbon Project (GCP) under the Future Earth, satellite remote sensing projects of JAXA, Japan and NASA, USA. He is currently leading the WMO's global greenhouse gases watch (G3W) task team – Networks. Prof. Patra is serving as editor of a few research journals and has published more than 200 peer-reviewed publications.

研究相談、共同研究など大歓迎です

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