Physical Research Laboratory
Ahmedabad
Special Area Seminar

(Space & Atmospheric Sciences Division)

Title: **"Atmospheric Methane from Agriculture in South Asia (AMASA)"**

Speaker: **Prof. Sachiko Amano Hayashida**
Nara Women's University, Japan

Date: **15 November 2016**

Venue: **Ground Floor Lecture Hall**

Time: **16:00 hrs**

Highlight of the talk:

Methane (CH_4) is the second most significant anthropogenic greenhouse gas. Most of methane emissions from Asia are attributable to ruminant animals and rice fields, but the quantitative estimate of methane emissions remains highly uncertain. Then we started a project to study methane emission estimate from South Asia. The project is supported by Ministry of Environment. The first goal of the project is to downscale the emission estimate from a global scale into a regional scale and improve methane emission estimate from South Asia by using GOSAT and ground-based data. To accomplish this goal, we are now collaborating with many local scientists and farmers to carry out in-situ measurements in India and Bangladesh. The second goal is to develop some emission mitigation proposals. In this project, we are focusing on methane emission from rice fields. One approach to reduce methane emission from rice fields is an intermittent draining of water, and another approach is a proper fertilizer management. Based on local experimental works on those measures, we will arrange some mitigation scenarios, and input them into an atmospheric transport model to examine if it is realizable or detectable.

All interested are welcome.