



CLEAN AIR SOCIETY OF AUSTRALIA & NEW ZEALAND

Victoria/Tasmania Branch

The Clean Air Society of Australia and New Zealand and the Australian Society of Soil Science are jointly hosting a seminar/discussion on Thursday, 2 September, 2010:

THE INFLUENCE OF AGRICULTURAL SOILS ON ATMOSPHERIC COMPOSITION

Emissions from agricultural landscapes account for significant quantities of several gases that impact on atmospheric function, influencing climate change and air quality including ozone abundance. Gases include nitrogenous gases such as nitrous oxide, nitric oxide and nitrogen dioxide, and ammonia, as well as other gases such as methane and sulfur containing gases. At this seminar/discussion event we will discuss the history, current understanding and future directions in understanding these emissions, focusing on emissions from soils but also with regard to plant and animal systems. The aim is to improve understanding amongst the members of the Societies (and other interested parties) of the scales of emission, the processes through which they occur, options for quantification, and to stimulate discussion on research and policy responses.

The following speakers will present:

Ian Galbally
CSIRO Marine and Atmospheric Research Division

The discovery and unravelling of the processes of soil-atmosphere trace gas exchange.

Ian's research on the composition and chemistry of the atmosphere is shedding light on the processes that form the air around us, with implications for climate change and human health. He, and his co-workers, pioneered the study of nitric oxide from soils and VOCs from pastures. Ian is a leader of the development of national greenhouse gas inventories and of the international co-ordination of studies of atmospheric chemistry. Ian will provide a brief history of the understanding of landscape emissions of trace gases.

Debra Turner
Melbourne School of Land and Environment
The University of Melbourne

Measuring Trace Gas Emissions from Agriculture

Debra is a postdoctoral fellow studying gaseous emissions from agricultural landscapes. Debra will discuss measurement options, including open path spectrometry, passive and active traps, field chambers and will discuss the outcomes of some recently completed projects.

Deli Chen
Melbourne School of Land and Environment
The University of Melbourne

Processes and Modelling Trace Gas Emissions from Soil

Deli's research on the nitrogen cycle in agricultural soils, is improving our understanding of gaseous emissions from systems with elevated fertility. The MSLE group has pioneered open-path measurement technology, and developed system models to quantify these emissions. Deli will discuss current thinking about the processes leading to these emissions, and the system modelling required to reasonably quantify them.



CLEAN AIR SOCIETY OF AUSTRALIA & NEW ZEALAND

Victoria/Tasmania Branch

- 2 -

Richard Eckard
Melbourne School of Land and Environment
The University of Melbourne and The Department of Primary Industries (Vic)

Victorian Responses

Richard is Science Leader in DPI for several programs, including: Greenhouse in Agriculture, Victorian Climate Change Adaptation Program and Whole Farm Systems Analysis and Tools for the Australian and New Zealand Grazing Industries. Richard will provide insights into Victorian agricultural research and policy directions and achievements.

Details are also available on the CASANZ website at: www.casanz.org.au.

DATE:	Thursday, 2 September, 2010
VENUE:	EPA Conference Room 4 th Floor Conference Room 200 Victoria Street, Carlton
TIME:	1.45 – 4.30 pm
RSVP:	Friday, 27 August, 2010 Associate Professor Robert Edis Mob: 0447 447 468 Email: roberte@unimelb.edu.au
COST:	No Charge