

Partner search form

Date:	23 October 2009
Valid until:	31 December 2009

Full name of organisation:	COUNCIL FOR SCIENTIFIC AND INDUSTRIAL RESEARCH
Organisation acronym (abbreviation):	CSIR
Department / sector / faculty:	NATIONAL LASER CENTRE
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Postal code:	PRETORIA – 0001
City:	PRETORIA
Country:	SOUTH AFRICA
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Former participation in EU research projects as Co-ordinator: If yes, please specify:	No, but involved in FP6 and have three bi-lateral project between FRANCE and SOUTH AFRICA.
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Project idea

Project title:

Atmospheric pollution and climate change in Africa

Acronym:

Pollution and Climate Change

Project type:

FP7-AFRICA - ENV.2010.1.3.3-1 (Activity : 6.1)

Short description of project idea:

In the present context of global change, atmospheric and climatic research should be more organized into a framework for international collaborations and research networks. During recent years, the importance of systematic monitoring of the atmospheric structure, dynamics and composition has been confirmed by numerous satellite and surface observations. Together with land use changes, aerosol-burden has perturbed the surface/atmosphere radiative balance, as well as cloud properties, resulting in regional climatic impacts. Over Africa and neighbouring regions, these regional impacts are influenced by dynamical variability which play an important role in global climate change. The quantitative characterisation of these anthropogenic regional factors and their relative climatic impacts are still uncertain. In this domain, the improvement and use of integrative climate modelling tools is a necessity for environmental management and climate change mitigation (IPCC 2001, 2007). Compared with developed regions, such studies over Africa are very limited and are poorly documented even though they are important components of the global atmosphere.

In this context, African studies relating to atmosphere pollution and climate change are vital. We would like to quantify the pollution mechanisms and its role in climate change through various ground based, satellite observations and model simulation studies. There are plans to have longer observational campaign measurements to fulfil these objectives. We aim to improve the atmosphere model, understand climate change issues and transfer knowledge between Africa and the EU. The knowledge transfer is mainly focussed at developing young researchers by supporting post-graduate (Msc and PhD) studies.

Expertise:

Atmosphere remote sensing, pollution, meteorology, atmosphere structure and dynamics, Aerosols and Clouds.

Profile of partner sought

Type of partner:	COLLABORATION
Role to cover in the project:	Joint observations, model simulations studies, knowledge transfer, research works and scientific discussions.
Country / Region:	EUROPEAN UNION and Mediterranean Partner Countries
Start of collaboration:	2010
Expertise required:	Atmosphere studies, Atmosphere pollutions, Meteorology, model and simulations, Climate change and related studies, dust particulates, aerosol and its transport mechanisms, Atmosphere remote sensing and related fields

I agree with the publication of my data!

Please fill-in in English and return to contact@esastap.org.za