Geophysical Research Abstracts, Vol. 9, 04757, 2007
SRef-ID: 1607-7962/gra/EGU2007-A-04757

ASN: The Atmospheric Soot Network (ASN): a resource for atmospheric modelers and experimentalists alike.

D. Baumgardner (1), O. Popovicheva (2), K. Gierens (3), R. Miyake-Lye (4), R. Niessner (5), M. Petters (6), H. Puxbaum (7), J. Suzanne (8), E. Villenave (9) and **M. J. Rossi (10)**

(1) Universidad Nacional Autonoma de Mexico, Mexico, (2) Skobeltsyn Institute of Nuclear Physics of Moscow State University, Moscow, 119992 Russia, (3) DLR Oberpfaffenhofen, Germany, (4) Aerodyne Research Inc., Billerica, MA 01821 USA, (5) Institute of Hydrochemistry, Technical University of Munich, D-81377 Munich, Germany, (6) Department of Atmospheric Science, Colorado State University, Fort Collins, CO 80523 USA, (7) Institute for Chemical Technologies and Analytics, Vienna University of Technology, Vienna, Austria, (8) CRMC-N CNRS (UPR 7251), Campus de Luminy, F-13288, Marseille Cedex 9, France, (9) Laboratoire de Physico-Chimie Moléculaire, CNRS UMR 5803, Université de Bordeaux I, F-33405 Talence Cedex, France, (10) Laboratoire de Pollution Atmosphérique et Sol (LPAS), Ecole Polytechnique Fédérale de Lausanne (EPFL), CH-1015 Lausanne, Suisse.

Among all atmospheric aerosols soot occupies a special place because it is the only aerosol that strongly absorbs actinic radiation. This is one of the reasons for the following three critical properties of soot aerosol in a climate-sensitive context: (1) it strongly affects the radiative balance of the terrestrial atmosphere; (2) soot is a reactive substrate and consequently affects the composition of the atmosphere, and (3) its surface evolves with time when emitted into the atmosphere. This latter property is related to the CCN and IN activity of fresh and aged soot embedded in an oxidizing atmosphere as well as its anticipated change over time. In order to better study this type of aerosol and its consequences on global climate and atmospheric chemistry we propose to set up a network of researchers sharing a common interest in the study of the atmospheric aspects of soot. This is an open call for interested colleagues to join ASN. Briefly, the ASN mission may be summarized as follows:

ASN is to promote and coordinate activities that contribute to an improvement in the

understanding of how soot impacts the environment. The ASN will accomplish this mission by:

(a) promoting links between the soot generation industry and the research community to develop a common approach for the characterization of soot exhaust; (b) maintaining a data base of literature on soot related studies that are linked to environmental impact; (c) organizing inter-laboratory studies that use soot reference materials to compare measurement techniques and develop complementary methods for soot characterization; (d) planning and conducting workshops that address soot/environment related issues; (e) facilitating the collaboration of research groups for planning soot related field projects; (f) coordinating the development of a comprehensive data base of soot reference materials; (g) functioning as the interface to the climate-modeling community with respect to soot-related atmospheric research and how results from this research can be linked to climate change and other environmental processes that are important for climate modeling

The poster will present the details of the proposal for this informal network such as its goals and objectives, structure of the network, executive committee, etc.