

# Ruß-Aerosole

## Workshop zu Messmethoden und Perspektiven

8. Oktober 2014

Leibniz Institut für Troposphärenforschung

Permoserstr. 15

04318 Leipzig

Rußpartikel entstehen vorrangig bei der unvollständigen Verbrennung von fossilen Brennstoffen und Biomasse. Ruß in der Außenluft beeinflusst sowohl die Gesundheit der Menschen als auch den Klimawandel.

Eine einheitliche Definition für Ruß fehlt. Maße für die Zusammensetzung des Rußes sind abhängig von der Messmethodik. Bisher existieren keine Grenzwerte und keine gesetzlichen Regelungen für die Konzentration von Rußpartikeln in der Außenluft.

Die Rückführung der Messgröße Ruß auf anerkannte Referenzmethoden sowie geeignete Rußmesstechniken für Luftgütemessnetze sind deshalb Themen dieses Workshops.

Programm:

10:00 Introduction

Prof. Dr. A. Wiedensohler, TROPOS, Leipzig

10:15 Raman Spectroscopy as a reference method for mass absorption coefficient measurements of atmospheric soot particles.

Dr. Stephan Nordman, MPIC, Mainz

10:45 Outlook for a reference method for multi-wavelength absorption.

Dr. Thomas Müller, TROPOS, Leipzig

11:15 Aethalometer miniaturization for aircraft equivalent black carbon measurements – results from regional, global and Arctic campaigns

Griša Močnik, Aerosol, Ljubljana, Slovenia

11:45 Mittagspause

13:00 Refractory black carbon mass and mixing state measurements using the Single Particle Soot Photometer.

Dr. Martin Gysel, PSI, Villigen, Switzerland

13:30 Measurement of particulate organic and elemental carbons: challenges and proposed solutions

Dr. Jean-Phillippe Putaud, JRC, Ispra, Italy

14:00 OC and EC analyzed by thermographic and thermo-optical methods: A two year inter-comparison for the central European site Melpitz, Germany.

Dr. Gerald Spindler, TROPOS, Leipzig

14:30 Kaffeepause

15:00 Zusammenfassung und Diskussion

16:00 Ende des Workshops

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Sprache: Deutsch (Englisch), Folien englisch

Workshop Gebühr: keine.

Wir bitten um Anmeldung bis zum 1.10.2014



# Soot Aerosols

## Workshop on Measurement methods and perspectives

October 8<sup>th</sup> 2014

Leibniz Institute for Tropospheric Research

Permoserstr. 15

04318 Leipzig

Soot particles in the atmosphere originate primarily from incomplete combustion of fossil fuels or biomass burning. Soot in the ambient air causes adverse health effects in humans. Furthermore soot absorbs light in the atmosphere influencing the climate.

A single definition for soot is missing. Measures for soot and its composition are highly dependent on measurement method. Currently there are no legal requirements to measure soot concentrations in the atmosphere in Europe.

This workshop focuses on traceability of soot measurements and on soot measuring instruments suitable for the day to day operation in air quality monitoring networks.

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10:45 Outlook for a reference method for multi-wavelength absorption.

Dr. Thomas Müller, TROPOS, Leipzig

11:15 Aethalometer miniaturization for aircraft equivalent black carbon measurements – results from regional, global and Arctic campaigns

Griša Močnik, Aerosol, Ljubljana, Slovenia

11:45 Lunch break

13:00 Refractory black carbon mass and mixing state measurements using the Single Particle Soot Photometer.

Dr. Martin Gysel, PSI, Villigen, Switzerland

13:30 Measurement of particulate organic and elemental carbons: challenges and proposed solutions

Dr. Jean-Phillippe Putaud, JRC, Ispra, Italy

14:00 OC and EC analyzed by thermographic and thermo-optical methods: A two year inter-comparison for the central European site Melpitz, Germany.

Dr. Gerald Spindler, TROPOS, Leipzig

14:30 Coffee break

15:00 Summary and discussion

16:00 End of workshop

Contact: [ali@tropos.de](mailto:ali@tropos.de)

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Language: German (English), presentations English

Workshop fee: none.

We would appreciate your registration by e-mail until October 1<sup>st</sup> 2014.

