EAC 2016 - TOURS (FRANCE) SEPTEMBER 4-9, 2016

SPECIAL SESSIONS

Special sessions on particular topics will be held, in response to requests from attendees.
Applicants are kindly requested to send an e-mail to the Chairs of the Scientific Committee (jean-pascal.borra@pgp.u-psud.fr and francois.gensdarmes@irsn.fr) by December the 31st at the latest.

SPECIAL SESSION 1

- **PLASMA-based AEROSOL PROCESSES**

This session highlights recent developments of atmospheric pressure plasmas for nanoparticles production by nucleation, either by cooling of expanding vapour plumes produced by plasma-surface interaction or by chemical reactions of gaseous/liquid precursors injected either in or downstream the plasma . Besides, some examples of aerosol processing will also be presented for surface functionalization and coatings.

SPECIAL SESSION 2

- **PROPERTIES and IMPACT of AIRCRAFT PARTICULATE MATTER EMISSIONS**

This session addresses the topic of aircraft engine particulate matter emissions, and their subsequent evolution and atmospheric impact. The characterization of aircraft soot physical and chemical properties using conventional and alternative fuels will be emphasized, as well as their role in contrail formation, air quality and climate change.

SPECIAL SESSION 3

- **Physico-chemical characterization of soot particles AND THEIR EVOLUTION**

This session deals with the physico-chemical characterization of soot particles emitted during combustion processes. Abstracts regarding real-time, on-line analysis methods and reporting theoretical/modeling studies are warmly welcomed. Papers dealing with the evolution of physico-chemical properties of soot particles during their ageing in the atmosphere or under others specific conditions will be also considered.

SPECIAL SESSION 4

- **FILTRATION and GAS-PARTICLE SEPARATION**

This session deals with the separation of a dispersed phase from gas (including fibrous filters, granular beds, electrostatic precipitators, cyclones, wet scrubbers …)

SPECIAL SESSION 5

- **RADIOACTIVE AEROSOL TRANSFER LINKED TO THE FUKUSHIMA EVENT**

This session deals with mechanisms involved in aerosol transfer during the initial stage or soon after the radioactive releases, and post-accident secondary re-emission from formerly deposited radionuclides on ecosystems (still on-going). Modeling and experimental results are welcome. This session also encompasses characterization and properties of radionuclide-labeled aerosols.

SPECIAL SESSION 6

- **BIOAEROSOL**

This session deals with the bioaerosols (behavior, concentration and the composition) that can be found in environmental, occupational and domestic settings. It also addresses the methods and strategies used for their study and their removal as well as the health effects aspects.

SPECIAL SESSION 7

- **AEROSOL RESUSPENSION**

This special session will be dedicated to the understanding of balance between particles adhesion and resuspension by different mechanisms (thermal, mechanical) with a special focus on aeraulic effects.

SPECIAL SESSION 8

- **AEROSOL EXPOSURES FOR TOXICOLOGICAL AND THERAPEUTIC STUDIES**

This session addresses topics at the interface of exposure, dosimetry, and biological response: standardization of in-vitro/in-vivo exposure conditions and exposure protocols; generation of controlled and stable aerosols for in-vitro/in-vivo models of the lung; reliable measurements of physical and chemical aerosol characteristics for inhalation conditions; bridging the gaps between in-vivo and in-vitro science as well exposure and health outcome from an aerosol perspective.