Environmental Sustainability and Global Warming

Objectives

a. To help the audience see the interwoven relationship present among the environmental, health, and Global Warning issues.
b. To better understand the collective extent of exposure to relevant pollutants in both atmospheric and hydrospheric ecobiohabitats
c. To help the audience perceive the exposure related potential health effects
d. To encourage the audience and scientific communities to expand the use of the Green Building concept for CO_2 reduction and healthy living
e. To help the audience be aware of possible environmental and health effects caused by various synthetic nanomaterials used in biomedical and industrial applications

Scope

The scope of this symposium will be limited to selected environmental events related to Global Warning that has been threatening the sustainability of ecobiohabitats. The symposium will start with a session that covers the global warming and climate change issues followed by additional sessions investigating environmental pollution issues in both atmospheric and hydrospheric events in the context of climate change.

Session Titles and Topics

a. Global Warming and Climate Change (Title_session I)
    i. Trend of Green House Gas Production_Sources
    ii. Impacts of Climate Change
    iii. Strategies for Green House Gas Reduction

b. Green Building Design in a New Paradigm (Title_session II)
    i. Assessment of Indoor Air Quality (AQI)
    ii. Impacts of Green Building Design on Energy Efficiency
    iii. Human Exposure
    iv. VOC exposure
    v. Odor
    vi. PM

c. Air Quality and Exposure Assessment (Title_session III)
    i. Traffic related Pollutant Exposure
    ii. PM Exposure in Indoor Settings
    iii. Exposure During Biodiesel and Other Fuel Burning
    iv. Human Traffic in Impacts
    v. Nano Particles/Material Exposure/Filtration

d. Water Pollution and Conservation (Session IV)
    i. Filtratioon
    ii. Pesticides
    iii. Heavy Metals
    iv. Nano Particles/Material Exposure/Filtration

Symposium Chair and Co-Chair:

a. Chair: John J. Bang, Ph.D., M.D. (NC Central University, Durham, NC, USA)
b. Co-Chair: Heekwan Lee, Ph.D. (Incheon University Incheon, Korea)

Session Chairs and Co-Chairs:

a. Session I:
Chair: Jinsuk Kim, Ph.D. (Senior Scientist, Division Director, Standard and Quality of Life at KRISS)
Co-Chair: Sunyoung Bae, Ph.D. (North Carolina A&T State University, Greensboro, NC, USA)

b. Session II:
Chair: Heekwan Lee, Ph.D. (Incheon University, Incheon, Korea)
Co-Chair: TBA

c. Session III:
Chair: Richard Baldauf, Ph.D. (U.S. EPA, Office of Research and Development, National Risk Management Research Laboratory, RTP, North Carolina)
Co-Chair: Andrey Khlystov, Ph.D. (Duke University, Pratt's School of Engineering)

d. Session IV:
Chair: Sijin Lee, Ph.D. (Kyonggi University, Director of International Exchange in KOSENV)
Co-Chair: Heileen Hsu-Kim, Ph.D. (Duke University, Pratt's School of Engineering)

Special Publications:

Possibility: Total Environment, Journal of Air and Waste Management Association