

## **Climate Change threats to Occupational Health, Safety, Productivity and Social Well-being: proactive and preventive solutions needed now.**

### **Symposium chairs:**

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### **Goal:**

To raise awareness among occupational epidemiologists about the serious threats to health and productivity that **increasing workplace heat exposure** will cause as climate change brings more hot days in large parts of the world. The symposium will hopefully lead to more epidemiological research describing the occupational heat problems and their preventive solutions in different parts of the world.

### **Summary of symposium topic:**

This topic is timely as the accumulating analyses of climate change threats increasingly identify occupational heat exposure as an important health risk, which will also undermine local socio-economic development. Other occupational health risks will be discussed (e.g. extreme weather injuries, vector-borne disease risks, and emergency worker health hazards). The overall threat and climate change mitigation as a preventive solution will be analyzed with quantitative modelling. Participants from five major countries of the world will present perspectives of the issues from their different viewpoints, and the mixture of disciplines of speakers will provide new insights. The lack of current descriptive occupational epidemiology studies of different workplace hazards linked to climate change will be highlighted. Specific gaps will be described in the evidence available for quantitative occupational health impact assessments. Climate change Adaptation examples will be shown as well as Mitigation solutions to climate change, carried out in a "Just Transition" manner.

**Proposed speakers (total 2 hours after each speaker talks appr. 12 minutes, then they sit as a panel for questions and 30 minutes discussion at the end):**

<b>Speaker</b>	<b>Topic</b>
<i>Tord Kjellstrom</i> (male), Occupational and Environmental Epidemiologist, former professor at the University of Auckland and Australian National University, currently based in Mapua, New Zealand. Also senior researcher at CETRI, Cyprus.	Overview of the current epidemiological evidence of heat effects on health of working people. New analysis of heat impacts based on climate models at country and global level.

<p><i>Jenni Vanos</i> (female), Assistant Professor, Senior Sustainability Scientist, School of Sustainability, Arizona State University, Phoenix, AZ, USA</p>	<p>New studies in the USA on heat effects on working people and consideration of the Urban Heat Island effect in vulnerable urban areas.</p>
<p><i>Vidhya Venugopal</i> (female), Professor, Occupational Hygienist, Sri Ramachandra University, Chennai, India</p>	<p>Field studies of these effects on India, and assessment of the importance at national level.</p>
<p><i>Cunrui Huang</i> (male), Professor, Public Health PhD, Sun Yat-Sen University, Guangzhou, China</p>	<p>Field studies of these effects in China, and assessment of the importance at national level.</p>
<p><i>Wenjia Cai</i> (female), Assistant Professor Center for Earth System Science, Tsinghua University, China</p>	<p>Estimates of the economic impacts of the work capacity loss due to hot work environments.</p>
<p><i>Jason Lee</i> (male), Associate Professor, Thermal Physiologist, National University of Singapore</p>	<p>New initiatives in international collaboration for describing the occupational heat hazards via epidemiological studies and modelling.</p>