

# KARIN MARIA LUNDGREN

Parternas Gränd 67, 226 47 Lund Sweden

E-mail: [karin.lundgren@design.lth.se](mailto:karin.lundgren@design.lth.se)

Mobile nr: +46 (0) 703635969

## EDUCATION:

### **CURRENT: PHD Candidate at Lund Technical University, Sweden**

*Topic: Occupational Health, Heat Stress and Climate Change.* Part of a Swedish SIDA funded project in collaboration with India titled: Sweden-India cooperation on protection of working people from health and productivity risks due to workplace heat exposure and the links to climate change. Also involved in various other project, including ASHRAE 1504-TRP standardization work on traditional clothing.

### **Master's of Science (MSc) International Master's in Environment and Sustainability Science (LUMES), Lund University, Sweden, 2010**

Modules included: Environmental Problem Awareness, Ideas behind Economy, Environment and Society, Environmental Governance, Sustainability Science, Systems Analysis, Research Methods, Environmental Pollution and Human Health, Development and Sustainability, Transport and Industry and Sustainability and Urban Systems and Sustainability. I have also studied an introductory course in GIS (Geographical Information System) during this time.

### **Bachelor's of Science (BSc Hons) Environmental Science (Awarded Upper Second-Class Honours), The University of Plymouth, United Kingdom, 2008**

Modules included: Work Based Learning Enterprise Project, Climate Change: Impacts and Responses, Waste Management, Reclamation of Contaminated Land, Interdisciplinary Approaches to Environmental Science, Sustainable Management, Natural Ecosystems, Research Methods and Field and Professional Skills Development. The course has included a variety of field trips, including a residential field trip to Malaysia.

### **Diploma: Climate Change Adaptation, U21 Summer School, University of Queensland, Brisbane, Australia, 2009**

The top 21 Research Universities in the world gathered to discuss the topic of Climate Change Adaptation. Field trips, discussions and lectures surrounding the topic were conducted. Multicultural problem solving and new ideas evolved with a focus on changes, impacts and responses. The outcome was a Global Change Response Plan; designed collectively to tackle one of the greatest challenges to face humanity and the planet this century.

### **Certificate: Umeå University, English Studies, Sweden, 2005**

**2000 - 2003 Science-programme** (Equivalent to A-levels)

**Östra Gymnasieskolan**, Umeå, SWEDEN: The programme primarily included Biology, Maths, Physics and Chemistry.

## WORK EXPERIENCE:

### **External Collaborator (Consultant): The International Labour Office, Occupational Safety and Health (SafeWork), Geneva Switzerland, 2011**

Several research papers were produced on mercury. A special focus on waste management was given to collection, final storage and/or recycling. Alternatives was then be evaluated against costs, environmental performance, compliance with current regulations, implementation considerations, technology maturity, potential risks to the public and workers, and public perception. I also looked at risks posed to workers in artisanal small scale gold mining, including a review of alternatives to mercury use in this sector. The papers will feed into the ILO input into the INCs developing a legally binding document on mercury. Additionally, an overview paper was produced on electronic waste issues; the scale of use, informal recyclers exposure in developing countries, Occupational Safety and Health (OSH) regulations and destinations for the transboundary trade flow in e-waste. Research was also conducted regarding new occupational safety and health issues in the green economy, with a special focus on renewable energies, transport, agriculture and waste management.

**Intern: World Health Organisation (WHO) Public Health and the Environment (PHE), Geneva, Switzerland, 2010**

Health and environment are inevitably interlinked, however research and projects focusing on primary disease prevention are limited and funding is scarce. As a result, I undertook as a part of the Public Health and Environment team, an analysis of the current flow of resources from bilateral and multilateral agencies and special funding mechanisms to health and environmental activities. In addition, our team looked at the proportions and amounts that go to addressing linkages between health and environment. This assessment will lay the foundation for a future global fund for health and environment initiatives applicable to UN Organizations and NGO's.

**Intern: United Nations Environment Programme (UNEP) Chemicals Branch, Geneva, Switzerland, 2010**

There are several challenges faced by the Stockholm Convention on Persistent Organic Pollutants (POPs) capacity building programmes, especially as a result of the ratification of nine new chemical substances in 2009. In relation to this, I conducted an evaluation study together with UNEP Chemicals to identify problems and solutions to the programmes and look into how developing countries can better address the new POPs. My final recommendations were adopted by the Stockholm Secretariat. Other tasks involved writing a newsletter for the Mercury partnership, which is an international body monitoring global mercury usage and release. I also did organisation of the global monitoring programme of dioxins and furans, a project funded by the Global Environment Facility and the Strategic Approach to International Chemicals Management Quick-Start Programme Fund.

**Intern/Consultant: Westden Ltd (Environmental Charity) Tavistock, United Kingdom, 2007**

A major part of UK homes consists of stone-walled dwellings which are cold, damp and difficult to insulate. My work with Westden involved looking into energy efficiency in dwellings, potential barriers and solutions with rural settings. Potential CO<sub>2</sub> savings when insulating these dwellings were performed by the use of various calculations. I also worked with various sustainability projects and wrote funding applications.

**COMPETENCIES:**

**Analytical:** I possess various analytical skills in both quantitative and qualitative research; from analyzing samples in the laboratory, using software packages and using qualitative methods such as interviews, questionnaires and systems analysis of social-environment interactions. Expertise in heat stress assessments and techniques. I can design and implement studies in the field and in the laboratory.

**Sampling and research:** I can use a variety of fieldwork techniques from experimental design through to sampling and presenting data. I am able to operate safely and responsibly under field conditions. I am capable of researching primary and secondary sources and I have got specialist knowledge of scientific instrumentation and sustainability analysis. Additionally, I have got time management skills and am capable of prioritizing specific tasks.

**Communication:** I have the capability of working both individually and as a part of a team. I have a considerable interdisciplinary perspective and I can construct oral or written reports in both English and Swedish.

**Computing:** Extensive use of MS Office. I am capable of performing a statistical analysis using Excel, StatGraphics and SPSS. Further experiences of modelling programmes include climate change extreme events, the Predicted Heat Strain Model (ISO 7933:2004), STELLA 9.0.3, and the Threshold 21 sustainability assessment. Other programmes include GIS geographical information systems, Hotspot contaminated land and Synaps world negotiations programme.

**Languages:**

- Swedish: Mother Tongue
- English: Fluent
- Spanish: Intermediate
- French: Basic

## PUBLICATIONS:

**Lundgren, K., Kjellstrom, T. (2013)** *Sustainability Challenges from Climate Change and Air Conditioning Use in Urban Areas*. Sustainability. **2013**, 5, 3116-3128.

**Lundgren, K., Kuklane, K., Gao, G., Holmér, I., (2013)** *Effects of Heat Stress on Working Populations when facing Climate Change*. Industrial Health. Vol. **51**

**Havenith, G., Hodder, S., Ouzzahra, Y., Loveday, D., Kuklane, K., Lundgren, K., Fan, J., Au, J., (2013)** *Report on manikin measurements for ASHRAE 1504-TRP*. The American Society of Heating Refrigerating and Air Conditioning Engineers.

**Zhao, Mengmeng ; Lundgren, Karin ; Li, Jun ; Kuklane, Kalev (2012)** *A Ventilated Cooling Shirt Worn at Office Work in Hot Climate: Cool or Not?* Industrial Health.

**ILO (2012)** *The Global Impact of E-waste: Addressing the Challenge*. SECTOR and SafeWork Publication ISBN 978-92-2-126898-7 [online] Available at: [http://www.ilo.org/wcmsp5/groups/public/---ed\\_dialogue/---sector/documents/publication/wcms\\_196105.pdf](http://www.ilo.org/wcmsp5/groups/public/---ed_dialogue/---sector/documents/publication/wcms_196105.pdf)

**ILO (2011)** *Towards an ILO Approach to Climate Change Adaptation*. [online] Available at: [http://www.ilo.org/wcmsp5/groups/public/---ed\\_emp/---emp\\_ent/documents/publication/wcms\\_169569.pdf](http://www.ilo.org/wcmsp5/groups/public/---ed_emp/---emp_ent/documents/publication/wcms_169569.pdf)

**WHO/UNEP (2010)** *Environmental Determinants and Management Systems for Human Health and Ecosystem Integrity in Africa - First Synthesis Report on the Situation Analysis and Needs Assessment for the Implementation of the Libreville Declaration on Health and Environment in Africa*

## REFERENCES:

### **Mr. Pavan Baichoo**

Technical Officer  
Safety and Health at Work and the  
Environment (SafeWork)  
International Labour Organisation (ILO)  
4 Rte. des Morillons  
1211 Geneva  
Switzerland  
E-mail: [baichoo@ilo.org](mailto:baichoo@ilo.org)  
Tel: +41 (22) 799 6722

### **Dr. Kalev Kuklane**

Associate Professor  
Lund Technical University  
Department of Design Sciences  
Sölvegatan 26  
SE-221 00  
Lund, Sweden  
E-mail:  
[Kalev.Kuklane@design.lth.se](mailto:Kalev.Kuklane@design.lth.se)  
Tel.: +46 (46) 222 7833

### **Dr. Tord Kjellström**

Senior Professor  
Umeå University, Sweden and  
Australian National University  
Public Health and Epidemiology  
SE- 901 85  
Umeå, Sweden  
E-mail: [tord.kjellstrom@epiph.umu.se](mailto:tord.kjellstrom@epiph.umu.se)