

CV - Chuansi Gao

PhD, associate professor

Thermal Environment Laboratory, Division of Ergonomics and Aerosol Technology, Department of Design Sciences, Faculty of Engineering, Lund University, Sweden

Email: Chuansi.Gao@design.lth.se Web: <http://www.eat.lth.se/english/staff/chuansi-gao/>

1. Higher education

2004, PhD in ergonomics, Sweden. 1989, MSc in occupational health; 1984, BSc in environmental health, China.

2. Present position

2012, associate professor, Lund University, Sweden.

3. Appointment as reader (docent)

2011, Lund University

4. Work within relevant areas

Since 2004, I have worked on human-clothing-thermal environment interactions through physiological and thermal manikin approaches including heat and cold stress, thermal comfort, personal cooling and warming strategies to cope with thermal stress. During 2014-2015, participated in a multidisciplinary collaboration project "HEAT: what are the impacts and solutions of increasing heat on humans and ecosystems?" Since 2016, I have been participating in the EU Horizon 2020 framework project "HEAT-SHIELD" in the context of climate change. Published more than 100 papers, co-edited and contributed to the book "Protective Clothing: Managing Thermal Stress", acted as supervisor for PhD students, reviewer for 15 SCI journals and evaluator for EU project proposals.

5. Selected recent publications

Gao C, Kuklane K, Östergren, Kjellstrom T. 2016. Occupational heat stress assessment and protective strategies in the context of climate change. Submitted.

Lu Y., Gao C., et al. 2015. A novel personal cooling system (PCS) incorporated with phase change materials (PCMs) and ventilation fans: An investigation on its cooling efficiency. *Journal of Thermal Biology*, 52, 137-146.

Gao C, Lin L, Halder A, Kuklane K, Holmér I. 2015. Validation of standard ASTM F2732 and comparison with ISO 11079 with respect to comfort temperature ratings for cold protective clothing. *Applied Ergonomics*, 46: 44-53.

Gao C., 2014. Phase change materials for warming or cooling in protective clothing. In Wang F, Gao C, editors. *Protective Clothing: Managing Thermal Stress*. Oxford, UK: Woodhead Publishing Limited. pp. 227-49.

Kuklane K, Lundgren K, Gao C, et al. 2015. Ebola: Improving the Design of Protective Clothing for Emergency Workers Allows Them to Better Cope with Heat Stress and Help to Contain the Epidemic. *Annals of Occupational Hygiene*, 59(2), 258-261. doi:10.1093/annhyg/mev003

Zhao, M., Gao, C., Wang, F., Kuklane, K., Holmér, I., Li, J. 2013. A Study on Local Cooling of Garments with Ventilation Fans and Openings Placed at Different Torso Sites. *International Journal of Industrial Ergonomics*, 43, 232-237.

Lundgren K., Kuklane K, Gao C., et al. 2013. Effects of Heat Stress on Working Populations when facing Climate Change. *Industrial Health*, 51, 3-15.

Wang F., Gao, C., Kuklane K., Holmér I. 2013. Effects of various protective clothing and thermal environments on heat strain of unacclimated men: The PHS (predicted heat strain) model revisited. *Industrial Health*, 51, 266-274.

Gao, C., Kuklane, K., Wang, F., Holmér, I. 2012. Personal cooling with phase change materials to improve thermal comfort from a heat wave perspective. *Indoor Air*, 22 (6), 523-530.

Gao, C., Kuklane, K., Holmér, I., 2011. Cooling vests with phase change materials: the effects of melting temperature on heat strain alleviation in an extremely hot environment. *European Journal of Applied Physiology*, 111:1207-1216.