



heat transfer society

PRESIDENT'S NIGHT

Thursday 18 October 2018

Prof. Hans Müller-Steinhagen, The Society President

will address the Society on

Recent Developments in Concentrating Solar Thermal Power

In addition to wind and photovoltaic power, concentrating solar thermal power (CSP) will make a major contribution to an electricity provision from renewable energies. Drawing on almost 50 years of operational experience in the multi-MW range, CSP is now a proven technology with a reliable cost and performance record. In conjunction with thermal energy storage, electricity can be provided according to demand. Depending on the concentration factors, temperatures up to 1000°C can be reached to produce saturated or superheated steam for steam turbine cycles or compressed hot gas for gas turbine cycles. The heat rejected from these thermodynamic cycles can be used for seawater desalination, process heat and centralized provision of chilled water. While electricity generation from CSP plants is more expensive than from wind turbines or photovoltaic panels, its independence from fluctuations and daily variation of wind speed and solar radiation provides it with a higher value. To become competitive with mid-load electricity from conventional power plants within the next decade, mass production of components, increased plant size and planning/operating experience will be accompanied by technological innovations.

Prof. D.Eng. Dr.-Ing. habil Hans Müller-Steinhagen is the Rector (i.e. president) of Technische Universität Dresden, one of the 11 German Universities of Excellence. Following a distinguished academic career in Canada, New Zealand and England, he became the Director of the Institute of Technical Thermodynamics of the German Aerospace Centre and Director of the Institute for Thermodynamics and Thermal Engineering of the University of Stuttgart from 2000-2010. In this capacity, he was leading 270 research staff working on topics related to heat and mass transfer, heat exchanger design and fouling, process thermodynamics, multi-phase flow, fuel cells, solar technology and energy systems analysis. Prof. Müller-Steinhagen has been the supervisor of 65 doctoral theses, author or co-author of more than 650 publications, and the recipient of numerous international awards and prizes. In 2012, he received an honorary doctorate from the University of Brno in the Czech Republic and in 2015 from Dankook University in South Korea. Furthermore, he is a fellow of the Royal Academy of Engineering and of ACATECH, and a member of many supervisory and advisory boards. In 2014 Prof Müller-Steinhagen was elected the "German University Manager of the Year."

The presentation is at 7.00 pm with a buffet from 6.00 pm.

The venue is St. Matthew's Conference Centre, 20 Great Peter Street, Westminster, London, SW1P 2BU. Nearest stations are St James's Park and Westminster.

We are using Eventbrite for bookings for this event. Please book your place at <https://presidentnight2018.eventbrite.co.uk>

Please feel free to share the details of this event with your colleagues.

Enquiries: Russell Skinner, Email: heat.transfer.uk@gmail.com

If undelivered, please return to Simon Earland, 29 West Street, Tavistock, PL19 8JY

Note that views expressed at forums do not necessarily reflect those of the Society