

SusTEM2017 Agenda

Venue:

- Keynote speeches, oral presentations and poster exhibitions: [Golden Tulip Hotel](#), Alkmaar
- Conference dinner: [Rivers Club & Restaurant](#), Alkmaar
- Site visit (optional, limited space): Energy Research Centre of the Netherlands (ECN), Petten

Conference Day 1: Wednesday 28 June 2017				
Wednesday, 28 June 2017 Session 1	0900-1000	Arrivals & registration		
	1000-1015	Welcome address: <i>Professor Tony Roskilly</i>		
	1015-1100	Keynote: The future of renewable heating by <i>Dave Pearson</i> , Director of Star Renewable Energy, UK		
		Track 1 Industrial waste heat utilisation	Track 2 Industrial applications	Track 3 Thermal networks
	1100-1130	T1P1 Recovering cold energy and waste heat in a LNG power generation system by a thermoacoustic Stirling power generator <i>Speaker:</i> <i>Dr Kai Wang</i> (Singapore)	T2P1 Optimal design of hybrid RO/AD desalination plants: A solution for irrigation and drinking <i>Speaker:</i> <i>Dr Andrew Smallbone</i> (UK)	T3P1 Diagnostic information system dynamics in the evaluation of machine learning algorithms for the supervision of energy efficiency of district heating-supplied buildings <i>Speaker:</i> <i>Dr Sebastian Kiluk</i> (Poland)
	1130-1200	T1P2 High-efficiency industrial waste-heat recovery through computer-aided integrated working-fluid and ORC system optimisation <i>Speaker:</i> <i>Dr Martin White</i> (UK)	T2P2 Improvement of waste heat regeneration on an industrial textile dryer: redesign of heat exchangers network and components <i>Speaker:</i> <i>Dr Daniele Fiaschi</i> (Italy)	T3P2 4th generation district heating solutions – the enabler for integrating low temperature energy sources into a community heating system – examples of successful applications <i>Speaker:</i> <i>Dr Christian Engel</i> (Netherlands)
		Tea/Coffee break & poster exhibition		
	1215-1245	T1P3 Techno-economic analysis of the Sailing Heat concept <i>Speaker:</i> <i>Dr Robert de Boer</i> (Netherlands)	T2P3 Latent heat recovery in drying of milk powder using liquid sorption <i>Speaker:</i> <i>Dr Michel van der Pal</i> (Netherlands)	T3P3 Application cases and economic benefits of thermo-chemical networks <i>Speaker:</i> <i>Dr Andrew Smallbone</i> (UK)
	1245-1315	T1P4 A chemisorption power generation cycle with multi-stage expansion driven by low grade heat <i>Speaker:</i> <i>Dr Huashan Bao</i> (UK)	T2P4 Syngas generation through pyrolysis of biomass <i>Speaker:</i> <i>Dr Abdullah Malik</i> (UK)	T3P4 Review of urban energy transition in the Netherlands and the role of smart energy management <i>Speaker:</i> <i>Mr Richard van Leeuwen</i> (Netherlands)
		Lunch & poster exhibition		

Wednesday, 28 June 2017
 Session 2

1415-1500	Keynote: Energy efficiency in industry in the Strategic Energy Technology (SET) plan – R&D opportunities and challenges by <i>Petter Egil Røkke</i> , Research Director of SINTEF Energy Research, Norway		
	Track 1 Industrial waste heat utilisation	Track 2 Renewable heating and cooling systems	Track 3 Industrial energy, materials and products (CIE-MAP)
1500-1530	T1P1 Thermal power fluctuations in waste heat to power systems: an overview on current and innovative solutions <i>Speaker:</i> <i>Dr Alessandro Romagnoli</i> (Singapore)	T2P1 Hybrid photovoltaic-thermal solar systems for combined heating, cooling and power provision in the urban environment <i>Speaker:</i> <i>Dr Alba Ramos</i> (UK)	T3P1 Industrial decarbonisation of the pulp and paper sector: A UK perspective <i>Speaker:</i> <i>Professor Geoffrey Hammond</i> (UK)
1530-1600	T1P2 Heat transfer analysis of a pipe-embedded glass envelope utilising ground-source water for direct heating <i>Speaker:</i> <i>Mr Chong Shen</i> (China)	T2P2 Effects of surface temperature on solar PV performance and cooled panel for efficiency optimisation <i>Speaker:</i> <i>Professor Zhijun Peng</i> (UK)	T3P2 Achieving transitions in UK energy and material use: Public deliberations of a low material future <i>Speaker:</i> <i>Professor Nicholas Pidgeon</i> (UK)
Tea/Coffee break & poster exhibition			
1615-1645	T1P3 Principle investigation on advanced absorption power generation cycles <i>Speaker:</i> <i>Dr Zhiwei Ma</i> (UK)	T2P3 Energy analysis of alternative CO ₂ refrigeration system configurations for retail food applications <i>Speaker:</i> <i>Dr Konstantinos Tsamos</i> (UK)	T3P3 Invisible Energy Policy – Analysis of the link between consumption and energy demand <i>Speaker:</i> <i>Professor John Barrett</i> (UK)
1645-1715	T1P4 Four-stage looped thermoacoustic Stirling power generator for low temperature waste heat <i>Speaker:</i> <i>Professor Limin Qui</i> (Singapore)	T2P4 Environmental impacts of temperature controlled food distribution <i>Speaker:</i> <i>Miss Ashika Rai</i> (UK)	T3P4 Industrial energy demand and carbon emissions reduction in the UK: Challenges, insights and opportunities <i>Speaker:</i> <i>Professor Geoffrey Hammond</i> (UK)
1800-2030	Conference dinner		

Conference Day 2: Thursday, 29 June 2017

Thursday, 29 June 2017 Session 3	0830-0900	Arrivals & registration		
	0900-0945	Keynote: Building sustainability by <i>Alistair Guthrie</i> , Arup Fellow and the former Design Leader of Global Sustainable Buildings, UK		
		Track 1 Control, modelling and optimisation	Track 2 Building energy performance	Track 3 Energy storage
	0945-1015	T1P1 Development of free-cooling detection procedures to support energy intelligence actions within telecommunication environments <i>Speaker:</i> <i>Dr Marco Sorrentino</i> (Italy)	T2P1 Computational study of the energy savings of a high-rise residential building retrofitted to Passive House <i>Speaker:</i> <i>Professor Huilan Huang</i> (China)	T3P1 Lumped analysis of thermodynamic loss mechanisms of high-efficiency reciprocating-piston compressors and expanders for energy-conversion or energy-storage applications <i>Speaker:</i> <i>Dr Paul Sapin</i> (UK)
	1015-1045	T1P2 1-D transient numerical modelling of counter-current two-phase stratified flow inside a medium temperature solar linear collector <i>Speaker:</i> <i>Professor Antonio Lecuona</i> (Spain)	T2P2 Evaluating the role of building thermal inertia for the provision of decentralised demand-side primary electrical frequency regulation services <i>Speaker:</i> <i>Mr Sean Williams</i> (UK)	T3P2 Study on performance of a solar collector with heat collection and storage <i>Speaker:</i> <i>Professor Gang Li</i> (China)
		Tea/Coffee break		
	1100-1145	Keynote: Policy and economic challenges related to the energy transition by <i>Adel El Gammal</i> , Secretary General of The European Energy Research Alliance (EERA), Belgium		
	1145-1215	T1P3 Numerical investigation of the effects of a side-branched Helmholtz resonator on a looped-tube travelling wave thermoacoustic engine <i>Speaker:</i> <i>Dr Zhibin Yu</i> (UK)	T2P3 Impact of solar energy on the energy balance of a low energy building <i>Speaker:</i> <i>Professor Dorota Chwieduk</i> (Poland)	T3P3 Study on solidification process of sodium acetate trihydrate for seasonal solar thermal energy storage <i>Speaker:</i> <i>Dr Zhiwei Ma</i> (UK)
	1215-1245	T1P4 Simulation and implementation of heat load shifting in a low carbon dwelling <i>Speaker:</i> <i>Dr Nicholas Kelly</i> (UK)	T2P4 The energy and indoor environmental performance of super-insulated dwellings – A fabric optimisation case study in the UK <i>Speaker:</i> <i>Dr Yaodong Wang</i> (UK)	T3P4 Design and experimental investigation of a high power segmented zeolite 13X/water sorption energy storage system <i>Speaker:</i> <i>Mr Rens van Alebeek</i> (Netherlands)
		Lunch and poster exhibition		

Thursday, 29 June 2017 Session 4	1400-1445	Keynote: Innovative options for efficient use of heat in industry by <i>Kees Biesheuvel</i> , Cluster Director of the ISPT Innovation Cluster: Utilities and Optimal Use of Heat, the Netherlands		
		Track 1 Heat pumps and heat pipes	Track 2 Building energy performance	Track 3 Energy storage
	1445-1515	T1P1 Evolution of compact sorption generators for ammonia - active carbon heat pumps <i>Speaker:</i> <i>Professor Robert Critoph</i> (UK)	T2P1 Introducing innovative performance metrics for high-level monitoring and diagnosis of telecommunication sites <i>Speaker:</i> <i>Professor Gianfranco Rizzo</i> (Italy)	T3P1 Domestic thermal storage requirements for heat demand flexibility <i>Speaker:</i> <i>Dr Andrew Cowie</i> (UK)
	1515-1545	T1P2 Numerical study on thermal performance of a gravity assisted loop heat pipe <i>Speaker:</i> <i>Dr Xingxing Zhang</i> (Sweden)	T2P2 Investigation on heating and cooling operation status of a thermally activated building system (TABS) using night-time electricity in Ewha campus complex (ECC) <i>Speaker:</i> <i>Professor Jae-Han Lim</i> (South Korea)	T3P2 How does MgSO ₄ impregnation and Mg ²⁺ ion exchange impact the energy storage characteristics of 13x molecular sieves for use in domestic thermochemical energy storage? <i>Speaker:</i> <i>Mr Daniel Mahon</i> (UK)
	1545-1615	T1P3 A bottom-up approach for determining the European industrial heat pump potential <i>Speaker:</i> <i>Dr Andrew Marina</i> (Netherlands)	T2P3 An evaluation of fabric insulation and exposed thermal mass to maximise adaptive thermal comfort <i>Speaker:</i> <i>Dr Mohammad Royapoor</i> (UK)	T3P3 Model-based energy performance assessment of the world largest underground seasonal thermal energy storage in a pilot district heating system in Chifeng City <i>Speaker:</i> <i>Mr Luyi Xu</i> (Netherlands)
		Closing address by <i>Professor Tony Roskilly</i>		
		Tea/Coffee break		
Conference Day 3: Friday, 30 June 2017				
Friday, 30 June 2017	1000-1530	Site visit to the ECN facilities		