

# WORKSHOP

## „Energy Harvesting Systems - FlexTEG 2015“

June 25<sup>th</sup>- 26<sup>th</sup>, 2015

Fraunhofer Institute for Material and Beam Technology IWS  
Winterbergstraße 28, 01277 Dresden, Germany

Thursday, June 25<sup>th</sup>, 2015

08:30	Registration	
	Dissemination Workshop for European Projects regarding Energy Harvesting	Responsible: Dr. Sara Giordani, <i>European Commission</i> , <i>Aljoscha Roch Fraunhofer IWS</i>
09:00	Welcome and opening	Fraunhofer IWS
	NanoCaTe project	
09:15	Overview NanoCaTe-Project - <i>NanoCaTe</i>	Aljoscha Roch, Fraunhofer IWS Germany
09:35	Printed polymer thermoelectrics – Approach for thermoelectric polymers and devices - <i>NanoCaTe</i>	Lukas Stepien, Fraunhofer IWS Germany
09:55	Development of bulk TEGs: modelling and experiment - <i>NanoCaTe</i>	Ngo Van Nong, Technical University of Denmark
10:15	Printable energy storage materials for coupled energy harvesting/storage devices - <i>NanoCaTe</i>	1. Benjamin Schumm, Fraunhofer IWS, Germany 2. Maziar Ahmadi, LEITAT, Spain
10:45	System integration of Energy harvesting + storage device / Applications - <i>NanoCaTe</i>	Infineon/TUG
11:05	<i>Coffee break</i>	
	SiENERGY project	
11:20	Overview SiENERGY-Project - <i>SiENERGY</i>	<u>Luis</u> Fonseca CNM-CSIC, Spain

11:40	Top-down and bottom-up approaches for SiNWs based micro-TEGs - <i>SiNERGY</i>	Dario Narducci UNIMIB
12:00	Electrostatic and piezoelectric approaches for micro mechanical harvesters - <i>SiNERGY</i>	Gonzalo Murillo CNM-CSIC
12:20	Thin film/3D approaches for on-chip batteries - <i>SiNERGY</i>	Alfonso Sepúlveda imec
12:40	Integration feasibility and application scenarios - <i>SiNERGY</i>	Martijn Goedbloed imec-NL
13:00	<i>Lunch break</i>	
	MATFLEXEND project	
14:20	Results of 1.5 years research on micro batteries and capacitive energy harvesting - <i>MATFLEXEND</i>	Robert Hahn, Fraunhofer IZM, Germany <a href="mailto:robert.hahn@izm.fraunhofer.de">robert.hahn@izm.fraunhofer.de</a>
14:40	Materials and devices developed in MATFLEXEND: prospects for future developments and research partnership - <i>MATFLEXEND</i>	Wolfgang Bock, ANITRA, Germany
15:00	<i>Coffee break</i>	
	MANpower project	<a href="mailto:cian.omurchu@tyndall.ie">cian.omurchu@tyndall.ie</a>
15:30	Overview MANpower Project - <i>MANpower</i>	Cian O'Murchu, Tyndall National Institute, Ireland
15:50	Low Frequency PiezoMEMS Energy Harvester - <i>MANpower</i>	Nathan Jackson, Tyndall National Institute, Ireland
16:10	Nanostructured Oxides based Electrochemical Supercapacitor - <i>MANpower</i>	Kafil M. Razeeb, Tyndall National Institute, Ireland
16:30-18:30	Coffee + Poster Session + Tour Fraunhofer IWS	
18:30	Dinner	

Friday, June 26<sup>th</sup>, 2015

Topic: Energy Harvesting Systems - FlexTEG 2015

Implantable energy harvesting systems (?)		
9:30	Arrival	
10:00	Nano-power integrated circuits for energy harvesting applications	Aldo Romani, Università di Bologna, Italy
10:20	Dynamics of entropy, charge and energy in thermoelectric generators	Prof. Feldhoff, University Hannover, Germany
10:40	Experimental investigation of the applicability of a thermoelectric generator to recover waste heat from a combustion chamber	Patricia Aranguren Garacochea, Public University of Navarra, Spain
11:00	<i>Coffee break</i>	
11:30	System and measurement	Hans-Fridtjof Pernau Fraunhofer IPM, Germany
12:00	A flexible thermoelectric generator fabricated using bulk materials	Benjamin Geppert, Universität Hannover, Germany
12:20	Experiments on screen printing of thermoelectric modules	Jyrki Tervo; VTT Technical Research Centre of Finland Ltd
12:40	Simulation of thermoelectric composites and systems	Petra Streit Fraunhofer ENAS, Germany
13:00	<i>Lunch break</i>	
14:00	Development of geometric diodes for antenna based solar-electric energy harvesting	Moritz Greifzu, Fraunhofer IWS, Germany
14:20	angefragt	<a href="mailto:takeda@mech.nagaokaut.ac.jp">takeda@mech.nagaokaut.ac.jp</a>
14:30	angefragt	<a href="mailto:kaspars.pudzis@cfi.lu.lv">kaspars.pudzis@cfi.lu.lv</a>
14:50	<i>Coffee break</i>	
16:00	End of Workshop	

Sunday, June 28<sup>th</sup>, 2015 – Thursday, July 2<sup>nd</sup>, 2015, Dresden

34TH ANNUAL INTERNATIONAL CONFERENCE ON THERMOELECTRICS  
13TH EUROPEAN CONFERENCE ON THERMOELECTRICS

Scientific program not yet available

