

## Workshop on using SMES for energy storage applications

**Date:** 16-18 September 2018

**Venue:** Ross Priory, Loch Lomond, Glasgow, UK

### Schedule

16 <sup>th</sup> Sep, Day 1: Arrival, accommodation available from this day		
17:00		Coach available from Strathclyde University to Ross Priory
09:25		Reception (buffet dinner available)
17 <sup>th</sup> Sep, Day 2: Invited talks from guests, conference dinner		
8:00		Coach to take Strathclyde researchers to Ross Priory
9:00		Registration
9:10		Welcome, Weijia Yuan
9:15		Introduction of Strathclyde and the Energy Institute, Graeme Burt
9:30		4x25 mins talks; 20 mins talk + 5 mins Q&A; chair: Weijia Yuan
	I	EERA SMES Subprogram. The SMES, a very flexible, robust and efficient instrument for enhancing Energy Storage Systems by hybridisation Xavier Granados, Institute of Materials Science of Barcelona (ICMAB), Spain
	II	Development of MgB <sub>2</sub> superconductor for SMES applications Serdar Atamert, Epochwires, UK
	III	Superconducting technologies for SMES- Industrial Perspectives Ziad Melham, Oxford Instrument
	IV	SMES-FCL project for renewable energy integration Diaa-Eldin Mansour, Tanta University
11:10		Break
11:20		4x25 mins talks; 20 mins talk + 5 mins Q&A; chair: Diaa-Eldin Mansour
	V	SMES-battery hybrid storage study Weijia Yuan, Strathclyde University
	VI	Cryogenic and HTS conductor challenges and potential solutions for practical SMES systems Sastry Pamidi, Florida State University

	<b>VII</b>	A novel MJ class high temperature superconducting energy storage system consisted of composite cable for application in power system Jiahui Zhu, China Electric Power Research Institute
	<b>VIII</b>	Research and development activity on SMES in Italy Antonio Morandi, Bologna University
<b>13:00</b>		Lunch
<b>14:00</b>		Round table discussions 1; industry requirement of SMES technology and how to improve SMES technology; chair: Sastry Pamidi Attendees will be divided into 2 groups to discuss 2 subjects; each for 20 mins long; then 20 mins to summarise
	<b>I</b>	SMES materials and magnets Example Questions to answer: What material best for SMES? What should be improved, Jc/cost/Top? Best magnet configuration?
	<b>II</b>	SMES applications Example questions to answer: What niche applications? For energy or power application? Technology Readiness Level? Economic case?
<b>15:00</b>		Break and Networking
<b>15:45</b>		Round table discussions 2, roadmaps/review papers and future funding opportunities, chair Antonio Morandi All attendees are invited to sit around and discuss. Students' attendance in this session not compulsory, is optional.
	<b>I</b>	Do we need roadmaps/review papers? What chapters?
	<b>II</b>	What future funding opportunities available?
<b>18:00</b>		Conference dinner
<b>18th Sep, Day 3: Lab tour</b>		
<b>8:30</b>		Coach departs
<b>9:30</b>		Visit to PNDC
<b>11:00</b>		visit to Technology and Innovation Centre in Strathclyde
<b>19th Sep, Day 4: Departure</b>		