The International Flow Battery Forum 2015: PROGRAMME – Updated 26 May 2015

Tuesday 16 June 2015

Time			
0830	Refreshments available		
0900	Anthony Price	IFBF Secretary	Introduction: (Electricity Storage in the UK)
	Session 1: Welcome to Scotland:		***Chairman Anthony Price***
0910	Seonaid Vass	Director Renewable and Low Carbon Technologies, Scottish Enterprise	Energy in Scotland and the role of energy storage
	Session 1a: Flow batteries in the UK		
0930	Leonard Berlouis	University of Strathclyde	Performance Characteristics of the Zn-Ce hybrid redox flow battery
0950	James Cross & Peter Ridley	EA Technology and REDT	Progress of a vanadium redox flow battery project for Gigha Island, Scotland.
1020	Richard Wills	University of Southampton, UK.	Developing a commercially viable soluble lead flow battery
1040	**REFRESHMENTS**		
	Session 2: Update on recent flow battery operating experience and flow battery applications:		***Chairman Adam Whitehead***
1110	Arnon Blum	Enstorage	HBr Flow Batteries as a source for bulk energy storage
1125	Toshikazu Shibata	Sumitomo Electric Industries	Recent test results of the 5MWh flow battery systems
1145	Rick Winter	UET	Results of two flow battery deployments
1205	Angel Luis	EDP Spain	Design, manufacture and deployment of a VFB
1225	***Session 3. Manufacturing and Commercialisation – Panel and discussion session:***		***Moderated by Anthony Price***
	Bjorn Hage Sebastian Koenig Joined by Bret Adams, Rick Winter, Arnon Blum	bh consulting, Australia Karlsruhe Institute of Technology	Ideas for flow battery manufacturing Design parameters for VFB and power conversion systems
1305	**LUNCH**		
	Session 4: ***Safety and design.***		***Chairman: Jens Noack***
1410	Adam Whitehead	Cellstrom GmbH	Critical safety features of the vanadium redox flow battery
1430	Christina Roth	FU Berlin	Robust 3D structured carbon based electrodes for all Vanadium redox flow batteries
1450	Christian Gutsche	University of Oldenburg, Energy and Semiconductor Research Laboratory	Influence of vanadium ions on degradation of platinum catalysts for vanadium air redox flow
1510	Kyle Smith	University of Illinois, Urbana-Champaign	Materials selection criteria for next-generation flow batteries
	Session 5: **Poster session**		**Moderator: Anthony Price**
1530	Poster commercials	Selected poster authors present their work	
1600	**REFRESHMENTS & Poster Session**		
1730	**End of Day 1**		
	Reception & Dinner: Coaches leave for visit and dinner at the Kelvingrove Art Gallery and Museum Dinner Venue from 1800. The return coaches leave from 2245.		

Wednesday 17 June:

0845	Chairman	IFBF	Introduction: Day 2.
	Session 6: *New Developments in flow batteries and materials:*		***Chairman: Rick Winter***
0900	Harini Hewa Dewage	Imperial College, London	Study of loss mechanisms in regenerative hydrogen cerium fuel cell
0920	Wei Wang	PNNL	Ambibipolar zinc polyiodide electrolyte for high energy density RFB
0940	Belen Amunategui	Tecnicas Reunidas, Spain	New development on zinc/air flow batteries
1000	Lorenz Gublar	Paul Scherrer Institut	Ion conducting membranes with vanadium barrier properties
1020	David Lloyd	Aalto University, Finland	Separator performance and scale up of the all copper RFB
1040	Puiki Leung	Imdea Energia	Development of an aqueous all-copper hybrid flow battery
1100	**REFRESHMENTS**		
	Session 7: Improving Performance:		***Chairman: Christian Rüdiger***
1120	Michael Tucker	Lawrence Berkeley National Laboratory	Improving the durability, performance and cost of the Br2 - H2 RFC
1140	William Braff	MIT	Membraneless hydrogen bromine flow battery
1200	Christine Minke	Clausthal University	Cost potentials for VRFB core components
1220	Sreenivas Jayanti	IIT Madras	Pressure drop in flow batteries
	Session 8: Modelling and Numerical Analysis: Panel session and discussion session:		***Moderated by Kathryn Toghill***
1240	Matteo Zago Kyeongmin Oh Maik Becker	Politecnico di Milano Inha University TU Clausthal	Impedance based modelling of a VFB Numerical analysis of cross over effects in H/BR Flow Batteries Optimisation by mathematical modelling
1310	**LUNCH**		
	Session 9: *New developments in flow battery design, material and operation:*		***Chairman: Jens Noack***
1420	Patrick Ruch	IBM Research Zurich	Power delivery and thermal management of electronic packages using redox flow systems
1440	Jonathan Sassen	Epsilor-Electric Fuel Ltd	A novel iron/iron flow battery for grid storage
1500	Kensuke Takechi	Toyota Research Institute of North America	Supercooled catholyte based on solvate ionic liquid
1520	Chun Yu Ling	National University of Singapore and Temasek Polytechnic	Impact of Pulsating electrolyte flow on full vanadium flow battery
1540	**REFRESHMENTS**		
1600	Luis Arenas	University of Southampton	Electrolyte properties on the performance of zinc cerium systems
1620	David Finkelstein	Cornell University	Boosting vanadium voltage
1640	Oliver Osters	NEXT Energy	Bidirectional redox vanadium air systems
1700	Anthony Price	Closing comments and Networking refreshments	