Workshop: "Lithium and its role in the low-carbon energy transition: materiality, geopolitics and technology"

5th of June, 2019

Lucia Windsor Room-Newnham College

University of Cambridge

Renewable energies are now firmly at the centre of global debate, requiring novel strategic resources such as lithium for new technologies leading to the low-carbon energy transition. This transition will have important technological, geopolitical and socio-environmental consequences as profound as those which came with the shift to fossil fuels more than a hundred years ago.

The University of Cambridge with a vast tradition in innovation has a leading role in this energy transition with ground-breaking research in the areas of technology, social, economic and material sciences.

This workshop seeks to gather people from industry and researchers within the University from different departments and research centres to discuss the potential of lithium and low-carbon energy transition technologies and policies and to build a network of collaboration and knowledge exchange.

Programme

12:30 pm Lunch

13:30 pm Welcome and Introductions

• Dr. Emma Mawdsley – Director of the Margaret Anstee Centre for Global Studies	Welcome,
• Dr. Daniela Sanchez-Lopez – Research fellow Margaret Anstee Centre for Global Studies	Aims, format of the workshop, introduction of participants.

Part 1 – 13:40 – 14:50

• Prof. Clare Grey - Department of Chemistry	**Title:** *"Materials Chemistry: Structure and Function"*
• Dr. Erlendur Jonsson - Postdoctoral Research Associate Department of Chemistry	**Title**: "*Alternatives to lithium-ion batteries"*

• Dr. Daniela Sanchez Lopez-Research Fellow at the Margaret Anstee Centre, Newnham College.	**Title:** *Lithium and the complexity of the low-carbon energy transition*

14:50 – 15:05 Coffee break

Part 2 - 15:05 – 16:15

• Dr. Mathias Groh -Postdoctoral Research Fellow Department of Chemistry	**Title**: "*All-Solid-State Batteries for Safe Energy Storage"*
• Dr. Hugo Bronstein - Lecturer in Physics and Chemistry Departments.	**Title**: To be confirmed
• Dr. Sai Shivareddy - Industrial Visitor to the Cambridge Graphene Centre and the Engineering Department.	**Title:** *"Research and development of fast charging lithium ion battery materials - an industrial perspective"*
• Dr Carrie Pemberton Ford - Director of the Cambridge Centre for Applied Research in Human Trafficking	**Title**: "*Socio economic rights impact of the extraction of components for Lithium batteries: case of Cobalt in DRC*"

Part 3 - 16:15 – 17:30

• Prof. Khaled Soufani - Director of the Executive MBA Programme/ Director of the Circular Economy Centre (CEC)	**Title**: "*Circular economy, sustainable economic growth and innovation"*
• Prof. Vasant Kumar -Department of Materials Science & Metallurgy	**Title**: "*Energising a Billion Lives - Lithium in its role in the low- carbon transition"*
• Dr. Estel Blay - Business Manager – Extractive Industries (Catapult Satellite Applications) • Stephen Spittle - Satellite Solutions Architect (Catapult Satellite Applications)	**Title**: "*Disruptive technologies for Lithium market*"
• Clara Galeazzi - Post-graduate researcher – Land Economy Department	**Title: "***Material Supply Chains for Electric Vehicle Battery Technologies"*

17:30 – Drinks reception