Lee Alan Burton

Personal Details

Nationality:	British	**Place of Birth:**	U.K.
Email Address:	lee.burton@uclouvain.be	**Twitter Handle:**	@leeaburton
Telephone:	+32 484 26 11 57	**Website:**	leeaburton.github.io
Office Address:	Chemin des Étoiles 8 bte L7.03.01 à 1348 Louvain-la-Neuve, Belgium.		
Google Scholar Profile:	https://scholar.google.com/citations?user=fEp-jzkAAAAJ&hl=en		
Linkedin Profile:	http://uk.linkedin.com/pub/lee-burton/54/272/95a/		

Professional Profile

Professional Status: International Research Fellow (full time).

Professional Affiliations: Member of the Royal Society of Chemistry.

Research Experience:

- "Move in" Research Fellow, Université Catholique de Louvain, Belgium.
- "JSPS" Research Fellow, Tokyo Institute of Technology, Japan.
- Visiting Scholar, Harvard University, Boston, Massachusetts, USA.
- Research Intern, Australian Antarctic Division, Tasmania, Australia.
- Summer Intern, Department of Chemistry, University of Warwick, UK.

International Experience: UK, Australia, France, USA, Japan, Belgium.

Languages: English (native), French (conversational), Japanese (level 1), British Sign Language (level 1).

Qualifications

Doctoral Qualification: PhD in Sustainable Chemical Technologies, University of Bath, UK.

Undergraduate Degree: Master of Chemistry (Hons), University of Warwick, UK.

Other Qualifications: Master of Research (Merit), University of Bath, UK.
Diplôme d'Études en Langue Française (B1), Université Catholique de Louvain

Key Skills Summary

- Project and data management, task delegation, problem solving and international collaboration.
- Programming proficiency in Python 2/3, Bash and LaTeX languages.
- Project proposal, bid evaluation and persuasive/technical writing skills.
- Control of Substances Hazardous to Health (COSHH) and risk assessment practices.
- Numerical and technical analysis, software and computer literacy, 3D visualisation software.
- Budget management, resource allocation and account keeping.
- Multi-disciplinary teamwork, event organisation and laboratory management roles
- Presentation and teaching expertise, data formatting and demographic awareness.

Employment History

December 2016 to Present – Research Fellow, Université Catholique de Louvain, Belgium.

- Recipient of "Move-In Louvain" research fellowship funded by the EU Marie-Curie actions.
- Recipient of the European Commission Seal of Excellence award 2018.
- Invited speaker & session chair at European Materials Research Society (E-MRS) Conference, 2017.
- B1 level Diplôme d'Études en Langue Française (DELF) qualification obtained.
- Invited Speaker, "Out-Thinkers" event, British Science Festival, UK.
- 2 international patents pending, contribution purchased by Panasonic Corporation.
- 2 research articles published so far, including use of high-throughput computing on all known materials.
- Mentor of PhD student on project applying cutting-edge simulation procedures to photovoltaics.
- Tutorial leader on database querying & high-throughput screening at Materials Research Society (MRS) Spring Meeting 2018

November 2014 to November 2016 – Japanese Society for the Promotion of Science (JSPS) International Research Fellow, Kyoto University and Tokyo Institute of Technology, Japan.

- Royal Society (UK) nominated candidate for maximally funded 2-year research fellowship.
- Equal shareholder on international patent for 11 novel semiconductors (number WO/2017/065294).
    - Personal contribution included use of evolutionary algorithms for structure prediction and

development of high-throughput analysis method for undiscovered materials.

- Speaker at four international conferences and invited contribution to international workshop.
- Five research article publications in high impact, peer reviewed research journals published including Nature Communications and Physical Review Letters.
- Japanese language classes and culture engagement activities attended throughout the fellowship.
- Volunteer participant of JSPS Science Dialogue program: lecturing at senior high schools (ages 15-17).

October 2010 to October 2014 – Doctoral Student, Centre for Sustainable Chemical Technologies, University of Bath, UK.

- Multi-disciplinary PhD funded by Engineering and Physical Sciences Research Council scholarship.
    - Six publications in peer reviewed research journals with international collaborators.
    - Three oral presentations at international conferences including an invited talk at the International Union of Materials Research Societies Conference, 2011.
    - Presented with Award for Encouragement of Materials Research Science by the Japanese Materials Research Society.
    - Over 2,000 GBP in external grant money and bursary awards.
- Laboratory custodian of Solar Instrument Room, Building 3 South, Department of Chemistry.
    - Developed control and safety standards for contemporary lab space.
    - Implemented training and operating protocols for hazardous experimental procedures.
- Public engagement and ambassadorial roles for the Centre for Sustainable Chemical Technologies.
    - Elected Ambassador to the UK Energy Research Network for the Bath graduate school.
    - Invited speaker for the British Science Association's 'Science Café' public presentation.
    - University of Bath STEM (Science, Technology, Engineering and Mathematics) ambassador.
- Casual Demonstrator and teaching assistant.
    - Communication and interpersonal skills deployed across various levels of expertise.

December 2013 to May 2014 – Events Manager, "Pint of Science" festival, Bath, UK.

- Theme leader of 'Planet Earth' section, Bath chapter, for international science festival 'Pint of Science'.
- Responsibilities included: budget allocations, costing, talk selection and program design.

November 2013 to April 2014 – Conference Organiser, Royal Society of Chemistry (RSC) Meeting, Chicheley Hall, Buckinghamshire, UK.

- Organising committee member for the RSC, Solid State Group Easter Meeting, Buckinghamshire, UK.
- Responsibilities included: budget allocations, costing, talk selection and program design.

July 2013 to December 2013 – Visiting Scholar, Harvard University, Boston, MA, USA.

- Established international collaboration between the University of Bath (UK), Harvard University (USA) and the Massachusetts Institute of Technology (USA).
- Involved multiple visits between UK & USA, confidential data handling and regular teleconferencing.

October 2010 to September 2011 – Master of Research, University of Bath, Bath, UK.

- A post-graduate degree with taught courses and 2 research projects: cathode materials for lithium ion batteries and porous materials for hydrogen storage.

April 2009 to September 2009 – Research Intern, University of Tasmania, TAS, Australia.

- Designed/built 2-D gas chromatography suite to analyse oil spills for Australian Antarctic Division.

References on Request

Professor Aron Walsh,
Royal School of Mines,
Imperial College London,
London, SW7 2BP
United Kingdom
a.walsh@imperial.ac.uk
+44 (0)20 7594 1178

Professor Fumiyasu Oba
Laboratory for Materials & Structures,
Tokyo Institute of Technology,
Yokohama 226-8503
Japan
oba@msl.titech.ac.jp
+81 (0)45-924-5511

Doctor David Scanlon
Christopher Ingold Building,
University College London,
London, WC1H 0AJ
United Kingdom
d.scanlon@ucl.ac.uk
+44 (0)20 7679 4558