Michael W. Gaultois

I'm a materials chemist developing clean energy technologies and methods in data-driven material discovery. I directly lead the research activity of 10 researchers across chemistry, physics, and computer science.

home: Rue des Lattes 15, Meyrin 1217, Switzerland
email: m.gaultois@liverpool.ac.uk tel: +41 (0)76 799 09 16
ORCiD 0000-0003-2172-2507 Google Scholar

Languages

Fluent in both French and English.

Employment

2018–present Research Fellow, Theme Lead in Inorganic Materials
Leverhulme Research Centre for Functional Materials Design
The Materials Innovation Factory, University of Liverpool, UK.

2015–2017 Marie Skłodowska–Curie International Fellow, *University of Cambridge*, United Kingdom.
Postdoctoral Associate, *St Catharine's College*, Cambridge, United Kingdom.
Advisor: Professor Dame Clare Grey

Education

2011–2015 PhD Chemistry, *University of California*, Santa Barbara, CA, USA.
International Fulbright Science & Technology Fellow, NSERC Postgraduate Scholarship
Advisor: Professor Ram Seshadri
Thesis: Design principles for oxide thermoelectrics
Created a database of thermoelectric materials and developed online visualization tools, extracted trends and insight, and developed material selection guidelines and design principles.

2009–2011 MSc Chemistry, *University of Saskatchewan*, Saskatoon, SK, Canada.
Julie Payette–NSERC Research Scholarship
Advisor: Professor Andrew P. Grosvenor
Thesis: Final-state Effects in X-ray Spectra from Transition Metal Oxides and Silicates
Prepared and characterized amorphous and crystalline inorganic materials using X-ray absorption and photoelectron spectroscopy at synchrotron radiation facilities.

2004–2009 BSc Chemistry (Honours), *University of Alberta*, Edmonton, AB, Canada.
Advisor: Professor Arthur Mar
Thesis: Anionic Ga–Ga bonding in *RE*–Co–Ga systems (*RE* = Gd, Tb, Dy, Ho, Er)
Thesis: Anion-stabilized differential fractional site occupancy in ternary Zr–Si–As
Created isothermal ternary phase diagrams, grew single crystals and determined the structures of novel intermetallic phases, and used ab initio calculations to determine the electronic structure.

Publications

78 publications in leading peer-reviewed journals. >2700 citations, h-index 25.
Highly published and highly cited work on outstanding problems in materials chemistry, condensed matter physics, chemical engineering, and geology. Please see Google Scholar or ORCiD for full list of publications.

Invited presentations

19 invited presentations at international conferences and research institutes.

Selected awards and recognition

2022 Ramsay Trust Memorial Fellowship, *Society of Chemical Industry*.
2018 Parkin Prize, for "outstanding contributions to promoting science," *British Crystallographic Association*.
2016 Runner up, *Air Force Research Lab* Materials Science and Engineering Data Challenge. (**$5 000 prize**)
2015 Marie Skłodowska–Curie Individual Fellowship, held at *University of Cambridge*. **€183 455**
2012 Graduate Thesis Award, for the most outstanding thesis in Physical and Engineering Sciences. *University of Saskatchewan*.
- Henry Taube Medal, for the "most significant overall contribution to research and scholarly activity," *University of Saskatchewan*.

2011 International Fulbright Science & Technology Award, *U.S. Department of State* **$151 639**
- Vanier Canada Graduate Scholarship (*declined*) **$150 000**
- NSERC Alexander Graham Bell Canada Graduate Scholarship (CGS-D) (*declined*) **$105 000**

2010 Julie Payette–NSERC Research Scholarship, held at *University of Saskatchewan* **$25 000**