

**PhD position** at the [University of Liverpool](#), United Kingdom.

**Title** : Data Science and Machine Learning Applied to the Discovery of Solid Lithium Ion Conductors.

**Deadline** : 28 February 2018, funded for 3.5 years from October 2018.

**Eligibility** : UK/EU, international students can pay higher tuition fees.

**Supervisors** : Dr [Matthew Dyer](#) and Dr [Vitaliy Kurlin](#).

**Description.** New inorganic materials are needed to advance technologies such as batteries for electric vehicles and grid storage, and to develop basic science. This PhD project is an exciting opportunity for the development and application of methods taken from data science and machine learning to the discovery of new inorganic materials which will function as the electrolyte within an all solid state lithium ion battery.

**Environment.** The student will be part of a wider project addressing the Faraday Challenge "Batteries for Britain" at the [Materials Innovation Factory](#). As well as obtaining knowledge and experience in data science, machine learning and inorganic material discovery, the student will develop skills in teamwork and scientific communication as computational and experimental researchers within the team work closely together.

**Requirements.** Applications are welcomed from candidates with a strong interest and/or background in data science, machine learning, computational materials discovery or related fields. The successful candidate should have, or expect to have, at least a 2:1 degree or equivalent in Computer Science, Mathematics, Chemistry, Physics or Materials Science. Though the advert at the link below mentions teaching in Chemistry, there might be no teaching commitments and in any case this teaching can be done in any department within the [Faculty of Science and Engineering](#).

**Programmings skills** : C++ or Python.

**Informal enquiries** : Dr [Vitaliy Kurlin](#), e-mail [vitaliy.kurlin@gmail.com](mailto:vitaliy.kurlin@gmail.com).

**Application link** : <https://www.liverpool.ac.uk/chemistry/postgraduate/postgraduateopportunities/data-science-and-machine-learning-applied-to-the-discovery-of-solid-lithium-ion-conductors>.