**NOVEL APPLICATIONS OF TRACE METAL STABLE ISOTOPE MEASUREMENTS IN MEDICAL RESEARCH**

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**PhD position in the MAGIC Group at the**

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The use of multiple-collector inductively coupled plasma mass spectrometry (MC-ICP-MS) for trace metal stable isotope analysis is well established within geochemistry, essentially since the conception of such instruments. The utilization of this high precision technique in medical and life science research has only just begun, however, and the scope of applications is vast, from diagnosis to mechanistic understanding. This project will investigate the use of trace metal isotope analyses, originally developed and applied for geochemical research, within a medical context, in particular for studies in neurosciences, oncology, and toxicology.

The analytical work will be carried out in the clean room and mass spectrometry laboratories of the MAGIC Research Center at the Department of Earth Science & Engineering, Imperial College London ([www.imperial.ac.uk/ese/research/magic](http://www.imperial.ac.uk/ese/research/magic)). The interdisciplinary nature of the project implies that the successful candidate will need to communicate effectively with academic professionals from medicine, biology, chemistry and engineering.

Applications from those with degrees in Chemistry, Biology, Biochemistry, Earth Science, Geology, Geochemistry or a related discipline are welcome. Please don’t hesitate to get in touch via email (markrehk@imperial.ac.uk) if you are interested or have further questions.

Selected literature:


