Several PhD studentships available investigating CO$_2$ Sequestration (flow in porous media) making use of our state-of-the-art laboratories. We are soliciting applications for the following PhD projects that are envisaged to start late 2012.

1. **Multiphase flow properties of the carbonate rock/water/CO$_2$ system at various scales**

2. **Reactive transport in the carbonate rock/water/CO$_2$ system**

A more general call for PhD students is also now occurring. Further details available through this [link](http://www3.imperial.ac.uk/earthscienceandengineering). Ignore closing date.

These posts are supported by a student bursary (approximately £18,000 rate) and PhD fees for three years from October 2012 or sooner and are available for UK / EU or international candidates.

You will be an enthusiastic and self-motivated person who meets the academic requirements for enrolment for the PhD degree at Imperial College London. These are normally at least a 2:1 honours degree in applied mathematics, physical science or engineering and preferably MSc with a good dissertation in a relevant subject. You will have an enquiring and rigorous approach to research together with a strong intellect and disciplined work habits. Good team-working, observational and communication skills are essential. Some international travel and work at industrial sponsors’ research facilities will be required.

The successful applicants will be encouraged to collaborate with other QCCSRC team members and other academic staff members, publish the research results in internationally recognised peer reviewed journals and present the research results at relevant national and international scientific and professional conferences, as well as industrial sponsor meetings. You will become a skilled communicator, comfortable in an international situation.

The links below will detail project summarise available and you are encouraged to discuss details with the Principal Investigator.

1. **Mineral contamination by thin films** ([Prof Trusler](http://www3.imperial.ac.uk/earthscienceandengineering))

2. **Carbonate microporosity** ([Dr Boek](http://www3.imperial.ac.uk/earthscienceandengineering))

3. **Impurities in CO$_2$ stream and effects on IFT, PVT** ([Prof Trusler](http://www3.imperial.ac.uk/earthscienceandengineering))

4. **CO$_2$ viscosity experiments** ([Prof Trusler](http://www3.imperial.ac.uk/earthscienceandengineering) and [Dr Boek](http://www3.imperial.ac.uk/earthscienceandengineering))

5. **EOS modelling - SAFT** ([Profs Jackson, Galindo and Adjiman](http://www3.imperial.ac.uk/earthscienceandengineering))

6. **Pore-scale multiphase flow** ([Prof Blunt](http://www3.imperial.ac.uk/earthscienceandengineering))

7. **CO$_2$ shale swelling experiments and modelling** ([Dr Boek](http://www3.imperial.ac.uk/earthscienceandengineering))
8. Pore-scale reactive transport (Dr Boek)
9. Core-scale reactive transport (Dr Krevor)
10. Fracture reactive transport (Prof Blunt)

The PIs listed above will be flexible and involve other academic and research staff as Co-PIs.

To be considered for future unspecified openings please send to Mrs Anca Gourlay your CV and a covering letter stating which area of study interest you, summarise your research experience and why you want to do a PhD at Imperial.

Contact:
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Tel + 44 (0)20 759 42685 or