



Sujata Ray was born and raised in Kolkata, India, where she met her husband as an undergraduate student. Sujata loves mountains, particularly the Himalayas.

Sujata is a post-doctoral researcher at the BP Institute of the University of Cambridge in the United Kingdom, where she is working on the sequestration of carbon dioxide in deep saline aquifers and investigating the possibility of injecting carbon dioxide into the subsurface as a supercritical fluid.

Sujata RAY

Home Country
India

Degree
Post-Doctorate in
Earth Sciences

Expertise
Civil and
Environmental
Engineering

Research Focus
Carbon Dioxide
Storage in Deep Saline
Aquifers

Host University
University of
Cambridge,
United Kingdom

Fellowship Awarded
2007

The capture and sequestration of carbon dioxide in underground aquifers is a possible means of mitigating climate change due to anthropogenic emissions. However, a risk assessment is necessary to determine whether the injected carbon dioxide will remain in the subsurface or if it will find its way out through fractures in the underground rock. Sujata conducts experiments and mathematical analysis to determine the possible flow rates of the injected fluid and the likelihood of its escape through fractures in the subsurface.

Sujata is interested in studying the potential impact of climate change in developing and emerging economies where few studies have been carried out to date. She plans to investigate the effect of climate change on water resources in India, where the source glaciers of its freshwater rivers are steadily receding. As India is vulnerable to fluctuations in its water resources, Sujata believes that further research in this area is key to helping the country adapt to a changing climate.

When she completes her studies at Cambridge, Sujata plans to teach at an Indian institute of technology.