



Building global CCS academic collaboration

Dr Philippa Parmiter
SCCS Business and Project Manager

Summary

- About SCCS
- International Academic CCS Summit
- Outputs and next steps

SCCS is a partnership of
the British Geological Survey,
Heriot-Watt University,
the University of Aberdeen,
the University of Edinburgh,
and the University of Strathclyde,
with Associate Member the University of St Andrews

Funded by the Scottish Funding Council



Achieving the SCCS vision

Progressing fundamental CCS research

Forming appropriate worldwide partnerships

Providing independent analysis and policy advice

Connecting government, industry and research

Educating CCS professionals

Encouraging public awareness of CCS
through outreach, education and engagement

Enabling CO₂
emissions
reduction through
CCS research
and knowledge
exchange

Expertise across the full CCS chain



- Capture engineering for power and industry – materials and benchmarking, integration in system (flexibility, techno-economics, operability)
- Transport – pipeline and shipping
- Storage - screening and ranking of sites, MMV, leakage overburden simulation
- Utilisation – catalysis, CO₂-EOR, mineralisation
- Economics, public perception, environmental impacts, regulation and policy



International CCS Academic Summit



Funded by:
UK FCO in Calgary, CSLF Capacity Building Fund, NRCan

Outputs and Follow-ups



International CCS Academic Summit

Outputs R

Executive summary

Scottish Carbon Capture and Storage hosted the International CCS Academic Summit on 25-26 February 2010. Academics from 18 leading institutions met face-to-face, discussed and developed plans for future collaboration and storage opportunities and future international CCS projects. Attendees also heard from the department, SENER, about CCS utilization and storage opportunities and future international CCS projects. The Newton Fund programme is a Commonwealth Office of Science and Technology initiative.

The summit was extremely successful in that it provided a mix of formal and informal networking opportunities. In addition, the formal one-to-one meetings were a very important step in developing future collaborations.

International funding opportunities

- ✓ Launch of a new £20m M partnership
- ✓ European Horizon 2020 project €42m (£32.7m) ERA Net project Spain, Sweden, Turkey and
- ✓ UK-partner Newton Fund project over five years, including funding for
- ✓ China National Science Re

- ✓ University of Alberta and W
- ✓ CGS/KZN and University of
- ✓ Universities of Oslo and Ed
- ✓ University of Strathclyde and
- ✓ Chinese Academy of Science
- ✓ Austin and CGS/KZN/Wits
- ✓ Universities of Regina and
- ✓ Heriot-Watt University and
- ✓ Universities of Melbourne and
- ✓ Universities of Edinburgh and
- ✓ involvement in Guangdong
- ✓ Universities of Oslo and Aberdeen – collaboration on 3D digital rock scanning
- ✓ Universities of Aberdeen and Calgary, Alberta, Texas – CCS monitoring and
- ✓ Universities of Melbourne and Alberta – Aquistore sample access
- ✓ CGS/KZN and University of Melbourne – South African CO₂ storage future
- ✓ Universities of Regina and Melbourne – involvement in MSc programme
- ✓ Universities of Edinburgh and Melbourne – ongoing and collaborative pro
- ✓ Universities of Heriot-Watt and Texas at Austin – discussion on extending and guest lecturer programmes to include CCS activities
- ✓ China University of Petroleum and Heriot-Watt University – expansion placements
- ✓ University of Aberdeen and the South African institutes – possible joint F
- ✓ Yonsei University and Wits University – gasifier modelling design work
- ✓ China University of Petroleum made many new contacts among attendees and opportunities with the SCCS partner institutes
- ✓ University of Edinburgh and CGS/KZN – ongoing talks on potential co project



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Objectives of an academic network

- Knowledge sharing and collaboration between international researchers with established track records in CCS research
- Maximising value from existing injection and capture research and pilot facilities by enabling access for international researchers
- Capacity building in countries new to CCS research



Next steps

- International funding opportunities
 - Accessible and up to date
 - Enabling researcher mobility and academic exchange
- Annual/biannual meeting
- Enabling access to CCS test and pilot facilities
- International teaching
 - online courses
 - lecturer exchanges
- ‘Carbon Capture Olympics’ every four years to assess progress in CO₂ capture methods

Conclusions

- Lots of interest in a network – someone needs to be responsible
- Funding is available – but timelines could be co-ordinated
- Maximise value and make the most of new ways of learning and communicating

Thank you

philippa.parmiter@sccs.org.uk

+44 (0) 7795 882 122

www.sccs.org.uk/events/past-events/73-international-ccs-academic-summit

