

# What's on 2013-4

# BIGCCS

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## BIG in Japan

We are proud to announce that the BIGCCS Centre produced 25 full-text scientific papers for the GHGT-11 Conference, which was held in Kyoto, Japan, November 18-22, 2012.

Below you find a complete listing of all the BIGCCS publications, with a direct link to the papers on the Science Direct website.

All GHGT-11 papers are issued in a special issue of the Energy Procedia journal (Vol. 37, 2013).

### Enjoy your reading!



BIGCCS Project Director Ms. Mona J. Mølnevik in Kyoto

1. **Anantharaman, R.;** K. Jordal, T. Gundersen  
[CO<sub>2</sub> Capture Processes: Novel approach to benchmarking and evaluation of improvement potentials](#)
2. **Anantharaman, R.;** S. Roussanaly, S.F. Westman, J. Husebye  
[Selection of optimal CO<sub>2</sub> capture plant capacity for better investment decisions](#)
3. **Aronu, U. E.;** A. F. Ciftja, I. Kim, A. Hartono  
[Understanding precipitation in amino acid salt systems at process conditions](#)
4. **Arstad, B.;** A. Spjelkavik, K. A. Andreassen, A. Lind, J. Probst, R. Blom  
[Studies of Ca-based high temperature sorbents for CO<sub>2</sub> capture](#)
5. **Aursand, E.;** P. Aursand, T. Berstad, C. Dørum, M. Hammer, M., S. T. Munkejord, O. Nordhagen  
[CO<sub>2</sub> pipeline integrity: A coupled fluid-structure model using a reference equation of state for CO<sub>2</sub>](#)
6. **Berstad, D.;** R. Anantharaman, P. Nekså  
[Low-temperature CCS from an IGCC power plant and comparison with physical solvents](#)
7. **Ditaranto, M.;** R. Anantharaman, T. Weydahl  
[Performance and NO<sub>x</sub> emissions of refinery fired heaters retrofitted to hydrogen combustion](#)
8. **Enaasen, N.;** A. Tobiesen, H. M. Kvamsdal, M. Hillestad  
[A numerical solution strategy for dynamic simulation of post-combustion CO<sub>2</sub> capture](#)
9. **Enaasen, N.;** A. Tobiesen, H. M. Kvamsdal, M. Hillestad  
[Dynamic modeling of the solvent regeneration part of a CO<sub>2</sub> capture plant](#)
10. **Fontaine, M. L.;** T. A. Peters, M. T. P. McCann, I. Kumakiri, R. Bredesen  
[CO<sub>2</sub> removal at high temperature from multi-component gas stream using porous ceramic membranes infiltrated with molten carbonates](#)

11. **Frykman, P.;** C. M. Nielsen, N. Bech  
Trapping effects of small scale sedimentary heterogeneities
12. **Hoff, K. A.;** H. F. Svendsen  
CO<sub>2</sub> absorption with membrane contactors vs. packed absorbers – Challenges and opportunities in post combustion capture and natural gas sweetening
13. **Jakobsen, J. P.;** S. Roussanaly, M. J. MølInvik, G. Tangen  
A standardized approach to multi-criteria assessment of CCS chains
14. **Løvseth, S. W.;** G. Skaugen, J. H. G. Stang, J. P. Jakobsen, Ø. Wilhelmsen, R. Span, R. Wegge  
CO2Mix Project: Experimental determination of thermo physical properties of CO<sub>2</sub>-rich mixtures
15. **Ma'mun, S.;** I. Kim  
Selection and characterization of phase-change solvent for carbon dioxide capture: precipitating system
16. **MølInvik, M. J.;** R. Aarlien, N. A. Røkke  
BIGCCS Centre-supporting large-scale CCS implementation
17. **Nielsen, C. M.;** P. Frykman, F. Dalhoff  
Synergy benefits in combining CCS and geothermal energy production
18. **Roussanaly, S.;** A. L. Brunsvold, E. S. Hognes, J. P. Jakobsen, X. Zhang  
Integrated techno-economic and environmental assessment of an amine-based capture
19. **Roussanaly, S.;** E. S. Hognes, J. P. Jakobsen  
Multi-criteria analysis of two CO<sub>2</sub> transport technologies
20. **Sánchez, R. A.;** Z. Chao, J. Solsvik, H. A. Jakobsen  
An investigation of the heat integration between the two riser units constituting a circulating fluidized bed reactor for the SE-SMR process
21. **Seljeskog, M.;** A. Sevault, M. Ditaranto  
Pursuing the oxy-fuel light/heavy oil retrofit route in oil refineries - A small scale retrofit study
22. **Stang, J. H. G.;** S. W. Løvseth, S. Ø. Størset, B. Malvik, H. Rekstad  
Accurate measurements of CO<sub>2</sub> rich mixture phase equilibria relevant for CCS transport and conditioning
23. **Taheri, A.;** D. Wessel-Berg, O. Torsæter  
Simulation study of density-driven natural convection mechanism in isotropic and anisotropic brine aquifers using a black oil reservoir simulator
24. **Weydahl, T.;** P. Salimath, A. Gruber  
Fundamental modeling of a membrane reactor with in situ hydrogen separation and combustion
25. **White, J. C.;** G. A. Williams, R. A. Chadwick  
Thin layer detectability in a growing CO<sub>2</sub> plume: Testing the limits of time-lapse seismic resolution

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