

Recent publications:

S. I. Aanonsen, G. Nævdal, D. S. Oliver, A. C. Reynolds and B. Vallès: "The ensemble Kalman filter in reservoir engineering – A review". SPE Journal, Vol. 14, No. 3, pp. 393-412, 2009.

Berenblyum, R.A., Zuta, J., Fjelde, I. and Surguchev, L.M., "Simulation Aspects of the CO₂ EOR Including Foam," Paper B09, 15th European Symposium on Improved Oil Recovery, Paris, France, 27 - 29 April 2009.

Berenblyum, R. Calderon and G. Surguchev, L.M., "Simulating CO₂ EOR Process: Numerical Investigation Based on the Experimental Results", presented at the SPE International conference on CO₂ Capture, Storage and Utilization, November 2-4, 2009, San Diego, CA, USA. SPE 126423.

Berenblyum, R. Zuta, J.F. Fjelde, I. and Surguchev, L.M., "Simulation Aspects of the CO₂ EOR Including Foam Simulation Aspects of the CO₂ EOR Including Foam, presented at the 15th European Symposium on Improved Oil Recovery, April 27 - 29 April 2009, Paris, France.

Berenblyum, R. Shchipanov, A. Reich, E.M. Surguchev, L.M. and Potsch, K., "Analytical Estimation of Advanced IOR Performance", presented at the 11th European Conference on the Mathematics of Oil Recovery (EXMOR XI), September 8-11, 2008, Bergen, Norway.

Roman Berenblyum and Leonid Surguchev, "Aspects of the chemical injection simulation", presented at the 29th IEA-EOR conference, November 2008, China.

Berenblyum, R. Kollbotn and L. Surguchev, L.M., "Modeling CO₂ Injection: IOR Potential after Waterflooding", presented at the Sixteenth SPE Improved Oil Recovery Symposium, April 19-23, 2008, Tulsa, USA, SPE 113436.

R. Berenblyum, G. Calderon, L. Kollbotn and L.M. Surguchev, "Simulation Aspects of the CO₂ Flooding, Sensitivity and Case Study", presented at EAGE Conference "Geosciences – From New Ideas to New Discoveries", April 7-10, 2008, St. Petersburg, Russia.

S. Evje, A. Hiorth, M. Madland and R. Korsnes, "A mathematical model relevant for weakening of chalk reservoirs due to chemical reactions". Networks and Heterogeneous Media, Vol 4 (4), pp. 755-788, 2009.

Evje, S. and A. Hiorth (2009). "A mathematical model for dynamic wettability alteration controlled by waterrock chemistry." Submitted to Network and Heterogeneous Media.

Fjelde, I., Zuta, J. and Duyilemi, O.V., "Oil Recovery from Matrix during CO₂-foam flooding of Fractured Carbonate Oil Reservoirs," SPE 113880. Earlier version of the paper was presented at the 2008 SPE Europec/EAGE Annual Conf. and Exhib., Rome, Italy, 9–12 June 2008.

Fjelde, I., Zuta, J. and Hauge, I., "Retention of CO₂-foaming Agents onto Chalk: Effects of Surfactant Structure, Temperature and Residual Oil Saturation," SPE 113259, *SPE Reservoir Evaluation & Engineering - Formation Evaluation*, June: 419-426.

Fjelde, I. "Formation Damage Caused By Emulsions During Drilling With Emulsified Drilling Fluids," SPE 105858, *SPE Drilling & Completion*, June 2009, 222-228.

Fjelde, I., Zuta, J. and Duyilemi, O.V., "Oil Recovery from Matrix during CO₂-foam flooding of Fractured Carbonate Oil Reservoirs," SPE 113880, the 2008 SPE Europec/EAGE Annual Conf. and Exhib., Rome, Italy, 9–12 June 2008.

Fjelde, I., "Sulfate in rock samples from carbonate reservoirs," SCA2008-19, International Symposium Society of Core Analysts, Abu Dhabi, UAE, 29 October-2 November, 2008.

Fjelde, I., Zuta, J. and Hauge, I., "Retention of CO₂-foaming Agents onto Chalk: Effects of Surfactant Structure, Temperature and Residual Oil Saturation," SPE 113259, the 2008 SPE Improved Oil Recovery Symp., Tulsa, Oklahoma, U.S.A., 19–23 April 2008.

Fjelde, I. and Asen, S.M., "Improved Spontaneous Imbibition of Water in Reservoir Chalks," Paper A17, 15th European Symposium on Improved Oil Recovery, Paris, France, 27 - 29 April 2009.

Frette, O.I., Virnovsky, G.A. and Silin, D., "Estimation of the curvature of an interface from a digital 2D image", Computational Materials Science 44 (2009) 867-875.

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V. Haugen, G. Nævdal, L.-J. Natvik, G. Evensen, A. M. Berg and K. M. Flornes: "History Matching Using the Ensemble Kalman Filter on a North Sea Field Case". SPE Journal, Vol. 13, No. 4, pp. 382-391, December 2008

Helland, J.O., Ryazanov, A.V. and van Dijke, M.I.J.: "Characterisation of pore shapes for pore-network models", paper to be presented at the ECMOR XI conference in Bergen, September 8-11, 2008.

A. Hiorth, S. Evje and S. M. Skjæveland, Int. J. Numer. Meth. Fluids. 59, 405-421 (2009) "A lattice Boltzmann-BGK algorithm for a diffusion equation with Robin boundary condition - application to NMR relaxation".

A. Hiorth, L. M. Cathles, J. Kolnes, O. Vikane, A. Lohne, R. I. Korsnes and M. V. Madland, SCA 2008 52 (2008) "A chemical model for the seawater-CO₂-carbonate system-aqueous and surface chemistry". Paper presented at the International Symposium of the Society of Core Analysts held in Abu Dhabi, UAE 29 October-2 November, 2008.

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O. Huseby, R. Valestrand, G. Nævdal and J. Sagen: "Natural and conventional tracers for improving reservoir models using the EnKF approach." Accepted for publication in SPE Journal.

Kolnes, J., Hiorth, A., Siqveland, O.K., Omdal, E., Zangiabadi and B. Madland, M.V., "Contact angle measurements on calcite using model oils", presented at the 10th Wettability Conference, October 27-28, 2008, Abu Dhabi UAE.

Korsnes, R.I, Madland, M.V., Vorland, K.A.N, Hildebrand-Habel, T., Kristiansen, T.G and Hiorth, A., 2008. Enhanced Chemical Weakening of Chalk due to Injection of CO₂ Enriched Water. This paper was prepared for presentation at the International Symposium of the Society of Core Analysts held in Abu Dhabi, UAE 29 October-2 November, 2008.

Lohne, A., Han, L., van der Zwaag, C., van Velzen, H., Mathisen, A-M., Twynam, A., Hendriks, W., Bulgachev, R. and Hatzignatiou, D., "Formation Damage and Well Productivity Simulation", presented at the 2009 SPE European Formation Damage Conference. 27-29 May 2009, Scheveningen, The Netherlands, SPE 122241.

Rolf J. Lorentzen and Geir Nævdal, "Data Assimilation of Large-Scale Models Within the Petroleum Industry", presented at Nordic Matlab User Conference 2008, November 20 - 21, 2008, Stockholm, Sweden.

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Surguchev, L.M and Calderon, G., "Modelling of CO₂ injection", presented at the 15th European Symposium on Improved Oil Recovery, April 27 - 29 April 2009, Paris, France.

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Zuta, J.F. and Fjelde, I., "Transport of CO₂-Foaming Agents during CO₂-Foam Processes in Fractured Chalk Rock," SPE121253, *SPE Journal Reservoir Evaluation & Engineering-Reservoir Engineering*, accepted.

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