

Some good reads on ATBS

Audibert, A., Argillier, J.-F., 1995, Thermal Stability of sulfonated polymers, SPE 28953 presented in San Antonio, February 14-17. <https://doi.org/10.2118/28953-MS>

Ballard J.M., Buscall F.A., Waite A. 1988. The theory of shear-thickening polymer solutions. Published in Polymer, Volume 29, Issue 7, July 1988, Pages 1287-1293.

Bauyrzhan Satken. Adsorption/Retention of Polymer Solution in Porous Media. Mechanics [physics]. Université de Bordeaux, 2021. English. NNT : 2021BORD0145 . tel-03267834

Divers T., Gaillard N., Bataille S., Thomas A., Favéro C. "Successful Polymer Selection for CEOR: Brine Hardness and Mechanical Degradation Considerations." Paper presented at the SPE Oil and Gas India Conference and Exhibition, Mumbai, India, April 2017. doi: <https://doi.org/10.2118/185418-MS>

Gaillard N., Giovannetti B., Favero C., Caritey J.P., Dupuis G., Zaitoun A., 2014, New Water Soluble NVP Acrylamide Terpolymers for Use in EOR in Harsh Conditions, SPE 169108 presented at Tulsa Oklahoma, 12-16 April. <https://doi.org/10.2118/169108-MS>

Gaillard, N., Giovannetti, B., Favero, C. 2010. Improved Oil Recovery Using Thermally and Chemically Protected Compositions based on co- and ter-Polymers Containing Acrylamide. Paper SPE 129756 presented at the SPE Improved Oil Recovery Symposium. Tulsa, SPE-177073-MS 13 Oklahoma. 24-28 April. <https://doi.org/10.2118/129756-MS>

Gaillard N., Thomas, A., Bataille S., Dupuis G., Daguerre F., Favéro C. Advanced Selection of Polymers for EOR Considering Shear and Hardness Tolerance Properties. EAGE Conference Proceedings, IOR 2017 - 19th European Symposium on Improved Oil Recovery, Apr 2017, Volume 2017, p.1 – 18. <https://doi.org/10.3997/2214-4609.201700333>

Ilyasov, I.; Koltsov, I.; Golub, P.; Tretyakov, N.; Cheban, A.; Thomas, A. Polymer Retention Determination in Porous Media for Polymer Flooding in Unconsolidated Reservoir. Polymers 2021, 13, 2737. <https://doi.org/10.3390/polym13162737>

Jouenne S., Polymer flooding in high temperature, high salinity conditions: Selection of polymer type and polymer chemistry, thermal stability, Journal of Petroleum Science and Engineering, Volume 195, 2020, 107545, ISSN 0920-4105,

Hollander A.F., Ssomasundaran P., Gryte C.C. 1981. Adsorption Characteristics of Polyacrylamide and Sulfonate-Containing Polyacrylamide Copolymers on Sodium Kaolinite. Journal of Applied Polymer Science, Vol. 26, 2123-2138.

Kamal M.S., Sultan A.S., Al-Mubaiyedh U.A., Hussein I.A., 2015. Review on Polymer Flooding: Rheology, Adsorption, Stability, and Field Applications of Various Polymer Systems.

Levitt, D.B., Pope, G.A., 2008, Selection of Screening of Polymers for Enhanced-Oil Recovery, SPE113845 presented in Tulsa, 19-23 April. <https://doi.org/10.2118/113845-MS>

Moradi-Araghi, A., Cleveland, D.H., Jones, W.W., and Westerman, I.J. 1987. Development and Evaluation of EOR Polymers Suitable for Hostile Environments: II-Copolymers of Acrylamide and Sodium AMPS. Paper SPE 16273 presented at the International Symposium on Oilfield Chemistry, San Antonio, TX 4-6 February. <https://doi.org/10.2118/16273-MS>

Noïk Ch., Audibert A., Delaplace Ph., 1994. Injectivity of Sulfonated Polymers under North Sea Oil Field Conditions. SPE 27769 presented at the SPE/DOE 9th symposium on Improved Oil Recovery, Tulsa, Oklahoma, USA, 17-20 April. <https://doi.org/10.2118/27769-MS>

Parker, W.O. and Lezzi, A. 1993. Hydrolysis of sodium-2-acrylamido-2-methylpropanesulfonate copolymers at elevated temperature in aqueous solution via ¹³C n.m.r. spectroscopy. Polymer 34 (23): 4913-4918.

Rashidi M. Physico-Chemistry Characterization of Sulfonated Polyacrylamide Polymers for Use in Polymer Flooding. Dissertation for the degree philosophae doctor, University of Bergen, 2010.

Rashidi M., Blokhuis A.M., Skaug A. 2010. Viscosity and Retention of Sulfonated Polyacrylamide Polymers at High Temperature. DOI 10.1002/app33056, published in Wiley InterScience September 30.

Rashidi M., Blokhuis A.M., Skaug A. 2009. Viscosity Study of Salt Tolerant Polymers. DOI 10.1002/app32011. Published in Wiley InterScience, March 29.

Ryles, R.G. 1988. Chemical Stability Limits of Water-Soluble Polymers Used in Oil Recovery. SPE Reservoir Engineering 3(1): 23-34.

Vermolen, E.C.M., van Haasterecht, M.J.T., Masalmeh, S.K., Faber, M.J., Boersma, D.M., Gruenenfelder, M.. 2011. Pushing the Envelope for Polymer Flooding Towards High-Temperature and High-Salinity Reservoirs with Polyacrylamide Based ter-Polymers. SPE141497 presented at the Middle-East Oil and Gas Show and Conference, in Manama, Bahrain, 25-28 September. <https://doi.org/10.2118/141497-MS>

Zaitoun A., Makakou P., Blin N., Al-Maamari R.S.S, Abdel-Goad M., Al-Sharji H.H., 2011. Shear Stability of EOR Polymers. SPE 141113 presented at the SPE International Symposium on Oilfield Chemistry, The Woodlands, Texas, USA, 11-13 April. <https://doi.org/10.2118/141113-PA>

Further reading

Beteta A., Nurmi L., Rosati L., Hanski S., McIver K., Sorbie K., and Toivonen S. K. Impact of Acrylate and 2-Acrylamido-Tertiary-Butyl Sulfonic Acid Content on the Enhanced Oil Recovery Performance of Synthetic Polymers. SPE J. 26 (2021): 2092–2113. doi: <https://doi.org/10.2118/200441-PA>

Ghoniem S., Chauveteau G., Moan M., Wolff C. 1981. Mechanical Degradation of Semi-diluted Polymer Solution in Laminar Flows. Can. J. of Chem. Eng., 59, 450-454, August.

Kulawardana, E.U., Koh, H., Kim, D.H., Liyanage, P.J., Upamali, K.A.N., Huh, C., 2012, Rheology and Transport of Improved EOR Polymers under Harsh Reservoir Conditions, Paper SPE 154294, presented in Tulsa, 14-18 April 2012.

Maerker J.M., 1975. Shear Degradation of Partially Hydrolyzed Polyacrylamide Solutions. SPE Engineering Journal, August, 311-321 (Trans. SRE-AIME, 259).

Moradi-Araghi, A. and Doe, P.H. 1987. Hydrolysis and Precipitation of Polyacrylamide in Hard Brines at Elevated Temperatures. SPE Reservoir Engineering, 2(2): 189-198.

Seright R.S., 1980. The Effects of Mechanical Degradation and Viscoelastic Behavior on Injectivity of Polyacrylamide Solutions. SPE9297, Proceedings of the 55th SPE Annual Fall Conference, Dallas, Texas, September.

Seright, R.S., Campbell, A.R., Mozley, P.S., and Han, P. 2010. Stability of Partially Hydrolyzed Polyacrylamides at Elevated Temperatures in the Absence of Divalent Cations. SPE Journal (June 2010) 341-348.

Sorbie, K.S., 1991, Polymer-Improved Oil recovery, Boca Raton, FL : CRC Press, Inc pp 92-99.

Steindl J., Hincapie R.E., Borovina A., Puls C., Badstöber J.H.G., and Torsten C. Improved EOR Polymer Selection Using Field-Flow Fractionation. Paper presented at the Abu Dhabi International Petroleum Exhibition & Conference, Abu Dhabi, UAE, November 2021. doi: <https://doi.org/10.2118/207700-MS>

Thomas A., Gaillard N., Favéro C. 2013. Some Key Features to Consider When Studying Acrylamide-Based Polymers for Chemical Enhanced Oil Recovery. Oil&Gas Science and Technology Journal, Vol. 67, n°6, pp. 883-1039.