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### Referências bibliográficas

ALVARADO, D. A.; MARSDEN, S. S. Flow of Oil-in-Water Emulsions Through Tubes and Porous Media, SPEJ, p. 369-377, 1979.

ATKINSON, H.; Recovery of petroleum from oil bearing sands. Estados Unidos, Patente nº. 1615311, 1929.

AZIZ, K., Settari, A. Petroleum reservoir engineering. London: Applied Science Publisher, 1979.

AZZAM, M. I. S., DULLIEN, F. A. L. Flow in tubes with periodic step changes in diameter: A numerical solution. Chemical Engineering Science, v.32, n.12, p. 1445-1455, 1977.

BAI, B.; HAN, M.; Li, Y.; WEI, M.;GAO, Y. Selective Water Shutoff Technology Study and Application of W/O Emulsions. Proceedings of the 24th SPE/DOE Symposium on IOR, Tulsa, USA, pp. 1-7, 2000. SPE/DOE 59320.

BAKKE, S.; OREN, P. E. Reconstruction of berea sandstone and pore-scale modelling of wettability effects. Petroleum Science e Engineering, v.39-3/4, p. 177-199, 2003.

BROZ J. S., French, T. R., Carroll, H. B.; Blocking of high permeability zones in steamflooding by emulsions. Proc. 3rd. International Conference on Heavy Crude and Tar Sands, UNITAR, long Beach, v.1, p. 444-451, 1985.

BLUNT, M. J.; VALVATNE, P. H.; PIRI, M.; LOPEZ, X; Predictive Pore-Scale Modeling of Single and Multiphase Flow. Transport in Porous Media, v. 58, p. 23-41, 2005.

COBOS, S.; CARVALHO, M. S. ; ALVARADO, V. Flow of oil-water emulsions through a constricted capillary. International Journal of Multiphase Flow, v.35-6, p. 507-515, 2009.

COOKE Jr., C. E., WILLIAMS, R. E., KOLODZIE, P. A.; Oil recovery by alkaline flooding. J. Pet. Technol., pp. 1365-1374, 1974. SPE-4739.

COKER, D. A., Torquato, S., Dunsmoir, J. H. Morphology and physical properties of Fontainebleau sandstone via tomographic analysis. *Journal of Geophysical Resources*, v.101, p. 497–506, 1996.

DEVEREUX, O. F. Emulsion Flow in Porous Solids. *Chemical Engineering Journal*, v. 7-2, p. 121-136, 1974.

DULLIEN, F. A. L. Fluid Transport and Pore Structure. 2<sup>a</sup> ed. San Diego: Academic Press, 1992.

DULLIEN, F. A. L., Dhawan, G. K., Characterization of pore structure by a combination of quantitative photomicrography and mercury porosimetry. *Journal of Colloid Interface Sciences*, v.47-2, p. 337-349, 1974.

DUNSMOIR, J. H., Ferguson, S. R., D'Amico, K. L., Stkes, J. P. X-Ray microtomography: A new tool for the characterization of porous media. *Society of Petroleum Engineers*, SPE 22860, 1991.

EIA, 2011, U.S. Energy Information Administration, Annual Energy Outlook 2011, DOE/EIA-0383ER, 2011. (adaptação)

FATT, I. The network model of porous media I. *Pet. Trans. AIME*, v.207, p. 144-181, 1956.

FAN, L. T., Nassar, R., Hwang, S. H., Chou, S. T., Analysis of deep bed filtration data: Modeling as a birth-death process, *A.I.Ch.E. J.*, 31-11, p. 1781, 1985.

GARDESCU, I. I., Behavior of gas bubbles in capillary spaces, *Trans. AIME* 86, pp. 351–370, 1930.

GOGARTY, W.B. Rheological Properties of Pseudoplastic Fluids in Porous Media, *SPE J.*, p. 149-160, 1967.

HAZLLET, R. D. Statistical characterization and stochastic modeling of pore networks in relation to fluid flow, *Math. Geol.*, v.29, p. 801–822, 1997.

HERZIG, J. P., LECLERC, D. M., LEGOFF, P. Flow of suspensions through porous media – Application to deep bed filtration. *Ind. Eng. Chem.*, v.62, p. 8-35, 1970.

HO, B.P., Leal, G. *Journal of Fluid Mechanics*, v.71, p. 361–384, 1975.

HORNER R. M. W., JARVIS, R. J., MACKIE, R. I. Deep bed filtration – A new look at the basic equations. *Water resources*, v.20, n.115, 1984.

Imperial College: banco de dados. Disponível em:

<[www3.imperial.ac.uk/earthscienceandengineering/research/perm/porescalemodeling](http://www3.imperial.ac.uk/earthscienceandengineering/research/perm/porescalemodeling)>. Acesso em: 11 Abr. 2011.

JAMIN, J. Memoire sur l'équilibre et le mouvement des liquides dans les corps poreux. Comptes Rendus Academie de Sciences de France v. 50, p. 172, 1860.

JENNINGS, H.Y. Jr., JOHNSON, C.E. Jr., MCAULIFFE, C.D. A caustic waterflooding process for heavy oils. Journal of Petroleum Technology, p. 1344–1352, 1974.

JERAULD G. R., HATFIELD, J. C., SCRIVEN, L. E., DAVIS, H. T. Percolation and conductin of Voronoi and triangular networks – A case study in topological disorder. Journal Phys. Chem., v.17, p. 3429-3439, 1984.

JOSHI M. A class of stochastic models for porous media. Thesis (Ph.D.), University of Kansas, 1974.

KHAMBHRATNA, F., Chulalongkorn University; Thomas, S., Farouq Ali, S.M. Numerical simulation and experimental verification of oil recovery by macroemulsion. Society of Petroleum Engineers, 39033, 1997.

KIRKPATRICK, S. Percolation and conduction. Review of modern physics, v. 45, n. 574, 1973.

KNACKSTEDT M. A., Sheppard, A. P., Pinczewski, W. V.: 1998, Simulation of mercury porosimetry on correlated grids: Evidence for extended correlated heterogeneity at the pore scale in rocks, Phys. Rev. E Rapid Communications 58, R6923–R6926

KOPLIK, J., LASSESTER, T. J., One and two-phase flow in network models of porous media. Chemical Engineering Communication, v. 26, p. 285–295, 1984. “n”

LAKE, W. L.; Enhanced oil recovery, Prentice-Hall, 1989.

MANSWART, C., Hilfer, R. Reconstruction of random media using Monte Carlo methods. Physical Review. E 59, 5596– 5599, 1998.

MARTINEZ, M. J., Udell, K. S. Axisymmetric creeping motion of drops through circular tubes. J. Fluid Mech. 210, 565–591, 1990.

MASON, G., MORROW, N. R. Capillary behavior of a perfectly wetting liquid in irregular triangles tubes. Journal of Colloid Interface Sciences. v.141, n.262, 1991.

MCAULIFFE, C.D. Oil-in-water emulsions and their flow properties in porous media. Journal of Petroleum Technology, p.727-733, 1973a.

\_\_\_\_\_. Crude oil-in-water emulsions to improve fluid flow in an oil reservoir. *Journal of Petroleum Technology*, p. 721–726, 1973b.

MONTALVO, M. A. Escoamento de emulsões óleo em água através de microcapilares. Rio de Janeiro, 2008. Dissertação (mestrado), Pontifícia Universidade Católica do Rio de Janeiro.

MUNGAN, N., Smith, F. W., Thompson, J. L., Some aspects of polymer floods, *J. Pet. Technol.*, v. 18-9, p. 1143-1150, 1966.

OLBRICHT, W. L., LEAL, L. G. The motion of droplets through a tube of periodically varying diameter. *Journal Fluid Mechanics*, v.134, p.329-355, 1983.

OH & SLATTERY (1979), ver rege

ØREN, P. E., BAKKE, S., ARNTZEN, O. J. Extending predictive capabilities to network model. *Society of Petroleum Engineers*, v.3, p. 324-336, 1998.

ØREN, P. E., BAKKE, S. Process based reconstruction of sandstones and prediction of transport properties. *Transport in Porous Media*, v.46, p. 311–343, 2002.

PATZEK, T.W., E240 - Fundamentals on multiphase flow in porous media, First ed., Berkeley, U. C. Berkeley, p. 250, 1999.

PATZEK, T. W.; SILIN, D. B. Shape factor correlations and hydraulic conductance in noncircular capillaries. I. One-phase creeping flow. *Journal of Colloid and Interface Science*, v.236, p.295-304, 2001.

PAYATAKES, A. C., TIEN, C., TURIAN, R. M. A new model for granular porous media – Model formulation. “*AICHE J*”, v.19-1, n.58, 1973.

REGE, S. D., FOGLER, H. S. Network model for straining dominated particle entrapment in porous media. *Chemical Engineering Science*, v.42-7, n.1553, 1987.

REGE, S. D. A network model for flow, reaction, and particle entrapment in porous media. Thesis (Ph.D.), University of Michigan, 1988.

ROSE, W., Studies of waterflood performance – III. Use of network models. *Illinois state geological survey circular*, v.237, p. 1-31, 1957.

SAAD, Y., SCHULTZ, M. H. GMRES: A generalized minimal residual algorithm for solving nonsymmetric linear systems. *Society for Industrial and Applied Mathematics*, v.7, p.856-869, 1986.

SAFFMAN, P.G., TAYLOR, G.I. The penetration of a fluid into a porous medium or Hele-Shaw cell containing a more viscous liquid. Proc. Roy. Soc., A245, p. 312-329, 1958.

SAHIMI M., DAVIS, H. T., SCRIVEN, L. E. Dispersion in disordered porous media. Chemical Engineering Communication, v.23, p.329-341, 1983.

SARMA, H.K., MAINI, B.B., JHA, K., 1998. J. Can. Petrol. Technol. v.37, p. 55–62, 1998.

SHELDON, J. W., ZONDEK, B., CARDWELL, W. T. One-dimensional, incompressible, non-capillary, two-phase fluid flow in a porous medium. Society of Petroleum Engineers, v.216, p. 290–296, 1959.

SIMON, R. KELSEY, F. J. The use of capillary tube networks on reservoir performance studies. Society of Petroleum Engineers Journal, v.99, 1971.

SOK, R. M., *et al.* Direct and stochastic generation of network models from tomographic images: effect of topology on two phase flow properties. Transport in porous media, v. 46, p. 345– 372, 2002.

SOO, H., Radke, C. J. The flow mechanism of dilute, stable emulsion in porous media. Ind. Eng. Chem. Fundamentals, v.23, p.342-347, 1984.

SOO, H., Williams, M. C., Radke, C. J. A filtration model for the flow of dilute, stable emulsions in porous media. I. Parameter evaluation and estimation. Chemical Engineering Science, v.41, 1986.

UZOIGWE, Marsden, 1970.

WARDLAW, N. C. Pore geometry of carbonate rocks as revealed by pore cases and capillary pressure. n. 60, p. 245-257, 1976.

YORTSOS, Y. C., Sharma, M. M., Application of percolation theory to noncatalytic gas-solid reactions. A.I.Ch.E., v.32, p.46-55, 1986.