

## Referências Bibliográficas

- ACOSTA, A. *Hierarchical Pixel-Based Geostatistical Modeling of Estuarine Reservoir Through Streamline Simulation in Ceuta-Tomoporo Field, West Venezuela*. **Trinidad and Tobago Energy Resources Conference**, Port of Spain, Trinidad, 2010.
- ALIZADEHA, B.; NAJJARIA, S.; KADKHODAIE-ILKHCHIC, A. *Artificial neural network modeling and cluster analysis for organic facies and burial history estimation using well log data: A case study of the South Pars Gas Field, Persian Gulf, Iran*. **Computers & Geosciences**, Volume 45, Agosto de 2012, pp. 261–269.
- ALLWARDT, J. R. *2D modeling of overpressure in a salt withdrawal basin, Gulf of Mexico, USA*. **Marine and Petroleum Geology**, v. 26, 2009, p. 464-473.
- ALSOP, G.I. et al. *The geometry of drag zones adjacent to salt diapirs*. **Journal of the Geological Society**, v. 157, 2000, pp. 1019-1029.
- ARAUJO, E. M. P.; et al. *Drilling Optimization Using 3D Geomechanical Modeling in the Llanos Orientales Basin, Colombia*. **Latin American and Caribbean Petroleum Engineering Conference, 2010, Lima, Peru. Proceedings**... Lima, Peru: Society of Petroleum Engineers, 2010.
- ATHY, L.F. *Density, porosity and compaction of sedimentary rocks*: **AAPG Bulletin**, v. 14/1, p. 1-14, 1930.
- BACHRACH, R. et al. (2007) *From pore-pressure prediction to reservoir characterization: A combined geomechanics-seismic inversion workflow using trend-kriging techniques in a deepwater basin*. **The Leading Edge**, May 2007, p. 590-595.
- BALDWIN, B. AND BUTLER, E.O.: "Compaction Curves," **AAPG Bulletin** (1985) 69, No.4, 622.
- BANIK, N. et al. *Predrill prediction of subsalt pore pressure from seismic impedance*. **The Leading Edge**, v. 33, n. 4, 400–412, 2014.
- BENZAQUI, K.; COX, T. *Integration of Multi Scale Data in Facies Modeling using Neural Network*. **Frontiers + Innovation – 2009 CSPG CSEG CWLS Convention**, Calgary, Canadá, 2009.
- BOGGS, S.J., **Petroleum of Sedimentary Rocks**. 2<sup>a</sup> Edição, University of Oregon, 2009.

- BOHLING, G. *Stochastic Simulation and Reservoir Modeling Workflow.* **Kansas Geological Survey**, C&PE 940. 2005
- BORGE, H. **Fault controlled pressure modelling in sedimentary basins.** Tese de Doutorado. Departamento de Ciências Matemáticas, Norwegian University of Science and Technology, 2000.
- BORGHI, L. **Notas de aula da disciplina Fácies Sedimentares.** Universidade Federal do Rio de Janeiro, 2011.
- BOTELHO, F.V.C. Análise numérica do comportamento mecânico do sal em poços de petróleo. **Dissertação de Mestrado**, Departamento de Engenharia Civil, PUC-Rio, 2008.
- BOURGOYNE, A.T.; YOUNG, F.S. *A Multiple Regression Approach to Optimal Drilling and Abnormal Pressure Detection.* **Soc. Pet. Eng. Journal**, pp.371-384, Aug. 1974.
- BOWERS, G.L. Pore pressure estimation from velocity data; accounting for overpressure mechanisms besides undercompaction. **SPE Drilling and Completions**, Junho de 1995.
- BOWERS, G.L. Determining an Appropriate Pore-Pressure Estimation Strategy. **OTC**, Texas, 2001.
- BOWERS, G.L.; KATSUBE, T.J. *The role of shale pore structure on the sensitivity os wireline logs to overpressure.* AAPG Special Volume on **Pressure Regimes on Sedimentary Basins and Their Prediction**. 2002.
- BOWERS, G.L. Detecting High Pressure. **The Leading Edge**, 21, v. 2, 174–177, 2002.
- BOWERS, G.L. *Pore Pressure Estimation From Velocity Data: Accounting for Overpressure Mechanisms Besides Undercompaction.* **Anais da SPE Drill & Completion**. SPE-27488-PA. 1995.
- BREDEHOEFT, J. D.; HANSHAW, B. B. *On the Maintenance of Anomalous Fluid Pressures: II. Source Layer at Depth* **Geological Society of America Bulletin**, September 1968, v. 79, no. 9, p. 1107-1122. 1968.
- BURRUS, J. *Overpressure models for clastic rocks, their relation to hydrocarbon 403 expulsion: a critical reevaluation.* In: Law, B.E., Ulmishek, G.F. & Slavin, V.I. (eds) **404 Abnormal Pressures in Hydrocarbon Environments.** AAPG, Tulsa, Memoir 70, 35-63. 1998.
- CARRIER, W.D. *Goodbye, Hazen, Hello, Kozeny-Carman.* **Journal of Geotechnical and Geoenvironmental Engineering**, Novembro, 2003.
- CHAPMAN, R.E. **Petroleum Geology.** Elsevier, 1983.

COSTA, A.M. *et al.* Simulação do comportamento do poço 6-RJS-457-RJ no trecho perfurado em zona de sal e dimensionamento dos revestimentos. **Relatório PETROBRAS/CENPES/DIPREX/SEDEM-017**.

CUNHA, T. *Gravity Anomalies, Flexure and the Thermo-Mechanical Evolution of the West Iberia Margin and its Conjugate of Newfoundland*. Tese de Doutorado, Departamento de Ciências da Terra, *University of Oxford*, 2008.

DA SILVA, T.M.S.D. **Modelagem de Geração e Migração do Petróleo na Bacia do Recôncavo, BA**. Dissertação de mestrado, Departamento de Engenharia Civil, COPPE, UFRJ, 2006.

DEN BOER, L.D. *et al.* *Using tomographic seismic velocities to understand subsalt overpressure drilling risks in the Gulf of Mexico. Anais da Offshore Technology Conference*, Texas, 2-5 de Maio de 2011.

DIX, C. H. *Seismic Velocities From Surface Measurements. Geophysics*, v. XX, n.1. p. 68-86. Janeiro - 1955.

DOYEN, P.M. *Seismic Reservoir Characterization – An Earth Modeling Perspective*. EAGE Publications, Education Tour Series, 2007.

DUSSEAU, M. B. *et al.* *Drilling Around Salt: Risks, Stresses, and Uncertainties. Anais do Gulf Rocks 2004*, 6<sup>th</sup> North America Rock Mechanics Symposium. Houston, Texas, 2004.

EATON, B.A., 1972, *The effect of overburden stress on geopressure prediction from well logs: Journal of Petroleum Technology*, v. 24/8, p. 929-934.

EATON, B.A. The Equation for Geopressure Prediction from Well Logs. **Anais da Fall Meeting of the Society of Petroleum Engineers of AIME**, Dallas, 28 de Setembro, 1 de Outubro. SPE 5544. 1975.

EBERHART-PHILLIPS, D.L. *Investigation of crustal structures and active tectonic processes in the Coast Rangers, Central California*. Tese de Doutorado. Stanford University, 1989.

ESPITALIÉ, J., *et al.* *La pyrolyse Rock-Eval et ses applications - première/deuxième partie. Revue de l'Institut Français du Pétrole*, v. 40, nº. 6, pp. 755-784. 1985.

FERTL, W.H.; CHILINGARIAN, G.V. *Abnormal formation pressures and their detection by pulsed neutron capture logs. Journal of Petroleum Science and Engineering*, 1, 23-28, 1987.

FJELDSKAAR, W. *et al.* *Interactive 2D basin modeling on workstations. Proceedings of SPE Petroleum Computer Conference*, Denver, Colorado, 1990.

FOSTER, J. B.; Whalen, H. E. *Estimation of Formation Pressures From Electrical Surveys – Offshore Louisiana.* SPE Paper 1200. 1966.

FREDRICH, J.T. et al. *Stress perturbations adjacent to salt bodies in the deepwater Gulf of Mexico.* Anais do SPE Annual Technical Conference and Exhibition, Denver, 2003.

FUJII, T. **Using 2D and 3D basin modelling and seismic seepage indicators to investigate controls on hydrocarbon migration and accumulation in the Vulcan sub-basin, Timor Sea, north-western, Australia.** Dissertação de Mestrado, Australian School of Petroleum, The University of Adelaide, 2007.

GTEP. Metodologias de Modelagem Aplicada à Análise de Estabilidade de Poços. **Relatório Interno de Projeto** GTEP-CENPES/Petrobras. Relatores: Marchesi, V.R. e Pilotto, D.D. 2014.

GUILMIN, A.L. *Contribution de la mécanique à l'étude des bassins sédimentaires: modélisation de la compaction chimique et simulation de la compaction mécanique avec prise en compte d'effets tectoniques.* Tese de Doutorado do Departamento de Sciences, Ingénierie et Environnement, Université Paris-Est, 2012.

HACK, R. et al. *Three and more dimensional modelling in geo-engineering.* Bulletin of Engineering Geology and the Environment. v.65, n.2, 2006, p.143-153.

HANTSCHEL, T., KAUERAUF, I. A. **Fundamentals of Basin and Petroleum Systems Modeling.** Springer-Verlag Berlin Heidelberg, 2009, 476 p.

HAYKIN, S. **Neural Networks: A Comprehensive Foundation.** MacMillan Publishing Company, 1994.

HAZEN, A. *Some physical properties of sands and gravels, with special reference to their use in filtration.* 24<sup>th</sup> Annual Rep. Massachussets State Board of Health, Pub. Doc, n. 34, p. 539-556, 1892.

HAZEN, A. *Discussion of dams on sand foundations.* By A.C. Koenig, Trans. Am. Soc. Civ. Eng., n 73, p. 199-203.

HOLBROOK, P. W.; HAUCK, M.L. *A Petrophysical-Mechanical Math Model for Real-Time Wellsite Pore Pressure/Fracture Prediction.* SPE Paper 16666. 1987.

HOOYMAN, P.J. *Calibrated Predrill Pore Pressure Prediction from 3D Seismic for the Cocuite Field, Veracruz Basin.* OTC Conference Paper – 2003.

- HOTTMANN, C.E., JOHNSON, R.K. Estimation of formation pressures from log-derived shale properties. **Journal of Petroleum Technology**, v.17, 1965, p. 717-722, SPE1110.
- HOULDING, S. W. **3D geoscience modelling, computer techniques for geological characterization**. Springer, Berlin Heidelberg New York, 1994, 159p.
- HUFFMAN, A.R. *The future of pore-pressure prediction using geophysical methods*. **The Leading Edge**, Fevereiro de 2002.
- ISAACKS, E.H.; SRIVASTAVA, R.M. **An Introduction to Applied Geostatistics**. Oxford University Press, 1989.
- JORDEN, J.R. and SHIRLEY, O.J. *Application of Drilling Performance Data to Overpressure Detection*, **Journal of Petroleum Technology**, p1387-1394, Vol.18, No.11, Nov 1966.
- LANDIM, P. M. B. **Análise estatística de dados geológicos**. São Paulo: UNESP, 2003. 253p.
- KARPA, J. *Atlas Prospect: Mississippi Canyon Blocks 713 & 714. DEA and MMS Deepwater Geohazards Workshop*, MontGOMery, Texas, EUA, 2001.
- KRIGE, D.G. *A Statistical Approach to Some Basic Mine Valuation Problems on the Witwatersrand*. **Journal of the Chemical, Metallurgical and Mining Society of South Africa**, V. 52, n. 6, Dezembro de 1951, pp. 119-139.
- LIAW, A. et al. *Integrated Pore Pressure Prediction in Gunnison Field. SEG/San Antonio 2007 Annual Meeting*, 2007.
- LIU, J.; KATZ, B.J. *Integration of basin modeling, uncertainty analysis, hydrocarbon charge volume assessment in petroleum exploration risk evaluation*. **International Petroleum Technology Conference**, Pequin, China, 2013.
- LONGXIN, M. et al. 2008. *Integrated 3D Geology Modeling Constrained by Facies and Horizontal Well Data for Block of the Orinoco Heavy Oil Belt*. **SPE International Thermal Operations and Heavy Oil Symposium**, Calgary, Alberta, Canada, 2008.
- LOPATIN, N.V.. Temperature and geologic timer as factors in calcification. **Seriva Geologicheskaya**, Izvestiya Akademii Nauk USSR, N. 3, 95-106, 1971.
- LOPEZ, J.L. et al. *Integrated SEM 3D pore pressure prediction and uncertainty analysis*. **The Leading Edge**, 52-59, Janeiro, 2004.
- LUO, G. et al. *Geomechanical modeling of stresses adjacent to salt bodies: Part 1 - Uncoupled models*. **AAPG Bulletin**, v. 96, n. 1, 2012, pp. 43–64.
- LOU, X., and VASSEUR, G. *Contributions of compaction and aquathermal pressuring to geopressure and the influence of environmental conditions*.

**American Association of Petroleum Geologists Bulletin**, v. 76, p. 1550-1559, 1992.

MALLOY, S. et al. *Uncertainty Analysis of Subsalt Overpressure Development in Offshore Louisiana, Gulf of Mexico*. **Mathematical Geology**, v. 28, n. 6, 1996.

MANN, D.M.; MACHENZIE, A.S. *Prediction of pore fluid pressures in sedimentary basins*. **Marine and Petroleum Geology**, v. 7, p. 55-65.

MARCHESI, V.R.; FONTOURA, S.A.B. *Geological and Geomechanical Modeling Procedures Suitable for Civil, Mining and Petroleum Engineering*. **44th US Rock Mechanics Symposium**, ARMA 2010.

MARCHESI, V.R. et al. *Geological-Geomechanical Modeling as a Support for the Design and Monitoring of Oil Wells*. **SBMR-2014-017 ISRM Conference Paper – 2014**.

MATHERON, G. *Principles of geostatistics*. **Economic Geology**, 1963, v. 58 n. 8 p. 1246-1266.

MATHERON, G. *The theory of regionalized variables and its applications*. **Les Cahiers du Centre de morphologie mathématique de Fontainebleau**, 1971.

MCINTYRE, B.; et al. *Wellbore Instability in Forties: Diagnosis of Root Causes for Improved Drilling Performance*. **Offshore Europe, 2009**, Aberdeen, UK. Proceedings... Aberdeen, UK: Society of Petroleum Engineers, 2009.

MILKOV, A.V. et al. *Compartmentalization and time-lapse geochemical reservoir surveillance of the Horn Mountain oil field, deep-water Gulf of Mexico*. **AAPG Bulletin**, v. 91, no. 6, Junho de 2007, pp. 847–876, 2007.

MOAZZENI, A. R.; NABAEI, M.; SHAHBAZI, K.; SHADRAVAN, A. *Mechanical Earth Modelling Improves Drilling Efficiency and Reduces Non-Productive Time (NPT)*. **SPE Deep Gas Conference and Exhibition**, 2010, Manama, Bahrain. Proceedings... Manama, Bahrain: Society of Petroleum Engineers, SPE 131718, 2010.

MOHRIACK et al. (2009). **Sal: Geologia e Tectônica. Exemplos nas Bacias Brasileiras**. Organizadores: Webster Mohriack, Peter Szatmari, Sylvia dos Anjos. São Paulo, Beca Edições Ltda, 2008.

MOUCHET, J.P.; MITCHELL, A. *Abnormal pressures while drilling*. **Manuals Techniques Elf Aquitaine**, v. 2, 255 p, 1989.

NUNN, J.A. *Burial and thermal history of the Haynesville shale: implications for overpressure, gas generation, and natural hydrofracture*. **Gulf Coast Association of Geological Societies Journal**, v. 1, p. 81–96, 2012.

NIKOLINAKOU, M.A. et al. *Geomechanical modeling of stresses adjacent to salt bodies:Part 2—Poroelastoplasticity and coupled overpressures.* **AAPG Bulletin**, v. 96, no. 1, Janeiro de 2012, pp. 65–85.

O'BRIEN, J.J., et al. *Buildup of Overpressure Beneath Offshore Salt Sheets: Case Histories and Models.* **25th Annual OTC in Houston.** Texas, EUA, 1993.

PETERS, K. E., et al. *A Four-Dimensional Petroleum Systems Model for the San Joaquin Basin Province, California.* **U.S. Geological Survey Professional Paper** 1713, p. 1-35. 2007.

PETERS, K.E., CASSA, M.R. *Applied source rock geochemistry*" In: Magoon, L.B., Dow, W.G. (eds.) **The Petroleum System - from source to trap,** **AAPG Memoir 60**, pp. 93-120. 1994.

PENNEBAKER, E. S. *An Engineering Interpretation of Seismic Data.* **SPE Paper** 2165. 1968.

PLUMB, R.; et al. *The Mechanical Earth Model Concept and Its Application to High-Risk Well 117 Construction Projects.* **IADC/SPE Drilling Conference, 2000**, New Orleans, Louisiana. Proceedings... New Orleans, Louisiana: Society of Petroleum Engineers, 2000.

PYTTE, A. M.; REYNOLDS, R. C. *The thermal transformation of smectite to illite.* In N. D. Naeser and T. H. McCulloh, editors, **Thermal History of Sedimentary Basins: Methods and Case Histories**, p. 133–140. Springer – Verlag, 1989.

QUIGLEY, T.M. et al. *Kinetic theory of petroleum generation, “Migration of hydrocarbons in sedimentary basins”*, B. Doliguez (ed.), Editions Technip, Paris, 649-665, 1987.

Rehm, B. and McClendon, R. 1973. *Measurement of formation pressure from drilling data.* artigo SPE 3601

RIBEIRO, D. A. S. **Modelagem geoquímica 2D de sistemas petrolíferos na porção sul da Bacia do Espírito Santo.** Dissertação de Mestrado. COPPE. 2011, p. 128.

ROCHA, L.A.S.; AZEVEDO, C.T. **Projeto de Poços de Petróleo.** 2<sup>a</sup> Edição. Editora Interciênciac, Rio de Janeiro. 2009.

ROHLEDER, S.A. et al. *Challenges of Drilling an Ultra-Deep Well in Deepwater – SPA prospect.* **Anais da SPE/IADC Drilling Conference**, Amsterdam, 19-21 de Fevereiro, 2003.

ROSA, A.J. et al. **Engenharia de Reservatórios de Petróleo.** Editora Interciênciac, Rio de Janeiro, 2006.

- ROSERO, S.M.A. **Modelo Geomecânico Aplicado à Análise de Estabilidade de Poços com Ênfase em Folhelhos.** Dissertação de Mestrado. Departamento de Engenharia Civil - PUC-Rio, 2013.
- ROWAN, M. G. *A systematic technique for the sequential restoration of salt structures.* **Tectonophysics**, v. 228, 1993, p. 331-348.
- SALEH, S.; WILLIAMS, K.; RIZVI, A. *Automating Pore-Pressure Prediction in Subsalt Sediments.* **Anais da Offshore Technology Conference**, Houston, Texas, 2013. OTC 24159.
- SALEH, S.; WILLIAMS, K.; RIZVI, A. *Rubble Zone Below Salt: Identification and Best Drilling Practices.* **Anais da SPE Annual Technical Conference and Exhibition**, New Orleans, Louisiana, 2013\_a. SPE 166115.
- SEYMOUR, K. P. et al. *Drilling Close to Salt Diapirs in the North Sea.* **Anais da Offshore European Conference**, Aberdeen, 1993. SPE 26693.
- SHAKER, S.S. *Causes of disparity between predicted and measured pore pressure.* **The Leading Edge**, August, 2002
- SHAKER, S.; SMITH, M. *Pore Pressure Predictions in the Challenging Supra/Sub-Salt.* **Anais da AAPG Annual Meeting**, Houston, Texas, 10-13 de Março, 2002.
- SCHNEIDER, F. et al. *Mechanical and chemical compaction model for sedimentary basin simulators.* **Tectonophysics**, 263: 307–313, 1996.
- SCHNEIDER, F.; Hay, S., *Compaction Model for Quartzose Sandstones: Application to the Garn Formation, Haltenbanken, Mid-Norwegian Continental Shelf,* **Marine and Petroleum Geology**, V. 18, Agosto de 2001, pp. 833–848.
- SCHNEIDER, F., NADEAU, P.; Hay, S. *Model of shale permeability as a function of the temperature. Application to Mesozoic mudstones, Egersund Basin, Norwegian Continental Shelf,* **EAGE 65th Conference & Exhibition**, 2003.
- SCHREIBER, B.C. *Environments of subaqueous gypsum deposition.* In: **Marine Evaporites** (Eds W.E. Dean and B.C. Schreiber), SEPM Short Course, 4, 43–143, 1978.
- SILVEIRA, B.T. (2009) **Estimativa de Pressão de Poros em 3 Dimensões.** Dissertação de mestrado em Engenharia Civil. PUC-Rio.
- SINCLAIR, T.D. *The Generation and Continued Existence of Overpressure in the Delaware Basin, Texas.* Tese de Doutorado, Departamento de Geociencias, University of Durham, 2007.
- SMITH, J.E. *The dynamics of shale compaction and evolution of pore fluid pressure.* **Mathematical Geology**, (3):239–263, 1971.

SWARBRICK, R.E.; OSBORNE, M.J. Mechanisms that Generate Abnormal Pressures. **AAPG Memoir 70**, p. 13-34, 1998.

STUNES, S. ***Methods of Pore Pressure Detection from Real-time Drilling Data***. Dissertação de Mestrado, Departamento de Engenharia de Petróleo e Geofísica Aplicada, Norwegian University of Science and Technology, 2012.

TARAZONA, D.C.M. ***Modelagem de pressão de poros para perfuração de poços de petróleo com abordagem da modelagem de bacias: Aplicação na bacia da Guajira – Colômbia***. Dissertação de Mestrado, Departamento de Engenharia Civil, PUC-Rio, 2013.

TERZAGHI, K. 1947. *Shear characteristics of quicksand and soft clay*. Proc. **7th Texas Conf. Soil Mech. and Found. Eng.**, Univ. Texas, Austin, Texas.

TORSCH, W.C. ***Thermal and pore pressure history of the haynesville shale in north Louisiana: a numerical study of hydrocarbon generation, overpressure, and natural hydraulic fractures***. Dissertação de Mestrado, Departamento de Geologia e Geofísica, Louisiana State University and Agricultural and Mechanical College. 2012.

TURNER, A. K. *Challenges and trends for geological modeling and visualization*. **Bulletin of Engineering Geology and the Environment**. v.65, n.2, 2006, p.109-127.

UNGERER, P. et al. *Geological and geomechanical models in oil exploration, principles and practical examples, “Petroleum geochemistry and basin evaluation”*, G. Demaison (ed.), **AAPG Memoir 35**, p. 53-77, 1975.

UNGERER, P. et al. *Basin evaluation by integrated two-dimensional modeling of heat transfer, fluid flow, hydrocarbon generation and migration*. **AAPG Bulletin**, 74:309–335, 1990.

VALDERRAMA CRUZ, N.V. (2009). ***Modelagem 3D de pressão de poros a partir de dados de poços***. Dissertação de Mestrado. Programa de Pós-Graduação em Engenharia Civil, PUC-Rio.

WILLSON, S. M. et al. *Wellbore Challenges in the Deep Water, Gulf of Mexico: Case History Examples from the Pompano Field*. **Anais SPE Annual Technical Conference and Exhibition**. Denver, Colorado, 2005. SPE 84266.

WILLSON, S.M.; FREDRICH, J.T. *Geomechanics considerations for through and near salt well design*. **Anais SPE Annual Technical Conference and Exhibition** Dallas, Texas, 2005. SPE 95621

YARDLEY, G.S.; SWARBRICK, R.E. *Lateral transfer: a source of additional overpressure?* **Marine and Petroleum Geology**, v. 17, 2000, p. 523-537.

YUHONG, X. *Ahead of Bit Pore Pressure Prediction using VSP - A Case Study in South China Sea. International Oil and Gas Conference and Exhibition in China*, 2010.

ZAKREVSKY, K.E. **Geological 3D Modelling**. EAGE Publications, Education Tour Series, 2011.

ZAMORA, M. *Slide Rule Correlation Aids 'd' Exponent Use. Oil and Gas Journal*, Dezembro 18, 1972.

ZILBERMAN, V. I. et al. *Prediction of Abnormally High Formation Pressures (AHFP) in petroliferous salt-bearing sections. Journal of Petroleum Science and Engineering*, v. 29, 2001, p. 17-27.

<http://www.geovariances.com/en/isatis-interfaces-with-premier-software-solutions-ru349>. Acesso em 09.11.2014.