

## REFERENCES

- [1] Annisa Aditsania, Silvy Dewi Rahmawati, Pudjo Sukarno, and Edy Soewono. Modeling and simulation performance of sucker rod beam pump. In *AIP Conference Proceedings*, volume 1677, page 080008. AIP Publishing, 2015.
- [2] Robin Beckwith et al. Pumping oil: 155 years of artificial lift. *Journal of Petroleum Technology*, 66(10):101–107, 2014.
- [3] RF Bishop, MF Flynn, MC Boscá, and R Guardiola. Paths to optimization in the multistate rayleigh-ritz variational method: Applications to the double-well quantum anharmonic oscillator. *Physical Review A*, 40(11):6154, 1989.
- [4] Richard L Burden and J Douglas Faires. Numerical analysis. *Cengage Learning*, 9, 2010.
- [5] Zi-Ming Feng, Jing-Jing Tan, Qi Li, and Xin Fang. A review of beam pumping energy-saving technologies. *Journal of Petroleum Exploration and Production Technology*, 8(1):299–311, 2018.
- [6] SG Gibbs et al. Predicting the behavior of sucker-rod pumping systems. *Journal of Petroleum Technology*, 15(07):769–778, 1963.
- [7] Boyun Guo. *Petroleum production engineering, a computer-assisted approach*. Elsevier, 2011.
- [8] Roy M Knapp. *A dynamic investigation of sucker-rod pumping*. PhD thesis, University of Kansas, 1969.
- [9] Xinfu Liu, Yaoguang Qi, Yanxiang Li, and Chunhua Liu. An approach to the design calculation of sucker rod pumping systems in coalbed methane wells. *Chinese Journal of Mechanical Engineering*, 24(2011), 2011.
- [10] S Miska, A Sharaki, and JM Rajtar. A simple model for computer-aided optimization and design of sucker-rod pumping systems. *Journal of Petroleum Science and Engineering*, 17(3-4):303–312, 1997.
- [11] V Sahni and J Gruenebaum. Rayleigh-ritz variational calculations of real-metal-surface properties. *Physical Review B*, 19(4):1840, 1979.
- [12] J Yuan and SM Dickinson. The flexural vibration of rectangular plate systems approached by using artificial springs in the rayleigh-ritz method. *Journal of Sound and Vibration*, 159(1):39–55, 1992.