

- Ali, Y. M., Saleh, D. S. N., Ayash, W. A., Ghani, S. Z., & Salih, S. A. (2020). Design and CFD Simulation of Knockout Drum. *Journal of Petroleum Research and Studies*, 10(4), 181–198. <https://doi.org/10.52716/jprs.v10i4.377>
- Aparicio, L. M., & Dumesic, J. A. (1994). Ammonia synthesis kinetics: Surface chemistry, rate expressions, and kinetic analysis. *Topics in Catalysis*, 1(3–4), 233–252. <https://doi.org/10.1007/BF01492278>
- Backhurst, J. R., Harker, J. H., Richardson, J. F., Coulson, J. M., & Chhabra, R. P. (1999). *Chemical Engineering Volume 1: Fluid Flow, Heat Transfer and Mass Transfer*. Elsevier Science.
- Brauns, J., & Turek, T. (2020). Alkaline water electrolysis powered by renewable energy: A review. *Processes*, 8(2). <https://doi.org/10.3390/pr8020248>
- Brown, T. (2016). *Engineering Economics and Economic Design for Process Engineers*. CRC Press.
- Brownell, L. E., & Young, E. H. (1959). *Brownell Process Equipment Design Handb.pdf*.
- Chi, J., & Yu, H. (2018). Water electrolysis based on renewable energy for hydrogen production. *Cuihua Xuebao/Chinese Journal of Catalysis*, 39(3), 390–394. [https://doi.org/10.1016/S1872-2067\(17\)62949-8](https://doi.org/10.1016/S1872-2067(17)62949-8)
- Christensen, P. V. (2001). Design and operation of large capacity ammonia plants. *4th Conference for Development and Integration of Petrochemical Industries in the Arab States*, 1–10.
- Couper, J. R., Penney, W. R., & Fair, J. R. (2012). *Chemical Process Equipment: Selection and Design*. Elsevier Science.
- Curran, W. C. W. (2011). *Industrial Waste Treatment Handbook*. Elsevier Science.
- Ding, S., Guo, B., Hu, S., Tian, Z., Gu, J., Zhang, T., Yang, F., & Ouyang, M. (2023). Experimental and modeling study on energy flow of 250 kW alkaline water electrolysis system under steady state conditions and cold start process. *Fuel*, 350, 128799. <https://doi.org/https://doi.org/10.1016/j.fuel.2023.128799>



Garrett, D. E. (2012). *Chemical Engineering Economics*. Springer Netherlands.

Hariramani, R. (2008). Process safety management. *Chemical Engineering World*, 43(2), 90–91. <https://doi.org/10.1201/b11720-11>

Haynes, W. M. (1942). Edition 95. In *Journal of the American Pharmaceutical Association*.

Humphreys, J., Lan, R., & Tao, S. (2021). Development and Recent Progress on Ammonia Synthesis Catalysts for Haber–Bosch Process. *Advanced Energy and Sustainability Research*, 2(1). <https://doi.org/10.1002/aesr.202000043>

Kern, D. Q. (2019). *Process Heat Transfer*. Echo Point Books and Media.

Khajuria, H. (2011). *Model-based Design, Operation and Control of Pressure Swing* Harish Khajuria. 1–203.

Khan, Z. A., Siddiquee, A. N., Kumar, B., & Abidi, M. H. (2018). *Principles of Engineering Economics with Applications*. Cambridge University Press.

Lin, B., Heng, L., Fang, B., Yin, H., Ni, J., Wang, X., Lin, J., & Jiang, L. (2019). Ammonia Synthesis Activity of Alumina-Supported Ruthenium Catalyst Enhanced by Alumina Phase Transformation. *ACS Catalysis*, 9(3), 1635–1644. <https://doi.org/10.1021/acscatal.8b03554>

Mohammed, T. (2021). *Design of Ammonia Reactor* Talal Mohammed Jassim Third Year Chemical Engineer University of Birmingham. July. <https://doi.org/10.13140/RG.2.2.23762.89289>

Olabi, A. G., Abdelkareem, M. A., Al-Murisi, M., Shehata, N., Alami, A. H., Radwan, A., Wilberforce, T., Chae, K. J., & Sayed, E. T. (2023). Recent progress in Green Ammonia: Production, applications, assessment; barriers, and its role in achieving the sustainable development goals. *Energy Conversion and Management*, 277(October 2022), 116594. <https://doi.org/10.1016/j.enconman.2022.116594>

Perry, R. H., & Green, D. W. (2008). *Perry's Chemical Engineers' Handbook, Eighth Edition* (Issue v. 8, Bag. 2008). McGraw-Hill Education.

Ramalho, R. (2012). *Introduction to Wastewater Treatment Processes*. Elsevier Science.

Rashid, M. M., Mesfer, M. K. Al, Naseem, H., & Danish, M. (2015). Hydrogen Production by

Water Electrolysis: A Review of Alkaline Water Electrolysis, PEM Water Electrolysis and High Temperature Water Electrolysis. *International Journal of Engineering and Advanced Technology*, 3, 2249–8958.

- Sánchez, M., Amores, E., Abad, D., Rodríguez, L., & Clemente-Jul, C. (2020). Aspen Plus model of an alkaline electrolysis system for hydrogen production. *International Journal of Hydrogen Energy*, 45(7), 3916–3929. <https://doi.org/10.1016/j.ijhydene.2019.12.027>
- Shamiri, A., & Aliabadi, N. (2021). Modeling and performance improvement of an industrial ammonia synthesis reactor. *Chemical Engineering Journal Advances*, 8, 100177. <https://doi.org/10.1016/j.ceja.2021.100177>
- Smith, C., Hill, A. K., & Torrente-Murciano, L. (2020). Current and future role of Haber-Bosch ammonia in a carbon-free energy landscape. *Energy and Environmental Science*, 13(2), 331–344. <https://doi.org/10.1039/c9ee02873k>
- Smith, J. M. (1950). Introduction to chemical engineering thermodynamics. In *Journal of Chemical Education* (Vol. 27, Issue 10). <https://doi.org/10.1021/ed027p584.3>
- Smith, J. M., Van Ness, H. C., & Abbott, M. M. (2001). *Introduction to Chemical Engineering Thermodynamics*. McGraw-Hill.
- Stapleton, P., & Glover, M. (2001). Environmental Management Systems : An Implementation Guide for Small and Medium-Sized Organizations Environmental Policy Management Review Continual Planning Checking / Corrective Action Implementation. *Manager*.
- Towler, G., & Sinnott, R. (2012). *Chemical Engineering Design: Principles, Practice and Economics of Plant and Process Design*. Elsevier Science.
- Ulrich, G. D. (1984). *A Guide to Chemical Engineering Process Design and Economics*. Wiley.
- Webb, D. (2008). *Large Scale Ammonia Storage and Handling*. 1–37.
- Williams, P. T. (2013). *Waste Treatment and Disposal*. Wiley.
- Yaws, C. L. (1999). Chemical Properties Handbook: Physical, Thermodynamic, Environmental, Transport, Safety, and Health Related Properties for Organic and Inorganic Chemicals. In *McGrawHill handbooks* (p. 779).