

DAFTAR PUSTAKA

- Ahad, J., Ahmad, M., Farooq, A., Siddique, W., Waheed, K., Qureshi, K. R., Shah, A., Ahmed, A., Bibi, A., & Irfan, N. (2023). Influence of throat and diverging section on the performance of venturi scrubber by using computational fluid dynamics. *Progress in Nuclear Energy*, 163, 104800.
<https://doi.org/10.1016/j.pnucene.2023.104800>
- Ausma, T., & De Kok, L. J. (2019). Atmospheric H₂S: Impact on Plant Functioning. *Frontiers in Plant Science*, 10, 743. <https://doi.org/10.3389/fpls.2019.00743>
- Basafa, M., & Hawboldt, K. (2019). Reservoir souring: Sulfur chemistry in offshore oil and gas reservoir fluids. *Journal of Petroleum Exploration and Production Technology*.
- Chan, Y. H., Lock, S. S. M., Wong, M. K., Yiin, C. L., Loy, A. C. M., Cheah, K. W., Chai, S. Y. W., Li, C., How, B. S., Chin, B. L. F., Chan, Z. P., & Lam, S. S. (2022). A state-of-the-art review on capture and separation of hazardous hydrogen sulfide (H₂S): Recent advances, challenges and outlook. *Environmental Pollution*, 314, 120219.
<https://doi.org/10.1016/j.envpol.2022.120219>
- Chattopadhyay, P. (2007). Absorption & Stripping. *Kamal Jagasia for Asian Books Pvt. Ltd.*
- Cui, G., Bhat, S. A., Li, W., Ishiguro, Y., Wei, Y., & Li, F. (2022). H₂S, MeSH, and NH₃ emissions from activated sludge: An insight towards sludge characteristics and microbial mechanisms. *International Biodeterioration & Biodegradation*, 166, 105331. <https://doi.org/10.1016/j.ibiod.2021.105331>

Dashliborun, A. M., Larachi, F., & Taghavi, S. M. (2019). Gas-liquid mass-transfer behavior of packed-bed scrubbers for floating/offshore CO₂ capture.

Chemical Engineering Journal, 377, 119236.

<https://doi.org/10.1016/j.cej.2018.06.025>

Fang, J.-J., Yang, N., Cen, D.-Y., Shao, L.-M., & He, P.-J. (2012). Odor compounds from different sources of landfill: Characterization and source identification.

Waste Management, 32(7), 1401–1410.

<https://doi.org/10.1016/j.wasman.2012.02.013>

Georgiadis, A., Charisiou, N., & Goula, M. (2020). Removal of Hydrogen Sulfide From Various Industrial Gases: A Review of The Most Promising Adsorbing Materials. *Catalysts*, 10(5), 521. <https://doi.org/10.3390/catal10050521>

He, X. (2018). A review of material development in the field of carbon capture and the application of membrane-based processes in power plants and energy-intensive industries. *Energy, Sustainability and Society*, 8(1), 34.

<https://doi.org/10.1186/s13705-018-0177-9>

Huang, K., Zhang, J.-Y., Hu, X.-B., & Wu, Y.-T. (2017). Absorption of H₂S and CO₂ in Aqueous Solutions of Tertiary-Amine Functionalized Protic Ionic Liquids. *Energy & Fuels*, 31(12), 14060–14069.

<https://doi.org/10.1021/acs.energyfuels.7b03049>

Hydrogen Sulfide H₂S Safety Data Sheet SDS P4611.pdf. (n.d.).

Jafari, M. J., Matin, A. H., Rahmati, A., Azari, M. R., Omid, L., Hosseini, S. S., & Panahi, D. (2018). Experimental optimization of a spray tower for ammonia removal. *Atmospheric Pollution Research*, 9(4), 783–790.

<https://doi.org/10.1016/j.apr.2018.01.014>

- Kang, J.-H., Yoon, Y., & Song, J. (2020). Effects of pH on the simultaneous removal of hydrogen sulfide and ammonia in a combined absorption and electro-oxidation system. *Journal of Hazardous Materials*, 382, 121011.
<https://doi.org/10.1016/j.jhazmat.2019.121011>
- Kim, K.-H. (2006). Emissions of reduced sulfur compounds (RSC) as a landfill gas (LFG): A comparative study of young and old landfill facilities. *Atmospheric Environment*, 40(34), 6567–6578.
<https://doi.org/10.1016/j.atmosenv.2006.05.063>
- Lee, W. Y., Park, S. Y., Lee, K. B., & Nam, S. C. (2020). Simultaneous Removal of CO₂ and H₂S from Biogas by Blending Amine Absorbents: A Performance Comparison Study. *Energy & Fuels*, 34(2), 1992–2000.
<https://doi.org/10.1021/acs.energyfuels.9b03342>
- Levenspiel, O. (1999). *Chemical reaction engineering* (3rd ed). Wiley.
- Li, H., Zhang, R., Wang, T., Sun, X., Hou, C., Xu, R., Wu, Y., & Tang, Z. (2022). Simulation of H₂S and CO₂ removal from IGCC syngas by cryogenic distillation. *Carbon Capture Science & Technology*, 3, 100012.
<https://doi.org/10.1016/j.ccst.2021.100012>
- Liu, W., Chu, G.-W., Luo, Y., Zhan, Y.-Y., Zhang, L.-L., & Chen, J.-F. (2019). Desulfurization of Offshore Natural Gas by Chelated Iron Solution in a HiGee Reactor: A Feasibility Study. *Industrial & Engineering Chemistry Research*, 58(24), 10629–10634. <https://doi.org/10.1021/acs.iecr.9b02630>
- Liu, X., Wang, B., Dong, X., Qiu, Y., & Meng, Q. (2021). Enhancement effect of nanofluids on the desulfurization and regeneration performance of ionic

liquid-based system. *Journal of Hazardous Materials*, 419, 126394.

<https://doi.org/10.1016/j.jhazmat.2021.126394>

Liu, X., Wang, B., Lv, X., Meng, Q., & Li, M. (2021). Enhanced removal of hydrogen sulfide using novel nanofluid system composed of deep eutectic solvent and Cu nanoparticles. *Journal of Hazardous Materials*, 405, 124271. <https://doi.org/10.1016/j.jhazmat.2020.124271>

Lu, H. T., Liu, L., Kanehashi, S., Scholes, C. A., & Kentish, S. E. (2018). The impact of toluene and xylene on the performance of cellulose triacetate membranes for natural gas sweetening. *Journal of Membrane Science*, 555, 362–368. <https://doi.org/10.1016/j.memsci.2018.03.045>

Marín, D., Vega, M., Lebrero, R., & Muñoz, R. (2020a). Optimization of a chemical scrubbing process based on a Fe-EDTA-carbonate based solvent for the simultaneous removal of CO₂ and H₂S from biogas. *Journal of Water Process Engineering*, 37, 101476. <https://doi.org/10.1016/j.jwpe.2020.101476>

Marín, D., Vega, M., Lebrero, R., & Muñoz, R. (2020b). Optimization of a chemical scrubbing process based on a Fe-EDTA-carbonate based solvent for the simultaneous removal of CO₂ and H₂S from biogas. *Journal of Water Process Engineering*, 37, 101476. <https://doi.org/10.1016/j.jwpe.2020.101476>

Mei, Y., Dai, J., Wang, X., Nie, Y., & He, D. (2021). Novel low-temperature H₂S removal technology by developing yellow phosphorus and phosphate rock slurry as absorbent. *Journal of Hazardous Materials*, 413, 125386. <https://doi.org/10.1016/j.jhazmat.2021.125386>

- Rava, E., Schoeman, J. J., Allison, P. J., & Dilsook, V. (2019). Management of hydrogen sulphide generation at a Kraft mill effluent plant. *Water SA*, 34(2), 245. <https://doi.org/10.4314/wsa.v34i2.183645>
- Reátegui-Romero, W., Castillejo-Melgarejo, F., & King-Santos, M. E. (2019). Industrial Manufacturing of Aqueous Solutions of Sodium Sulphhydrate (NaHS 43%) in a Multi-Phase Reactor. *The Open Chemical Engineering Journal*, 13(1), 46–67. <https://doi.org/10.2174/1874123101913010046>
- Schiavon Maia, D. C., Niklevicz, R. R., Arioli, R., Frare, L. M., Arroyo, P. A., Gimenes, M. L., & Pereira, N. C. (2017). Removal of H₂S and CO₂ from biogas in bench scale and the pilot scale using a regenerable Fe-EDTA solution. *Renewable Energy*, 109, 188–194. <https://doi.org/10.1016/j.renene.2017.03.023>
- Sun, M., Wang, X., Zhao, Z., & Qiu, J. (2022). Review of H₂S selective oxidation over carbon-based materials at low temperature: From pollutant to energy storage materials. *New Carbon Materials*, 37(4), 675–694. [https://doi.org/10.1016/S1872-5805\(22\)60622-X](https://doi.org/10.1016/S1872-5805(22)60622-X)
- Tian, X., Wang, L., & Fu, D. (2019). Absorption and Removal Efficiency of Low-Partial-Pressure H₂S in a Tetramethylammonium Glycinate Activated N-Methyldiethanolamine Aqueous Solution. *Energy & Fuels*, 33(9), 8413–8422. <https://doi.org/10.1021/acs.energyfuels.9b01983>
- Tian, X., Wang, L., Zhang, P., Fu, D., & Wang, Z. (2021). A high efficient absorbent for the separation of H₂S from low partial pressure coke oven gas. *Environmental Science and Pollution Research*, 28(5), 5822–5832. <https://doi.org/10.1007/s11356-020-10968-w>

- Üresin, E., Saraç, H. İ., Sarıoğlu, A., Ay, Ş., & Akgün, F. (2015). An experimental study for H₂S and CO₂ removal via caustic scrubbing system. *Process Safety and Environmental Protection*, 94, 196–202.
<https://doi.org/10.1016/j.psep.2014.06.013>
- Vallejos, M. E., Olmos, G. V., Taleb, M. C., Felissia, F. E., Ehman, N. V., Peresin, M. S., Area, M. C., & Maximino, M. G. (2022). Dissolving pulp from eucalyptus sawdust for regenerated cellulose products. *Cellulose*, 29(8), 4645–4659.
<https://doi.org/10.1007/s10570-022-04581-y>
- Wang, B., Cheng, J., Wang, D., Li, X., Meng, Q., Zhang, Z., An, J., Liu, X., & Li, M. (2020). Study on the Desulfurization and Regeneration Performance of Functional Deep Eutectic Solvents. *ACS Omega*, 5(25), 15353–15361.
<https://doi.org/10.1021/acsomega.0c01467>
- Wang, M., Lawal, A., Stephenson, P., Sidders, J., & Ramshaw, C. (2011). Post-combustion CO₂ capture with chemical absorption: A state-of-the-art review. *Chemical Engineering Research and Design*, 89(9), 1609–1624.
<https://doi.org/10.1016/j.cherd.2010.11.005>
- Wang, Y., Liu, Y., & Wang, Y. (2020). Oxidation absorption of hydrogen sulfide from gas stream using vacuum ultraviolet/H₂O₂/urea wet scrubbing system. *Process Safety and Environmental Protection*, 140, 348–355.
<https://doi.org/10.1016/j.psep.2020.05.025>
- Wang, Y., Liu, Y., & Xu, J. (2019). Separation of hydrogen sulfide from gas phase using Ce³⁺/Mn²⁺-enhanced fenton-like oxidation system. *Chemical Engineering Journal*, 359, 1486–1492.
<https://doi.org/10.1016/j.cej.2018.11.028>

- Wang, Y., Wang, Z., & Liu, Y. (2018). Oxidation Absorption of Gaseous H₂S Using Fenton-Like Advanced Oxidation Systems. *Energy & Fuels*, 32(11), 11289–11295. <https://doi.org/10.1021/acs.energyfuels.8b02657>
- Wu, H., Zhu, Y., Bian, S., Ko, J. H., Li, S. F. Y., & Xu, Q. (2018). *H₂S adsorption by municipal solid waste incineration (MSWI) fly ash with heavy metals immobilization*.
- Yong, W. F., & Zhang, H. (2021). Recent advances in polymer blend membranes for gas separation and pervaporation. *Progress in Materials Science*, 116, 100713. <https://doi.org/10.1016/j.pmatsci.2020.100713>
- Zhan, J., Wang, B., Zhang, L., Sun, B.-C., Fu, J., Chu, G., & Zou, H. (2020). Simultaneous Absorption of H₂S and CO₂ into the MDEA + PZ Aqueous Solution in a Rotating Packed Bed. *Industrial & Engineering Chemistry Research*, 59(17), 8295–8303. <https://doi.org/10.1021/acs.iecr.9b06437>
- Zhang, C., Wang, X., Liu, H., Liu, C., Li, S., Xue, J., & Zeng, X. (2020). Development and application of modified lye for treating hydrogen sulphide in coal mine. *Fuel*, 269, 117233. <https://doi.org/10.1016/j.fuel.2020.117233>
- Zhang, M., Liu, Z., Pan, B., Iglauer, S., & Jin, Z. (2023). Molecular simulation on CO₂/H₂S co-adsorption in organic and inorganic shale nanopores. *Applied Surface Science*, 624, 157167. <https://doi.org/10.1016/j.apsusc.2023.157167>