

7. References

- [1] S. Ladanai and J. Vinterbäck, “Global Potential of Sustainable Biomass for Energy.”
- [2] IEA, “IEA Energy Technology Essentials - Biomass for Power Generation and CHP,” *High Temp.*, pp. 1–4, 2007.
- [3] R. Mehrabian, A. Shiehnejadhesar, R. Scharler, and I. Obernberger, “Multi-physics Modeling of Packed Bed Biomass Combustion,” *Fuel*, vol. 122, pp. 164–178, 2014.
- [4] N. Duffy, “Investigation of Biomass Combustion in Grate Furnaces using CFD,” *02.03.01_CombustionBiomass*, no. December, 2012.
- [5] H. Khodaei, Y. M. Al-Abdeli, F. Guzzomi, and G. H. Yeoh, “An overview of processes and considerations in the modelling of fixed-bed biomass combustion,” *Energy*, vol. 88, pp. 946–972, 2015.
- [6] S. Ranasinghe, “Promoting Sustainable Biomass Energy Production and Modern Bio-Energy Technologies.”
- [7] R. P. Van Der Lans, L. T. Pedersen, A. Jensen, P. Glarborg, and K. Dam-Johansen, “Modelling and experiments of straw combustion in a grate furnace,” *Biomass and Bioenergy*, vol. 19, no. 3, pp. 199–208, 2000.
- [8] D. Vortmeyer and R. J. Schaefer, “Equivalence of one- and two-phase models for heat transfer processes in packed beds: one dimensional theory,” *Chem. Eng. Sci.*, vol. 29, no. 2, pp. 485–491, 1974.
- [9] J. S. Ryan and W. L. H. Hallett, “Packed bed combustion of char particles: Experiments and an ash model,” *Chem. Eng. Sci.*, vol. 57, no. 18, pp. 3873–3882, 2002.
- [10] H. Zhou, A. D. Jensen, P. Glarborg, P. A. Jensen, and A. Kavaliauskas, “Numerical modeling of straw combustion in a fixed bed,” *Fuel*, vol. 84, no. 4, pp. 389–403, 2005.
- [11] W. Yang, C. Ryu, and S. Choi, “Unsteady one-dimensional model for a bed combustion of solid fuels,” *Proc. Inst. Mech. Eng. Part A J. Power Energy*, vol. 218, no. 8, pp. 589–598, 2004.
- [12] R. Mehrabian Bardar, “CFD Simulation of the Thermal Conversion of Solid Biomass in Packed Bed Furnaces by Ramin Mehrabian Bardar,” no. November, 2013.
- [13] L. Shan *et al.*, “Studies on combustion behaviours of single biomass particles using

- a visualization method," *Biomass and Bioenergy*, vol. 109, no. September 2017, pp. 54–60, 2018.
- [14] J. Porteiro, J. L. Míguez, E. Granada, and J. C. Moran, "Mathematical modelling of the combustion of a single wood particle," *Fuel Process. Technol.*, vol. 87, no. 2, pp. 169–175, 2006.
 - [15] S. Kumar and S. Dasappa, "Modeling and analysis of single particle conversion of biomass in a packed bed gasification system," vol. 112, pp. 1382–1395, 2017.
 - [16] J. Cooper and W. L. H. Hallett, "A numerical model for packed-bed combustion of char particles," *Chem. Eng. Sci.*, vol. 55, no. 20, pp. 4451–4460, 2000.
 - [17] D. Shin and S. Choi, "The combustion of simulated waste particles in a fixed bed," *Combust. Flame*, vol. 121, no. 1–2, pp. 167–180, 2000.
 - [18] H. Ström, S. Sasic, and H. Thunman, "Challenges and opportunities in the Eulerian approach to numerical simulations of fixed-bed combustion of biomass," *Procedia Eng.*, vol. 102, pp. 1573–1582, 2015.
 - [19] J. K. A. T. Rajika and M. Narayana, "Modelling and simulation of wood chip combustion in a hot air generator system," *Springerplus*, vol. 5, no. 1, 2016.
 - [20] M. A. Gómez, J. Porteiro, D. Patiño, and J. L. Míguez, "CFD modelling of thermal conversion and packed bed compaction in biomass combustion," *Fuel*, vol. 117, pp. 716–732, 2014.
 - [21] A. Srivivasan, "One-Dimensional Pseudo-Homogeneous Packed Bed Reactor Modeling Including No-Co Kinetics," p. 206, 2011.
 - [22] K. Kwiatkowska and P. Zukb, "Biomass gasification solver based on OpenFOAM," *Comput. Phys. Commun.*, no. November, pp. 1–29, 2013.
 - [23] T. Jurena, *Numerical modelling of grate combustion Ph.D. Thesis*. 2012.
 - [24] N. Fernando and M. Narayana, *A comprehensive two dimensional Computational Fluid Dynamics model for an updraft biomass gasifier*, vol. 99. Elsevier Ltd, 2016.
 - [25] N. Wakao and S. Kaguei, "Heat and mass transfer in packed beds," vol. 1, p. 18, 1983.
 - [26] F. Grinnell, *Second Edition*. 2018.