

Chem., 46, pp. 356–363. <https://doi.org/10.1016/j.jiec.2016.11.004>.

6 Zhang Y., Nahil M.A., Wu C., Williams P.T. (2017) Pyrolysis–catalysis of waste plastic using a nickel–stainless-steel mesh catalyst for high-value carbon products, *Environ. Technol. (United Kingdom)*, 38, pp. 2889–2897. <https://doi.org/10.1080/09593330.2017.1281351>.

7 Ragaert K., Delva L., Geem K. Van. (2017) Mechanical and chemical recycling of solid plastic waste, *Waste Manag.*, 69, pp. 24–58. <https://doi.org/10.1016/j.wasman.2017.07.044>.

8 Munir D., Irfan M.F., Usman M.R. (2018) Hydrocracking of virgin and waste plastics: A detailed review, *Renew. Sustain. Energy Rev.*, 90, pp. 490–515. <https://doi.org/10.1016/j.rser.2018.03.034>.

9 Weitkamp J. (2012) Catalytic Hydrocracking-Mechanisms and Versatility of the Process, *ChemCatChem.*, 4, pp. 292–306. <https://doi.org/10.1002/cctc.201100315>.

10 Mir R.A., Pandey O.P. (2019) Waste plastic derived carbon supported Mo<sub>2</sub>C composite catalysts for hydrogen production and energy storage applications. *J. Clean. Prod.*, 218, pp. 644–655. <https://doi.org/10.1016/j.jclepro.2019.02.004>.

11 Munir D., Abdullah, Piepenbreier F., Usman M.R. (2017) Hydrocracking of a plastic mixture

over various micro-mesoporous composite zeolites, *Powder Technol.*, 316, pp. 542–550. <https://doi.org/10.1016/j.powtec.2017.01.037>.

12 Wong S.L., Ngadi N., Abdullah T.A.T., Inuwa I.M. (2015) Current state and future prospects of plastic waste as source of fuel: A review. *Renew. Sustain. Energy Rev.*, 50, pp. 1167–1180. <https://doi.org/10.1016/j.rser.2015.04.063>.

13 Aubakirov Y.A., Sassykova L.R., Tashmukhambetova Z.K., Akhmetova F.Z., Sendilvelan S., Sharipov K.O., Kubekova S.N., Batyrbayeva A.A., Azhigulova R.N., Ryskaliyeva R.G., Zhussupova A.K., Abildin T.S. (2019) Thermo-catalytic processing of polymer waste over catalysts on the basis of natural zeolite from the tayzhuzgen field (Kazakhstan) modified by molybdenum, *Rasayan J. Chem.*, 12, pp. 1701–1709. <https://doi.org/10.31788/RJC.2019.1245435>.

14 Li J., Liu X., Han Q., Yao X., Wang X. (2013) Formation of WO<sub>3</sub> nanotube-based bundles directed by NaHSO<sub>4</sub> and its application in water treatment. *J. Mater. Chem. A.*, 1, pp. 1246–1253. <https://doi.org/10.1039/c2ta00382a>.

15 Wdowin M., Franus M., Panek R., Badura L., Franus W. (2014) The conversion technology of fly ash into zeolites. *Clean Technol. Environ. Policy.*, 16, pp. 1217–1223. <https://doi.org/10.1007/s10098-014-0719-6>.