

## **Research Publications**

### ***Submitted/Revisions Submitted***

1. Iqbal, A., Akhtar, J., Sheikh, N., Ahmad, N., **Munir, S.**, Compressive Strength and Thermal Conductivity of Fly Ash Cement Blocks. Journal of the Pakistan Institute of Chemical Engineers
2. Asghar, H., Akhtar, J., Sheikh, N., **Munir, S.**, Agglomeration of Pakistani Coal using n-heptane. Journal of the Pakistan Institute of Chemical Engineers
3. Rana, Q., Arif, R., Shahzad, K., Akhtar, J., **Munir, S.**, Upgradation of Mianwali Coal Using Froth Flotation and Nitric Acid Leaching. International Journal of Oil, Gas and Coal Technology (Revisions Submitted)

### ***Published***

1. Ayoub G., Akhtar, J., Rana, M., Qasim, M., Sheikh, N., **Munir, S.**, (2017), Investigation of forestry wastes: Torrefaction and their thermal properties for use in energy recovery schemes, Energy Sources, Part A: Recovery, Utilization and Environmental Effects, (U.K.), Pages 100-107.
2. Ilyas, M., Akhtar, J., **Munir, S.**, (2017), Reverse flotation of cut-of-grade of Lakhra coal, Energy Sources, Part A: Recovery, Utilization and Environmental Effects, (U.K.), Pages 1999-2005.
3. Khan, A., Akhtar, J., Shahzad, K., Sheikh, N., **Munir, S.**, (2017) Co-pyrolysis and hydrogenation of waste tires and tar coal blends, Energy Sources, Part A: Recovery, Utilization and Environmental Effects, (U.K.), 39(15):1-7.
4. Zara, M., Ahmad, Z., Akhtar, J., Shahzad, K., Sheikh, N., **Munir, S.**, (2017) Extraction and characterization of humic acid from Pakistani lignite coals, Energy Sources, Part A: Recovery, Utilization and Environmental Effects, (U.K.), Pages 1159-1166.
5. Kanwal, S., Sana, H., Nawaz, S., **Munir, S.**, (2017) Influence of Relative Humidity and Temperature on Grindability of Pakistani and Afghani Coals, The Journal of Energy and Environmental Science, 132 (2017) 663-668
6. Iram, S., Akhtar, J., Sheikh, N., & **Munir, S.** (2017). Oxidative Desulphurization of Chakwal Coal using  $KMnO_4$ ,  $FeSO_4$  and Sodium Hypochlorite. Energy Sources, Part A: Recovery, Utilization, and Environmental Effects Pages 426-432.
7. Sana, H., Kanwal, S., Akhtar, J., Nawaz, S., Sheikh, N., **Munir, S.**, (2017) Evaluation of Washability Characteristics of Khushab Coal (Pakistan) by Heavy Media Separation. Energy & Environment. Volume: 28 issue: 5-6, page(s): 598-607
8. Akhtar, J., Sheikh, N., **Munir, S.**, (2017) Linear regression based correlations for estimation of high heating values of Pakistani Lignite coals, Energy Sources, Part A: Recovery, Utilization, and Environmental Effects
9. Sana, H., Kanwal, S., Akhtar, J., Haider, R., **Munir, S.**, (2017) Production of ethanol and bio-chars from Pakistani ligno-cellulosic biomasses, Energy Sources Part A Recovery Utilization and Environmental Effects, (U.K.), Pages 465-472.

10. **Munir, S.**, Sattar, H., Azam, M., & Nadeem, A. (2016). Thermal and Kinetics Analysis of Corn Cobs, Falsa Sticks and Chamalang Coal under Oxidizing and Inert Atmosphere. *Energy Sources, Part A: Recovery, Utilization, and Environmental Effects*.
11. Mustafa, A., Ahmad, T., Akhtar, J., Shahzad, K., Sheikh, N., & **Munir, S.** (2016). Agglomeration of Makarwal coal using soybean oil as agglomerant. *Energy Sources, Part A: Recovery, Utilization, and Environmental Effects*, 38(24), 3733-3739.
12. Azam, S., Akhtar, J., Mushtaq, S., Sheikh, N., & **Munir, S.** (2016). Cleaning of Pakistani low-grade coal by agglomeration. *Energy Sources, Part A: Recovery, Utilization, and Environmental Effects*, 38(16), 2462-2470.
13. Sana, H., Kanwal, S., Akhtar, J., Haider, R., Nawaz, S., Sheikh, N., & **Munir, S.** (2016). Bio Ethanol Production from Ligno-Cellulosic Biomass (Rice Hulls and Wheat Straw) and Chemical Characterization of Pyrolysed Bio Chars. *Energy Sources, Part A: Recovery, Utilization, and Environmental Effects* (<http://dx.doi.org/10.1080/15567036.2016.1225138>)
14. Akhtar, J., Rehman, S., Sheikh, N., & **Munir, S.** (2016). Agglomeration of Pakistani coal (Lakhra) using diesel oil. *Energy Sources, Part A: Recovery, Utilization, and Environmental Effects*, 38(21), 3144-3149.
15. Wahab, A., Nawaz, S., Shahzad, K., Akhtar, J., Kanwal, S., **Munir, S.**, & Sheikh, N. (2015). Desulfurization and demineralization of Lakhra coal by molten caustic leaching. *Energy Sources, Part A: Recovery, Utilization, and Environmental Effects*, 37(11), 1219-1223.
16. Rizvi, A. H., Daood, S. S., Javed, M. T., **Munir, S.**, Pourkashanian, M., & Nimmo, W. (2015). Reactivity Analysis of Pakistani Thar Lignite Reserves in oxidizing Thermogravimetric Analysis Atmospheres. *Energy & Fuels*, 29(8), 5349-5360.
17. Rafaqat, U., Akhtar, J., Sheikh, N. U., & **Munir, S.** (2015). Cleaning of Dukki (Baluchistan) coal by oil agglomeration process. *International Journal of Oil, Gas and Coal Technology*, 9(1), 79-88.
18. Shahzad, K., Kanwal, S., Nawaz, S., Sheikh, N., & **Munir, S.** (2014). Effects of moisture and coal blending on the Hardgrove grindability index of Pakistani coals. *International Journal of Coal Preparation and Utilization*, 34(1), 1-9.
19. **Munir, S.**, Nimmo, W., & Gibbs, B. (2011). The effect of air staged, co-combustion of pulverised coal and biomass blends on NOx emissions and combustion efficiency. *Fuel*, 90(1), 126-135.
20. **Munir, S.**, Nimmo, W., & Gibbs, B. M. (2010). Air and Fuel Staged Co-Combustion of Coal with Biomass in Power Station Boilers. *Journal of Quality and Technology Management*, VI(II), 81-111.
21. **Munir, S.**, Nimmo, W., & Gibbs, B. (2010). Potential slagging and fouling problems associated with biomass-coal blends in coal-fired boilers. *Journal of Pakistan Institute of Chemical Engineers*. Vol. 38, 1, 26.

22. **Munir, S.**, Nimmo, W., & Gibbs, B. (2010). Biomass as potential reburn fuel in coal-fired boilers. *Journal of Quality and Technology Management*, VI(II), 43-79.
23. **Munir, S.**, Nimmo, W., & Gibbs, B. (2010). Shea meal and cotton stalk as potential fuels for co-combustion with coal. *Bioresource Technology*, 101(19), 7614-7623.
24. **Munir, S.**, Nimmo, W., & Gibbs, B. (2010). Co-combustion of agricultural residues with coal: turning waste into energy. *Energy & Fuels*, 24(3), 2146-2153.
25. **Munir, S.** (2010). A review on Biomass-Coal Co-combustion: current state of knowledge. *Proceedings of Pakistan Academy of Sciences*, 47(4), 265-287.
26. Daood, S. S., **Munir, S.**, Nimmo, W., & Gibbs, B. M. (2010). Char oxidation study of sugar cane bagasse, cotton stalk and Pakistani coal under 1% and 3% oxygen concentrations. *biomass and bioenergy*, 34(3), 263-271.
27. **Munir, S.**, Daood, S. S., Ul Hassan Rizvi, S. Z., & Butt, M. A. (2009). Development of an Inclined Plate Extractor-Separator for Immiscible Liquids. *Energies*, 2(4), 957-975.
28. **Munir, S.**, Daood, S., Nimmo, W., Cunliffe, A., & Gibbs, B. (2009). Thermal analysis and devolatilization kinetics of cotton stalk, sugar cane bagasse and shea meal under nitrogen and air atmospheres. *Bioresource Technology*, 100(3), 1413-1418.
29. **Munir, S.**, Akhtar, N., Nimmo, W., & Gibbs, B. (2009). NO<sub>x</sub> formation during combustion process and in-furnace control technologies. *Journal of Pakistan Institute of Chemical Engineers*, 37, 13-21.
30. Daood, S. S., **Munir, S.**, Akhtar, N. A., & Butt, M. A. (2007). Effect of operating parameters on extraction in sieve plate pulsed extraction column. *Proceedings of Pakistan Academy of Sciences*, 44, 189-195.

### **Book Published**

Published book titled “Co-combustion of Coal with Biomass: Energy for a Clean Environment”  
**Publisher:** VDM Verlag Dr. Müller, **ISBN-13:** 978-3639327984