

## CONTRIBUTION TO SCIENTIFIC LITERATURE

### Publications

1. Iqbal, A., Sattar, H., **Haider, R.**, Munir, S., **2019**. *Synthesis and Characterization of Pure Phase Zeolite A4 from Coal Fly Ash*. Journal of Cleaner Production 219, 258-267.
2. Liu, F., Guo, H., Wang, Q., **Haider, R.**, Urynowicz, M., Fallgren, F., Jin, S., Tang, M., Chen, B., Huang, Z., **2019**. *Characterization of organic compounds from hydrogen peroxide-treated subbituminous coal and their composition changes during microbial methanogenesis*. Fuel 237, 1290-1216
3. **Haider, R.**, Ghauri, M. A., Rahim, M. U., **2018**. *On Comparison between Fungal and Bacterial Pretreatment of Coal for Enhanced Biogenic Methane Generation*. Geomicrobiology Journal 35 (5), 432-437
4. Sana, H., **Haider, R.**, Rahim, M. U., Munir, S., **2018**. *Effect of Complexing Agents on Desulphurization and Deashing of Coal by H<sub>2</sub>O<sub>2</sub>/H<sub>2</sub>SO<sub>4</sub> Leaching*. Energy & Environment 29(7), 1142-1154
5. Guo, H., Wang, Q., Urynowicz, M. A., Fallgren, P., Jin, S., **Haider, R.**, Huang, Z., **2018**. *Microbial Communities involved in Methane Production from Coal treated by Potassium Permanganate*. Aspects in Mining & Mineral Science 1 (3), 1-5.
6. **Haider, R.**, **2017**. *Enhancing Biogenic Coalbed Methane Generation: Accomplishments*. Energy Sources, Part A: Recovery, Utilization, and Environmental Effects 39 (22), 2087-2089
7. **Haider, R.**, **2017**. *Coal Degradation through Fungal Isolate RHC2 from Romanian Brown Coal Sample*. Energy Sources, Part A: Recovery, Utilization, and Environmental Effects 39 (16) 1785-1790
8. **Haider, R.**, Rahim, M. U., **2017**. *Biogenic Methane Generation from Pakistani Bituminous Coal Samples*. Energy Sources, Part A: Recovery, Utilization, and Environmental Effects 39 (11), 1658-1663
9. Sana, H., Kanwal, S., Akhtar, J., **Haider, R.**, Nawaz, S., Sheikh, N., & Munir, S., **2017**. *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 39 (5), 465-472

10. **Haider, R.**, Ghauri, M.A., Akhtar, K., **2015**. *Isolation of Coal Degrading Fungus from Drilled Core Coal Sample and Effect of Prior Fungal Pretreatment on Chemical Attributes of Extracted Humic Acid*. Geomicrobiology Journal 32(10), 944-953
11. **Haider, R.**, Ghauri, M.A., **2015**. *Geo-Microbial Niches: The Control Rooms for Securing Energy Access*. Fuel 153(C), 717-719
12. **Haider, R.**, Ghauri, M.A., Jones, E.J., Orem, W.H., SanFilipo, J.R., **2015**. *Structural Degradation of Thar Lignite using MW1 Fungal Isolate – Optimization Studies*. International Biodeterioration & Biodegradation 100, 149-154
13. **Haider, R.**, Ghauri, M.A., Jones, E.J., SanFilipo, J.R., **2014**. *Methane Generation Potential of Thar Lignite Samples*. Fuel Processing Technology 126, 309-314
14. **Haider, R.**, Ghauri, M.A., Shahzad, K., SanFilipo, J.R., Jones, E.J., **2014**. *Analytical Investigations of Liberated Organics after Biodegradation of Lignite Samples*. Journal of Pakistan Institute of Chemical Engineers 42(2), 101-106
15. Khurram, M.S., Shahzad, K., Ahmed, A., **Haider, R.**, Ghauri, M., **2014**. *Kinetic Study of Metal-EDTA Complex Formation and Metal-to-Metal Exchange*. Journal of Pakistan Institute of Chemical Engineers 42(2), 91-99
16. **Haider, R.**, Ghauri, M.A., SanFilipo, J.R., Jones, E.J., Orem, W.H., Tatu, C.A., Akhtar, K., Akhtar, N., **2013**. *Fungal Degradation of Coal as a Pretreatment for Methane Production*. Fuel 104, 717-725
17. Ghauri, M. A., Anwar, M.A., Akhtar, N., **Haider, R.**, Tawab, A., **2009**. *Status of Coal Biotechnology in Pakistan*. Advanced Materials Research 71-73, 513-516

## **Book**

1. ***Biogenic Methane Generation from Low Rank Coals (with special reference to Thar coalfield, Pakistan)***  
 ISBN: 978-3-330-33307-9  
 Category: Geosciences  
 Published on: 28-Jun-2017  
 LAP LAMBERT Academic Publishing, Germany

## **Contributions to National Press/Public Awareness Activities**

1. ***Embarking on an Energy Age***, Sci-tech World, Dawn Newspaper, 10/01/2009
2. ***Coal Biotechnology***, Dawn Economic and Business Review, Dawn, 10/03/2008
3. ***DME-The New Fuel Option***, Sci-tech World, Dawn Newspaper, 12/08/2006
4. ***Let there be Light***, Sci-tech World, Dawn Newspaper, 17/06/2006
5. ***Tapping our Prime Resources***, Sci-tech World, Dawn Newspaper, 15/04/2006
6. ***Biotechnology of Coal and Bioprocessing***, Sci-tech World, Dawn Newspaper, 18/02/2006
7. ***Pollution Free Fuels***, Sci-tech World, Dawn Newspaper, 12/01/2006