

Curriculum Vitae

Personal information

Name: **Khadim Hussain**

Address: Village & P.O Tarakai, Tehsil
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K .P. K, Pakistan

E-mail: **hkhadim36@yahoo.com**

Date of birth: 10 Jan, **1982**

Nationality: Pakistani

Marital Status: Single

Contact No: 0092- 3333636491



Educational background

Degree/ Certificate held	Year of award	Field	Institution	Marks	
				Total	Obtained
PhD	2018	Analytical chemistry	Hazarauniversity mansehra	600	460
M.phil	2011	Analytical chemistry	Hazarauniversity mansehra	800	570
M.Sc	2005	Analytical chemistry	Institute of Chemical Sciences, University of Peshawar	1200	709
B.Sc	2003	Medical	Institute of Chemical Sciences, University of Peshawar	550	330
F.Sc	2000	Pre-Medical	Govt. Post Graduate College swabi	1100	612
Matric	1998	Science	Govt. High School Tarakai, swabi.	850	533

Field of interest:

(I) LIQUEFACTION OF COAL AND OTHER WASTE MATERIALS INTO USEFUL PRODUCTS USING MICROWAVES

(ii) INVESTIGATION OF NEW METHODES FOR THE CONVERSION OF BIOMASS INTO USEFUL FUEL AND HYDROCARBONS

Courses in M. Phil:

- (1) Solution chemistry
- (2) Special Topics in Analytical chemistry
- (3) Advance Instrumental Techniques
- (4) Polymer chemistry
- (5) Organometalics
- (6) Special Topics in inorganic chemistry
- (7) Advance Molecular spectroscopy
- (8) Nuclear Technology

Courses in PhD:

- (1) Physical chemistry of high polymer
- (2) Advance analytical techniques
- (3) Composite materials
- (4) Environmental chemistry
- (5) Thermal method of analysis
- (6) Advance crystallography

Teaching experience

- (I) Teaching of chemistry at Under Graduate / Graduate Level.
- (II) Teaching of chemistry at university Level.

Courses studied at M.Sc level

- ❖ Environmental chemistry
- ❖ Chromatographic and Electro analytical Techniques
- ❖ Spectroscopy and Electronics
- ❖ Inorganic chemistry
- ❖ Organic chemistry
- ❖ Physical chemistry
- ❖ Analytical chemistry

International publications:

1. **Hussain K**, Bashir N, Hussain Z, Naz MY, Sulaiman SA, Ghaffar A, Khan KM. Production of highly upgraded bio-oil by microwave–metal interaction pyrolysis of biomass in a copper coil reactor. *International Journal of Green Energy*. 2018 Oct 12:1-8.
2. Bashir N, **Hussain K**, Hussain Z, Naz MY, Ibrahim KA, Abdel-Salam NM. Effect of metal coil on product distribution of highly upgraded bio-oil produced by microwave-metal interaction pyrolysis of biomass. *Chemical Engineering and Processing-Process Intensification*. 2018 Jun 15.
3. Gulab, H., **Hussain, K.**, Malik, S. and Hussain, M., 2018. Effect of Process Conditions on Bio-oil Composition and Production from Catalytic Pyrolysis of Water Hyacinth Biomass. *Waste and Biomass Valorization*, pp.1-15.
4. **Hussain, K.**, Bashir, N., Hussain, Z. and Sulaiman, S.A., 2017. Cement catalyzed conversion of biomass into upgraded bio-oil through microwave metal interaction pyrolysis in aluminum coil reactor. *Journal of Analytical and Applied Pyrolysis*.
5. Hussain, Z., Bashir, N., Khan, M.I., **Hussain, K.**, Sulaiman, S.A., Naz, M.Y., Ibrahim, K.A. and Abdel-Salam, N.M., 2017. Production of highly upgraded bio-oils through two-step catalytic pyrolysis of water hyacinth. *Energy & Fuels*, 31(11), pp.12100-12107.
6. Hussain, Z., **Hussain, K.**, Sulaiman, S.A., Naz, M.Y., Ibrahim, K.A. and Abdel-Salam, N.M., Preparation of upgraded bio-oil using two-step catalytic pyrolysis of fresh, putrefied, and microbe-treated biomass. *Environmental Progress & Sustainable Energy*.
7. **Khadim Hussain**, Zahid Hussain, Hussain Gulab, Fazal Mabood, Khalid Mohammad Khan, Shahnaz Perveen and Mohammad Hassan Bin Khalid (2016). Production of fuel by co-pyrolysis of Makarwal coal and waste polypropylene through a hybrid heating system of convection and microwaves. *International journal of Energy Research*. 40 No 11, S 1532–1540.
8. Hussain Gulab, **Khadim Hussain**, Shahi Malik, Zahid Hussain, Zarbad Shah (2016). Catalytic co-pyrolysis of EischhorniaCrassipesbiomass and polyethylene using waste Fe and CaCO₃ catalysts. *International Journal of Energy*. 40, No 7, 940–951.
9. **K. Hussain** et al (2016). "Development of new UV–vis spectroscopic microwave-assisted method for determination of glucose in pharmaceutical samples." *SpectrochimicaActa Part A: Molecular and Bio-molecular Spectroscopy* 153: 212-215.
10. Gulab, Hussain; Jan, Fazal Akbar; **Hussain, Khadim**; Khan, M. Tahir; Hussain, Syed Hamid(2015) A case study evaluating water and salts removal capabilities of different brands of commercially available demulsifiers from slope oil emulsions. *Academic Journal Petroleum & Coal*; Vol. 57 Issue 5, p470
11. Zahid Hussain, Khalid Mohammad Khan and **Khadim Hussain** (2014). Microwave metal Interaction pyrolysis of waste polystyrene in copper coil reactor. Part A: Recovery, Utilization, and Environmental Effects. Volume 36, (18).
12. Zahid Hussain, **Khadim Hussain**, Khalid Mohammed Khan and Shahnaz Perveen (2013). The Disposal of Waste Low Density Polyethylene by Co- Liquefaction with Coal by Microwave Metal Interaction Pyrolysis in a Copper Coil Reactor. *J. Chem. Soc. Pak* 35, (1).
13. Zahid Hussain, Khalid Mohammad Khan and **Khadim Hussain** (2012). The conversion of waste polystyrene into useful hydrocarbons by Microwave metal interaction pyrolysis. *Fuel processing technology* 94(1).
14. Nadia Bashir, **Khadim Hussain**, Khalid Mohammad Khan, and Zahid Hussain (2012). A New Method for the Co-Liquefaction of Coal and Waste Tyre Rubber into Useful Products Using Microwave Metal Interaction Pyrolysis. *J. Chem. Soc. Pak*, 34 (1).

15. Zahid Hussain, Khalid Mohammad Khan, **Khadim Hussain**, Sadam Hussain and Shahnaz perveen (2011). Microwave spark emission spectroscopy for the analysis of cations: A simple form of atomic emission spectroscopy. Chinese Chemical Letters Vol 22 Issue 9.
16. Zahid Hussain, Khalid Mohammad Khan, Nadia Bashir and **Khadim Hussain** (2011). Co Liquifaction of Makarwal Coal and Waste polystyrene By Microwave metal interaction pyrolysis in copper coil reactor. Journal of Analytical and Pyrolysis Vol 90, Issue 1.
17. Zahid Hussain, Khalid Mohammad Khan, **Khadim Hussain** and Shahnaz perveen (2010). Preparation of a novel rechargeable storage battery using protein for the storage of Electricity. J. Chem. Soc. Pak Chem. Soc. Pak Vol 32, No 6.
18. Nadia Bashir, **Khadim Hussain**, Khalid Mohammad Khan, and Zahid Hussain (2010). Liquifaction of Makarwal Coal by Microwave metal interaction pyrolysis. J. Chem. Soc. Pak 32, 6.
19. Nadia Bashir, Zahid Hussain, **Khadim Hussain**, Khalid Mohammed Khan and Shahnazperveen, (2010). Gas chromatographic-Mass Spectrometric Analysis of the Products Obtained by Microwave-Metal Interaction Pyrolysis of Coal. J. Chem. Soc. Pak, 31, 6.
20. Zahid Hussain, Khalid Mohammad Khan and **Khadim Hussain** (2010). Microwave Metal Interaction pyrolysis of polystyrene. Journal of Analytical and Pyrolysis volume 89 issue 1.
21. Zahid Hussain Amir Zada Khadim Hussain Muhammad Y. Naz Nasser M. AbdEl-Salam, Khalid A. Ibrahim (2020) Preparation of activated porous glass adsorbent through thermochemical reforming of ampoules and eggshells for remediation of direct blue dye pollution

Languages

- ❖ English,
- ❖ Urdu
- ❖ Pashto

References

1. Dr. Hussain Gulab

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