Resume

Dr. Waheed Ahmad Khanday

Designation: Assistant Professor

Subject: Chemistry

Area of Specialization: Physical/Inorganic Chemistry

Research area: Surface Chemistry (Catalysis, Adsorption, Wastewater treatment, Waste Management, Zeolites, Activated Carbon, Zeolite-activated Carbon composites, Supramolecular Beads, etc.)

Teaching area: Surface Chemistry; Thermodynamics; Chemical Kinetics; Chemical & Phase equilibrium; Electrochemistry & Redox reactions; Solid State, Liquid State & Gaseous State; Photochemistry, etc.

College: Government Degree College, Anantnag

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Phone: +91-9906845272

Date of Appointment: 06-04-2017

Research Experience

Research Stage	Title of the Work/Thesis	University where the work was carried out	Year
Ph.D (Chemistry)	To Study synthesis and characterization of zeolites and their role as catalysts in Synthesis of biologically active compounds	DRDE, Gwalior/ Jiwaji University	2011-14
Post-Doctoral Fellowship	Synthesis of zeolites from low cost materials such as oil palm ash, etc, to be used as catalyst for pyrolysis of Agricultural waste to bio-fuels	Universiti Sains Malaysia(USM), Malaysia	2016-17

Summary

- After obtaining Master's Degree in Chemistry, Dr. Khanday joined Ph.D program under the supervision of **Prof. RadhaTomar** in the area of surface chemistry and the title of his work was, **"To Study synthesis and characterization of zeolites and their role as catalysts in synthesis of biologically active compounds"** which he successfully completed in June 2014. He carried out most of his lab work at **Protective Device Division, Defense Research Development Establishment (DRDE)**, Gwalior, India where he worked as **Junior Research Fellow (JRF)** between 2011-2013 in connection with the Major Research Project entitled "*Synthesis, Characterization and applications of zeolites*" funded by **Defense Research Development Organization (DRDO)**.During the collaborative project he worked with **Dr. S. Chandrasekhar, Scientist E**, over desorption and kinetics of chemical warfare agents with specific to organophosphorous compounds.
- During his Ph.D., he has synthesized different zeolites, converted them successfully into proton and various metal ion-exchanged catalytic forms and carried out catalytic studies to synthesize biologically active compounds using various ion-exchanged forms of zeolites. Also remediations of some environmental problems were studied using zeolites such as adsorption and thermal desorption of DMMP from environment and sorption of toxic metal ions from waste water. He also got acquainted and learnt various techniques like Gas Chromatography, Temperature Programmed Desorption, IR Spectroscopy, Cyclic Voltammetery, BET Surface area analysis, etc.
- He has worked as Post-Doctoral Research fellow in **School Of Chemical Engineering, Universiti Sains Malaysia**, under the supervision of **Prof. Bassim H. Hameed** on **"Synthesis of zeolites from low cost materials such as oil palm ash etc to be used as catalyst for pyrolysis of agricultural waste to bio-fuels"** .
- Dr. Khanday has published more than **30 research articles** in high quality ISI indexed journals (**almost all Q1**). He had also delivered paper and poster presentations in more than**10 national and international Conferences**. He is also reviewer of more than **20 journals of Elsevier publication** like catalysis communication, microporous and mesoporous materials, material engineering A, B & C being few among them.
- His area of research interest is synthesis of porous materials particularly zeolites, activated carbon, composites, mica minerals, etc. He also focuses on surface science and modification of these materials for various applications especially in surface catalysis, adsorption and detoxification of environment. He is also interested to work on organic synthesis under green technology using heterogeneous catalysts.

Research Publications

S. No	Name of authors, title, year, Vol. No. and Page Nos.	Journal and Publisher	ISSN No.	Impact Factor
1	Porous carbon–based material from fish scales for the adsorption of tetracycline antibiotics M Islam, BH Hameed, MJ Ahmed, **WA Khanday**, MA Khan, F Marrakchi (2022) 1-10	*Biomass Conversion and Biorefinery* Springer	2190-6823	4.050
2	A comprehensive review on green perspectives of electrocoagulation integrated with advanced processes for effective pollutants removal from water environment A Othmani, A Kadier, R Singh, C A Igwegb, M Bouzid, Md O Aquatar, **W A Khanday**, M E Bote, F Damiri, Ö Gökkuş, F Sher	*Environmental Research* Elsevier	0013-9351	8.431
3	Catalytic efficiency of various ion-exchanged forms of Erionite zeolite for the synthesis of 2-methylquinoxaline **WA Khanday**, SA Khanday, M Danish, R Tomar 9 (2022) 100261	*Applied Surface Science Advances* Elsevier	2666-5239	Not Computed Yet
4	Novel green adsorbents for removal of aniline from industrial effluents: A review S Ghosh, A Malloum, C Bornman, A Othmani, C Osagie, Z K Esfahani, **W A Khanday**, S Ahmadi, M H Dehghani 345 (2022) 118167	*Journal of Molecular Liquids* Elsevier	2190-6823	6.633
5	Preparation and characterization of banana trunk activated carbon using H_3PO_4 activation: A rotatable central composite design approach M Danish, Z Pin, L Ziyang, T Ahmad, S Majeed, ANA Yahya, **WA Khanday**, HPSA Khalil 282 ((2022) 125989	*Materials Chemistry and Physics* Elsevier	0254-0584	4.778
6	Continuous biodiesel production: A review of advances in catalysis, microfluidic and cavitation reactors JA Okolie, JI Escobar, G Umenweke, **W Khanday**, PU Okoye 307 (2022) 121821	*Fuel* Elsevier	0016-2361	8.035
7	Microporous Erionite-activated Carbon Composite From Oil Palm Ash for Doxycycline Antibiotic Removal **WA Khanday**, SA Khanday, MA Shah, M Danish, PU Okoye (2021) 1-15	*Environmental Processes* Springer	2198-7505	3.06

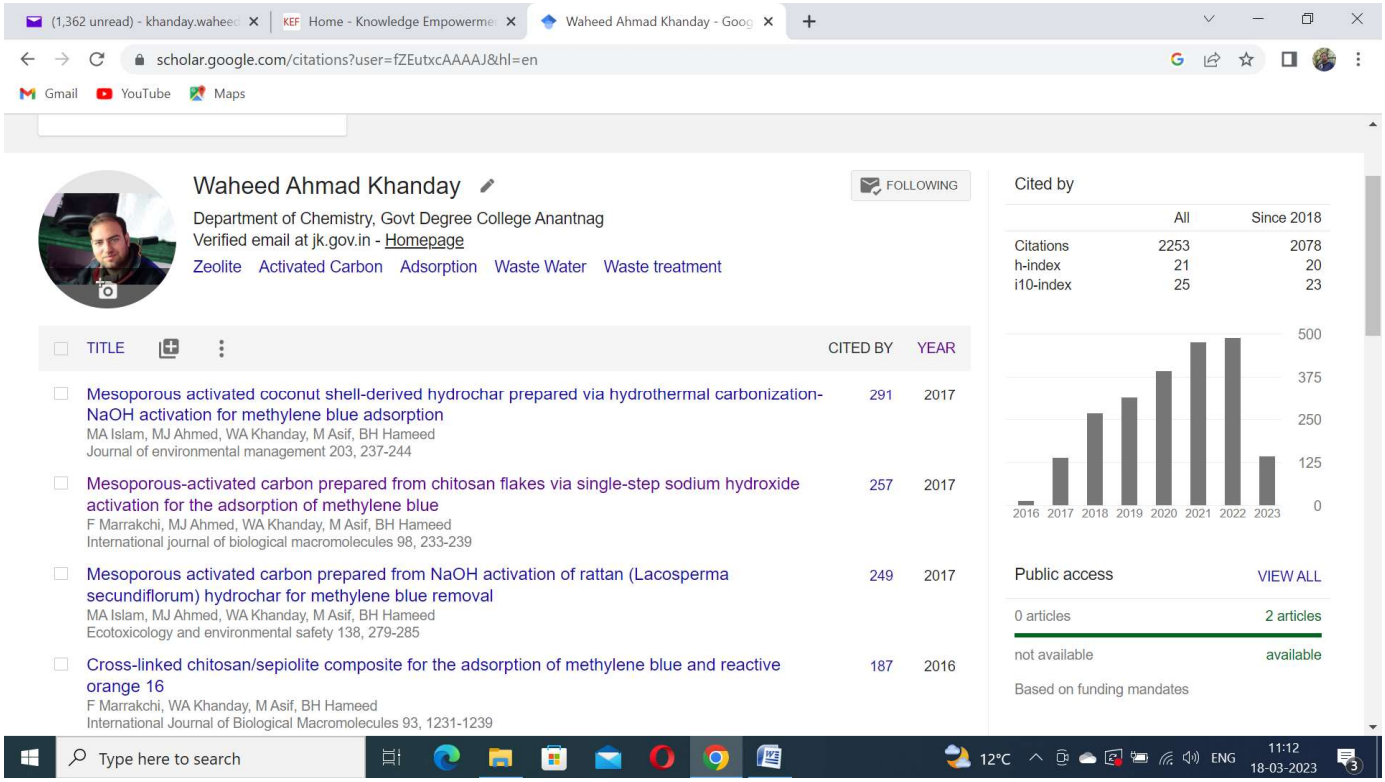
8	Box-Behnken optimization of glycerol transesterification reaction to glycerol carbonate over calcined oil palm fuel ash derived catalyst P.U.Okoye, S.Wang, **W.A.Khanday**, S. Li, T. Tang, L. Zhang 146 (2020) 2676-2687	*Renewable Energy* Elsevier	**0960-1481**	**8.634**
9	Application of erionite as an adsorbent for Cd^{2+}, Cu^{2+}, and Pb^{2+} ions in water **WA Khanday**, SA Khanday, M Danish 205 (2020) 328-335	*Desalination And Water Treatment* Taylor & Francis	**1944-3994**	**1.273**
10	Single-Step pyrolysis of phosphoric acid-activated chitin for efficient adsorption of cephalexin antibiotic **WA Khanday,** MJ Ahmed, PU Okoye, EH Hummadi, BH Hameed 280 (2019) 255-259	*Bioresource Technology* Elsevier	**0960-8524**	**11.889**
11	Zeolite-hydroxyapatite-activated oil palm ash composite for antibiotic Tetracycline adsorption **W.A.Khanday,** B.H.Hameed 215 (2018) 499-505	*Fuel* Elsevier	**0016-2361**	**8.035**
12	Optimization of banana trunk-activated carbon production for methylene blue- contaminated water treatment Mohammed Danish, Tanweer Ahmad, W. N. A. W. Nadhari, Mehraj Ahmad, **Waheed Ahmad Khanday**, Lou Ziyang, Zhou Pin 8 (2018) 9	Applied Water Science Springer	**2190-5495**	**5.411**
13	Biodiesel byproduct glycerol upgrading to glycerol carbonate over lithium–oil palm ash zeolite **W.A. Khanday**, P.U. Okoye, B.H. Hameed *151 (2017) 472-480*	*Energy Conversion and Management* Elsevier	**0196-8904**	**11.533**
14	Dynamic cum batch adsorption of a vesicant CWA (2-chloroethylethylsulfide) over synthetic erionite **Waheed Ahmad Khanday** *244 (2017) 15-20*	*Microporous and Mesoporous Materials* Elsevier	**1387-1811**	**5.876**
15	Cross-linked beads of activated oil palm ash zeolite/chitosan composite as a bio-adsorbent for removal of methylene blue and acid blue 29 dyes **W.A. Khanday**, A. Asif, B.H. Hameed *95(2017) 895–902*	*International Journal of Biological Macromolecules* Elsevier	**0141-8130**	**8.025**
16	Mesoporous zeolite-activated carbon composite from oil palm ash as an effective adsorbent for methylene blue **W.A. Khanday**, F. Marrakchi, B.H. Hameed *70 (2017) 32–41*	*Journal of the Taiwan Institute of Chemical Engineers* Elsevier	**1876-1070**	**5.477**

17	Application of Optimized Large Surface Area Date Stone (Phoenix Dactylifera) Activated Carbon for Rhodamin B Removal: Box-Behnken Design Approach M. Danish, **W.A. Khanday**, R. Hashim, N. Syuhada, M.N. Akhtar, M. Nizami *139 (2017) 280–290*	*Ecotoxicology and Environmental Safety* Elsevier	**0147-6513**	**7.129**
18	Mesoporous-activated carbon prepared from chitosan flakes via single-step sodium hydroxide activation for the adsorption of methylene blue. F. Marrakchi, Muthanna J. Ahmed, **W.A. Khanday**, M. Asif, B.H. Hameed *98 (2017) 233–239*	*International Journal of Biological Macromolecules* *Elsevier*	**0141-8130**	**8.025**
19	Mesoporous activated coconut shell-derived hydrochar prepared via hydrothermal carbonization-NaOH activation for methylene blue adsorption Md. Azharul Islam, M.J. Ahmed, **W.A. Khanday**, M. Asif, B.H. Hameed 203 (2017) 237–244	*Journal of Environmental Management* *Elsevier*	**0301-4797**	**8.910**
20	High-surface-area and nitrogen-rich mesoporous carbon material from fishery waste for effective adsorption of methylene blue F. Marrakchi, M. Auta, **W.A. Khanday**, B.H. Hameed 321 (2017) 428–434	*Powder Technology* *Elsevier*	**0032-5910**	**5.64**
21	Mesoporous activated carbon prepared from NaOH activation of rattan (*Lacosperma secundiflorum*) hydrochar for methylene blue removal Md. Azharul Islam, M.J. Ahmed, **W.A. Khanday**, M. Asif, B.H. Hameed *138 (2017) 297–285*	*Ecotoxicology and Environmental Safety* Elsevier	**0147-6513**	**7.129**
22	Mesoporous carbonaceous material from fish scales as low-cost adsorbent for reactive orange 16 adsorption F. Marrakchi, Muthanna J. Ahmed, **W.A. Khanday**, M. Asif, B.H. Hameed *71(2017) 47–54*	*Journal of the Taiwan Institute of Chemical Engineers* Elsevier	**1876-1070**	**5.477**
23	Nanoporous activated carbon prepared from karanj (Pongamiapinnata) fruit hulls for methylene blue adsorption Md. Azharul Islam, S. Sabar, A. Benhouria, **W.A. Khanday**, M.Asif, B.H.Hameed *74 (2017) 96–104*	*Journal of the Taiwan Institute of Chemical Engineers* Elsevier	**1876-1070**	**5.477**
24	Catalytic pyrolysis of oil palm mesocarp fibre on a zeolite derived from low-cost oil palm ash **Waheed Ahmad Khanday**, G. Kabir, B.H. Hameed *127 (2016) 265-272*	*Energy Conversion and Management* Elsevier	**0196-8904**	**11.533**

25	Cross-linked chitosan/sepiolite composite for the adsorption of methylene blue and reactive orange 16 F. Marrakchi, **W.A. Khanday**, A. Asif, B.H. Hameed *93 (2016) 1231–1239*	*International Journal of Biological Macromolecules* Elsevier	**0141-8130**	**8.025**
26	Polypyrrole and its composites with various cation exchanged forms of Zeolite X and their role in sensitive detection of Carbon monoxide Rawoof A. Naikoo, Sami U. Bhat, Muzzaffar A.Mir, Radha Tomar, **Waheed A. Khanday**, P. Dipak & DineshCTiwari 6 (2016) 99202-99210	*RSC Advances* RSC	**2046-2069**	**4.036**
27	Conversion of zeolite–A in to various ion-exchanged catalytic forms and their catalytic efficiency for the synthesis of benzimidazole. **Waheed Ahmad Khanday**, RadhaTomar *43 (2014) 141–145*	*Catalysis Communications* Elsevier	**1566-7367**	**3.51**
28	Dynamic adsorption of DMMP over synthetic zeolite-Alpha **Waheed Ahmad Khanday**, Sheikh Abdul Majid, S. Chandra Shekar, Radha Tomar *7 (2014) 115–123*	*Arabian Journal of Chemistry* Elsevier	**1878-5352**	**6.212**
29	Synthesis and characterization of various zeolites and study of dynamic adsorption of dimethyl methyl phosphate over them **Waheed Ahmad Khanday,** Sheikh Abdul Majid, S. Chandra Shekar, RadhaTomar *48 (2013) 4679–4686*	*Materials Research Bulletin* Elsevier	**0025-5408**	**5.6**
30	Study of sorption of metal oxoanions from waste water on surfactant modified analog of laumontite Preeti Gupta, **Waheed Ahmad Khanday**, Sheikh Abdul Majid, Vandna Kushwa, S.S. Tomar, RadhaTomar *1(2013) 510–515*	*Journal of Environmental Chemical Engineering* Elsevier	**2213-3437**	**7.968**
31	Study of sorption of Pb^{2+}, Cd^{2+}, Zn^{2+} and Cu^{2+} from waste water on synthetic analogues of clintonite **W.A. Khanday**, S.K.Singh, J. Bhaudoriya, S.A. Majid, S.S. Tomar, and RadhaTomar *2012,Vol.74, No.5,pp. 573–581. 2012.*	*Colloid Journal* Springer	**1608-3067**	**1.119**
32	Synthesis of 1, 5-Benzodiazepine and Its Derivatives by Condensation Reaction Using H-MCM-22 as Catalyst Sheikh Abdul Majid, **Waheed Ahmad Khanday** and Radha Tomar *Volume2012,ArticleID510650,6pages doi:10.1155/2012/510650*	***Oldname:*** *Journal of Biomedicine and Biotechnology* **New name:** BioMed Research International Hindawi	**2314-6141**	**3.246**

Total Impact Factor	200.176

Total Citations = 2253, h-index = 21 & i10-index = 25



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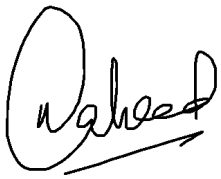
Date: 18-03-23

Place: Anantnag, Kashmir



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