

# MOHAMMAD ASIF

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## EMPLOYMENT HISTORY

<b>Professor</b>	Mar. 2005 – Present	King Saud University, Riyadh, KSA
<b>Associate Professor</b>	Jun. 1998 – Mar. 2005	King Saud University, Riyadh, KSA
<b>Assistant Professor</b>	Sep. 1993 – Jun. 1998	King Saud University, Riyadh, KSA
<b>Post-Doc. Research Associate</b>	Dec.1991 – Sep. 1993	Washington State University, WA, USA
<b>Graduate Research Assistant</b>	Sep. 1987 – Jul. 1991	University of Calgary, Calgary, Canada
<b>Graduate Teaching Assistant,</b>	Aug. 1984 – Jul. 1987	I.I.T., Kanpur, India

## EDUCATION

<b>Ph.D.</b> (Chem. Eng.)	The Univ. of Calgary, Canada, 1991	GPA: 3.9/4.0
<b>M.Tech.</b> (Chem. Eng.),	I.I.T. Kanpur, India, 1986	GPA: 10/10
<b>B.Sc. Eng.</b> (Chem. Eng.)	A.M.U., India, 1984	GPA: 9.3/10 (First Rank)

## RECENT COURSES

### MS/PhD

- Unsteady Transport Phenomena (CHE 618)
- Multiphase Flow (CHE 612)
- Adv. Transport Phenomena (CHE 545/511)
- M.S. Thesis

### Undergraduate

- Separation –I, Separation-II
- Mass Transport Operations (CHE-318)
- Capstone Design (CHE 496/CHE 497)
- Computer Programming (GE-209)

## RESERACH INTERESTS

- Handling and processing of nano-materials
- Two phase fluidization hydrodynamics
- Particle technology
- Adsorptive Separation

## **MAJOR FUNDED RESERCH PROJECTS (on-going/recently completed)**

1. De-agglomeration of nanoparticles by assisted fluidization using acoustic vibration and flow pulsation techniques, **M. Asif (P.I.) 12-NAN333-02**, NSTIP, KACST, (SAR 1,391,400)
2. Reduction of Post Combustion Carbon Dioxide by Adsorption in Fluidized Beds, **M. Asif (PI)**, A Ajbar (Co-PI) **ARP 35-125**, KACST (SAR 678,000)
3. Optimization of Catalyst Shape for Enhancing Conversion in Chemical Reactors. **M. Asif (P.I.)** M.A. Kamal, **08-PET297-02** National program for Science and Technology (SAR 268,000)
4. Vibration Induced Fluidization of Nano-materials. **M. Asif (P.I.) LGP 15-7** King Abdulaziz City of Science & Technology (SAR 106,000)
5. Improvement of fluidizability of nanoparticles. **M. Asif (P.I.)**, A. Ajbar, Y. Bakhbakhi **ARP 65/27** King Abdulaziz City of Science & Technology (SAR 504,000)
6. Modification and electromagnetic Properties of MgB<sub>2</sub> Superconductors by Nano materials doping for high magnetic field application. M. Shahabuddin (P.I.), N. Alzayed, **M. Asif, 09-ADV846-02** National Program for Science and Technology (SAR 1,945,000)
7. Development and Fabrication of MgB<sub>2</sub> Based Superconducting Wires M. Shahabuddin (P.I.), N. Alzayed, **M. Asif, 08-ADV397-02** National Program for Science and Technology, (SAR 1,429,000)
8. Production of Polymer Nanocomposite materials for Biomedical Applications Using Supercritical Fluid Technology. Y. Bakhbakhi (PI), A. Ajbar, **M. Asif, 09-ADV650-02** National program for Science and Technology, KACST.

## **Community Services**

- Advisory Board, 14th International Conference Multiphase Flow in Industrial Plants, 13–15 September 2017, Italy.
- Scientific Committee, 13th International Conference Multiphase Flow in Industrial Plant, September 17-18-19, 2014, Genova, Italy
- Technical Committee, 9<sup>th</sup> International Chemistry in Industry Conference and Exhibition (CHEMINDIX 2013)
- Review  
Powder Technology, Chem. Eng. Journal, Can. Journal of Chem. Eng.  
Custodian of the Two Holy Mosques Award (Takreem)  
Almarai Prize for Scientific Innovation
- Coordinator, Books Journals and Course-load Committee
- Member, PhD Comprehensive Examination Committee
- MS Thesis Supervisor, De-agglomeration of nano-powders using assisted fluidization techniques (2017)
- MS Thesis Supervisor, De-agglomeration of nano-powders using hybrid assisted fluidization techniques of micro-jet and flow pulsation (2016)

- [MS Thesis Supervisor](#), Improvement of fluidization of nano particles by particle mixing and pulsated flow, March 2011
- [PhD Thesis Examiner](#), Enhancement of the in-Field Critical Current Density of the Magnesium Diboride (MgB<sub>2</sub>) Superconductor (2017)
- [PhD Thesis Examiner](#), Optimization of the operation of an iron and steel plant for efficient energy utilization (2012)
- [MS Thesis Examiner](#), Development and characterization of nanofiber membranes, 2012
- [MS Thesis Examiner](#), Optimization of the dispersion of CNT dopants in the CNT-MgB<sub>2</sub> composite Superconductors (2012)

## **JOURNALS PUBLICATIONS (ISI INDEXED )**

1. Ali, S.S., Asif, M. 2017. Effect of particle mixing on the hydrodynamics of fluidized bed of nanoparticles. Powder Technology. 310, 234-240.
2. Asif, M, Ibrahim, AA, Mohammed, YA, Al-Ghurabi, EH, 2017. Effectiveness factor of two-dimensional ring-shaped catalyst pellets. Polish Journal of Chem. Technol., 19 (3) 99-105
3. Ahmed, M.J. Islam, Md Azharul. Asif, M. Hameed, B.H. Ahmed, M. J., et al., 2017. Human hair-derived high surface area porous carbon material for the adsorption isotherm and kinetics of tetracycline antibiotics. Bioresource Technology. 243, 778-784.
4. Ali Syed, Sadiq. Hossain SK, Safdar. Asif, Mohammad. 2017. Dynamic modeling of the isoamyl acetate reactive distillation process. Polish Journal of Chem. Technol., 19, 59.
5. Fakhri, Ali. Rashidi, Sahar. Asif, Mohammad. Ibrahim, Ahmed. 2017. Microwave-Assisted Synthesis of SiC Nanoparticles for the Efficient Adsorptive Removal of Nitroimidazole Antibiotics from Aqueous Solution.. 7, 205.
6. Ali Fakhri. Sahar Rashidi. Mohammad Asif. Ahmed A. Ibrahim. 2017. Synthesis and characterization of MnS<sub>2</sub>/reduced graphene oxide nanohybrid: an efficient adsorbent for pharmaceutical compound removal. Desalination and Water Treatment. 68, 236-244.
7. Gupta, Vinod Kumar. Fakhri, Ali. Rashidi, Sahar. Ibrahim, Ahmed A. Asif, Mohammad. Agarwal, Shilpi. 2017. Optimization of toxic biological compound adsorption from aqueous solution onto Silicon and Silicon carbide nanoparticles through response surface methodology. Materials Science and Engineering C. 77, 1128-1134.
8. Islam, Md Azharul. Ahmed, M.J. Khanday, W.A. Asif, M. Hameed, B.H. 2017. Mesoporous activated carbon prepared from NaOH activation of rattan (*Lacosperma secundiflorum*) hydrochar for methylene blue removal. Ecotoxicology and Environmental Safety. 138, 279-285.
9. Islam, Md Azharul. Ahmed, M.J. Khanday, W.A. Asif, M. Hameed, B.H. 2017. Mesoporous activated coconut shell-derived hydrochar prepared via hydrothermal carbonization-NaOH activation for methylene blue adsorption. Journal of Environmental Management. 203, 237-244.
10. Islam, Md Azharul. Sabar, S. Benhouria, A. Khanday, W.A. Asif, M. Hameed, B. H. 2017. Nanoporous activated carbon prepared from karanj (*Pongamia pinnata*) fruit hulls for methylene blue adsorption. Journal of the Taiwan Institute of Chemical Engineers. 74, 96-104.

11. Khanday, W.A. Asif, M. Hameed, B.H. 2017. Cross-linked beads of activated oil palm ash zeolite/chitosan composite as a bio-adsorbent for the removal of methylene blue and acid blue 29 dyes. *International Journal of Biological Macromolecules*. 95, 895-902.
12. Khanday, W.A. Marrakchi, F. Asif, M. Hameed, B. H. 2017. Mesoporous zeolite-activated carbon composite from oil palm ash as an effective adsorbent for methylene blue. *Journal of the Taiwan Institute of Chemical Engineers*. 70, 32-41.  
  
Gupta, V.K., Agarwal, S., Asif, M., Fakhri, A., Sadeghi, N. 2017, Application of response surface methodology to optimize the adsorption performance of a magnetic graphene oxide nanocomposite adsorbent for removal of methadone from the environment, *Journal Of Colloid and Interface Science*, 497, 193-200
13. Kumar, Nadavala. Dharmendra, Vummiti. Sreenivasulu, Vudagandla. Asif, Mohammad. Ibrahim, Ahmed. Balaram, Vysetti. 2017. Separation and Pre-Concentration of Pb and Cd in Water Samples Using 3-(2-hydroxyphenyl)-1H-1,2,4-triazole-5(4H)-thione (HTT) and Their Determination by Inductively Coupled Plasma Atomic Emission Spectrometry (ICP-AES). *Metals*. 7, 240.
14. Kumawat, Lokesh Kumar. Asif, M. Gupta, Vinod Kumar. 2017. Dual ion selective fluorescence sensor with potential applications in sample monitoring and membrane sensing. *Sensors and Actuators B: Chemical*. 241, 1090-1098.
15. Kumawat, Lokesh Kumar. Kumar, Manoj. Bhatt, Priyanka. Sharma, Anuj. Asif, M. Gupta, Vinod Kumar. 2017. An easily accessible optical chemosensor for Cu<sup>2+</sup> based on novel imidazoazine framework, its performance characteristics and potential applications. *Sensors and Actuators B: Chemical*. 240, 365-375.
16. Lunagariya, J. Kumar, N. Asif, M. Dhar, A. Vekariya, R. 2017. Dependency of Anion and Chain Length of Imidazolium Based Ionic Liquid on Micellization of the Block Copolymer F127 in Aqueous Solution: An Experimental Deep Insight. *Polymers*. 9, 285.
17. Manafi, M. R. Manafi, P. Agarwal, Shilpi. Bharti, Arvind Kumar. Asif, M. Gupta, Vinod Kumar. 2017. Synthesis of nanocomposites from polyacrylamide and graphene oxide: Application as flocculants for water purification. *Journal of Colloid and Interface Science*. 490, 505-510.
18. Marrakchi, F. Ahmed, M. J. Khanday, W. A. Asif, M. Hameed, B. H. 2017. Mesoporous-activated carbon prepared from chitosan flakes via single-step sodium hydroxide activation for the adsorption of methylene blue. *International Journal of Biological Macromolecules*. 98, 233-239.
19. Marrakchi, F. Ahmed, M. J. Khanday, W. A. Asif, M. Hameed, B. H. 2017. Mesoporous carbonaceous material from fish scales as low-cost adsorbent for reactive orange 16 adsorption. *Journal of the Taiwan Institute of Chemical Engineers*. 71, 47-54.
20. Vudagandla, S. Siva Kumar, N. Dharmendra, V. Asif, M. Balaram, V. Zhengxu, H. Zhen, Z. 2017. Determination of Boron, Phosphorus, and Molybdenum Content in Biosludge Samples by Microwave Plasma Atomic Emission Spectrometry (MP-AES). *Applied Sciences*. 7, 264.
21. Agarwal, Shilpi. Tyagi, Inderjeet. Gupta, Vinod Kumar. Dehghani, M.H. Jaafari, J. Balarak, D. M. Asif. 2016. Rapid removal of noxious nickel (II) using novel  $\gamma$ -alumina nanoparticles and

- multiwalled carbon nanotubes: Kinetic and isotherm studies. *Journal of Molecular Liquids*. 224, 618-623.
22. Ali, Syed Sadiq. Al-Ghurabi, Ebrahim H. Ajbar, Abdelhamid. Mohammed, Yahya A. Boumaza, Mourad. Asif, Mohammad. 2016. Effect of Frequency on Pulsed Fluidized Beds of Ultrafine Powders. *Journal of Nanomaterials*.
  23. Amani, H. Asif, M. Hameed, B.H. 2016. Transesterification of waste cooking palm oil and palm oil to fatty acid methyl ester using cesium-modified silica catalyst. *Journal of the Taiwan Institute of Chemical Engineers*. 58, 226-234.
  24. Bavandpour, Razie. Karimi-Maleh, Hassan. Asif, Mohammad. Gupta, Vinod Kumar. Atar, Necip. Abbasghorbani, Maryam. 2016. Liquid phase determination of adrenaline uses a voltammetric sensor employing CuFe<sub>2</sub>O<sub>4</sub> nanoparticles and room temperature ionic liquids. *Journal of Molecular Liquids*. 213, 369-373.
  25. Dehghanian, Nahid. Ghaedi, Mehrorang. Ansari, Amin. Ghaedi, Abdolmohammad. Vafaei, A. Asif, M. Agarwal, Shilpi. Tyagi, Inderjeet. Gupta, Vinod Kumar. 2016. A random forest approach for predicting the removal of Congo red from aqueous solutions by adsorption onto tin sulfide nanoparticles loaded on activated carbon. *Desalination and Water Treatment*. 57, 9272-9285.
  26. Fakhri, Ali. Behrouz, Sajjad. Asif, Mohammad. Tyagi, Inderjeet. Agarwal, Shilpi. Gupta, Vinod Kumar. 2016. Synthesis, structural and morphological characteristics of NiO nanoparticles Co-doped with boron and nitrogen. *Journal of Molecular Liquids*. 213, 326-331.
  27. Fakhri, Ali. Rashidi, Sahar. Asif, Mohammad. Tyagi, Inderjeet. Agarwal, Shilpi. Gupta, Vinod Kumar. 2016. Dynamic adsorption behavior and mechanism of Cefotaxime, Cefradine and Cefazolin antibiotics on CdS-MWCNT nanocomposites. *Journal of Molecular Liquids*. 215, 269-275.
  28. Ghasemi, Maryam. Mashhadi, Somaye. Asif, M. Tyagi, Inderjeet. Agarwal, Shilpi. Gupta, Vinod Kumar. 2016. Microwave-assisted synthesis of tetraethylenepentamine functionalized activated carbon with high adsorption capacity for Malachite green dye. *Journal of Molecular Liquids*. 213, 317-325.
  29. Gupta, Vinod Kumar. Gupta, Divya. Agarwal, Shilpi. Kothiyal, N. C. Asif, M. Sood, Swadeep. Pathania, Deepak. 2016. Fabrication of chitosan-g-poly(acrylamide)/Cu nanocomposite for the removal of Pb(II) from aqueous solutions. *Journal of Molecular Liquids*. 224, 1319-1325.
  30. Heibati, Behzad. Ghoochani, Mahboobeh. Albadarin, Ahmad B. Mesdaghinia, Alireza. Makhlof, Abdel Salam Hamdy. Asif, Mohammad. Maity, Arjun. Tyagi, Inderjeet. Agarwal, Shilpi. Gupta, Vinod Kumar. 2016. Removal of linear alkyl benzene sulfonate from aqueous solutions by functionalized multi-walled carbon nanotubes. *Journal of Molecular Liquids*. 213, 339-344.
  31. Kumawat, Lokesh Kumar. Mergu, Naveen. Asif, M. Gupta, Vinod Kumar. 2016. Novel synthesized antipyrene derivative based "Naked eye" colorimetric chemosensors for Al<sup>3+</sup> and Cr<sup>3+</sup>. *Sensors and Actuators B: Chemical*. 231, 847-859.
  32. Marrakchi, F. Khanday, W.A. Asif, M. Hameed, B.H. 2016. Cross-linked chitosan/sepiolite composite for the adsorption of methylene blue and reactive orange 16. *International Journal of Biological Macromolecules*. 93, 1231-1239.

33. Nekouei, Farzin. Noorizadeh, Hossein. Nekouei, Shahram. Asif, M. Tyagi, Inderjeet. Agarwal, Shilpi. Gupta, Vinod Kumar. 2016. Removal of malachite green from aqueous solutions by cuprous iodide-cupric oxide nano-composite loaded on activated carbon as a new sorbent for solid phase extraction: Isotherm, kinetics and thermodynamic studies. *Journal of Molecular Liquids*. 213, 360-368.
34. Nikfar, E. Dehghani, M. H. Mahvi, A. H. Rastkari, N. Asif, M. Tyagi, Inderjeet. Agarwal, Shipi. Gupta, Vinod Kumar. 2016. Removal of Bisphenol A from aqueous solutions using ultrasonic waves and hydrogen peroxide. *Journal of Molecular Liquids*. 213, 332-338.
35. Olutoye, M. A. Wong, S. W. Chin, L. H. Amani, H. Asif, M. Hameed, B. H. 2016. Synthesis of fatty acid methyl esters via the transesterification of waste cooking oil by methanol with a barium-modified montmorillonite K10 catalyst. *Renewable Energy*. 86, 392-398.
36. Oskoei, V. Dehghani, M. H. Nazmara, S. Heibati, B. Asif, M. Tyagi, I. Agarwal, Shilpi. Gupta, Vinod Kumar. 2016. Removal of humic acid from aqueous solution using UV/ZnO nano-photocatalysis and adsorption. *Journal of Molecular Liquids*. 213, 374-380.
37. Rajabi, M. Mirza, B. Mahanpoor, K. Mirjalili, M. Najafi, F. Moradi, O. Sadegh, H. Shahryari-ghoshekandi, R. Asif, M. Tyagi, I. Agarwal, S. Gupta, Vinod Kumar. 2016. Adsorption of malachite green from aqueous solution by carboxylate group functionalized multi-walled carbon nanotubes: Determination of equilibrium and kinetics parameters. *Journal of Industrial and Engineering Chemistry*. 34, 130-138.
38. V. Sreenivasulu. N. Siva Kumar. M. Suguna. M. Asif. Ebrahim H. Al-Ghurabi. Z. X. Huang. Z. Zhen. 2016. Biosynthesis of Silver Nanoparticles using Mimosa Pudica Plant root extract: Characterization, Antibacterial Activity and Electrochemical Detection of Dopamine. *International Journal of Electrochemical Science*. 11, 9959 – 9971.
39. Zare, Karim. Sadegh, Hamidreza. Shahryari-ghoshekandi, Ramin. Asif, Mohammad. Tyagi, Inderjeet. Agarwal, Shilpi. Gupta, Vinod Kumar. 2016. Equilibrium and kinetic study of ammonium ion adsorption by Fe<sub>3</sub>O<sub>4</sub> nanoparticles from aqueous solutions. *Journal of Molecular Liquids*. 213, 345-350.
40. Ali, Syed Sadiq. ics of Carbon Nanotubes during Sonication Using Electrical Conductivity Measurements. JouShahabuddin, Mohammed. Asif, Mohammad. 2015. In Situ Monitoring of Dispersion Dynamrnl of Nanomaterials.
41. Asif, Mohammad. 2015. Retrofitting of Fixed-Bed Heterogeneous Reactors for Glucose Isomerization. *Chemical Engineering Communications*. 202, 1547-1556.
42. Baghizadeh, Amin. Ranjbar, Shahla. Gupta, Vinod Kumar. Asif, Mohammad. Pourseyedi, Shahram. Karimi, Mohammad J. Mohammadinejad, Reza. 2015. Green synthesis of silver nanoparticles using seed extract of *Calendula officinalis* in liquid phase. *Journal of Molecular Liquids*. 207, 159-163.
43. Dehghani, Mohammad Hadi. Taher, Mahdieh Mohammad. Bajpai, Anil Kumar. Heibati, Behzad. Tyagi, Inderjeet. Asif, Mohammad. Agarwal, Shilpi. Gupta, Vinod Kumar. 2015. Removal of noxious

- Cr (VI) ions using single-walled carbon nanotubes and multi-walled carbon nanotubes. *Chemical Engineering Journal*. 279, 344-352.
44. Heibati, Behzad. Rodriguez-Couto, Susana. Al-Ghouti, Mohammad A. Asif, Mohammad. Tyagi, Inderjeet. Agarwal, Shilpi. Gupta, Vinod Kumar. 2015. Kinetics and thermodynamics of enhanced adsorption of the dye AR 18 using activated carbons prepared from walnut and poplar woods. *Journal of Molecular Liquids*. 208, 99-105.
  45. Heibati, Behzad. Rodriguez-Couto, Susana. Turan, Nurdan Gamze. Ozgonenel, Okan. Albadarin, Ahmad B. Asif, M. Tyagi, Inderjeet. Agarwal, Shilpi. Gupta, Vinod Kumar. 2015. Removal of noxious dye-Acid Orange 7 from aqueous solution using natural pumice and Fe-coated pumice stone. *Journal of Industrial and Engineering Chemistry*. 31, 124-131.
  46. Islam, Md Azharul. Asif, M. Hameed, B.H. 2015. Pyrolysis kinetics of raw and hydrothermally carbonized Karanj (*Pongamia pinnata*) fruit hulls via thermogravimetric analysis. *Bioresource Technology*. 179, 227-233.
  47. Islam, M. Azharul. Benhouria, A. Asif, M. Hameed, B.H. 2015. Methylene blue adsorption on factory-rejected tea activated carbon prepared by conjunction of hydrothermal carbonization and sodium hydroxide activation processes. *Journal of the Taiwan Institute of Chemical Engineers*. 52, 57-64.
  48. Islam, Md Azharul. Kabir, G. Asif, M. Hameed, B.H. 2015. Combustion kinetics of hydrochar produced from hydrothermal carbonisation of Karanj (*Pongamia pinnata*) fruit hulls via thermogravimetric analysis. *Bioresource Technology*. 194, 14-20.
  49. Islam, Md Azharul. Tan, I. A. W. Benhouria, A. Asif, M. Hameed, B.H. 2015. Mesoporous and adsorptive properties of palm date seed activated carbon prepared via sequential hydrothermal carbonization and sodium hydroxide activation. *Chemical Engineering Journal*. 270, 187-195.
  50. Kaur, Sumanjit. Rani, Seema. Kumar, Vipin. Mahajan, R.K. Asif, Mohammad. Tyagi, Inderjeet. Gupta, Vinod Kumar. 2015. Synthesis, characterization and adsorptive application of ferrocene based mesoporous material for hazardous dye Congo red. *Journal of Industrial and Engineering Chemistry*. 26, 234-242.
  51. Kaur, Sumanjit. Rani, Seema. Mahajan, R.K. Asif, M. Gupta, Vinod Kumar. 2015. Synthesis and adsorption properties of mesoporous material for the removal of dye safranin: Kinetics, equilibrium, and thermodynamics. *Journal of Industrial and Engineering Chemistry*. 22, 19-27.
  52. Mahmoodian, Hossein. Moradi, Omid. Shariatzadeha, Behnam. Salehf, Tawfik A. Tyagi, Inderjeet. Maity, Arjun. Asif, M. Gupta, Vinod Kumar. 2015. Enhanced removal of methyl orange from aqueous solutions by poly HEMA-chitosan-MWCNT nano-composite. *Journal of Molecular Liquids*. 202, 189-198.
  53. Moradi, Omid. Gupta, Vinod Kumar. Agarwal, Shilpi. Tyagi, Inderjeet. Asif, Mohammad. Makhlof, Abdel Salam Hamdy. Sadegh, Hamidreza. Shahryari-ghoshekandi, Ramin. 2015. Characteristics and electrical conductivity of graphene and graphene oxide for adsorption of cationic dyes from liquids: Kinetic and thermodynamic study. *Journal of Industrial and Engineering Chemistry*. 28, 294-301.

54. Najafi, Fahimeh. Moradi, Omid. Rajabi, Mostafa. Asif, Mohammad. Tyagi, Inderjeet. Agarwal, Shilpi. Gupta, Vinod Kumar. 2015. Thermodynamics of the adsorption of nickel ions from aqueous phase using graphene oxide and glycine functionalized graphene oxide. *Journal of Molecular Liquids*. 208, 106-113.
55. Njoku, V.O. Asif, M. Hameed, B.H. 2015. 2,4-Dichlorophenoxyacetic acid adsorption onto coconut shell-activated carbon: isotherm and kinetic modeling. *Desalination and Water Treatment*. 55, 132-141.
56. Njoku, V.O. Islam, Md Azharul. Asif, M. Hameed, B.H. 2015. Adsorption of 2,4-dichlorophenoxyacetic acid by mesoporous activated carbon prepared from H<sub>3</sub>PO<sub>4</sub>-activated langsung empty fruit bunch. *Journal of Environmental Management*. 154, 138-144.
57. Sadegh, Hamidreza. Shahryari-ghoshekandi, Ramin. Agarwal, Shilpi. Tyagi, Inderjeet. Asif, M. Gupta, Vinod Kumar. 2015. Microwave-assisted removal of malachite green by carboxylate functionalized multi-walled carbon nanotubes: Kinetics and equilibrium study. *Journal of Molecular Liquids*. 206, 151-158.
58. Sinha, Tanur. Ahmaruzzaman, M. Bhattacharjee, Archita. Asif, Mohammad. Gupta, V.K. 2015. Lithium dodecyl sulphate assisted synthesis of Ag nanoparticles and its exploitation as a catalyst for the removal of toxic dyes. *Journal of Molecular Liquids*. 201, 113-123.
59. Yari, Mohammad. Rajabi, Mostafa. Moradi, Omid. Yari, Ali. Asif, M. Agarwal, Shilpi. Gupta, Vinod Kumar. 2015. Kinetics of the adsorption of Pb(II) ions from aqueous solutions by graphene oxide and thiol functionalized graphene oxide. *Journal of Molecular Liquids*. 209, 50-57.
60. Ajbar, Abdelhamid. Asif, Mohamed. 2014. On the Existence of Complex Dynamics in Pure and Simple Microbial Competition in Bioreactors. *Arabian Journal for Science and Engineering*. 39, 7495-7501.
61. Algoufi, Y.T. Akpan, U.G. Asif, M. Hameed, B.H. 2014. One-pot synthesis of glycidol from glycerol and dimethyl carbonate over KF/sepiolite catalyst. *Applied Catalysis a-General*. 487, 181-188.
62. Ali, Syed Sadiq. Asif, Mohammad. Ajbar, Abdelhamid. 2014. Bed collapse behavior of pulsed fluidized beds of nano-powder. *Advanced Powder Technology*. 25, 331-337.
63. Amani, H. Ahmad, Z. Asif, M. Hameed, B.H. 2014. Transesterification of waste cooking palm oil by MnZr with supported alumina as a potential heterogeneous catalyst. *Journal of Industrial and Engineering Chemistry*. 20, 4437-4442.
64. Asif, Mohammad. 2014. An Efficient Analytical Solution Strategy For Multidimensional Heat Conduction Problems. *Heat Transfer Research*. 45, 263-278.
65. Azmi, N. H. M. Ayodele, O.B. Vadivelu, V.M. Asif, M. Hameed, B. H. 2014. Fe-modified local clay as effective and reusable heterogeneous photo-Fenton catalyst for the decolorization of Acid Green 25. *Journal of the Taiwan Institute of Chemical Engineers*. 45, 1459-1467.
66. Gupta, Vinod Kumar. Pathania, Deepak. Asif, Mohammad. Sharma, Gaurav. 2014. Liquid phase synthesis of pectin-cadmium sulfide nanocomposite and its photocatalytic and antibacterial activity. *Journal of Molecular Liquids*. 196, 107-112.

67. Hakeem, M.A. Kamil, M. Asif, M. 2014. Prediction of Boiling Heat Transfer Coefficients in Pool Boiling of Liquids Using Artificial Neural Network. *Journal of Scientific & Industrial Research*. 73, 536-540.
68. Karimi-Maleh, Hassan. Sanati, Afsaneh L. Gupta, Vinod Kumar. Yoosefian, Mehdi. Asif, Mohammad. Bahari, Ali. 2014. A voltammetric biosensor based on ionic liquid/NiO nanoparticle modified carbon paste electrode for the determination of nicotinamide adenine dinucleotide (NADH). *Sensors and Actuators B-Chemical*. 204, 647-654.
69. Njoku, V.O. Foo, K.Y. Asif, M. Hameed, B.H. 2014. Preparation of activated carbons from rambutan (*Nephelium lappaceum*) peel by microwave-induced KOH activation for acid yellow 17 dye adsorption. *Chemical Engineering Journal*. 250, 198-204.
70. Njoku, V.O. Islam, M. Azharul. Asif, M. Hameed, B.H. 2014. Preparation of mesoporous activated carbon from coconut frond for the adsorption of carbofuran insecticide. *Journal of Analytical and Applied Pyrolysis*. 110, 172-180.
71. Njoku, V.O. Islam, Md Azharul. Asif, M. Hameed, B.H. 2014. Utilization of sky fruit husk agricultural waste to produce high quality activated carbon for the herbicide bentazon adsorption. *Chemical Engineering Journal*. 251, 183-191.
72. Norouzi, Parviz. Gupta, Vinod Kumar. Asif, M. Rasoolipour, Solmaz. Faridbod, Farnoush. Ganjali, Mohammad Reza. 2014. Determination of methyl parathion in liquid phase by nano-composite carbon paste surface biosensor and differential FFT continuous linear sweep voltammetry. *Journal of Molecular Liquids*. 198, 239-245.
73. Tan, Y.L. Islam, Md Azharul. Asif, M. Hameed, B.H. 2014. Adsorption of carbon dioxide by sodium hydroxide-modified granular coconut shell activated carbon in a fixed bed. *Energy*. 77, 926-931.
74. Ali, Emad. Asif, Mohammed. Ajbar, AbdelHamid. 2013. Study of chaotic behavior in predator-prey interactions in a chemostat. *Ecological Modelling*. 259, 10-15.
75. Asif, Mohammad. 2013. Conversion Enhancement of Fixed-Bed Reactors Using Two-Dimensional Hollow Cylindrical Catalyst Pellet. *International Journal of Chemical Reactor Engineering*. 11.
76. Asif, Mohammad. 2013. Predicting minimum fluidization velocities of multi-component solid mixtures. *Particuology*. 11, 309-316.
77. Asif, Mohammad. Ali, Emad. Ajbar, Abdelhamid. 2013. On The Existence of Chaotic Behaviour In Pure And Simple Microbial Competition: The Role Of Contois Kinetics. *Anziam Journal*. 55, 162-174.
78. Asif, Mohammad. Ali, Syed Sadiq. 2013. Bed collapse dynamics of fluidized beds of nano-powder. *Advanced Powder Technology*. 24, 939-946.
79. Bakhbakhi, Yousef. Asif, Mohammad. Chafidz, Achmad. Ajbar, AbdelHamid. 2013. Formation of biodegradable polymeric fine particles by supercritical antisolvent precipitation process. *Polymer Engineering and Science*. 53, 564-570.
80. Bakhbakhi, Yousef. Asif, Mohammad. Chafidz, Achmad. Ajbar, AbdelHamid. 2013. Supercritical antisolvent synthesis of fine griseofulvin particles. *Advanced Powder Technology*. 24, 1006-1012.

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