

## LIST OF PUBLICATIONS OF PBI FACULTY

	<b>Name:</b>	<b>Ehsan Ali</b>
	<b>Publications:</b>	<ul style="list-style-type: none"> <li>• Optimizing the Performance of Membrane-Less Biosolar Cells SM Ahmad, M Mahmood, E Ali, MI Fareed Journal of Biobased Materials and Bioenergy 9 (Number 5), pp. 47, 2015</li> <li>• An review on bi-source, off-grid hybrid power generation systems based on alternative energy sources EAKS Muhammad Shahzad Aziz, Umair Saleem Journal of Renewable Sustainable Energy 7 1 2015</li> <li>• Wind–water hybrid system for power generation using still waters Ehsan Ali Renewable and Sustainable Energy Reviews 44, 611–613 2015</li> <li>• An overview: biomolecules from microalgae for animal feed and aquaculture Z Yaakob, E Ali, A Zainal, M Mohamad, MS Takriff Journal of Biological Research-Thessaloniki 21 (1), 1 44 2014</li> <li>• Growth of Scenedesmus dimorphus in different algal media and pH profile due to secreted metabolites AHA Al-Shatri, E Ali, NKN Al-Shorgani, MS Kalil African Journal of Biotechnology 13 (16) 4 2014</li> <li>• Electrocoagulation of palm oil mill effluent for treatment and hydrogen production using response surface methodology BLN Ansori Nasution, E Ali, Z Yaakob, SK Kamarudin Pol. J. Environ. Stud. Vol. 23, No. 5 (2014), 1669-1677 2014</li> <li>• Biohydrogen production from agroindustrial wastes via Clostridium saccharoperbutylacetonicum N1-4 (ATCC 13564) NKN Al-Shorgani, EM Tibin, E Ali, AA Hamid, WMW Yusoff, MS Kalil Clean Technologies and Environmental Policy 16 (1), 11-21 9 2014</li> <li>• A comparative study using aluminum and iron electrodes for the electrocoagulation of palm oil mill effluent to reduce its polluting nature and hydrogen production simultaneously MA Nasution, Z Yaakob, E Ali, NB Lan, SRS Abdullah Pakistan J. Zool 45 (2), 331-337 3 2013</li> <li>• Enhancement of biobutanol production by butyric acid addition using Clostridium saccharoperbutylacetonicum N1-4 (ATCC 13564) NKN Al-Shorgani, MS Kalil, E Ali, WMW Yusoff, AA Hamid Biotechnology 11 (6), 326 5 2012</li> <li>• The use of pretreated palm oil mill effluent for acetone–butanol–ethanol fermentation by</li> </ul>

		<p>Clostridium saccharoperbutylaceticum N1-4  NKN Al-Shorgani, MS Kalil, E Ali, AA Hamid, WMW Yusoff, Clean Technologies and Environmental Policy 14 (5), 879-887 11 2012</p> <ul style="list-style-type: none"> <li>• Bioconversion of butyric acid to butanol by Clostridium saccharoperbutylaceticum N1-4 (ATCC 13564) in a limited nutrient medium  NKN Al-Shorgani, E Ali, MS Kalil, WMW Yusoff BioEnergy Research 5 (2), 287-293 33 2012</li> <li>• Electrocoagulation for Treatment of Industrial Effluents and Hydrogen Production  EAZ Yaakob Electrolysis, ISBN-978-953, <a href="http://www.intechopen.com">www.intechopen.com</a>. 2012 Electrocoagulation for treatment of industrial effluents and hydrogen production  Ehsan Ali, Z Yaakob INTECH Open Access Publisher 5 2012</li> <li>• Electrocoagulation of palm oil mill effluent as wastewater treatment and hydrogen production using electrode aluminum  MA Nasution, Z Yaakob, E Ali, SM Tasirin, SRS Abdullah Journal of environmental quality 40 (4), 1332-1339 5 2011</li> <li>• Characterization of various microalgae for biodiesel fuel production  NC Yin, Z Yaakob, E Ali, AM Min, NS Wa Journal of Materials Science and Engineering. A 1 (1A), 80 4 2011</li> <li>• Effects of Different Initial pH, Argon Gas and Nitrogen Gas on Cell Growth and Hydrogen Production using Rhodospirillum rubrum  SZS Jaapar, E Ali, MS Kalil, N Anuar 2011</li> <li>• An overview of microalgae as a wastewater treatment  Z Yaakob, K Fakir, E Ali, SRS Abdullah, MS Takriff Jordan International Energy Conference 2 2011</li> <li>• Biobutanol production by Clostridium acetobutylicum NCIMB 13357 in modified medium using date fruit as a carbon source  EI Khamaiseh, MS Kalil, E Ali, AA Hamid, WMW Yusoff Jordan International Energy Conference 2 2011</li> <li>• Enhancement of lipase catalyzed-fatty acid methyl esters production from waste activated bleaching earth by nullification of lipase inhibitors  L Dwiarti, E Ali, EY Park Bioresource technology 101 (1), 14-20 15 2010</li> <li>• Characterization and optimization of extracellular alkaline lipase production by Alcaligenes sp. using stearic acid as carbon source  M Mori, E Ali, D Du, EY Park Biotechnology and Bioprocess Engineering 14 (2), 193-201 6 2009</li> <li>• Clostridium thermocellum SdbA 由来の S 層 相同モジュールのペプチドグリカンへの結</li> </ul>
--	--	--

		<p>合 G ZHAO, E ALI, M SAKKA, T KIMURA, K SAKKA Appl Microbiol Biotechnol 70 (4), 464-469 2006</p> <ul style="list-style-type: none"> <li>• Binding of S-layer homology modules from Clostridium thermocellum SdbA to peptidoglycans G Zhao, E Ali, M Sakka, T Kimura, K Sakka Applied microbiology and biotechnology 70 (4), 464-469 25 2006</li> <li>3C11-1 Functions of family-22 carbohydrate-binding module in Clostridium josui Xyn10A Ehsan ALI, R ARAKI, G ZHAO, M SAKKA, S KARITA, T KIMURA, K SAKKA 日本生物工学会大会講演要旨集 17, 116 2005</li> <li>• Microbiology &amp; Fermentation Technology-Function of the Family-9 and Family-22 Carbohydrate-Binding Modules in a Modular b-1, 3-1, 4-Glucanase/Xylanase Derived from Clostridium stercoarium Xyn10B G Zhao, E Ali, R Araki, M Sakka, T Kimura, K Sakka Bioscience Biotechnology and Biochemistry 69 (8), 1562-1567 2005</li> <li>• Functions of family-22 carbohydrate-binding modules in Clostridium josui Xyn10A Ehsan Ali, R Araki, G Zhao, M Sakka, S Karita, T Kimura, K Sakka Bioscience, biotechnology, and biochemistry 69 (12), 2389-2394 10 2005</li> <li>• Function of the family-9 and family-22 carbohydrate-binding modules in a modular <math>\beta</math>-1, 3-1, 4-glucanase/xylanase derived from Clostridium stercoarium Xyn10B G Zhao, E Ali, R Araki, M Sakka, T Kimura, K Sakka Bioscience, biotechnology, and biochemistry 69 (8), 1562-1567 13 2005</li> <li>• Functions of family-22 carbohydrate-binding module in Clostridium thermocellum Xyn10C Ehsan Ali, G Zhao, M Sakka, T Kimura, K Ohmiya, K Sakka Bioscience, biotechnology, and biochemistry 69 (1), 160-165 15 2005</li> <li>• Comparative study of bioethanol production from sugarcane molasses by using Zymomonas mobilis and Saccharomyces cerevisiae AH Khoja, Ehsan Ali, K Zafar, AA Ansari, A Nawar, M Qayyum African Journal of Biotechnology 14 (31), 2455-2462 2 2015</li> <li>• A New Flocculant-Coagulant with Potential Use for Industrial Wastewater Treatment MH Jusof Khadidi, NK Al-Shorgani, E Ali, A Abdul Hamid, MS Kalil 2013 2nd International Conference on Environment, Energy and Biotechnology .</li> </ul>
--	--	---



**Name:**

**Dr Athar Mahmood**

**Publications:**

1. **Mahmood, A.**, Hussain, A., Shahzad A.N., and Honermeier, B. 2015. Biomass and biogas yielding potential of sorghum as affected by planting density, sowing time and cultivar. *Pakistan Journal of Botany*, 47(6), 2401-2408
2. **Mahmood, A.**, Honermeier, B., 2012. Chemical composition and methane yield of sorghum cultivars with contrasting row spacing. *Field Crops Research*. 128: 27-33. (2.972)
3. **Mahmood, A.**, Ullah, H., Ijaz, M., Naeem, A.S., Honermeier, B., 2013. Evaluation of sorghum cultivar for biomass and biogas production. *Australian Journal Crop Science*, 7(10):1456-1462.
4. **Mahmood, A.**, Honermeier, B., 2012. Effect of row spacing and cultivars on biomass yield and quality of *Sorghum bicolor* L. Moench. *Journal für Kulturpflanzen*, 64, 250–257.
5. **Mahmood, A.**, Habib Ullah, A.N. Shahzad, H. Ali, S. Ahmad, M. Zia-Ul-Haq, B. Honermeier & M. Hasanuzzaman., 2013. Biomass yield and chemical composition of sorghum cultivar with varying planting density and sowing date. *Sains Malaysiana* 42(10), 1561–1570. (0.408)
6. **Mahmood, A.**, Javaid, M.M., Aziz, M., Shahzad A.N., Rehman A., Honermeier, B., 2012. Yield and quality response of sorghum hybrids to different planting densities at different sowing times. *Int. J Agric. Appl. Sci.* 4, 42-47
7. Ullah, H., **Mahmood, A.**, Honermeier, B. 2014. Essential oil and composition of anise (*Pimpinella anisum* L.) with varying seed rates and row spacing. *Pak J Botany*. 46(5): 1859-1864, 2014. (IF: 1.24)
8. Ullah H., **Mahmood, A.**, Masood Iqbal Awan and Honermeier, B. 2015. Effect of row spacing and seed rate on fruit yield, essential oil and composition of anise (*Pimpinella anisum* L.). *Pak. J. Agri. Sci.*, Vol. 52(2), 1-9. (IF: 1.24)
9. Ijaz M., **Mahmood, A.**, Ullah, H. 2014. Response of Maize Hybrid (*Zea mays* L.) to Different Levels of Potassium. *Agriculture Research Communication*. 1: 30-38.
10. Aziz, M., **Mahmood, A.**, Asif, M., Ali, A., Syed, H.W., Javaid, M.M. 2015. Wheat Based Intercropping System- a review. *The journal of Animal and Plant Sciences*. Vol. 25 (4), 896-907

		<ol style="list-style-type: none"> <li>11. <b>Mahmood, A.</b>, Maqsood A., Ullah H., Amjed Ali A., Shazad A.N. 2015. Wheat growth and yield response to different planting methods and nitrogen rates. Science International. (Accepted).</li> <li>12. Awan I.M., R. Ahmad, E. A. Waraich, <b>A. Mahmood</b> and A. Hussain. 2014. Sunflower Response to Foliar Application of Urea and Integrated Foliar Fertilizers under Water Stress Conditions. Agric. Res. Commun. 2014. 1(2): 39-43</li> <li>13. Ullah, H., <b>Mahmood A.</b>, Honermeier, B., 2013. Effects of different fungicides on the infection by <i>Passalora malkoffii</i>, on fruit yield and on quality of aniseed (<i>Pimpinella anisum</i> L.) in Germany. Journal of Medicinal and Spice Plants. 18, 89-98. (0.30)</li> <li>14. Ullah, H., <b>Mahmood, A.</b>, Ijaz, M., Tadesse, B., Honermeier, B., 2013. Evaluation of anise (<i>Pimpinella anisum</i> L.) accessions regarding morphological characteristics, fruit yield, oil contents and composition. Journal of Medicinal Plant Research. 7(29), 2177-2186.</li> <li>15. Honermeier, B., Sajid Ali, S., Leschhorn, B., <b>Mahmood, A.</b>, Ijaz, M., Russo, M., Shafiee, M., Ullah, H., Zeller, S. 2013. Cultivation of medicinal and spice plants in Germany. A Review. International J Agriculture &amp; Biological Sciences. 15, 1379-1388. (IF: 0.90)</li> <li>16. Ali, H., Abid, S. A., Ahmad, S., <b>Mahmood, A.</b>, Shahzad, A. N., 2013. Impact of integrated weed management on weed biomass, seed cotton yield and fiber quality of flat-sown cotton (<i>Gossypium hirsutum</i> L.). Journal of animal and plant science. 23(4),1185-1192 (0.638)</li> <li>17. Rehman, A., <b>Mahmood, A.</b>, Iqbal, Z., Ahmed Z., Javaid, M.M., Zeb, A., Kaleem Ahmed, K., 2013. Growth and yield performance of maize (<i>Zea mays</i> L.) as affected by planting methods and NPK levels. Pakistan Journal Agriculture Sciences. 50, 329-335 (1.240)</li> <li>18. Mahmood, K., M.B Khan, Y. Y Song, M. Ijaz, S. M. Luo, H. Ullah, <b>Mahmood, A.</b>, Zeng, R.S. Exogenous application of signaling compounds to induce rice allelopathic potential in rhizosphere soil. International journal of Agriculture and Biology. 15, 1319-1324. (0.90)</li> <li>19. Ali, H., Iqbal, N., Shahzad, N.A., Sarwar, N., Ahmad, S., <b>Mahmood, A.</b> 2013. Seed priming improves irrigation water use efficiency, yield and yield components of late-sown wheat under limited water conditions. Turkish Journal Agriculture &amp; Forestry. 37, 534-544. (0.92)</li> </ol>
--	--	--

		<p>20. Ali, H., Abid, S. A., Shahzad, A. N, Ahmad, S., <b>Mahmood, A.</b> 2013. Integrated Weed Management in Cotton Cultivated in the Alternate-Furrow. Journal of Food, Agriculture and Environment 11, 1 66 4 - 1 669 (0.517)</p> <p>21. Qamar R., Ehsanullah., Rehman A., Ali, A., Gaffar,A., <b>Mahmood, A.</b>, Javeed, R., Aziz, M., 2013. Growth and assessment of wheat under tillage and nitrogen levels in rice wheat system. American Journal of Plant Sciences. 4, 2083-2091</p> <p>22. Shahid, M.A, Ali, A., Zia-Ul-Haq, M., Hassan, S.W., <b>Mahmood, A.</b>, Qamar, R. 2013. Effect of different concentrations of phosphine gas on the mortality of different strains of <i>Tribolium castaneum</i> (Hbst.) collected from different locations. Science International. 25(3),619-621</p> <p>23. Habib, D.M., Asif, m., Aziz, M., Ali, M., Ashraf, M., <b>Mahmood, A.</b>, Javaid, M.M., 2012. Growth performance of spring maize and soil fertility status as influenced by nutrient sources. Int. J Agric. Appl. Sci. 4, 35-41</p> <p>24. Noor, A.M., Hamid M.I., Iqbal, Z., Ullah, H., Hussain, A., <b>Mahmood, A.</b> 2012. Optimization of time and method of potassium application to potato (<i>Solanum tuberosum</i> l.) crop on sandy clay loam soil. Int. J. Agric. Appl. Sci. 4, 118-124</p> <p><b>PROCEEDING/ABSTRACT</b></p> <p>1. <b>Mahmood, A.</b>, Honermeier, B., 2015. Impact of different agronomic practices on biomass and biogas yield of sorghum. International Workshop on Renewable Energy Technologies for Community Development in Pakistan. Held on November 06-08, 2015</p> <p>2. Ur-Rehman H., Awan, M., <b>Mahmood, A.</b>, Ur-Rehman, S., Wakeel A., Aziz, T. 2015. Nutrient interaction an efficient strategy to improve micronutrient availability in soil plant system. Proceeding: International Conference on Soil Sustainability for Food Security, November, 15-17, 2015.</p> <p>3. Khan, A.M, <b>Mahmood, A.</b>, Tayyab, M., Rehman, H., 2015.Effect of compost on growth and biomass yield of sorghm bicolor. International Workshop on Renewable Energy Technologies for Community Development in Pakistan. Held on November 06-08, 2015.</p> <p>4. Tayyab, M., Khan U.M., Faheem M., Mehmood, K., Khan M.A., <b>Mahmood, A.</b>, 2015. Bio-energy: A step forward and a solution for energy crises. International Workshop on Renewable Energy Technologies</p>
--	--	--

		<p>for Community Development in Pakistan. Held on November 06-08, 2015.</p> <ol style="list-style-type: none"> <li>5. Rehman, U.H., Hassan U.M., Sagheer, M., Tayyab, M., Khan A.M., Sadaf, S., <b>Mahmood, A.</b> 2015. Insect as potential alternate source of energy and management of waste. International Workshop on Renewable Energy Technologies for Community Development in Pakistan. Held on November 06-08, 2015.</li> <li>6. <b>Mahmood, A.</b>, Honermeier, B. 2010. Effect of row spacing and cultivars on biomass yield and chemical composition of <i>Sorghum bicolor</i> L. Mitt. Ges. Pflanzenbauwiss. 22, 157-158.</li> <li>7. <b>Mahmood, A.</b>, Honermeier, B., 2009. Effect of different sowing times, plant densities and cultivars on biomass yield and biogas production of <i>Sorghum bicolor</i> L. Mitt. Ges. Pflanzenbauwiss. 21, 203-204.</li> <li>8. Gaudchau, M., <b>Mahmood, A.</b>, Honermeier, B., 2008. Investigations for the production of biomass for energy recovery from Maize, Sunflower and Sorghum. Mitt. Ges. Pflanzenbauwiss. 20, 93-94.</li> <li>9. Ijaz, M., Ullah, H., <b>Mahmood, A.</b>, Honermeier, B. 2013. Influence of fungicide and nitrogen application on seed yield and quality of winter rapeseed. International conference Crop Management in Changing Climate, February 11-13.</li> </ol> <p><b>POPULAR ARTICLE</b></p> <ol style="list-style-type: none"> <li>1. <b>Athar Mahmood</b>, Habib Ullah, Irfan Mujeed, Imran Khan and Muhammad Ijaz. 2014. Use of Sorghum Crop for Biogas Production. Technology Times, Vol. 5 Issue 43.</li> <li>2. Habib Ullah, <b>Athar Mahmood</b> and Muhammad Ijaz 2014. Medicinal benefits of Anise plant. Technology Times, Vol. 5 Issue 41.</li> <li>3. Muhammad Ijaz, <b>Athar Mahmood</b>, Habib Ullah and Ghulam Hassan Abbasi. 2014. Potential advantages of biochar in crop production. Technology Time. Vol. 5 Issue 45.</li> <li>4. Muhammad Zain, Dr. Imran Khan, <b>Dr. Athar Mahmood</b> and Dr. Umer Chattha. 2014. Biodiesel crops &amp; their Production, present and future. Technology time. Volume 05 Issue 45.</li> </ol>
--	--	---



<b>Name:</b>	<b>Sana Sadaf</b>
<b>Publications:</b>	<ol style="list-style-type: none"><li>1. <b>Sana Sadaf</b>, Haq Nawaz Bhatti, Zafar Iqbal and Muhammad Shahid. 2009. Chemical composition, antioxidant and antimicrobial activities of <i>Citrus jambhiri</i> Lush and <i>Citrus reticulata</i> Blanco essential oils. Journal of Chemical Society of Pakistan. 31(5):838-844.</li><li>2. <b>Sana Sadaf</b> and Haq Nawaz Bhatti. 2011. Biosorption of Foron turquoise SBLN using mixed biomass of white rot fungi from synthetic effluents. African Journal of Biotechnology, 10(62):13548-13554</li><li>3. Misbah Amin, Haq Nawaz Bhatti and <b>Sana Sadaf</b>. 2013. Bioremediation of Zirconium from Aqueous Solution by <i>Coriolus versicolor</i>: Process Optimization. Journal of Chemical Society of Pakistan, 35 (3): 692-698</li><li>4. <b>Sana Sadaf</b>, Haq Nawaz Bhatti, and Ismat Bibi. 2013. Efficient removal of disperse dye by mixed culture of <i>Ganoderma lucidum</i> and <i>Coriolus versicolor</i>. Pakistan Journal of Agriculture Sciences, 50(2): 261-266.</li><li>5. Saima Noreen, Haq Nawaz Bhatti, Sana Nausheen, <b>Sana Sadaf</b> and Muhammad Ashfaq. 2013. Batch and fixed bed adsorption study for the removal of Drimarine Black CL-B dye from aqueous solution using a lignocellulosic waste: A cost affective adsorbent. Industrial Crops and Products 50: 568–579.</li><li>6. <b>Sana Sadaf</b>, Haq Nawaz Bhatti, Shaukat Ali and Khalil-ur Rehman. 2014. Removal of Indosol Turquoise FBL dye from aqueous solution by bagasse, a low cost agricultural waste: batch and column study. Desalination and Water Treatment, 52: 184–198</li><li>7. <b>Sana Sadaf</b> and Haq Nawaz Bhatti. 2014. Batch and fixed bed column studies for the removal of Indosol Yellow BG dye by peanut husk. Journal of the Taiwan Institute of Chemical Engineers, 45 (2): 541-553</li><li>8. <b>Sana Sadaf</b> and Haq Nawaz Bhatti. 2014. Equilibrium modeling for adsorptive removal of Indosol Black NF dye by low-cost agro industrial waste: batch and continuous study. Desalination and Water Treatment. 52: 4492–4507</li><li>9. <b>Sana Sadaf</b> and Haq Nawaz Bhatti. 2014. Evaluation of peanut husk as a novel, low cost biosorbent for the removal of Indosol Orange RSN dye from aqueous solutions: batch and fixed bed studies. Clean Technologies and Environmental Policy, 16(3): 527-544</li><li>10. Sana Nausheen, Haq Nawaz Bhatti, <b>Sana Sadaf</b>, Zobia Farrukh and Saima Noreen. 2014.</li></ol>

	<p>Equilibrium Modeling of Removal of Drimarine Yellow HF-3GL Dye from Aqueous Solutions by Low Cost Agricultural Waste. <i>Journal of Chemical Society of Pakistan</i>. 36 (1): 177-190.</p> <p>11. <b>Sana Sadaf</b>, Haq Nawaz Bhatti, Sana Nausheen and Saima Noreen. 2014. Potential use of low cost lignocellulosic waste for the removal of Direct Violet 51 from aqueous solution: Equilibrium and breakthrough studies. <i>Archives of Environmental Contamination and Toxicology</i>. 66 (4): 557-571</p> <p>12. Sana Nausheen, Zobia Furrukh, Haq Nawaz Bhatti, <b>Sana Sadaf</b> and Saima Noreen. 2014. Adsorptive removal of Drimarine Red HF-3D dye from aqueous solution by low cost agricultural waste: Batch and Column study. <i>Chemistry and Ecology</i>. 30(4): 376-392</p> <p>13. Shazia Nawaz, Haq Nawaz Bhatti, Tanveer Hussain Bokhari and <b>Sana Sadaf</b>. 2014. Removal of Novacron Golden Yellow dye from aqueous solutions by low cost agricultural waste: Batch and Fixed bed study. <i>Chemistry and Ecology</i>. 30(1): 52-65</p> <p>14. Sana Zaheer, Haq Nawaz Bhatti, <b>Sana Sadaf</b>, Yusra Safa and M. Zia-ur-Rehman. 2014. Biosorption characteristics of sugarcane bagasse for the removal of foron blue e-bl dye from aqueous solutions. <i>J. Anim. Plant Sci</i>. 24(1) : 272-279</p> <p>15. Shazia Nawaz, Haq Nawaz Bhatti, Tanveer Hussain Bokhari and <b>Sana Sadaf</b>. 2014. Removal of Novacron Black dye from aqueous solutions using low cost agricultural waste: Batch and fixed bed study. <i>Scientia Iranica C</i>, 21 (6): 2066-2075.</p> <p>16. <b>Sana Sadaf</b>, Haq Nawaz Bhatti, Muhammad Arif, Misbah Amin and Farva Nazar. 2014. Box-Behnken design optimization for the removal of Direct Violet 51 dye from aqueous solution using lignocellulosic waste. doi: 10.1080/19443994.2014.968215. <i>Desalination and Water Treatment</i></p> <p>17. <b>Sana Sadaf</b>, Haq Nawaz Bhatti, Muhammad Arif, Misbah Amin and Farva Nazar. 2015. Adsorptive removal of direct dyes by PEI-treated peanut husk biomass: Box-Behnken experimental design. <i>Chemistry and Ecology</i>, 31(3): 252–264.</p> <p>18. Haq Nawaz Bhatti, <b>Sana Sadaf</b> and Asif Aleem. 2015. Treatment of textile effluents by low cost agricultural wastes: Batch Biosorption Study. 25(1) <i>J. Anim. Plant Sci</i>.</p> <p>19. <b>Sana Sadaf</b>, Haq Nawaz Bhatti, Sana Nausheen and Misbah Amin. 2015. Application of a novel lignocellulosic biomaterial for the removal of Direct Yellow 50 dye from aqueous solution: Batch and column study. 47: 160–170 <i>Journal of</i></p>
--	---

	<p>the Taiwan Institute of Chemical Engineers.</p> <p>20. <b>Sana Sadaf</b> and Haq Nawaz Bhatti. 2015. Removal of COD from real textile effluents using agro-industrial wastes. <i>Desalination and Water Treatment</i> 53(10): 2585-2592</p> <p>21. <b>Sana Sadaf</b> and Haq Nawaz Bhatti. 2015. Response surface methodology approach for optimization of adsorption process for the removal of Indosol Yellow BG dye from aqueous solution by agricultural waste. doi: 10.1080/19443994.2015.1048308. <i>Desalination and Water Treatment</i>.</p> <p>22. Zubera Naseem, Haq Nawaz Bhatti, <b>Sana Sadaf</b>, Saima Noreen and Sadia Ilyas. 2016. Sorption of uranium (VI) by <i>Trapa bispinosa</i> from aqueous solution: Effect of pretreatments and modelling studies. <i>Desalination and Water Treatment</i>, 57 (24):11121-11132</p>
--	--

	<b>Name:</b>	<b>Dr. Saima Mirza</b>
	<b>Publications:</b>	<p>1. Mirza, S. S., Qazi, J. I. Chen, S., 2013. "Photobiohydrogen production of <i>Rhodobacter capsulatus</i>-PK from wheat straw. <i>Biotechnology for Biofuels</i>, 6: 144.</p> <p>2. Mirza, S.A. and Mirza, A. M., 2002. Study of bacterial Flora of Water Samples from Educational Institutions of Lahore as Pollution Indicator. <i>Biologia</i> 48, (1&amp;2): 351-355.</p> <p>3. Qazi, J. I., Chaudhry, N. and Mirza, S. S., 2011. Biofuel from cellulosic mass with incentive for feed wastes. In: Bernardes, M. A. S., editor <i>Biofuel production: recent developments and prospects</i>. Intechweb.org. p: 247-292.</p> <p>4. Mirza, S. S., Qazi, J. I., Chen, S., 2011. Photofermentative hydrogen production from purple non sulfur bacteria by employing in sugarcane bagasse. 11th International Conference on Sustainable Energy Technologies, September 2-5, 2012, Vancouver, Canada.</p> <p>5. Qazi, J. I., Maqsood, S. Mirza, S. S., 2013. Single Cell Protein Production by Purple Non Sulfur Bacteria from Agro-Industrial Wastes. 5th IC-EpsMsO Conference 3-6 July 2013.</p> <p>6. Mirza, S. S., Qazi, J. I., 2013. Cellulolytic Potential of Purple Non-Sulfur Bacteria: Efficient Conversion of Cellulose Containing Waste into Biohydrogen. 5th IC-EpsMsO Conference 3-6 July 2013.</p> <p>7. Mirza, S. S., Ashraf, A., 2014. Evaluation of</p>

		sugarcane bagasse as a carbon source for the growth and lipid production potential of garden soil yeast. Pacific Rim Summit on Industrial Biotechnology and Bioenergy Breakout, 7-9 December 2014, San Diego.
--	--	---

	<b>Name:</b>	<b>Dr. Kashif Kamran</b>
	<b>Publications:</b>	<ol style="list-style-type: none"> <li>1. <u>K. Kamran</u>, M. van Soestbergen and L. Pel. Electrokinetic salt removal from porous materials using ion exchange membranes. <i>Transport in Porous Media</i>, 96 (2013):221-235. DOI 10.1007/s11242-012-0083-0</li> <li>2. <u>K. Kamran</u>, M. van Soestbergen, H.P. Huinink and L. Pel. Inhibition of electrokinetic ion transport in porous materials due to potential drops induced by electrolysis. <i>Electrochimica Acta</i>, 78 (2012): 229-235.</li> <li>3. <u>K. Kamran</u>, L.Pel, A.Sawdy, H. Huinink and K. Kopinga. Desalination of porous building materials by electrokinetics: an NMR study. <i>Mater. Struct.</i>, 45 (2012): 297-308.</li> <li>4. <u>K. Kamran</u>, M.A. Rahman and A. Maqsood. Thermal and electrical properties of crystalline silver bromide. <i>J. Phys. D: Appl. Phys.</i>, 40 (2007): 869-873</li> <li>5. A. Maqsood, <u>K. Kamran</u> and M.A. Rahman. Temperature dependent thermophysical properties of D-Er<sub>2</sub>Si<sub>2</sub>O<sub>7</sub>. <i>J. Phys. D: Appl. Phys.</i>, 39 (2006): 756-758</li> <li>6. A. Maqsood, <u>K. Kamran</u>. Thermophysical properties of porous sandstones: measurements and comparative study of some representative thermal conductivity models. <i>International Journal of Thermophysics</i>, 26(2005): 1617-1632</li> <li>7. A. Maqsood, <u>K. Kamran</u> and I.H. Gul. Prediction of thermal conductivity of granite rocks from porosity and density data at normal temperature and pressure: in situ thermal conductivity measurements, <i>J. Phys. D: Appl. Phys.</i>, 37 (2004): 3396-3401</li> <li>8. A. Maqsood, M.A. Rahman, <u>K. Kamran</u> and I.H. Gul. Thermophysical properties of AgCl in the temperature range 77-300K. <i>J. Phys. D: Appl. Phys.</i>, 37 (2004): 1845-1847</li> </ol>



<b>Name:</b>	Dr. Javed Iqbal
<b>Publications:</b>	<b>Published:</b> 1. "Solution processable quinacridone based materials as acceptor for organic heterojunction solar cells", Iqbal Javed , Zoulun Zhang , Tai Peng , Tianlei Zhou , Hongyu Zhang , Muhammad Issa Khan , Yu Liu and Yue Wang , Solar Energy Materials & Solar Cells., 2011, 95, 2670-2676. (I.F: 5.33) 3. "Synthesis, Characterization and application of Alkyl Cyanoquinacridonediimine in bulk heterojunction solar cells", Iqbal Javed a,b,c*, Iqbal Saleem d, Wang Yue a, Muhammad Nadeem Akhtar d (J.Chem.Soc.Pak., Vol. 37, No. 03, 2015, 418-425). (I.F: 0.6) 4. "Quinacridone Derivatives with One-dimensional Aggregation-Induced Red Emission Property", Iqbal Javed, Tianlei Zhou, Faheem Muhammad, Hongyu Zhang and Yue Wang, Langmuir, 2012, 28 (2), pp 1439–1446 (I.F: 4.45) 5. "Multistimuli-responsive benzothiadiazole-cored phenylene vinylene derivative with nanoassembly properties", Chuandong Dou, Dong Chen, Javed Iqbal, Yang Yuan, Hongyu Zhang and Yue Wang, Langmuir., . 2011; 27(10):6323-9. (I.F: 4.45) 6. "Anthracene-Arrangement-Dependent Emissions of Crystals of 9-Anthrylpyrazole Derivatives", Zuolun Zhang, Yu Zhang, Dandan Yao, Hai Bi, Iqbal Javed, Yan Fan, Hongyu Zhang and Yue Wang, Cryst. Growth Des., 2009, 9 (12), pp 5069–5076. (I.F: 4.89) 7. "Dimeric quinacridone cyclophanes: Synthesis, structures, and photophysical properties", Ding Yi Yu, Tai Peng, Iqbal Javed, Hong Yu Zhang, Jing Ying Zhang and Yue Wang, SCIENCE CHINA Chemistry., 2011, 54, 314-319. (I.F: 1.69) 8. "Photophysical, Electrochemical Properties and Temperature Dependent Geometrical Isomerism in Alkyl Quinacridonediiimines", Iqbal Javed a,b,c*, Ayub Khurshid d,e, Muhammad Nadeem Arshad f, Yue Wang a, New J. Chem., 2014, 38, 752-761 (I.F: 3.15) 9. Marine Bioactive Peptides: Types, Structures, and Physiological Functions, Cheorun Jo, Faisal Fareed Khan, Muhammad Issa Khan & Javed Iqbal, Food Reviews International (DOI: 10.1080/87559129.2015.1137311) (I.F: 2.5) 10. Synthesis, characterization and biological activity of cobalt (II) complex with N,N,N',N'-tetrakis(2-hydroxypropyl) ethylenediamine, Muhammad Nadeem Akhtar, William T. A. Harrison, Muhammad Shahid, Islam-Ullah Khan, Ejaz, Javed Iqbal, Transition Metal Chemistry (DOI: 10.1007/s11243-016-0025-8) (Impact factor:

		<p>1.306)</p> <p>11. R.U. Nisa, M.A. Hashmi, S. Sajjad, T. Mahmood, J. Iqbal, K. Ayub, Quantum Mechanical Investigation on Acceleration of Electrocyclic Reactions through Transition Metal Catalysis, Journal of Organometallic Chemistry (2016), doi: 10.1016/j.jorganchem.2016.02.017. (Impact factor: 2.17)</p> <p>12. R.U. Nisa, Z. Sugheer, M.A. Hashmi, M. Sharif, M.A. Gilani, R. Ludwig, T. Mahmood, J. Iqbal, K. Ayub, Theoretical mechanistic investigation of Zinc(II) catalyzed oxidative amidation of benzyl alcohols with amines, Polyhedron (2016), doi: <a href="http://dx.doi.org/10.1016/j.poly.2016.03.047">http://dx.doi.org/10.1016/j.poly.2016.03.047</a> (IF = 2.02)</p> <p>13. “An Arylene Vinylene compound of Donor-Acceptor-Donor type for Solution Processed Organic Solar cells with High Open- Circuit Voltage. Iqbal Javeda,b, Larson Christianc, Enevold Jennyc, Eliasson Bertila, Edman Ludvigc ( In Press , Solar Energy Materials &amp; Solar Cells,2015 SOLMAT-D-14-01456) (I.F: 5.03)</p> <p>14. “Chemical composition and biological (antioxidant, antimicrobial and haemolytic) activities of essential oils of an endemic plant (Thymus linearis subsp. hedgei Jalas)” Muhammad Abid Rashid*a, Aisha Ashrafa, Sadia Nazir*b, Shahzad Nazira, Raziya Nadeema, Javed Iqbala Sidra Jabbara, Amir Ahmedc &amp; Rasool Bakhsh Tareend Romanian Biotechnology Letters,</p> <p>15. Mixed ligand coordination polymer as potential <math>\alpha</math>-glucosidase inhibitor, Muhammad Nadeem Akhtar, Muhammad Mateen, Muhammad Ashraf, Irshad Ahmed, Abida Ejaz, Muhammad Shahid, Muhammad Farooq Warsi, Javed Iqbal, J.Chem.Soc.Pak. (I.F: 0.6)</p> <p><b>Submitted</b></p> <p>1. Biosorption of Lead from Aqueous Solutions by using Biomass of Nerium oleander, Muhammad Nadeem Akhtar, Lubna Shahzadi, Muhammad Asif Hanif , Javed Iqbal, J.Chem.Soc.Pak. (I.F: 0.6)</p> <p>2. Effective Chemical Modification to Improve Dyeability /Durability of Direct Dyes on Cotton Fabrics , Muhammad Rizwan Shakir1, Javed Iqbal1*, Ijaz Ahmed Bhatti1, Assad Farooq2 , Muhammad Azaam Ashraf2, Fibers and Polymers (FIPO-D-16-00008) (I.F: 0.8)</p> <p>3. The effect of electron withdrawing or donating substitutions on the optoelectronic properties of triphenylamine based donor molecules for organic solar cells. M.Adnan,a J.Iqbal,a* S.Bibia , K.Ayubb,R.Hussainc, M.N.Akhtara, M. A. Rashida, B. Eliassond , RSC Advances, (RA-</p>
--	--	--

		<p>ART-01-2016-000197) (I.F: 3.8)</p> <p>4. Isolation, spectroscopic, density functional theory, biological activities and molecular docking studies of (S)-2-hydroxy-N-((2S,3S,4R,E)-1,3,4-trihydroxyicos-16-en-2-yl)tricosanamide. Khurshid Ayub;Taj U Rahman; Ghias Uddin; Tariq Mahmood; Riaz Hussain; Muhammad A Hashmi; Muhammad I Choudhary, PhD; Ralf Ludwig; Khanzadi F Khattak, PhD; Arif Lodhi, PhD; Javed Iqbal; Farman A khan; Comptes rendus chimie.</p> <p>4. Molecular Engineering of Quinoacridine based materials with Aggregation-Induced Red Emission Property. Javed Iqbal1*, Saleem Iqbal2, Yue Wang3, Khurshid Ayub4, Muhammad Nadeem Akhtar1,(JSCS-16-00213).</p> <p><b>ABSTRACT PUBLISHED IN PROCEEDINGS</b></p> <p>1. " Organic solar cells as a renewable energy source: A step way forward towards artificial leaf"Javed Iqbal, at International workshop on Renewable energy technology in Pakistan, organized by University of Kassel, Germany and University of Agriculture, Faisalabad.16-18 December,2014. (ISBN 978-969-9035-01-04)</p> <p>2. " Biogas energy and its impact in Pakistan" Muhammad Nadeem Akhtar, Javed Iqbal, at International workshop on Renewable energy technology in Pakistan, organized by University of Kassel, Germany and University of Agriculture, Faisalabad.16-18 December,2014.</p> <p>3. " Open circuit voltages exceeding 1 V from a small molecule organic solar cell using the novel ZOPTAN-TPA donor, Iqbal Javed, Christian Larson, Bertil Eliasson, Ludvig Edman" at ICMS 2014, TURKU, FINLAND. 30 Jun-05 JUL, 2014.</p> <p>4. Electronic structure and optical properties of Al doping of ZnO using first-principles calculations, Muhammad Kashif1, Javed Iqbal2, Shaukat Ali Shahid1, Ateeq ur Rehman1, "3rd National Computational Science Conference (NCSC-2015)" on 13-15 May 2015 at the Institute of Space Technology, Islamabad, Pakistan</p> <p>5. Design of an organic material by DFT calculations with high open circuit voltage of 1.0 V for an organic solar cell. Dr.Javed Iqbal1*, Dr. Kashif Ismail2 "3rd National Computational Science Conference (NCSC-2015)" on 13-15 May 2015 at the Institute of Space Technology, Islamabad, Pakistan.</p> <p>6. "Design of photovoltaic materials for organic solar cells" Muhammad Adnan, Javed Iqbal* , International Workshop on Renewable Energy Technologies for Community Development in Pakistan organized by University of Kassel, Germany and University of Agriculture, Faisalabad (November 04-06, 2015) (ISBN 978-969-9035-11-</p>
--	--	--

		<p>1) 7. Designing of Efficient Hole Transport Materials Based on TPA (triphenyl amine) for Photovoltaic Applications, Muhammad Adnan and Dr.Javed Iqbal*, International Conference of Biochemistry, Biotechnology and Biomaterials, FEBRUARY 22-24, 2016, University of Agriculture, Faisalabad, Pakistan.</p> <p>8. Simulation of UV-Vis Spectra of Phenanthrene Based Medicinally Active Compounds, Zeenat Zara and Dr.Javed Iqbal*, International Conference of Biochemistry, Biotechnology and Biomaterials, FEBRUARY 22-24, 2016, University of Agriculture, Faisalabad, Pakistan.</p> <p>9. Benchmark Studies of UV/Vis Spectra of Coumarin Derivatives from Medicinal Plants, Javed Iqbal*, Muhammad Irfan and Muhammad Adnan, International Conference of Biochemistry, Biotechnology and Biomaterials, FEBRUARY 22-24, 2016, University of Agriculture, Faisalabad, Pakistan.</p>
	<p><b>Name:</b></p> <p><b>Publications:</b></p>	<p>Muhammad Azam Khan</p> <p><b>ABSTRACTS PUBLISHED IN PROCEEDINGS</b></p> <p>Sher, M.A., S. Munir, <b>M.A. Khan</b> and S.H. Khan. <i>Gene mapping and sink-source interaction during reproductive stage drought tolerance in wheat: Classification of 550 Wheat accession on the bases of days to heading.</i> 5<sup>th</sup> International Conference on “Agriculture Food Security and Climate Change” Sep. 09-11, 2014. University of Poonch, Rawalakot&amp;PAS-forum.</p> <p><b>Khan, M.A.</b>, A. Mahmood, M.Tayyab and H. Rehman. <i>Effect of compost on growth and biomass yield of sorghum bicolor.</i> International Workshop on Renewable Energy Technologies for Community Development in Pakistan. .November 04-06, 2015. University of Agriculture Faisalabad.</p> <p>Tayyab, M., M.U. Khan, M.Faheem, K. Mehmood, H.Rehman, <b>M.A.Khan</b> and A.Mahmood. <i>Bio-Energy: A step forward and a solution for energy crises.</i> International Workshop on Renewable Energy Technologies for Community Development in Pakistan. November 04-06, 2015. University of Agriculture Faisalabad.</p> <p>Rehman, H., M.Hassan, M. Sagheer, M. Tayya, <b>M.A. Khan</b>, S. Sadaf and A. Mahmood. <i>Insects as potential alternate source of</i></p>

		<p><i>energy and management of wastes.</i> International Workshop on Renewable Energy Technologies for Community Development in Pakistan. November 04-06, 2015. University of Agriculture Faisalabad.</p> <p><b>SCIENTIFIC PUBLICATIONS:</b></p> <p><b>Khan, M.A.,</b> F.A. Khan, Smiullah,U. Ijaz, Asif Ali and Sehar Nawaz 2013. <i>Genetic Studies for Quality and Nutrient Uptake in Okra Under Irrigated and Wastewater.</i> International Journal of Agriculture and Crop Sciences. 56(11), 744-749.</p> <p><b>Khan, M.A.,</b> F.A. Khan, Smiullah, U. Ijaz, Asif Ali and Sehar Nawaz 2013. <i>Genetics of Yield and Physiological Attributes in Okra under Wastewater. International Journal of Agriculture and Crop Sciences.</i> 6(11), 750-756.</p>
	<p><b>Name:</b></p>	<p><b>Muhammad Tayyab</b></p>
	<p><b>Publications:</b></p>	<p>Khan, M.U., <b>M. Tayyab</b>, M. Faheem and M. R. Khan, 2015. Design, development and performance evaluation of distillery yeast sludge dryer. International Journal of Recycling of Organic Waste in Agriculture (Springer), manuscript number IRWA-D-15-00054R3, (Submitted)</p> <p>Rehman, T., M. U. Khan, <b>M. Tayyab</b>, M. W. Akram and M. Faheem. 2015. Present status of farm mechanization in Pakistan – A review. Agricultural Engineering International: CIGR Journal, Review Version No. 3650-14211-1-RV (Submitted)</p> <p><b>Tayyab, M.,</b> A. Munir, H. Haroon, 2015. Abstract published in “Abstract book of International Workshop on Renewable Energy Technologies for Community Development in Pakistan” entitled “Biomass Gasification Power Generation: A Solution for Energy Crises” with ISBN 978-969-9035-11-1</p> <p><b>Tayyab, M.,</b> M. U. Khan, M. Faheem, K. Mehmood, H. Rehman, M.A. Khan, A. Mahmood, 2015. Abstract published in “Abstract book of International Workshop on Renewable Energy Technologies for Community Development in Pakistan” entitled “Bio-Energy: A step forward and a solution for energy crises” with ISBN 978-969-9035-11-1</p> <p>R. Habib, M. Hasan, M. Sagheer, <b>M. Tayyab</b>, M. A. Khan, S. Sadaf, A. Mahmood, 2015. Abstract published in “Abstract book of International Workshop</p>

		<p>on “Renewable Energy Technologies for Community Development in Pakistan” entitled “Insects as potential alternate source of energy and management of wastes” with ISBN 978-969-9035-11-1</p> <p>Khan, M.U., A. Munir, S.N. Khan, R. A. Aslam, <b>M. Tayyab</b>, 2015. Abstract published in “Abstract book of International Workshop on “Renewable Energy Technologies for Community Development in Pakistan” entitled “Economic feasibility of biogas plant for rural areas of Pakistan” with ISBN 978-969-9035-11-1</p> <p>Khan, M.U., A. Munir, <b>M. Tayyab</b>, F. Noor, U. Farooq, 2015. Abstract published in “Abstract book of International Workshop on “Renewable Energy Technologies for Community Development in Pakistan” entitled “Green energy: Issues and challenges for Pakistan- Wind energy prospective” with ISBN 978-969-9035-11-1</p> <p>Haroon, H. and <b>M. Tayyab</b>, 2015. Abstract published in “Abstract book of International Workshop on Renewable Energy Technologies for Community Development in Pakistan” entitled “Production of maximum possible pure syngas by catalytic gasification of Bio-mass for the sake of electricity generation, using UNIQUE gasifier incorporated with catalytic filters and sorbents” with ISBN 978-969-9035-11-1</p> <p>Khan, M.A., A. Mahmood, <b>M. Tayyab</b>, Habib ur Rehman, 2015. Abstract published in “Abstract book of International Workshop on “Renewable Energy Technologies for Community Development in Pakistan” entitled “Effects of compost on growth and biomass yield of sorghum bicolor” with ISBN 978-969-9035-11-1</p> <p><b>Tayyab, M.</b>, A. Munir, S. N. Husnain, 2013. Abstract published in “Abstract book of International Conference on Renewable Energy Technologies in Pakistan” entitled “Design and development of solar roasting system for value addition of agricultural products” with ISBN 978-969-9035-05-0</p> <p>Afzal, A., A. Munir, <b>M. Tayyab</b>, 2013. Abstract published in “Abstract book of International Conference on Renewable Technologies in Pakistan” entitled “Value addition of agricultural products using solar distillation system” with ISBN 978-969-9035-05-0</p> <p>Husnain, S.N., A. Munir, <b>M. Tayyab</b>, 2013. Abstract published in “Abstract book of</p>
--	--	---

		International Conference on Renewable Energy Technologies in Pakistan” entitled “Design and development of solar assisted milk pasteurizer based Scheffler technology” with ISBN 978-969-9035-05-0
--	--	--

	<b>Name:</b>	<b>Hassan Haroon</b>
	<b>Publications:</b>	<ul style="list-style-type: none"> <li>• Haroon, H. and M. <b>Tayyab</b>, 2015. Abstract published in “Abstract book of International Workshop on Renewable Energy Technologies for Community Development in Pakistan” entitled “Production of maximum possible pure syngas by catalytic gasification of Biomass for the sake of electricity generation, using UNIQUE gasifier incorporated with catalytic filters and sorbents” with ISBN 978-969-9035-11-1</li> <li>• Tayyab, M., A. Munir, H. Haroon, 2015. Abstract published in “Abstract book of International Workshop on Renewable Energy Technologies for Community Development in Pakistan” entitled “Biomass Gasification Power Generation: A Solution for Energy Crises” with ISBN 978-969-9035-11-1</li> </ul>
	<b>Name:</b>	<b>Habib ur Rehman</b>
	<b>Publications:</b>	<ul style="list-style-type: none"> <li>• Sagheer<sub>1</sub>, M., M. Hasan<sub>1</sub>, <b>H. Rehman<sub>1</sub></b>, F.Z.A Khan<sub>1</sub>*, H.T. Gul<sub>2</sub>, S.R. Haidri<sub>1</sub>, S.A Bukhari<sub>2</sub>, M. Aftab, J. Ali<sub>3</sub>, T. Amjad, Y.S. Bajwa<sub>1</sub>, 2013. <b>Growth regulatory potential of five indigenous plant extracts against <i>Tribolium castaneum</i> (Herbst) (Coleoptera:Tenebrionidae)</b>. J. bio. sci., 3(12): 50-54.</li> <li>• Khan M.A., A. Mahmood, M.Tayyab and <b>H. Rehman</b>. <i>Effect of compost on growth and biomass yield of sorghum bicolor</i>. International Workshop on Renewable Energy Technologies for Community Development in Pakistan. .November 04-06, 2015. University of Agriculture Faisalabad.</li> <li>Sagheer<sub>1</sub>, M., M. Hasan<sub>1</sub>, <b>H. Rehman<sub>1</sub></b>, F.Z. Ahmad Khan<sub>1</sub>*, Qurban Ali<sub>1</sub>, K. Ali<sub>1</sub>, M.B. Ayyub<sub>1</sub>, H.T Gul<sub>2</sub>, U.A Tarar<sub>1</sub>, 2013. <b>Screening of some medicinal plant extracts for toxic and repellent potential against adult stage of rust red flour beetle, <i>Tribolium castaneum</i> (Herbst)(Coleoptera: Tenebrionidae)</b>. J. bio. Sci., 3(9): 273-</li> </ul>

		<p>279.</p> <p><b>R. Habib.,</b> M. Hasan, M. Sagheer, M. Tayyab, M. A. Khan, S. Sadaf, A. Mahmood, 2015. Abstract published in “Abstract book of International Workshop on “Renewable Energy Technologies for Community Development in Pakistan” entitled <b>“Insects as potential alternate source of energy and management of wastes”</b> with ISBN 978-969-9035-11-1</p> <ul style="list-style-type: none"> <li>• Tayyab. M, M.U. Khan, M.Faheem, K. Mehmood. <b>H.Rehman,</b> M.A.Khan and A.Mahmood. <i><b>Bio-Energy: A step forward and a solution for energy crises.</b></i> International Workshop on Renewable Energy Technologies for Community Development in Pakistan. November 04-06, 2015. University of Agriculture Faisalabad.</li> </ul>
--	--	---