CURRICULUM VITAE

PERSONAL DETAILS:

Name:

DR. ABDUL GHAFOOR

Father's Name:

MANSAB DAR

Date of Birth:

March 04, 1983

Nationality:

Pakistani

Languages Known:

English (Excellent), Urdu (Excellent),

(Read &Write)

Punjabi (Good), Italian (Fair)

CONTACT AND MAILING ADDRESSES:

Department of Farm Machinery and Power, Faculty of Agricultural Engineering and Technology, University of

Official/Mailing Address:

Agriculture, Faisalabad (38040), Pakistan.

Tel: +92-41-9200161Ext. 3002; Cell: +923326602169 E-mail: abdul.ghafoor@uaf.edu.pk & ag_1272@yahoo.com Chak No. 79/JB, P/O Same Tehsil & District, Faisalabad,

Pakistan.

Permanent Home Address:

BIOGRAPHY:

Currently, I am working as Professor in the Department of Farm Machinery and Power at Faculty of Agricultural Engineering and Technology, University of Agriculture Faisalabad-Pakistan since September, 2024. Previously, I have worked as Assistant Professor from August, 2019 to September, 2024 and as Lecturer from July 2007 to August 2019. I have completed Undergraduate (2001-2005) and Master (2005-2007) degrees in Agricultural Engineering from University of Agriculture, Faisalabad, Pakistan. I have secured a CGPA 3.98 out of 4.00 and won a SILVER MEDAL in M.Sc.(Hons.) Agricultural Engineering. I have also won PhD Scholarship from Higher Education Commission (HEC), Islamabad to study at Politecnico di Torino, Italy. I have successfully completed PhD degree from Politechnico di Torino in 2013. I have published significant scholarly contributions, including nearly 50 peer-reviewed research articles (Impact Factor > 100; Citations >1488; h-index = 14; i10-index = 18 as of March 2025). In addition, I have published more than 50 abstracts and 04 book chapters. I have also completed 05 research projects as Principal Investigator (PI) and 15 research projects as Co-principal Investigator (Co-PI) funded by International and National funding agencies.

I have also won Research Productivity Awards in the year 2015 and 2016 awarded by Pakistan Council for Science and Technology) PCST), Islamabad-Pakistan. I was ranked at 42nd position under Young Scientist (under 40 years of age) Category and 74th position in Overall Category in the discipline of Engineering Sciences throughout the county in the Directory of Productive Scientist of Pakistan (PSP-2017) published by Pakistan Council for Science and Technology (PCST), Islamabad-Pakistan. I was also ranked at 38th position under Young Scientist (under 40 years of age) Category and ranked at 71st position in Overall Category in the discipline of Engineering Sciences throughout the county in the Directory of Productive Scientist of Pakistan (PSP-2016) published by PCST, Islamabad-Pakistan. I have also worked as a conference secretary in a series of International conferences and workshops. Furthermore, I have also supervised 40 master research students for their research work and co-supervised more than 50 master research students. I have also supervised 03 PhD students and co-supervised 08 PhD students.

RESEARCH PROFILES:

Google Scholar: https://scholar.google.com.pk/citations?user=b1qGTyEAAAAJ&hl=en

ResearchGate: https://www.researchgate.net/profile/Dr-Abdul-Ghafoor

Orcid ID: https://orcid.org/0000-0002-3866-1694

Scopus ID: https://www.scopus.com/authid/detail.uri?authorId=57052409600

Publons: https://www.webofscience.com/wos/author/record/Z-2498-2019

Linkedin: https://pk.linkedin.com/in/dr-abdul-ghafoor-3a84b1138

AWARDS/DISTINCTIONS:

1. Research Productivity Award (**RPA-2016**) by Pakistan Council for Science and Technology (PCST), Islamabad-Pakistan.

- 2. Research Productivity Award (**RPA-2015**) by Pakistan Council for Science and Technology (PCST), Islamabad-Pakistan.
- 3. Ranked at 42nd position in the Directory of Productive Scientist of Pakistan (PSP-2017) under Young Scientist (under 40 years of age) Category in the discipline of Engineering Sciences published by Pakistan Council for Science and Technology (PCST), Islamabad-Pakistan.
- 4. Ranked at 74th position in the Directory of Productive Scientist of Pakistan (PSP-2017) in the discipline of Engineering Sciences published by Pakistan Council for Science and Technology (PCST), Islamabad-Pakistan.
- 5. Ranked at 38th position in the Directory of Productive Scientist of Pakistan (PSP-2016) under Young Scientist (under 40 years of age) Category in the discipline of Engineering Sciences published by Pakistan Council for Science and Technology (PCST), Islamabad-Pakistan.
- 6. Ranked at 71st position in the Directory of Productive Scientist of Pakistan (PSP-2016) in the discipline of Engineering Sciences published by Pakistan Council for Science and Technology (PCST), Islamabad-Pakistan.
- 7. Earned "SILVER MEDAL" in M.Sc.(Hons.)/M.Phil. Agricultural Engineering securing 3.98/4.00 CGPA.
- 8. Serving as HEC Approved Supervisor (Letter No. 1-HEC/HRD/HAS/2018/18262 Dated 26-01-2018)
- 9. Earned PhD Scholarship from Higher Education Commission (HEC), Islamabad to study at Politecnico di Torino, ITALY under HEC MS leading to PhD Scholarship Scheme for Universities of Engineering Sciences and Technologies in Pakistan.
- 10. First division throughout the academic career.
- 11. Worked as Workshop Secretary for "International Workshop on Sustainable Energy Solutions for Community Development in Pakistan" organized by University of Agriculture Faisalabad-Pakistan and University of Kassel, Germany, held on November08-09, 2016 at University of Agriculture, Faisalabad-Pakistan.
- 12. Worked as Workshop Secretary for "International Workshop on Renewable Energy Technologies for Community Development in Pakistan" organized by University of Agriculture, Faisalabad-Pakistan and University of Kassel, Germany, held on November 04-06, 2015 at University of Agriculture, Faisalabad-Pakistan.
- 13. Worked as Workshop Secretary for "International Workshop on Renewable Energy Technologies in Pakistan" organized by University of Agriculture, Faisalabad-Pakistan and University of Kassel, Germany, held on December 16-18, 2014 at University of Agriculture, Faisalabad-Pakistan.

- 14. Worked as Conference Secretary for "International Conference on Renewable Energy Technologies in Pakistan" organized by University of Agriculture, Faisalabad Pakistan &University of Kassel, Germany, held on October 1-3, 2013 at University of Agriculture, Faisalabad-Pakistan.
- 15. Successfully completed "Italian Language Course" organized by Politecnico di Torino, ITALY held on 31-11-2009 to 21-12-2009.
- 16. Earned 100/100 marks in the subject of Mathematics and overall A-One grade in the Board of Intermediate and Secondary Education (BISE) Examination, Faisalabad-Pakistan.
- 17. Earned merit scholarship in F.Sc. Pre-Engineering awarded by BISE, Faisalabad-Pakistan.
- 18. Earned merit scholarship in B.Sc. Agri. Engineering awarded by BISE, Faisalabad-Pakistan.
- 19. Earned merit scholarship in M.Sc. (Hons.) Agricultural Engineering awarded by University of Agriculture, Faisalabad-Pakistan.

ACADEMIC QUALIFICATIONS:

Examination Passed	Board/ University	Passing Year	Marks Obtained (%)	Division	Distinction	Subjects
Matriculation	Board of Intermediate and Secondary Education, Faisalabad, Pakistan	1999	81.05	First	1 st position in High School	Science subjects
F.Sc.	-do-	2001	71.09	First	BISE, FSD Scholarship	Pre- Engineering
B.Sc.	University of Agriculture, Faisalabad, Pakistan	2005	74.71	First	BISE, FSD Scholarship	Agricultural Engineering
M.Sc.(Hons.) /M.Phil	University of Agriculture, Faisalabad, Pakistan	2007	84.34	First	1 st Position and SILVER MEDAL	Agricultural Engineering (Specializati on in Farm Machinery & Power)
Ph.D.	Politecnico di Torino, Italy	2013	-	-	HEC-PAK Scholarship	Engineering (Energetics)

TEACHING AND RESEARCH EXPERIENCE:

- 1. Working as **Professor** (on Regular Basis) in the Department of Farm Machinery and Power, Faculty of Agricultural Engineering and Technology, University of Agriculture, Faisalabad w.e.f. 07-09-2024 to Date.
- 2. Worked as **Assistant Professor** (on Regular Basis) in the Department of Farm Machinery and Power, Faculty of Agricultural Engineering and Technology, University of Agriculture, Faisalabad w.e.f.31-08-2019 to 06-09-2024(05 Years 0 Month 06 Days).
- 3. Worked as **Lecturer** (on Regular Basis) in the Department of Farm Machinery and Power, Faculty of Agricultural Engineering and Technology, University of Agriculture, Faisalabad from 16-07-2007 to 30-08-2019 (12 Years 1 Month 15 Days).
- 4. Worked as **Lecturer** (on Contract Basis) in the Department of Farm Machinery and Power, Faculty of Agricultural Engineering and Technology, University of Agriculture, Faisalabad from 20-09-2005 to 15-07-2007 (1 Year 9 Months 26 Days).

RESEARCH PROJECTS:

1. Ongoing/Completed Research Projects as Principal Investigator (PI)/Project Coordinator

Sr.	Project Title	Role	Funding Agency and	Total	Status
No.			Duration (From - To)	Budget	
1.	Strengthening of AMRI Research and Development Capabilities in Collaboration with UAF for Fabrication of Cost Effective and Efficient Small Agriculture Implements for Small Farmers	Project Coordi nator/ PI	Agriculture Department, Govt. of the Punjab, Lahore (2020-2023) (3-Years)	PKR 105.141 Million	Completed
2.	Development and Experimental Investigation of Self-propelled Row Crops Variable Height Crop Sprayer for Efficient Crop Spraying	PI	National Research Program for Universities (NRPU) by Higher Education Commission (HEC), Islamabad-Pakistan (2018-2020) (2-Years)	PKR 1.900 Million	Completed
3.	Variable Rate Agro-chemical Application System in Citrus Orchards using On-the-go Sensors	PI	Punjab Agriculture Research Board (PARB), Lahore - Pakistan 2018-2020 (2-Years)	PKR 0.8512 Million	Completed
4.	Development of Locally Fabricated Flat Plate Solar Collector for Energy Production and Solar Driven Desalination with Reverse Osmosis (PV-RO)	PI	National Research Program for Universities (NRPU) by Higher Education Commission (HEC), Islamabad-Pakistan (2017-2019) (2-Years)	PKR 1.819 Million	Completed

2. Ongoing/Completed Projects as Co-PI/Team Member (TM)

Sr.	Project Title	Role	Funding Agency and	Total	Status
No.			Duration (From - To)	Budget	
1.	Multi-Tasking Machine for	Co-PI	Higher Education	PKR	Completed
	Precision Sowing of Row Crops		Commission (HEC),	13.734	
			Islamabad under	Million	
			Technology		
			Development Fund		
			(TDF) Program		
			2019-2021 (2-Years)		
2.	Development of Quality	Co-PI	National Research	PKR	Completed
	Oriented Solar Assisted		Program for	3.0255	
	Diagonal Dryer for Perishable		Universities (NRPU)	Million	
	Products		by Higher Education		
			Commission (HEC),		

			Islamabad-Pakistan (2017-2019) (2-Years)		
3.	Development of Solar Assisted Multicrop Dryers and Energy Efficient Grain Storage Structures for Value Addition and Food Security	Co-PI	Punjab Agriculture Research Board (PARB), Lahore - Pakistan 2017-2019 (2-Years)	PKR 6.728 Million	Completed
4.	Design and Development of a Solar Assisted Cold Storage System for the Preservation of Perishables	Co-PI	Higher Education Commission (HEC), Islamabad under Technology Development Fund (TDF) Program 2017-2019 (2 Years)	PKR 3.317 Million	Completed
5.	Promotion of High Value Agriculture through Provision of Climate Smart Technology Package	Field Engr.	JV for Project Supervision and Monitoring (PSM) Consultancy Services by On Farm Water Management (OFWM), Government of the Punjab, Pakistan 2017-2019 (2-Years)	PKR 99.00 Million	Completed
6.	Field Evaluation and Refinement of DSR Drill and Production Technology for Basmati Rice in Selected Pilot Sites in Basmati Rice Tract of Punjab, Pakistan	Co-PI	Asian Development Bank (ADB) through Punjab Agriculture Research Board (PARB), Lahore 2017-2018 (2-Years)	US\$ 19500	Completed
7.	Income Generation through Development and Indigenization of Energy Efficient E-pedelec Rickshaw and Solar Assisted Milk Powder Machine for Rural Community	Co-PI	International Center for Development and Decent Work (ICDD), Germany 2016-2017 (1-Year)	Euro 15000	Completed
8.	Commercialization of IC Engines for Power Generation from Agricultural Waste using Gasifier	Co-PI	Endowment Fund Secretariat (EFS), University of Agriculture, Faisalabad-Pakistan 2015-2016 (1-Year)	PKR 2.167 Million	Completed
9.	Income Generation using Solar Based Food Processing Technologies for Rural Community	Co-PI	International Center for Development and Decent Work (ICDD), Germany 2014-2016 (2-Years)	Euro 16028	Completed
10.	Establishment of Punjab Bio- energy Institute (PBI) at	Team Mem.	Govt. of the Punjab (GOP), Lahore	PKR 499.00	Completed

	University of Agriculture, Faisalabad-Pakistan		Pakistan (2014-2016)	Million	
11.	Awareness Campaign Regarding Energy Saving Strategies in Faisalabad District	Co-PI	Higher Education Commission (HEC), Islamabad-Pakistan 2015-2016 (1-Year)	PKR 1.025 Million	Completed
12.	Renewable Energy Technologies in Pakistan (Project ID No. 5 525155)	Co-PI	German Academic Exchange Service (DAAD), Germany (Jan. 01 to Dec. 31, 2015)	Euro 39975	Completed
13.	Skills for Biogas Plants (2015) for the Training of "Biogas Plant Supervisors and Technicians" for Faisalabad and Chiniot Districts (4-Batches)	Co-PI	Punjab Skills Development Fund (PSDF), Lahore 15-01-2015 to 15-05-2015 (1-Year)	PKR 17.90 Million	Completed
14.	Nominated by VC-UAF to Coordinate Survey on Biomass Mapping in Pakistan (Notification No. 34092/ORIC Dated 26-03-2015)	UAF Focal Person	Survey Conducted by NUST, Islamabad in Collaboration with AEDB/World Bank during 2015 (1-Year)	N.A.	Completed
15.	Short Term Pilot Project to Test Financing of Solar Tubewells in South Punjab	Team Mem.	Consultancy Services under Memorandum of Understanding (MoU) signed on Oct. 2014 between The First Micro-Finance Bank Ltd. and UAF 2015 (1-Year)	N.A.	Completed
16.	Construction of Bag Type Biogas Plant at University of Agriculture Faisalabad, Pakistan	Co-PI	Endowment Fund Secretariat (EFS), University of Agriculture Faisalabad 2013-2014 (1-Year)	PKR 1.552 Million	Completed

3. Contributions to PC-1(s):

- I. Worked for 5.8 MW_p (3.8 MW running load) Solar Power Electricity Generation Plant with Green Houses at University of Agriculture, Faisalabad to be installed by APOLO AMPEX (Pvt.) Ltd.(Status: Team Member).
- II. Worked for preparing PC-1 for Establishment of Punjab Bioenergy Institute (PBI) at University of Agriculture, Faisalabad-Pakistan (**Status: Team Member**).
- III. Worked for preparing PC-1 for installing 15MW Biomass Power Generation Plant (BPGP) at University of Agriculture, Faisalabad submitted to Government of Punjab (Status: Team Member).

LIST OF PUBLICATIONS:

A. IMPACT FACTOR PUBLICATIONS:

Sr. No.	Name of Authors	Year of Publication	Title	Name of Journal	Actual Impact Factor
1.	M. Usman Farid, Indiana A. Olbert, Andreas Bück, Abdul Ghafoor, Guangxue Wu	January, 2025	CFD modelling and simulation of anaerobic digestion reactors for energy generation from organic wastes: A comprehensive review	Heliyon, 11(2):1-21	3.4
2.	Fraz Ahmad Khan, Farzaneh Khorsandi, Muddassir Ali, Abdul Ghafoor, Ahsan Raza Khan, Muhammad Umair, Shahzaib, Abdul Rehman, Zahid Hussain	December, 2024	Spray drift reduction management in agriculture: A review	Progress in Agricultural Engineering Sciences, 20(1):1-36	SJR 0.26
3.	Saddam Hussain, Xingpeng Lei, Hongqi Wu, Hao Li, Haiyan Song, Decong Zheng, Wang Jiawei, Anbang Li, M. Usman Farid, Abdul Ghafoor	November, 2024	Optimizing the design of a multi-stage tangential roller threshing unit using CFD modeling and experimental studies	Computers and Electronics in Agriculture 226, 109400	7.7
4.	Saddam Hussain, Hu Jianjun, Chen Yong, Asad Ali, Haiyan Song, Decong Zheng, M. Usman Farid, Abdul Ghafoor, Mukhtar Ahmed	March, 2024	CFD study of self- cleaning system of multi-stage tangential roller threshing unit for precise buckwheat breeding	Heliyon, 10 (5)	3.4
5.	Farwa Saeed, Abdul Ghafoor, M. Imtiaz Hussain, Kamran Ikram, Muhammad Faheem,	February, 2024	Empirical and numerical-based predictive analysis of a single-axis PV system under semi-	Frontiers in Energy Research 11, 1293615	2.6

	Muhammad Shahzad, Waseem Amjad, M. Mubashar Omar, Gwi Hyun Lee		arid climate conditions of Pakistan		
6.	Iqra Farhat Asif Nadeem Tabish Muhammad Raashid M. Imran Rashid M. Asif Hussain Muneeb Irshad Abdul Ghafoor M. Usman Farid, Numra Hassan Ansari Ammar Naseer	May, 2023	Performance analysis of monofacial and bifacial over-canal solar photovoltaic (PV) system and assessment of water and land conservation potential	Energy Sources, Part A: Recovery, Utilization, and Environment al Effects, 45(3):6981- 6993	2.902
7.	Zuhair Qamar Anjum Munir Timothy Langrish Abdul Ghafoor Muhammad Tahir	February, 2023	Experimental and Numerical Simulations of a Solar Air Heater for Maximal Value Addition to Agricultural Products	Agriculture, 13:1-17.	3.408
8.	Hafiz M. Nauman Abdul Ghafoor M. Azam Khan Asif Tanveer	December, 2022	Real time variable rate sprayer: Its development and comparative analysis of spray coverage with conventional orchard sprayer	Pakistan Journal of Agricultural Sciences, 59(6):993- 1002	0.856
9.	Waheed Tariq Chaudhry Arslan Sohail Ali Naqvi Muhammad Abdullah Abdul Nasir Syed Hamza Gillani Abdul Ghafoor Asma Sattar Haroon Rashid Muhammad Yamin	September 2022	Photocatalytic Removal of Azo Dyes Using a CNT Doped ZnO/Fe ₂ O ₃ Catalyst	Polish Journal of Environment al Studies, 31(5):1-11	1.699
10.	Abdul Ghafoor Fraz Ahmad Khan F. K. Kouhanestani M. Azam Khan H.M. Nauman M. Usman Farid	July, 2022	Development and Evaluation of a Prototype Self- Propelled Crop Sprayer for Agricultural Sustainability in Small Farms	Sustainabilit y, 14(15):1- 22.	3.889

11.	Saddam Hussain Decong Zheng Haiyan Song M. Usman Farid Abdul Ghafoor Xinvi Ba Hao Wang Wenjun Wang Alam Sher Salah J. Alshamali	March, 2022	Computational fluid dynamics simulation and optimisation of the threshing unit of buckwheat thresher for effective cleaning of the cleaning chamber	Journal of Agricultural Engineering, 53(1):1-8.	1.308
12.	Fraz Ahmad Khan Abdul Ghafoor M. Azam Khan M. Umer Chattha F. K. Kouhanestani	March, 2022	Parameter Optimization of Newly Developed Self-Propelled Variable Height Crop Sprayer Using Response Surface Methodology (RSM) Approach	Agriculture, 12:1-19	2.925
13.	Ghulam Murtaza Anjum Munir Abdul Ghafoor Asif Tanveer	Nov., 2021	Effect of operational parameters on drying rate and moisture content of maize by using hybrid solar dryer	Pakistan Journal of Agricultural Sciences, 58(5):1605- 1613	0.748
14.	Anjum Munir Talha Ashraf Waseem Amjad Abdul Ghafoor Sidrah Rehman Aman Ullah Malik Oliver Hensel Muhammad Sultan Tatiana Morosuk	Nov., 2021	Solar-Hybrid Cold Energy Storage System Coupled with Cooling Pads Backup: A Step towards Decentralized Storage of Perishables	Energies, 14(22):1-20.	3.004
15.	MJM Cheema M. Nauman Abdul Ghafoor A.A. Farooque Zeeshan Haydar M. Umair Ashraf M. Awais	Feb., 2021	Direct seeding of basmati rice through improved drills: potential and constraints in Pakistani farm settings	Applied Engineering in Agriculture, 37(1):53-63.	0.973
16.	Waseem Amjad M. Waseem Anjum Munir Abdul Ghafoor	Feb., 2021	Solar assisted dehydrator for decentralized controlled and	Journal of Solar Energy Engineering, 143(1):01101	1.641

	Furqan Asghar Gohar Ali Gilani		homogeneous multi-product drying	1 ISNN:0199- 6231	
17.	Usman Haider, Anjum Munir, Abdul Ghafoor, Shoukat Ali	Nov., 2020	Design of biogas fermentation chamber and techniques to enrich bio-methanation	Pakistan Journal of Agricultural Sciences, 57(6):1617- 1627. ISSN: 2076- 0906	0.663
18.	Abdul Ghafoor, Tauseef Ahmed, Anjum Munir, Ch. Arslan, Syed Amjad Ahmad	July, 2020	Techno-economic feasibility of solar based desalination through reverse osmosis	Desalination, 485:1-7. ISNN:0011- 9164	7.098
19.	Farhan Hussain Manzoor Ahmad Abdul Ghafoor Asif Tanveer	March, 2020	A developmental study of a solar assisted maize dryer for quality drying	Journal of Animal and Plant Sciences, 30(3):742- 748. ISSN: 1018- 7081	0.529
20.	Abdul Ghafoor Anjum Munir Tauseef Ahmed M. Nauman Waseem Amjad Azlan Zahid	Feb., 2020	Investigation of hybrid solar-driven desalination system employing reverse osmosis process	Desalination and Water Treatment, 178:32-40. ISSN: 1944- 3986	1.234
21.	Usama Bin Ajmal Manzoor Ahmad Abdul Ghafoor Abdul Khaliq	Dec., 2019	Fabrication and performance evaluation of variable width whole-stalk sugarcane harvester	Pakistan Journal of Agricultural Sciences, 56(4):885- 890. ISSN: 2076- 0906	0.618
22.	Ali Raza Anjum Munir Abdul Ghafoor Shoukat Ali	Oct., 2019	Soybean roasting using continuous solar roaster - A decentralized approach for agricultural processing	Journal of Food Process Engineering, 42(6):1-12 (e13184) ISSN: 1745- 4530	1.448
23.	Kamran Ikram, Manzoor Ahmad, Abdul Ghafoor,	June, 2019	Design, fabrication and performance evaluation of	Pakistan Journal of Agricultural	0.690

	Asif Tanveer		indigenous sugarcane leaf stripping machine	Sciences, 56(2):451- 457. ISSN: 2076-0906	
24.	Iqra Ayub, Anjum Munir, Abdul Ghafoor, Waseem Amjad M. Salman Nasir	Dec., 2018	Solar thermal application for decentralized food baking using Scheffler reflector technology	Journal of Solar Energy Engineering, 140(6):06100 5-061005-9 ISSN: 1528- 8986	1.614
25.	Iqra Ayub, Anjum Munir, Waseem Amjad, Abdul Ghafoor, M. Salman Nasir	August, 2018	Energy and exergy- based thermal analyses of a solar bakery unit	Journal of Thermal Analysis and Calorimetry, 133(2):1001- 1013. ISSN: 1588- 2926	2.042
26.	Hongyan Ren, Nan Jiang, Tao Wang, M. M. Omar, Wenquan Ruan Abdul Ghafoor	April, 2018	Enhanced biogas production in the duckweed anaerobic digestion process	Journal of Energy Resource Technology, 140(4):04180 5-041805-9. ISSN:0195- 0738	2.197
27.	Arslan Afzal, Anjum Munir, Abdul Ghafoor, Jorge L. Alvarado	Dec., 2017	Development of hybrid solar distillation system for essential oil extraction	Renewable Energy, 113:22-29. ISSN: 0960- 1481	3.476
28.	Sidrah Ashfaq, Manzoor Ahmad, Anjum Munir, Abdul Ghafoor	Oct., 2017	Improvement of air homogeneity in solar assisted paddy dryer with central air flow channel	International Journal of Food Engineering 13(10):1-8. ISSN: 1556- 3758	0.497
29.	Rabia Anum, Abdul Ghafoor, Anjum Munir	April, 2017	Study of the drying behaviour and performance evaluation of gas fired hybrid solar dryer	Journal of Food Process Engineering 40(2):1-11. ISSN: 1745- 4530	0.675
30.	Azlan Zahid, Abdul Ghafoor, Anjum Munir,	March, 2017	Solar desalination of water using evaporation	Desalination and Water Treatment	1.173

21	Manzoor Ahmad, Abdul Nasir, Syed Amjad Ahmad	2016	condensation and heat recovery method	68:80-90. ISSN: 1944- 3986	0.120
31.	Hamza Bilal, Abdul Ghafoor, Anjum Munir	Dec., 2016	Desalination of brackish water using dual acting solar still	Journal of Engineering Research 4(4):178- 193. ISSN: 2307-1885	0.128
32.	Abdul Ghafoor, Tanzeel ur Rehman, Anjum Munir, Manzoor Ahmad, Muhammad Iqbal	July, 2016	Current status and overview of renewable energy potential in Pakistan for continuous energy sustainability	Renewable and Sustainable Energy Reviews, 60:1332- 1342. ISSN: 1364-0321	5.901
33.	Manzoor Hussain, Manzoor Ahmad, M. Akram, Abdul Ghafoor	March, 2016	Comparative study for the effect of different sowing techniques on wheat (Triticumaestivum L.) productivity and economic feasibility	Custos e Agronegocio On Line, 12(1):36-48. ISSN: 1808- 2882	0.060
34.	Abdul Ghafoor, G. V. Fracastoro	March, 2015	Cost-effectiveness of multi-purpose solar thermal systems and comparison with PV-based heat pumps	Solar Energy, 113:272-280. ISSN: 0038- 092X	3.469
35.	Abdul Ghafoor, Anjum Munir	March, 2015	Worldwide overview of solar thermal cooling technologies	Renewable and Sustainable Energy Reviews, 43:763-774. ISSN: 1364- 0321	5.901
36.	Abdul Ghafoor, Anjum Munir	February, 2015	Design and economics analysis of an off-grid PV system for household electrification	Renewable and Sustainable Energy Reviews, 42:496-502. ISSN: 1364-	5.901

				0321	
37.	Anjum Munir, Oliver Hensel, Wolfgang Scheffler, Heike Hoedt, Waseem Amjad,	October, 2014	Design, development and experimental results of a solar based distillery for the	Solar Energy, 108:548-559. ISSN: 0038- 092X	3.469
	Abdul Ghafoor		essential oils extraction from medicinal and aromatic plants		
38.	Anjum Munir, Jehanzeb Alvi, Sidrah Ashfaq, Abdul Ghafoor	March, 2014	Performance evaluation of a biomass boiler on the basis of heat loss method and total heat values of steam	Pakistan Journal of Agricultural Sciences, 51(1):209- 215. ISSN: 2076-0906	1.049

B. NON-IMPACT FACTOR PUBLICATIONS:

Sr. No.	Name of Authors	Year of Pub.	Title	Name of Journal
1.	Shahzad Ahmad Zarina Yasmeen Muhammad Ashraf Abdul Ghafoor Manzoor Ahmad Abdul Aleem Ghulam Saddique M. Iqbal Sabir Maqsood Ahmad Iftikhar Haider	Sep., 2022	Performance assessment of tractor mounted garlic planter using different varieties of garlic	Journal of Agricultural Research, 60(3):251-257
2.	Sohail Ahmad Abdul Ghafoor M. Azam Khan M. Usman Farid	July, 2022	Development and testing of walk-behind granular fertilizer applicator for precise fertilizer application	Pak. J. Agri., Agril. Engg., Vet. Sci., 38(1):65-70
3.	Anam Sadia M. Usman Farid Abdul Ghafoor Abdul Nasir Umer Maqsood M. Zeeshan Farid Muhammad Iqbal	Sep., 2020	Effective management of hospital and medical waste in rural areas of Pakistan: A case study	Agrobiological Records, 2:76-84. ISSN: 2708-7190
4.	Fraz A. Khan Anjum Munir Abdul Ghafoor Ghulam Murtaza	April, 2018	The design, fabrication and performance evaluation of solar sustained batch type maize dryer for valuation addition	International Journal of Agriculture, Environment and

				Food Sciences, 2(2):50-56. ISSN:2618-5946
5.	Fraz A. Khan Ahmet Kurklu Abdul Ghafoor Qasid Ali M. Umair Shahzaib	April, 2018	A review of hydroponic greenhouse cultivation for sustainable agriculture	International Journal of Agriculture, Environment and Food Sciences, 2(2):59-66. ISSN:2618-5946
6.	Arslan Afzal, Jorge L. Alvarado, Anjum Munir, Abdul Ghafoor	April, 2017	Income generation of rural community by using solar distillation system	Renewable Energy & Power Quality Journal (RE&PQJ), 1(15):179-183. ISSN: 2172-038X
7.	H. M. Nauman, Abdul Ghafoor, Anjum Munir, Manzoor Ahmad	Dece mber, 2015	Development and performance evaluation of indigenized flat plate collector water heater for domestic and industrial applications	Agricultural Engineering International: CIGR Journal, 17(4):156-164. ISSN: 1682-1130
8.	Azeem Anjum, Abdul Ghafoor, Anjum Munir, Muhammad Iqbal, Manzoor Ahmad	March , 2015	Design modification of conventional wheat straw chopper	Agricultural Engineering International: CIGR Journal, 17(1):50-58. ISSN: 1682-1130
9.	Abdul Ghafoor, Anjum Munir	Octob er, 2014	Thermo-economic optimization of solar assisted heating and cooling (SAHC) system	International Journal of Renewable Energy Development, 3(3):175-185. ISSN: 2252-4940
10.	M. Tauseef Asghar, Abdul Ghafoor, Anjum Munir, Muhammad Iqbal, Manzoor Ahmad	July, 2014	Design modification and field testing of groundnut digger	Asian Journal of Science and Technology, 5(7):389-394. ISSN: 0976-3376
11.	Ahmad Nawaz Gill, Abdul Ghafoor, Anjum Munir, Muhammad Iqbal	July, 2014	Design modification and field performance of two row maize planter	International Journal of Development Research, 4(7):1336-1340. ISSN: 2230-9926
12.	Mariela Arboit, Jacopo Toniolo,	March ,	Experimental and theoretical analysis of thermal solar collector systems for DHW	Renewable Energy & Power

	Abdul Ghafoor,	2012	in northern Italy	Quality Journal
	G. V. Fracastoro			(RE&PQJ),
				1(10):167-172.
				ISSN: 2172-038X
13.	Marco Simonetti,	March	In-field monitoring and numerical	Renewable
	Luca Degiorgis,	,	parametric analysis of a small size	Energy & Power
	G. V. Fracastoro,	2012	adsorption solar cooling plant in Italy	Quality Journal
	Abdul Ghafoor,			(RE&QPJ),
	Mariela Arboit			1(10):997-1001.
				ISSN: 2172-038X

C. LIST OF BOOKS/BOOK CHAPTERS/PROCEEDING/ABSTRACT BOOKS/MANUALS:

Sr. No.	Author(s)/Editors	Year	Title	Name of Publisher
1.	M. Usman Farid, Atta Ullah, Abdul Ghafoor, Shahbaz N. Khan, Mazhar Iqbal, Furqan Muhayodin, Abdul Shabbir, Chaudhry Arslan Abdul Nasir	2023	Air Pollution and Clean Energy: Latest Trends and Future Perspectives	IntechOpen Limited 5 Princes Gate Court, London, SW7 2QJ, UK Published by IntechOpen in a Book "Air Pollution - Latest Status and Current Developments" ISBN978-1-83768-917-0 ISSN2754-6713
2.	Anjum Munir Abdul Ghafoor Waseem Amjad Adeel Ashraf Oliver Hensel	2019	Published Book Chapter entitled "Occupational Health and Safety in Pakistan's Sugar Mills" in a book "Occupational Safety and Health Challenges in Southern Agriculture"	Rainer HammpVerlag, Augsburg, Munchen Germany. Volume 15. ISBN 978-3-95710-247-8 Labor and Globalization: ISSN 2196-5382
3.	Anjum Munir Oliver Hensel Abdul Ghafoor Waseem Amjad	2018	Published Book Chapter entitled "Providing Rural Areas with Decentralized Energy" in a book "Decent Work Deficits in Southern Agriculture: Measurements, Drivers and Strategies"	Rainer HammpVerlag, Augsburg, Munchen Germany. Volume 11. ISBN 978-3-86618-896-9 Labor and Globalization: ISSN 2196-5382
4.	Anjum Munir Allah Bakhsh Abdul Ghafoor Waseem Amjad Umar Farooq	2018	Published Book Chapter entitled "Rural Energy Solutions for Community Development" in a book "Developing Sustainable Agriculture in Pakistan"	Routledge Taylor and Francis Group Publishers - CRC Press
5.	Asghar Ali Sarfraz Hassan Abdul Ghafoor	2018	Published Book Chapter entitled "Farm Services" in a Book "Developing Sustainable Agriculture in Pakistan"	Routledge Taylor and Francis Group Publishers - CRC Press

6.	Oliver Hensel,	2016	Proceedings of Abstract Book	International Standard Book
	Allah Bakhsh,		entitled International Workshop on	Numbering (ISBN) Agency,
	Anjum Munir,		Sustainable Energy Solutions for	National
	Abdul Ghafoor,		Community Development in	Library of Pakistan
	Waseem Amjad		Pakistan	ISBN:978-969-9035-13-5
7.	Oliver Hensel,	2015	Proceedings of Abstract Book	International Standard Book
	Allah Bakhsh,		entitled International Workshop on	Numbering (ISBN) Agency,
	Anjum Munir,		Renewable Energy Technologies	National
	Abdul Ghafoor		for Community Development in	Library of Pakistan
			Pakistan	ISBN:978-969-9035-11-1
8.	Oliver Hensel,	2014	Proceedings of Abstract Book	International Standard Book
	Allah Bakhsh,		entitled International Workshop on	Numbering (ISBN) Agency,
	Anjum Munir,		Renewable Energy Technologies in	National
	Abdul Ghafoor		Pakistan	Library of Pakistan
				ISBN:978-969-9035-01-4
9.	Muhammad Iqbal,	2013	Training Manual for Biogas Energy	International Standard Book
	Anjum Munir,		Plant Supervisor	Numbering (ISBN) Agency,
	Abdul Ghafoor			National
				Library of Pakistan
				ISBN:978-969-9035-08-1
10.	Muhammad Iqbal,	2013	Training Manual for Biogas Energy	International Standard Book
	Anjum Munir,		Plant Technician (in Urdu)	Numbering (ISBN) Agency,
	Abdul Ghafoor			National
				Library of Pakistan
				ISBN:978-969-9035-09-8
11.	Oliver Hensel,	2013	Proceedings of Abstract Book	International Standard Book
	Muhammad Iqbal,		entitled International Conference	Numbering (ISBN) Agency,
	Anjum Munir,		on Renewable Energy	National
	Abdul Ghafoor		Technologies in Pakistan	Library of Pakistan
				ISBN:978-969-9035-05-0

D. INTERNATIONAL/NATIONAL PROCEEDINGS/ABSTRACTS PUBLISHED:

- 1. Muhammad Asif, Muhammad Usman Farid, Daniel Edward Ciolkosz, **Abdul Ghafoor**, Abdul Nasir, Shahbaz Hussain. 2022. Development of rotor type biomass densification machine for the production of RDF Pallets from Agricultural wastes and crop by-products. Published in Abstract Book of "Northeast Agricultural / Biological Engineering Conference NABEC 2022" held on July 31 to August 03, 2022 organized by American Society of Agricultural and Biological Engineers, USA.
- 2. Taha Hussain, Muhammad Azeem, Syed Mohammad Husnain Hashmi, Rameez, Muhammad Usman Farid, **Abdul Ghafoor**, Ch. Arslan, Muhammad Nadeem Ashraf, Abdul Nasir. 2022. Development of floating trash collecting machine (FTCM) for sustainable environment. Published in Abstract Book of "Climate Change Impacts and Solutions" held on November 07-09, 2022 at Institute of Soil and Environmental Sciences, University of Agriculture Faisalabad-Paistan. ISBN: 978-969-8237-94-3.
- 3. Muhammad Danish, Fayaz Ahmad, Ayesha Naz, Muhammad Usman Farid, **Abdul Ghafoor**, Ch. Arslan, Muhammad Nadeem Ashraf, Abdul Nasir. 2022. Sensor based flood irrigation alarming system for precision agriculture. Published in Abstract Book of "Climate Change

- Impacts and Solutions" held on November 07-09, 2022 at Institute of Soil and Environmental Sciences, University of Agriculture Faisalabad-Pakistan. ISBN: 978-969-8237-94-3.
- 4. Shahbaz Hussain, Muhammad Usman Farid, **Abdul Ghafoor**, Ch. Arslan, Muhammad Asif, Furqan Muhayodin, Muhammad Abubakar Aslam, Abdul Nasir. 2022. Thermo-chemical pyrolysis of saw dust to produce gaseous fuel using fluidized bed gasification technique to combat climate change and global warming. Published in Abstract Book of "7th International Conference on Climate Smart Agriculture: innovations and Adaptations" held on June 15-17, 2022 at Faculty of Agriculture, University of Poonch Rawalakot, Azad Jammu and Kashmir, Pakistan.
- 5. Fizza Aqib, Muhammad Usman Farid, Ch. Arslan, **Abdul Ghafoor**, Muhammad Asif, Abdul Nasir. 2022. Eco-friendly biomass stove for rural areas: a solution for climate change and natural resource management. Published in Abstract Book of "7th International Conference on Climate Smart Agriculture: innovations and Adaptations" held on June 15-17, 2022 at Faculty of Agriculture, University of Poonch Rawalakot, Azad Jammu and Kashmir, Pakistan.
- 6. Syed Nabeel Husnain, Oliver Hensel, Anjum Munir, M. Usman Farid, Waseem Amjad, **Abdul Ghafoor**. 2019. Design and development of solar based milk pasteurization unit using Scheffler reflector as a heat source. Published in Abstract Book of "International Conference on Green Energy Technologies: Opportunities and Challenges (GET)" held on October 29-30, 2019 at University of Agriculture Faisalabad-Pakistan. ISBN: 978-969-9035-18-0.
- 7. Bilal Ahmad, Hafiz Muhammad Usman Ali, **Abdul Ghafoor**. 2019. Field study of mould board plough for effective tilth. 2019. Published in Abstract Book of "International Conference on Green Energy Technologies: Opportunities and Challenges (GET)" held on October 29-30, 2019 at University of Agriculture Faisalabad-Pakistan. ISBN: 978-969-9035-18-0.
- 8. Mahnoor Baig, Hafiz M. Sheeraz, Umar Latif, Usama Amin, M. Usman Farid, Abdul Nasir, **Abdul Ghafoor**. 2019. Pulverized fuel combustion (PFC) of solid wastes for electricity generation. Published in Abstract Book of "International Conference on Green Energy Technologies: Opportunities and Challenges (GET) held on October 29-30, 2019 at University of Agriculture Faisalabad-Pakistan. ISBN: 978-969-9035-18-0.
- 9. Ayesha Khalil, Fizza Aqib, Aqsa Tahir, Kashif Ali, M. Amin, M. Usman Farid, Abdul Nasir, **Abdul Ghafoor**. 2019. Fluidized bed drying of agricultural products: An energy conservation technology in agricultural post-processing. Published in Abstract Book of "International Conference on Green Energy Technologies: Opportunities and Challenges (GET) held on October 29-30, 2019 at University of Agriculture Faisalabad-Pakistan. ISBN: 978-969-9035-18-0.
- 10. Hamza Mukhtar, H. M. Usman Ali, Bilal Ahmad, Usman Ali, **Abdul Ghafoor**, Sidrah Ashfaq. 2019. Design, development and performance evaluation of pedal driven lawn mower. Published in Abstract Book of "International Conference on Green Energy Technologies: Opportunities and Challenges (GET) held on October 29-30, 2019 at University of Agriculture Faisalabad-Pakistan. ISBN: 978-969-9035-18-0.
- 11. **Abdul Ghafoor**, Anjum Munir, Muhammad Azam Khan, Waseem Amjad. 2018. Provision of solar system designing for high efficiency irrigation system and tunnel farming in agriculture sector of Pakistan. Published in XIX-World Congress of CIGR, Antalya, Turkey held on April 22-25, 2018.
- 12. Zeeshan Haydar, **Abdul Ghafoor**, Saddam Hussain, Arfan Arshad, Muhammad Awais, Muhammad Umair. 2018. Precise droplet size measurement to mitigate pesticides related climate issues. Published in Abstract Book of "International Conference on Climate Smart

- Agriculture: The Way of Farming in 21st Century" held at Mian Nawaz Sharif University of Agriculture (MNSUA), Multan held on October 08-09, 2018.
- 13. Anjum Munir, Oliver Hensel, **Abdul Ghafoor**, Waseem Amjad. 2016. Sustainable solar and bioenergy technologies for community development in Pakistan. In Abstract Book of "International Workshop on Sustainable Energy Solutions for Community Development in Pakistan" held at University of Agriculture, Faisalabad-Pakistan from November08-09, 2016. ISBN 978-969-9035-13-5.
- 14. Jahan Zeb Alvi, Gang Pei, Anjum Munir, **Abdul Ghafoor**, Waseem Amjad, Sidrah Ashfaq. 2016. Comparison and optimization of the configurations for organic Rankine cycles with different working fluids using medium-temperature geothermal water. In Abstract Book of "International Workshop on Sustainable Energy Solutions for Community Development in Pakistan" held at University of Agriculture, Faisalabad-Pakistan from November08-09, 2016. ISBN 978-969-9035-13-5.
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- 16. Hafiz Muhammad Nauman, Abdul Ghafoor, M.J.M Cheema. 2016. A prospect of robotics in precision agriculture as an energy efficient technology in Pakistan. In Abstract Book of "International Workshop on Sustainable Energy Solutions for Community Development in Pakistan" held at University of Agriculture, Faisalabad-Pakistan from November08-09, 2016. ISBN 978-969-9035-13-5.
- 17. Azlan Zahid, **Abdul Ghafoor**, Manzoor Ahmad, Anjum Munir. 2016. Sustainable thermal desalination using combined-cycle solar and geothermal heat sources. In Abstract Book of "International Workshop on Sustainable Energy Solutions for Community Development in Pakistan" held at University of Agriculture, Faisalabad-Pakistan from November08-09, 2016. ISBN 978-969-9035-13-5.
- 18. Hasnain Yousuf, Saqlain Yousuf, Anjum Munir, **Abdul Ghafoor**, Yasir Jamil, Noor-uz-Zaman. 2016. Development and application of a work-bench for the real-time parametric investigation of in function photovoltaic system. In Abstract Book of "International Workshop on Sustainable Energy Solutions for Community Development in Pakistan" held at University of Agriculture, Faisalabad-Pakistan from November08-09, 2016. ISBN 978-969-9035-13-5.
- 19. Mudassar Anwar Butt, Azlan Zahid, **Abdul Ghafoor**, Muhammad Ali. 2016. Global renewable energy projections. In Abstract Book of "International Workshop on Sustainable Energy Solutions for Community Development in Pakistan" held at University of Agriculture, Faisalabad-Pakistan from November08-09, 2016. ISBN 978-969-9035-13-5.
- 20. Muhammad Ali, Manzoor Ahmad, **Abdul Ghafoor**, Azlan Zahid. 2016. Renewable desalination: A methodology for cost comparison. In Abstract Book of "International Workshop on Sustainable Energy Solutions for Community Development in Pakistan" held at University of Agriculture, Faisalabad-Pakistan from November08-09, 2016. ISBN 978-969-9035-13-5.
- 21. Syed Shariq Pervaiz, Anjum Munir, **Abdul Ghafoor**. 2016. Design modification of a hybrid continuous solar roaster for quality roasting of agricultural products. In Abstract Book of "International Workshop on Sustainable Energy Solutions for Community Development in Pakistan" held at University of Agriculture, Faisalabad-Pakistan from November08-09, 2016. ISBN 978-969-9035-13-5.

- 22. Abubakar Bin Talat, Anjum Munir, Syed Nabeel Husnain, **Abdul Ghafoor**. 2016. Solar thermal energy storage using phase change materials. In Abstract Book of "International Workshop on Sustainable Energy Solutions for Community Development in Pakistan" held at University of Agriculture, Faisalabad-Pakistan from November08-09, 2016. ISBN 978-969-9035-13-5.
- 23. Faisal Shahzad, Azlan Zahid, **Abdul Ghafoor**. 2016. Identification of renewable energy sources: only possible way for sustainable agriculture. In Abstract Book of "International Workshop on Sustainable Energy Solutions for Community Development in Pakistan" held at University of Agriculture, Faisalabad-Pakistan from November08-09, 2016. ISBN 978-969-9035-13-5.
- 24. Anjum Munir, **Abdul Ghafoor**, Allah Bakhsh. 2016. Design and development of floating drum biogas plants for tubewell operation and farm electrification. In Proceeding of "2nd International Conference on Biotechnology (ICB): Challenges and Opportunities in Pakistan" organized by Faculty of Biological Sciences & ORIC, University of South Asia, Lahore, Pakistan, February 24-25, 2016, Published by USA Journal of R&D. ISSN: 2412-6926.
- 25. Anjum Munir, Oliver Hensel, **Abdul Ghafoor.**2015. Development of decentralized RE technologies for value addition and income generation. In Abstract Book of "International Workshop on Renewable Energy Technologies for Community Development in Pakistan" held at University of Agriculture, Faisalabad, Pakistan, November 04-06, 2015. ISBN 978-969-9035-11-1.
- 26. **Abdul Ghafoor**, Anjum Munir, Manzoor Ahmad, Yingying Yang, Sidrah Ashfaq, Syed Nabeel Husnain. 2015. Combining heat pump with solar collectors and buffer storage for sanitary hot water production in hospital. In Abstract Book of "International Workshop on Renewable Energy Technologies for Community Development in Pakistan" held at University of Agriculture, Faisalabad, Pakistan, November 04-06, 2015. ISBN 978-969-9035-11-1.
- 27. Azlan Zahid, **Abdul Ghafoor**, Muhammad Ali, Umar Farooq. 2015. Techno-economic feasibility of integrated PV-RO system for desalination of water using three-point manual sun tracking and spray cooling of PV system. In Abstract Book of "International Workshop on Renewable Energy Technologies for Community Development in Pakistan" held at University of Agriculture, Faisalabad, Pakistan, November 04-06, 2015. ISBN 978-969-9035-11-1.
- 28. Arslan Afzal, Anjum Munir, **Abdul Ghafoor**, Muhammad Mubashar Omar, Muhammad Usman Khan. 2015. Extraction of essential oil from eucalyptus leaves by using solar distillation system. In Abstract Book of "International Workshop on Renewable Energy Technologies for Community Development in Pakistan" held at University of Agriculture, Faisalabad, Pakistan, November 04-06, 2015. ISBN 978-969-9035-11-1.
- 29. Muhammad Ali, **Abdul Ghafoor**, Sidrah Ashfaq, AzlanZahid, Umar Farooq, Mohsin Noor. 2015. Development and testing of baffles and corrugated type solar air collector. In Abstract Book of "International Workshop on Renewable Energy Technologies for Community Development in Pakistan" held at University of Agriculture, Faisalabad, Pakistan, November 04-06, 2015. ISBN 978-969-9035-11-1.
- 30. M. Mudassir Arif Ch., Anjum Munir, Abdul Ghafoor, M. Azam Khan, H. M. Nauman, UmerMaqsood, Waqar Akram. 2015. Design, development and testing of hybrid solar dryer for the processing of perishable agricultural products. In Abstract Book of "International Workshop on Renewable Energy Technologies for Community Development in Pakistan" held at University of Agriculture, Faisalabad, Pakistan, November 04-06, 2015. ISBN 978-969-9035-11-1.

- 31. Badar Munir Khan Niazi, Anjum Munir, **Abdul Ghafoor**, Hafiz Muhammad Nauman, Muhammad Mudassir Arif. 2015. Design optimization and performance evaluation of a continuous solar roaster to process the agricultural harvests. In Abstract Book of "International Workshop on Renewable Energy Technologies for Community Development in Pakistan" held at University of Agriculture, Faisalabad, Pakistan, November 04-06, 2015. ISBN 978-969-9035-11-1.
- 32. Azlan Zahid, **Abdul Ghafoor**, Anjum Munir, Manzoor Ahmad, Muhammad Ali, Umar Farooq. 2015. Solar desalination of water by heat recovery method using flat plate collector. In Abstract Book of "International Workshop on Renewable Energy Technologies for Community Development in Pakistan" held at University of Agriculture, Faisalabad, Pakistan, November 04-06, 2015. ISBN 978-969-9035-11-1.
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- 34. Rabia Anum, **Abdul Ghafoor**, Anjum Munir. 2015. Study of the drying behavior and performance evaluation of gas fired hybrid solar dryer. In Abstract Book of "International Workshop on Renewable Energy Technologies for Community Development in Pakistan" held at University of Agriculture, Faisalabad, Pakistan, November 04-06, 2015. ISBN 978-969-9035-11-1.
- 35. Iqra Ayub, Anjum Munir, **Abdul Ghafoor**. 2015. Development and performance evaluation of solar assisted bakery unit for value addition. In Abstract Book of "International Workshop on Renewable Energy Technologies for Community Development in Pakistan" held at University of Agriculture, Faisalabad, Pakistan, November 04-06, 2015. ISBN 978-969-9035-11-1.
- 36. Noor uz Zaman, Anjum Munir, **Abdul Ghafoor**. 2015. LED as instant power saving device. In Abstract Book of "International Workshop on Renewable Energy Technologies for Community Development in Pakistan" held at University of Agriculture, Faisalabad, Pakistan, November 04-06, 2015. ISBN 978-969-9035-11-1.
- 37. Zaheer Abbas, Anjum Munir, **Abdul Ghafoor**, Mubashir Ali. 2015. Capacity building of rural community for installation of biogas plants. In Abstract Book of "International Workshop on Renewable Energy Technologies for Community Development in Pakistan" held at University of Agriculture, Faisalabad, Pakistan, November 04-06, 2015. ISBN 978-969-9035-11-1.
- 38. Zohra Anmol, Manzoor Ahmad, Hafiz Muhammad Nauman, **Abdul Ghafoor**, Anjum Munir, Azlan Zahid. 2015. Design and development of passive solar water distiller for the production of purified drinking water at domestic level. In Abstract Book of "International Workshop on Renewable Energy Technologies for Community Development in Pakistan" held at University of Agriculture, Faisalabad, Pakistan, November 04-06, 2015. ISBN 978-969-9035-11-1.
- 39. Hafiz Muhammad Nauman, Manzoor Ahmad, **Abdul Ghafoor**, Anjum Munir, Muhammad MudassirArif Ch., Badar Munir Khan Niazi. 2015. Design and development of Jatropha oil extractor and processor for biodiesel production under local climatic conditions at farm level. In Abstract Book of "International Workshop on Renewable Energy Technologies for Community Development in Pakistan" held at University of Agriculture, Faisalabad, Pakistan, November 04-06, 2015. ISBN 978-969-9035-11-1.

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- 41. Anjum Munir, Oliver Hensel, **Abdul Ghafoor**, Muhammad Iqbal. 2014. Development, installation and performance evaluation of a biogas plant and solar based technologies at UAF. In Abstract Book of "International Workshop on Renewable Energy Technologies in Pakistan" held at University of Agriculture, Faisalabad, Pakistan, December 16-18, 2014. ISBN 978-969-9035-01-04.
- 42. **Abdul Ghafoor,** Khadija Tahira, Anjum Munir. 2014. Sensitivity analysis of multi-purpose solar thermal system. In Abstract Book of "International Workshop on Renewable Energy Technologies in Pakistan" held at University of Agriculture, Faisalabad, Pakistan, December 16-18, 2014. ISBN 978-969-9035-01-04.
- 43. Hafiz Muhammad Nauman, **Abdul Ghafoor**, Anjum Munir, Manzoor Ahmad, Badar Munir Khan Niazi, Farrukh Ehsan. 2014. Development of flat plate collector for energy production. In Abstract Book of "International Workshop on Renewable Energy Technologies in Pakistan" held at University of Agriculture, Faisalabad, Pakistan, December 16-18, 2014. ISBN 978-969-9035-01-04.
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- 45. ArslanAfzal, Anjum Munir, **Abdul Ghafoor**, Oliver Hensel, Muhammad Mubashar Omar, Faizan Majeed, Usman Khan. 2014. GC-MS analysis of solar distilled essential oil for value addition. In Abstract Book of "International Workshop on Renewable Energy Technologies in Pakistan" held at University of Agriculture, Faisalabad, Pakistan, December 16-18, 2014. ISBN 978-969-9035-01-04.
- 46. Syed Nabeel Husnain, Anjum Munir, **Abdul Ghafoor**, Muhammad Tayyab. 2014. Development and field experiments of solar distillation system for the extraction of essential oils using direct steam injection. In Abstract Book of "International Workshop on Renewable Energy Technologies in Pakistan" held at University of Agriculture, Faisalabad, Pakistan, December 16-18, 2014. ISBN 978-969-9035-01-04.
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- 52. Tanzeel ur Rehman, **Abdul Ghafoor**, Muhammad Faheem. 2014. Status of farm mechanization in Pakistan. In Abstract Book of "International Workshop on Renewable Energy Technologies in Pakistan" held at University of Agriculture, Faisalabad, Pakistan, December 16-18, 2014. ISBN 978-969-9035-01-04.
- 53. Anjum Munir, Oliver Hensel, Wolfgang Scheffler, Heike Hoedt, **Abdul Ghafoor**, Waseem Amjad. **2013**. Design, development and experimental results of a solar based distillery for the essential oils extraction from medicinal plants. Published in Abstract Book of Sun New Energy Conference SuNEC-2013 held at Santa Flavia, Sicily, ITALY, 10-12 September 2013, ISBN 9788868556761.
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- 60. Hafiz Abdul Qahir, Anjum Munir, **Abdul Ghafoor**, Jehanzeb Alvi. 2013. Design, development and installation of biogas plant for tubewell operation at UAF. In Abstract Book of "International Conference on Renewable Energy Technologies in Pakistan" held at University of Agriculture, Faisalabad, Pakistan, October 1-3, 2013, ISBN 978-969-9035-05-0
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- 62. Muhammad Usman, **Abdul Ghafoor**, Abdul Shabbir, Khalid Hussain and Wajid Naseem. 2008. Effect of different irrigation depths on cotton yield and water use efficiency. Proceedings of International Symposium on "Modern Approaches and Techniques in Agriculture to Ensure Food Security in Pakistan" held at University of Agriculture Faisalabad Pakistan.

LIST OF CURRICULUM/TECHNICAL REPORTS:

- 1. Special Invitee for PEC Engineering Curriculum Review and Development Committee (ECRDC) of Agricultural, Food and Allied Engineering Disciplines to review and update the curriculum for Bachelor of Agricultural Engineering degree program during different meetings in the year 2019 (Final version of curriculum was finalized in 2020 and published on PEC website).
- 2. Committee member of "Final Meeting of National Curriculum Review Committee (NCRC)" to develop OBE curriculum of B.Sc./M.Sc. Energy Systems Engineering held at HEC Regional Office, Peshawar from March 12-14, 2018. Notification No. 9-36(ESE)/Acad (Curri)/HEC/2017/1980 Dated 27-02-2018.
- 3. Committee member of "Preliminary Meeting of National Curriculum Revision Committee (NCRC)" to develop OBE curriculum of B.Sc./M.Sc. Energy Systems Engineering degree program held at HEC Regional Centre, Lahore from December 27-29, 2017. Notification No. 9-36(ESE)/Acad(Curri)/HEC/2017 Dated 27-12-2017.
- 4. Convener of a committee for conducting field surveys and preparing audit report for submission to Agriculture Department, Lahore for the project on "Promotion of Agriculture Mechanization" under Punjab Irrigated Agriculture Productivity Improvement Project in different Tehsils and Districts (TTS, Jhang, Faisalabad, Chiniot) of Faisalabad Division. (Survey conducted from November 16-30, 2017).
- 5. Convener of a committee for conducting field surveys and preparing audit report for submitting to Agriculture Department. Lahore for the projects on "Promotion of Agriculture Mechanization" and "Laser Land Leveler Units" provided under Punjab Irrigated Agriculture Productivity Improvement Project in different Tehsils and Districts (TTS, Jhang, Faisalabad, Chiniot) of Faisalabad Division. (Survey conducted from August 06-22, 2016).
- 6. Committee member of "Final Meeting of National Curriculum Review Committee (NCRC)" for a new degree program of B.Sc./M.Sc. Energy Systems Engineering held at HEC Regional Office, Lahore from September 29 to October 01, 2014. Notification No. 9-1/Energy Sys/Curri/HEC/2013/4861 Dated 22-09-2014.
- 7. Committee member of "Preliminary Meeting of National Curriculum Revision Committee (NCRC)" to develop the new curriculum of B.Sc./M.Sc. Energy Systems Engineering degree program held at HEC Regional Centre, Lahore from January 08-10, 2014. Notification No. 9-1/Energy Sys/Curri/HEC/2013/515 Dated 27-12-2013.
- 8. Committee member to visit 11 out of 50 biogas plants installed by the Department of Agriculture (Field Wing), Punjab during the year 2013 in order to prepare a detailed technical report on design, performance evaluation and monitoring of biogas plants at Jhang, Shorkot, Silanwali, Kotmomin, Kalurkot, Layyah, Muzaffargarh, Khanpur, Bahawalnagar and Wazirabad Sites from November 06-11, 2013 for submission to Additional Secretary (Planning), Agriculture Secretariat, Punjab, Pakistan.

9. Prepared a field testing report for comparison of SONALIKA RX60 (Indian) and MF-260 (Pakistani) tractor under the directive of the Dean, FAET for submission to Chief Minister of the Punjab.

COUNTRIES VISITED AND TASKS ACHIEVED:

Name of Country	Purpose of Visit	
Thailand	February 28, 2025 to March 02, 2025 (Notification Endst. No. PS-4/1247-	
	53 Dated 10-02-2025)	
	To attend Study Tour of the Asian and Pacific Network for Testing of	
	Agricultural Machinery (ANTAM) in Bangkok and Kamphaeng Saen,	
	Thailand, organized by the Centre for Sustainable Agricultural	
	Mechanization (CSAM) of the United Nations Economic and Social	
	Commission for Asia and the Pacific (ESCAP) as ANTAM Secretariat,	
	in collaboration with the Thailand National Agricultural Machinery	
	Center (NAMC) of Kasetsart University, Thailand	
Philippines	February 24-27, 2025 (Notification Endst. No. PS-4/1247-53 Dated 10-02-	
	2025)	
	To attend Knowledge-Sharing Workshops on Agricultural Machinery	
	Standard and Testing Code Development by the Agricultural Machinery	
	Testing and Evaluation Center, the University of the Philippines, Los	
	Banos (UPLB), the Philippines	
Nepal	December 03-11, 2024 (Notification Endst. No. PS-1(1)/16984-89 Dated 27-	
	11-2024)	
	To attend ANTAM workshop on sustainable and climate resilient	
	mechanization organized by the Asian and Pacific Network for Testing	
	of Agricultural Machinery (ANTAM) at Kathmandu, Nepal along with	
	11 th Annual Meeting of ANTAM and 7 th Regional Training of Trainers	
	of ANTAM sponsored by Asian Development Bank (ADB).	
Malaysia	October 25-26, 2024 (Notification Endst. No. PS-1(1)/15787-92Dated 17-10-	
	2024)	
	To attend workshop and exploratory visit for the potential utilization of	
	rice straw in bio-pellet and bio-plastic production in the Japan	
	International Research Center for Agricultural Sciences (JIRCAS) site in	
	MALAYSIA sponsored by Asian Development Bank (ADB)	
Nepal	July 18-19, 2024 (Notification Endst. No. PS-4/10019-25 Dated 05-07-2024)	
	To attend Regional Workshop on "Reducing Air Pollution through Output Description of the Pollution of	
	Creative Use of Crop Residue Pelletization" to be held from July 18-19,	
	2024 at the ICIMOD headquarters in Kathmandu, Nepal organized with	
	support from the United States Department of State.	
Thailand	May 19-24, 2024 (Notification Endst. No. PS-4/7175-81 Dated: 08.05.2024)	
	To attend meeting of the Technical Working Group (TWG) on combine	
	harvesters of the Asian and Pacific Network for Testing of Agricultural	
	Machinery (ANTAM) from 19-24 May 2024 at Khon Kaen & Bangkok,	
	Thailand organized by Centre for Sustainable Agricultural	
	Mechanization of the United Nations Economic and Social Commission	
	for Asia and the Pacific (ESCAP-CSAM) in collaboration with the Khon	
	Kaen Agricultural Engineering Research Center (KK-AERC) and the	
	Agricultural Engineering Research Institute (AERI) of the Department	
	of Agriculture of Thailand sponsored by Asian Development Bank	

Republic of South Korea December 6-8, 2023 (Notification Endst. No. PS-4/22919-25 Date 27.11.2023) To attend 10 th Annual Meeting of the Asian and Pacific Network Testing of Agricultural Machinery (ANTAM) from 6 to 8 December 2023 in Iksan, Republic of Korea organized by Centre for Sustaina Agricultural Mechanization (CSAM) of the United Nations Econor and Social Commission for Asia and the Pacific (ESCAP) with support of Asian Development Bank (ADB). Singapore October 15-17, 2018: (Notification Endst. No. PS-4/13550-56 Date 25.09.2018) Participation and Technical Presentation during 5 th International R Congress (IRC-2018) organized by "International Rice Resear Institute (IRRI)"from October 15-17, 2018 sponsored by As Development Bank (ADB). Republic of South Korea April 05-08, 2016: (Notification No. 2217-26/ORIC Dated 24-03-2016). Visited Tong Yang Mooslan (TYM), GMT Tractors and Agricultur Machinery Manufacturers to establish Agricultural Machine Manufacturing Assembly Line at University of Agricultur Faisalabad-Pakistan Visited Seojung Cooking food processing plant producing soft dring and various types of sauces. Germany I. June 13, 2014 - July 05, 2014:		(ADB).
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processing facilities and SMA. • Participated in Annual Thematic Conference (ATC) them "Reflections on MDG 1 'Decent Work for All': Where Do Stand?" held at University of Kassel, Germany sponsored International Center for Development and Decent Work (ICDD). II. June 02-12, 2015: • Participation in the Solar Summer School on "Applied So		
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Participation in the Solar Summer School on "Applied Solar School o		international Center for Development and Decent Work (ICDD).
Participation in the Solar Summer School on "Applied Solar School o		II June 02-12 2015.
reclinologies for Developing Countries organized and nosted by		
Department of Agricultural Engineering Witzenhousen Com-		Department of Agricultural Engineering, Witzenhausen Campus
University of Kassel, Germany from June 02-09, 2015.		
		visit of visite a forming limit in the first fir
Munich, Germany from June 10-12, 2015.	Assatuis	·
Austria March 16, 2011 – March 17, 2011:	Austria	,
		weight min time the end seem seems (2211) week
3 , 1		Effective Technology for European Communities" at Graz-Austria.
France, November 17, 2009 – June 07, 2013:	· ·	
Monaco, • Study Tours and Tourism	,	Study Tours and Tourism
Netherlands,	Netherlands,	
Spain,	Spain,	
Switzerland	Switzerland	
Italy November 17, 2009- June 07, 2013:	Italy	November 17, 2009- June 07, 2013:

• PhD Scholar at Politecnico di Torino awarded by Higher Education Commission (HEC), Islamabad-Pakistan

ADMINISTRATIVE EXPERIENCE:

- 1. Serving as Advisor for B.Sc. Agri. Engg. (7thand 8thSemester) as authorized on behalf of Dean, FAET to Sign UG-1 Forms, Library/Student ID Cards, Application Forms, Railway/PA Concession Forms, Scholarship/Loan Forms, Character Certificate and Registration Forms during Winter, Spring and Summer Semesters 2021-2022. Notification No. DET/2026 Dated 21-10-2021.
- 2. Served as Deputy Director Student Affairs in the office of Directorate of Student Affairs w.e.f. 23.09.2021. Notification No. Endst. No. SR-3/17/21-22/5275-5325 Dated 22-09-2021 to 30-01-2023 vide Notification No. Endst. No. SR-3/17/22-23/722-50 Dated 31.01.2023.
- 3. Served as Advisor for Intake Session 2020-2021 of Undergraduate Engineering Degrees as authorized on behalf of Dean, FAET to Sign UG-1 Forms, Library/Student ID Cards Application Forms, Railway/PA Concession Forms, Scholarship/Loan Forms, Character Certificate and Registration Forms during winter, spring and summer semesters 2020-2021. Notification No. DET/1978 Dated 24-09-2020.
- 4. Served as Advisor for Intake Session 2019-2020 of Undergraduate Engineering Degrees as authorized on behalf of Dean, FAET to Sign UG-1 Forms, Library/Student ID Cards Application Forms, Railway/PA Concession Forms, Scholarship/Loan Forms, Character Certificate and Registration Forms during winter, spring and summer semesters 2019-2020. Notification No. DET/2442 Dated 18-09-2019.
- 5. Assisted the Dean, Faculty of Agricultural Engineering and Technology, UAF to Look After Charge of the Chairman, Department of Farm Machinery and Power w.e.f. 25-04-2017 to 23-09-2019. Notification Endst. No. PS-1(4)43/3068-3167 Dated 01-02-2017.
- 6. Served as Co-Advisor as authorized on behalf of Dean, FAET to sign GS-10 Forms, Fee Installment Forms, Library/Student ID Cards Application Forms, Scholarship/Loan Forms, Course Work, Synopsis, E-30 Forms, Semi-final and Final Theses, DMC Forms, Provisional Certificate Forms, Migration/Character Certificate Forms, Degree in Absentia Forms other Form/Documents regarding Postgraduate/PhD Students of Faculty of Agricultural Engineering and Technology, UAF (Notification No. DET/252 Dated 19-01-2018 and No. DET/1269-89 Dated 08-05-2017).
- 7. Served as Advisor of Undergraduate Engineering Classes as Authorized to Sign UG-1 Forms, Library/Student ID Cards Application Forms, Railway/PA Concession Forms, Scholarship/Loan Forms, Character Certificate and Registration Forms etc. on behalf of the Dean, FAET, UAF during Winter and Spring Semester 2016-2017 (Notification No. DET/2856 Dated 27-07-2016), Winter and Spring Semester 2015-2016 (Notification No. DET/2697 Dated 29-08-2015) and Winter and Spring Semester 2013-2014 (Notification No. DET/4955 Dated 05-10-2013).
- 8. Assisted the Dean, FAET to Look After Charge of the Chairman in the Department of Farm Machinery and Power, Faculty of Agricultural Engineering and Technology, University of Agriculture, Faisalabad from 01-09-2015 to 18-10-2015. Notification No. Endst. No. PS-5/364/16260-65 Dated: 25-08-2015.
- 9. Working as Tutor for the students of Nishtar-I Group from April 15, 2016 to Date for weekly Tutorial Group Management (TGM)Classes. Notification Endst. No. SR-3/16/15-16/3931-4030 Dated 15-04-2016.

- 10. Serving as Focal Person for Pakistan Engineering Council (PEC), Islamabad to apply for reaccreditation of B.Sc. Agri. Engineering degree program and to make all the arrangements for successful visits of PEC team from 14-07-2014 to Date. Notification No. DET/1930 Dated 14-07-2014.
- 11. Nominated as Departmental Focal Person for Outreach Extension to work with the faculty of "Outreach Chair of US-Pakistan Center for Advanced Studies in Agriculture and Food Security (USPCAS-AFS and IAERD)" for carrying outreach extension activities in the selected villages in all Tehsils of Faisalabad. Notification No. PS-7(21-A)2014/27042 Dated: 13-11-2015.
- 12. Worked as Secretary, Board of Studies in the Department of Farm Machinery and Power, Faculty of Agricultural Engineering and Technology, University of Agriculture, Faisalabad from May 17, 2014 to April 24, 2017.
- 13. Served as Advisor, Society of Agricultural Engineering, Faculty of Agricultural Engineering and Technology, University of Agriculture, Faisalabad from 09-04-2014 to 14-10-2015 (Notification No. DET/944-49 Dated 09-04-2014) and 15-10-2015 to 10-02-2016 (Notification No. DET/3875 Dated 15-10-2015).
- 14. Worked as Co-Tutor for the students of Nishtar-I Group from 19-12-2013 to April 15, 2016for weekly Tutorial Group Management (TGM) classes. Notification No. Endst. No. SR-3/16/07/13/10519-89 Dated 19-12-2013.
- 15. Working as member Faculty Board of Studies in the Faculty of Agricultural Engineering and Technology, University of Agriculture, Faisalabad from September, 2013 to Date.
- 16. Working as member Board of Studies in the Department of Farm Machinery and Power, University of Agriculture, Faisalabad from September 20, 2005 to Date.
- 17. Worked as Assistant Superintendent Liaquat Hall, University of Agriculture Faisalabad, Pakistan from 01-08-2006 to 15-11-2009.
- 18. Worked as Secretary, Board of Studies in the Department of Farm Machinery and Power, Faculty of Agricultural Engineering and Technology, University of Agriculture, Faisalabad from 2007-2009.
- 19. Worked as Secretary, Society of Agricultural Engineers (SAE), Faculty of Agricultural Engineering and Technology, University of Agriculture, Faisalabad from 2007-2009.

INTERNATIONAL AND NATIONAL TRAININGS/ SEMINARS/WORKSHOPS/ SUMMER SCHOOLS/CERTIFICATE OF HONOURS &PARTICIPATION ETC.:

- 28-02 to 02-03, 2025 To attend Study Tour of the Asian and Pacific Network for Testing of Agricultural Machinery (ANTAM) in Bangkok and Kamphaeng Saen, Thailand, organized by the Centre for Sustainable Agricultural Mechanization (CSAM) of the United Nations Economic and Social Commission for Asia and the Pacific (ESCAP) as ANTAM Secretariat, in collaboration with the Thailand National Agricultural Machinery Center (NAMC) of Kasetsart University, Thailand.
- 24-27/02/2025 To attend Knowledge-Sharing Workshops on Agricultural Machinery Standard and Testing Code Development by the Agricultural Machinery Testing and Evaluation Center, the University of the Philippines, Los Banos (UPLB), The Philippines.
- 03-11/12/2024 To attend ANTAM workshop on sustainable and climate resilient mechanization organized by the Asian and Pacific Network for Testing of Agricultural Machinery (ANTAM) at Kathmandu, Nepal along with 11th

Annual Meeting of ANTAM and 7th Regional Training of Trainers of ANTAM sponsored by Asian Development Bank (ADB). 25-26/10/2024 To attend workshop and exploratory visit for the potential utilization of rice straw in bio-pellet and bio-plastic production in the Japan International Research Center for Agricultural Sciences (JIRCAS) site in MALAYSIA sponsored by Asian Development Bank (ADB) 18-19/07/2024 To attend Regional Workshop on "Reducing Air Pollution through Creative Use of Crop Residue Pelletization" to be held from July 18-19, 2024 at the ICIMOD headquarters in Kathmandu, Nepal organized with support from the United States Department of State. 19-24/05/2024 To attend meeting of the Technical Working Group (TWG) on combine harvesters of the Asian and Pacific Network for Testing of Agricultural Machinery (ANTAM) from 19-24 May 2024 at Khon Kaen & Bangkok, Thailand organized by Centre for Sustainable Agricultural Mechanization of the United Nations Economic and Social Commission for Asia and the Pacific (ESCAP-CSAM) in collaboration with the Khon Kaen Agricultural Engineering Research Center (KK-AERC) and the Agricultural Engineering Research Institute (AERI) of the Department of Agriculture of Thailand sponsored by Asian Development Bank (ADB). To attend 10th Annual Meeting of the Asian and Pacific Network for Testing 6-8/12/2023 of Agricultural Machinery (ANTAM) from 6 to 8 December 2023 in Iksan, Republic of Korea organized by Centre for Sustainable Agricultural Mechanization (CSAM) of the United Nations Economic and Social Commission for Asia and the Pacific (ESCAP) with the support of Asian Development Bank (ADB). Certificate of participation as Resource Person in the "One Week Refresher 01-06/08/2022 Course for Field Staff' organized by UAF Community College, PARS, UAF. Certificate of participation in the 7th International Conference on "Climate 15-17/06/2022 Smart Agriculture: Innovations and Adaptations" organized by Faculty of Agriculture, University of Poonch Rawalakot, Azad Kashmir, Pakistan. 24/05/2022 Certificate of appreciation for organizing one day PEC-CPD training workshop on "Waste to Energy Technologies" organized by Department of Structures and Environmental Engineering, Faculty of Agricultural Engineering and Technology, University of Agriculture Faisalabad-Pakistan (1.0 CPD Credit Point). 30/03/2022 Certificate of participation for attending One day International Seminar and Training Workshop on "World Water Day 2022" organized by Department of Irrigation and Drainage, Faculty of Agricultural Engineering and Technology, University of Agriculture Faisalabad-Pakistan (1.0 CPD Credit Certificate of participation for participating "2nd International Workshop on 24-25/03/2022 Diversification, value addition & supply Chain Management of Floriculture Industry" organized by Institute of Horticultural Sciences, University of Agriculture, Faisalabad-Pakistan. 27-28/12/2021 Certificate of Appreciation for attending "Agriculture and Food Sciences & DICE Mega Innovation & Entrepreneurship Event 2021" organized by Office of Research, Innovation & Commercialization (ORIC), MNSUA, Multan 29/07/2021 Certificate of Appreciation as Guest Speaker during one day workshop on title "Latest Trends in Computational Mathematics and Its Applications"

organized by Abdus Salam School of Mathematical Sciences (ASSMS), GC University, Lahore-Pakistan. 09-10/03/2021 Certificate of Participation to attend International Virtual Conference on "Computational Mechanics" organized by Pakistan Institute of Engineering and Applied Sciences (PIEAS), Islamabad-Pakistan, Reg. No. CMS-01-2021/P-25. 27/08/2020 Certificate of Appreciation as Resource Person for One Day Training Workshop on "Outcome Based Education: Issues and Concerns" organized by Society of Engineers and Technologists, Faculty of Agricultural Engineering and Technology, University of Agriculture Faisalabad-Pakistan Certificate of participation for attending "Webinar on Hermetic Cocoon 24/06/2020 Storage Technology" organized by Center for Agriculture and Bioscience International (CABI) and Asian Development Bank (ADB) under TA 9838-PAK: Enhancing Technology Based Agriculture and Marketing in Rural Punjab. 17/02/2020 Certificate of Honor as Workshop Organizer for organizing International PEC-CPD workshop on "Hydrological Monitoring Technologies" organized by Department of Structures and Environmental Engineering, Faculty of Agricultural Engineering and Technology, University of Agriculture Faisalabad-Pakistan (0.5 CPD Credit Point). 17/02/2020 Certificate of participation for attending one day International PEC-CPD workshop on "Hydrological Monitoring Technologies" organized by Department of Structures and Environmental Engineering, Faculty of Agricultural Engineering and Technology, University of Agriculture Faisalabad-Pakistan (0.5 CPD Credit Point). 13/02/2020 Certificate of Honor as Workshop Organizer for organizing International PEC-CPD workshop on "Irrigation Scheduling with Handing of Aqua Crop Modeling" organized by Department of Irrigation and Drainage, Faculty of Agricultural Engineering and Technology, University of Agriculture Faisalabad-Pakistan (0.5 CPD Credit Point). Certificate of participation for attending one day International PEC-CPD 13/02/2020 workshop on "Irrigation Scheduling with Handing of Aqua Crop Modelling" organized by Department of Irrigation and Drainage, Faculty of Agricultural Engineering and Technology, University of Agriculture Faisalabad-Pakistan (0.5 CPD Credit Point). 29/11/2019 Certificate of appreciation for organizing one day International workshop on "Hydrological Modeling using SWAT, HEC-HMS and R" Organized by Department of Irrigation & Drainage/Society of Engineers & Technologist, Faculty of Agri. Engg. and Tech., University of Agriculture Faisalabad – Pakistan (1.0 CPD Credit Point) 29/11/2019 Certificate of participation for attending one day International workshop on "Hydrological Modelling using SWAT, HEC-HMS and R" Organized by Department of Irrigation & Drainage/Society of Engineers & Technologist, Faculty of Agri. Engg. and Tech., University of Agriculture Faisalabad – Pakistan (1.0 CPD Credit Point) 21/11/2019 Certificate of participation for attending one day workshop on "Patent/Claims Drafting Techniques and Trade Mark Registration" organized by Technology

& Innovation Support Center (TISC) at University of Agriculture Faisalabad-Pakistan 30/10/2019 Certificate of participation for attending one day International Workshop on "Design and Practical Approach for Instrumentation and Measurement" organized by Department of Energy Systems Engineering, University of Agriculture Faisalabad-Pakistan (1.0CPD Credit Point). 27/09/2019 Certificate of appreciation as Chief Organizer for organizing one day PEC-CPD workshop on "Assessment Mechanism under Outcome Based Education (OBE)" organized by Faculty of Agricultural Engineering and Technology, University of Agriculture Faisalabad-Pakistan (One CPD Credit 27/09/2019 Certificate of participation for attending one day workshop on "Assessment Mechanism under Outcome Based Education (OBE)" organized by Faculty of Agricultural Engineering and Technology, University of Agriculture Faisalabad-Pakistan (One CPD Credit Point). Participated in One day workshop on "Cotton Productivity" on the occasion 31/01/2019 of International Conference on "Water Footprints of the Cotton - Textile Value Chain: Environmental Repercussions from Field to Hanger" organized by Faculty of Agricultural Engineering and Technology at University of Agriculture Faisalabad - Pakistan from January 29 to February 02, 2019 in collaboration with BMBF-InoCottonGrow Project Partners from Germany (1.0 CPD point). 29-30/11/2018 Participated in a Training Workshop on "Outcome Based Education (OBE)" organized by Faculty of Agricultural Engineering and Technology, University of Agriculture Faisalabad-Pakistan in collaboration with Pakistan Engineering Council (PEC), Islamabad-Pakistan. Participated in 5th International Rice Congress (IRC-2018) organized by Oct. 15-17/2018 "International Rice Research Institute (IRRI) at Singapore. 10/09/2018 Participated in a Training Workshop on "Outcome Based Education (OBE)" organized by Faculty of Agricultural Engineering and Technology, University of Agriculture Faisalabad-Pakistan. Participated in One Day Workshop on "Outcome Based Education (OBE) 27/03/2018 and SAR Development" organized by Faculty of Agricultural Engineering and Technology, University of Agriculture Faisalabad-Pakistan. Participated in an International Symposium "Global value chains (GVCs) and 01-02/12/2017 Decent work deficit in agriculture: Present challenges and future prospects" organized by Institute of Business Management Sciences, University of Agriculture Faisalabad-Pakistan. 08-09/12/2016 Participated in a workshop on "Effective Communication Skills and Innovative Methods for Extension and Outreach" organized by Outreach Chair of US-Pakistan Center for Advanced Studies in Agriculture and Food Security (USPCAS-AFS), held at University of Agriculture, Faisalabad-Pakistan. Certificate and Shield of Honor for participating in the "International 08-09/11/2016 Workshop on Sustainable Energy Solutions for Community Development in Pakistan" organized by University of Agriculture, Faisalabad-Pakistan and University of Kassel, Germany, held at University of Agriculture, Faisalabad-Pakistan (1.0 CPD point).

25-27/10/2016	Participated in training workshop on the use of "Precision Agriculture Technologies" organized by US-Pakistan Center for Advanced Studies in Agriculture and Food Security (USPCAS-AFS), held at University of
31/05/2016	Agriculture, Faisalabad-Pakistan Certificate of Participation on successful completion of training on "Faculty Social Enterprise Incubator Training Program" organized by Office of Research, Innovation and Commercialization (ORIC), held at University of
10/02/2016	Agriculture, Faisalabad-Pakistan Participated in Water Dialogue on "Irrigation Systems of Pakistan: Challenges and Opportunities" organized by Water Management Research Center (WMRC), Department of Irrigation and Drainage and WWF-Pakistan,
30/11-04/12/2015	held on February 10, 2016 at University of Agriculture, Faisalabad-Pakistan. Participated in a Workshop on "Climate Change Resilient Agriculture Systems" organized by Climate Change Chair under US-Pakistan Center for Advanced Studies in Agriculture and Food Security (USPCAS-AFS) at University of Agriculture, Faisalabad-Pakistan. Notification No. USPCAS-AFS-CCC/56 Dated 27-11-2015.
09-11/11/2015	Participated in "International Workshop on Building Capacity for Intellectual Property Management and Technology Transfer" organized by U.SPakistan Center for Advanced Studies in Agriculture and Food Security (USPCAS-AFS) and ORIC at University of Agriculture, Faisalabad-Pakistan.
04-06/11/2015	Certificate and Shield of Honor for participation in the "International Workshop on Renewable Energy Technologies for Community Development in Pakistan" organized by University of Agriculture, Faisalabad-Pakistan and University of Kassel, Germany, held at University of Agriculture,
02-09/06/2015	Faisalabad-Pakistan (1.0 CPD point). Certificate of participation for attending International DAAD Alumni Seminar on "Applied Solar Technologies for Developing Countries" held at Witzenhausen, Germany organized by University of Kassel in collaboration with Institute for Tropical and Subtropical Agriculture and sponsored by German Academic Exchange Service (DAAD), Germany.
16-18/12/2014	Certificate and Shield of Honor for participation in the "International Workshop on Renewable Energy Technologies in Pakistan" organized by University of Agriculture, Faisalabad-Pakistan and University of Kassel, Germany, held at University of Agriculture, Faisalabad-Pakistan (1.0 CPD
03-04/07/2014	point). Participated in Annual Thematic Conference (ATC) themed "Reflections on MDG 1 'Decent Work for All': Where Do We Stand?" held at University of Kassel, Germany sponsored by International Center for Development and
16-20/06/2014	Decent Work (ICDD), Germany. Certificate of participation for attending International Summer School on "Renewable Energy" held at Witzenhausen, Germany organized by University of Kassel in cooperation with Institute for Tropical and Subtropical Agriculture and supported by German Academic Exchange
05/06/2014	Service (DAAD), Germany. Certificate of Participation in a short course jointly organized by Pakistan Engineering Council (PEC) and Department of Structures and Environmental Engineering entitled "Drinking Water Quality Issues in Pakistan; Present

Scenario - Remedies and Management Practices" held at University of Agriculture, Faisalabad. 04/06/2014 Certificate and Shield of Honor for successfully arranging Engineers and Technologists Night-2014 as an Advisor of the Society of Engineers and Technologists in the Faculty of Agricultural Engineering & Technology, University of Agriculture, Faisalabad-Pakistan. 30/04/2014 Participated in Interactive Workshop on "CPD Framework for Professional Development of Engineers" organized by Pakistan Engineering Council (PEC) under Continuing Professional Development (CPD) Program held at "The University of Faisalabad", Faisalabad, Pakistan. Participated in "1st International Young Engineers Convention (IYEC-2014)" 18-20/04/2014 jointly organized by Pakistan Engineering Council (PEC) and University of Engineering & Technology (UET), Lahore held at UET, Lahore, Pakistan. Certificate of Participation for arranging Inter Faculty Sports Gala-2014 in Spring, 2014 the Faculty of Agricultural Engineering and Technology, University of Agriculture, Faisalabad-Pakistan. 01-03/10/2013 Certificate and Shield of Honor for participation and oral presentation in the "International Conference on Renewable Energy Technologies in Pakistan" organized by University of Agriculture, Faisalabad Pakistan and University of Kassel, Germany, held at University of Agriculture, Faisalabad-Pakistan (1.0 CPD point). Participated in Winter School held at OLYMPIC VILLAGE, SESTRIERE, 10-12/01/2011 ITALY on "Renewable Energy Sources and Energy Demand: State of the Art and Future Developments". Participated in "Professional Competency Enhancement Program for 15/07-11/08/2009 Teachers (PCEPT)" organized by National Academy of Higher Education, HEC, Islamabad, held at University of Agriculture, Faisalabad-Pakistan. Certificate of Honor awarded by Department of Farm Machinery and Power 25/06/2009 and Society of Agricultural Engineers (SAE), University of Agriculture, Faisalabad, for outstanding contributions in EXPO-2009 organized by Department of Farm Machinery and Power, University of Agriculture, Faisalabad-Pakistan. 23/03/2009 Certificate of Honor awarded by Hall Senate and Office of the Hall Warden, University of Agriculture, Faisalabad-Pakistan for working as Assistant Superintendent Liaquat Hall and making necessary arrangements on "Pakistan Day Celebrations". 01-12/2008 Certificate of Honor awarded by Society of Agricultural Engineers (SAE) for working as Secretary of Society of Agricultural Engineers, Faculty of Agricultural Engineering and Technology, University of Agriculture, Faisalabad-Pakistan. Participated in "Professional Certification in Mushroom Cultivation" 18-24/11/2008 organized by Pakistan Society of Agricultural Sciences, held at University of Agriculture, Faisalabad-Pakistan. Attended an International Symposium on "Modern Approaches and 13-14/10/2008 Techniques in Agriculture to Ensure Food Security in Pakistan" held at University of Agriculture, Faisalabad-Pakistan.

16-31/03/2008	Certificate of Honor awarded by Punjab Engineering Company (Regd.) for supervision of B.Sc. Agricultural Engineering Students in Industrial
23/03/2007	Manufacturing Training Program. Certificate of Honor awarded by Hall Senate and Office of the Hall Warden, University of Agriculture, Faisalabad for working as Assistant Superintendent Liaquat Hall and making necessary arrangements on "Pakistan Day Celebrations".
05/03/2006	Participated in a training program on "Result Oriented Presentations"
03/03/2000	organized by Pakistan Youth League, Multan-Pakistan.
01-11/02/2006	Worked with "National Volunteer Movement" in Batagram earthquake
01 11/02/2000	affected area at Base Camp Mansehra for rehabilitation of peoples of
	Earthquake hit areas.
23-28/01/2006	Participated in a Higher Education Commission (HEC) Training Course on
20 20/01/2000	"Enhancing Communication Skills for Effecting Teaching" held at
	University of Agriculture, Faisalabad-Pakistan.
20-24/12/2004	Participated in a 5-days "Civil Defense Training Course" held at University
	of Agriculture, Faisalabad organized by Civil Defense Department,
	Government of Punjab, Pakistan.
14-16/10/2004	Participated in a 3-days training course on "Global Positioning System and
	Spatial Database Management for Recourse Conservation Technologies"
	organized by On Farm Water Management, Sponsored by Rice-Wheat
	Consortium for the Indo-Gangetic Plains, New Delhi, India.
27/09-09/10/2004	Attended a 15-days Internship Program at Water Management Training
	Institute (WMTI), Lahore on "Water Course Lining".
10-25/12/2002	Attended a 15-days Survey Camp at Islamabad Sites for performing "Profile and Differential Leveling".
07-09/2001	Successfully completed 3-months Computer Diploma in "Office
	Management" from Quaid-e-Azam Computer Academy and English
	Institute, Faisalabad-Pakistan.

MEMBERSHIP OF SOCIETIES:

- 1. Lifetime membership of Pakistan Engineering Council (PEC), Islamabad as "Registered Engineer" **PEC Regd. No. AGRI/2495**.
- 2. Member of World Society of Sustainable Energy Technologies (WSSET).
- 3. Member Pakistan Society of Agricultural Engineers
- 4. Working as Reviewer for International Journal of Scientific Footprints ISSN: 2310-4090.Notification No. IJSF/15/15 Dated 11-12-2015.
- 5. Member "Faculty Board of Studies" in the Faculty of Agricultural Engineering and Technology, University of Agriculture, Faisalabad-Pakistan.
- 6. Member "Board of Studies" in the Department of Farm Machinery and Power, Faculty of Agricultural Engineering and Technology, University of Agriculture, Faisalabad-Pakistan.

PHD THESIS SUPERVISED(SUPERVISOR/MEMBER):

Sr. No.	Title of the Thesis	Year of Passing	Status
1.	Development and performance evaluation of self- propelled variable height crop sprayer by Engr. Fraz	2023	Supervisor

	Ahmad khan, Regd. No. 2010-ag-2288.		
2.	Design and development of real time automated spraying system for variable rate application by Engr. Muhammad Nauman, Regd. No. 2008-ag-2668.	2023	Supervisor
3.	Design and modeling of solar assisted milk powder spray dryer for decentralized applications by Engr. Zuhair Qamar, Regd. No. 2006-ag-2236.	2023	Member
4.	Design, development and performance evaluation of a multi crop hybrid solar dryer by Engr. Ghulam Murtaza, Regd. No. 2006-ag-2115.	December, 2021	Member
5.	Design, development of solar assisted maize dryer by Engr. Syed Farhan Hussain Bukhari, Regd. No. 2006-ag-2214.	August, 2020	Member
6.	Design and development of a continuous solar roaster (CSR) for the processing of agricultural products by Engr. Ali Raza, Regd. No. 2003-ag-2287.	August, 2019	Member
7.	Design, modification and performance evaluation of indigenous sugarcane harvester by Engr. Usama Bin Ajmal, Regd. No. 2006-ag-2206.	August, 2019	Member
8.	Design modification and performance evaluation of small scale sugarcane leaf stripping machine by Kamran Ikram, Regd. No. 2006-ag-2115.	June, 2018	Member
9.	Development of a hybrid solar distillation system for value addition of medicinal plants by Engr. Arslan Afzal, Regd. No. 2006-ag-2175.	May, 2018	Member

M.SC. (HONS.) THESIS SUPERVISED (SUPERVISOR/MEMBER):

I. SUPERVISED:

Sr.	Title of the Thesis	Year of	Status
No.		Passing	
1.	Development and performance evaluation of small-scale	2022	Supervisor
	self-propelled potato planter for small farmers by Engr.		
	Muhammad Aali Misaal, Regd. No. 2020-ag-229.		
2.	Development and performance evaluation of battery	2022	Supervisor
	operated walk behind garlic planter by Engr. Ayesha		
	Khalil, Regd. No. 2016-ag-6997.		
3.	Development and testing of locally developed walk	2021	Supervisor
	behind fodder cutter by Engr. Tayyab Razzaq, Regd. No.		
	2015-ag-6078.		
4.	Development and performance evaluation of mini	2021	Supervisor
	thresher for rapeseed crop by Engr. Hamza Mukhtar,		
	Regd. No. 2015-ag-6088.		
5.	Development of Sensor Based Spray Control System	2020	Supervisor
	using Self-Propelled Sprayer by Engr. Muhammad		
	Fawaz Saleem, Regd. No. 2014-ag-4344.		
6.	Study and Simulation of PVT system employing CFD	2020	Supervisor

	software by Engr. Humaira Tariq, Regd. No. 2014-ag-4496.		
7.	Development and testing of small scale walk behind pesticide sprayer by Engr. Hafiz Talha Ahmed, Regd. No. 2018-ag-199.	2020	Supervisor
8.	Development and testing of two row granular walk behind fertilizer applicator by Engr. Sohail Ahmad, Regd. No. 2014-ag-4332.	2020	Supervisor
9.	Simulation and experimental analysis of three point manual tracked solar system for optimization of energy production by Engr. Farwa Saeed, Regd. No. 2013-ag-4407.	2020	Supervisor
10.	Performance evaluation of self-propelled walk-behind rotary weeder by Engr. Muhammad Samiullah, Regd. No. 2013-ag-4515.	2019	Supervisor
11.	Development and testing of two row self-propelled bed shaper cum maize planter by Engr. Aurangzaib, Regd. No. 2013-ag-4391.	2019	Supervisor
12.	Designing and optimization of aero leaf wind tree for electrical energy production by Engr. ArshiaYounas, Regd. No. 2017-ag-2198 (ESE).	2019	Supervisor
13.	Development and testing of manually operated multicrop seed drill by Engr. Muhammad Jahan Zeb, Regd. No. 2013-ag-4430.	2019	Supervisor
14.	Development and testing of pedal driven lawn mower by Engr. Muhammad Azeem Boota, Regd. No. 2013-ag-4537.	2019	Supervisor
15.	Study of solar based desalination system through reverse osmosis by Engr. Tauseef Ahmed, Regd. No. 2013-ag-4659 (ESE).	2019	Supervisor
16.	Performance evaluation of walk-behind vegetables planter by Engr. Muhammad Asif, Regd. No. 2011-ag-2832.	2019	Supervisor
17.	Performance evaluation of mini handheld wheat cutter by Engr. Mazahar Sajjad, Regd. No. 2011-ag-2737.	2019	Supervisor
18.	Performance evaluation and testing of variable rate agrochemical sprayer by Engr. Mashal Younas, Regd. No. 2012-ag-3676.	2018	Supervisor
19.	Development and performance evaluation of small scale row crop maize planter by Engr. Muhammad Umar, Regd. No. 2012-ag-3717.	2018	Supervisor
20.	Development and performance evaluation of small scale bag type cotton picker by Engr. M. Naeem Farooq, Regd. No. 2012-ag-3721.	2018	Supervisor
21.	Development and experimental study of hybrid cooling and cleaning system on solar PV system by Engr. Ali Raza, Regd. No. 2016-ag-958.	2018	Supervisor
22.	Development and performance evaluation of battery	2018	Supervisor

	operated multi nozzle crop sprayer by Engr. Zeeshan Haydar, Regd. No. 2012-ag-3669.		
23.	Design and development of small scale self-propelled wheat cutting machine by Engr. Ammar Sajid, Regd. No. 2011-ag-2909.	2017	Supervisor
24.	Feasibility study and experimentation of geothermal potential for heating and cooling applications by Engr. Muhammad Usama Bin Riaz, Regd. No. 2011-ag-2806.	2017	Supervisor
25.	Design and development of fodder chopper machine for small scale farmers by Engr. Muhammad Amir Nawaz, Regd. No. 2011-ag-2785.	2017	Supervisor
26.	Performance evaluation of a bag type biogas plant by Engr. Sadam Hussain, Regd. No. 2011-ag-2759.	2017	Supervisor
27.	Study of variable rate agro-chemical application system for citrus orchards by Engr. Nasir Ramzan, Regd. No. 2011-ag-2884.	2017	Supervisor
28.	Design and development of self-propelled garlic planter by Engr. Sheikh Muhammad Farhan, Regd. No. 2011-ag- 2885.	2017	Supervisor
29.	Design and development of family size biogas plant using rotten fruits and poultry droppings by Engr. M. Ali Hassan, Regd. No. 2010-ag-2334.	2017	Supervisor
30.	Design modification of seed metering mechanism of wheat seed drill for rice drilling by Engr. M. Zaheer Umer, Regd. No. 2010-ag-2285.	2016	Supervisor
31.	Field testing and evaluation of vegetable nursery transplanter by Engr. Talha Tofique, Regd. No. 2009-ag-3226.	2016	Supervisor
32.	Design, development and testing of cotton seed planter by Engr. Shahzaib, Regd. No. 2010-ag-2328.	2016	Supervisor
33.	Development and performance study of a hybrid solar PV refrigerator by Engr. Waqas Akram, Regd. No. 2010-ag-2377.	2016	Supervisor
34.	Performance evaluation of a gas fired hybrid solar tunnel dryer by Engr. Rabia Anum, Regd. No. 2008-ag-2652.	2015	Supervisor
35.	Desalination of brackish water using indigenous dual acting solar still system by Engr. Hamza Bilal, Regd. No. 2009-ag-3093.	2015	Supervisor
36.	Solar desalination of water using evaporation condensation/heat recovery method by Engr. Azlan Zahid, Regd. No. 2009-ag-3108.	2015	Supervisor
37.	Sensitivity analysis of solar assisted heating and cooling system by Engr. Khadeeja Tahira, Regd. No. 2008-ag-2684.	2014	Supervisor
38.	Development of locally fabricated flat plate collector for energy production by Engr. Hafiz Muhammad Nauman, Regd. No. 2008-ag-2668.	2014	Supervisor

II. COMMITTEE MEMBER:

Sr. No.	Title of the Thesis	Year of Passing	Status
1	Performance evaluation of drying of potatoes and apples using locally designed solar dryer by Engr. Iqra Bashir, Regd. No. 2007-ag-1201.	2013	Member
2	Performance evaluation and optimization of Photovoltaic Panel for Energy Production by Engr. Muzammil Hussain, Regd. No. 2007-ag-1281.	2014	Member
3	Quality drying of sliced apples using solar tunnel dryer by Engr. Muhammad Waseem, Regd. No. 2007-ag-1265.	2014	Member
4	Design fabrication and performance evaluation of a solar water distiller by Engr. Zohra Anmol Regd. No. 2008-ag-2711.	2014	Member
5	Performance evaluation of a continuous solar roasting system for agricultural products by Engr. Farrukh Ehsan Regd. No. 2008-ag-2741.	2014	Member
6	Design, development and performance evaluation of a 2.7 m ² portable fixed focus solar cooker by Engr. Noor Asif Noor Regd. No. 2012-ag-911.	2014	Member
7	Design modification of a continuous solar roaster for the processing of agricultural products by Engr. Badar Munir Khan Niazi, Regd. No. 2008-ag-2746.	2014	Member
8	Performance evaluation of a 10 m ² Scheffler fixed focus concentrator using standard procedure by Engr. Sira Intezar, Regd. No. 2008-ag-2624.	2014	Member
9	Comparative study of solar, biogas, diesel and electric operated tubewells by Engr. Umar Hanif, Regd. No. 2008-ag-2791.	2015	Member
10	Design and performance evaluation of gasifier for I.C. engine operation by Engr. Ali Mehboob, Regd. No. 2009-ag-3201.	2015	Member
11	Design, development and performance evaluation of a hybrid solar dryer for the drying of perishable agricultural products by Engr. Muhammad MudassirArif Ch., Regd. No. 2008-ag-2739.	2015	Member
12	Comparative study of different sowing methods for wheat production by Engr. Noor Fatima, Regd. No. 2008-ag-2683.	2015	Member
13	Optimization of farm machinery at Directorate of Farms in University of Agriculture, Faisalabad by Engr. Bilal Shafiqe, Regd. No. 2005-ag-2200.	2015	Member
14	Evaluation of energy requirement for drying paddy with solar assisted paddy dryer by Engr. Muhammad Azhar Anwar, Regd. No. 2012-ag-1408.	2015	Member
15	Design modification of a hybrid continuous solar roaster for quality roasting of agricultural products by Engr.	2015	Member

Development and performance evaluation of a solar assisted bakery unit for value addition by Engr. Iqra Ayub, Regd. No. 2008-ag-2622. Design, development and optimization of baffles and corrugated type solar air collectors for drying applications by Engr. Muhammad Ali, Regd. No. 2009-ag-3109. Quality drying of apricot using CFD simulation in solar tunnel dryer by Engr. Muhammad Imran Akhtar, Regd. No. 2006-ag-2149. Qualitative study of fragile agricultural products using hybrid solar dryer by Engr. Aamir Saeed, Regd. No. 2006-ag-2755. Development, installation and performance evaluation of bagg. No. 2007-ag-1274. Development of a work-bench for the real-time parametric investigation of a model photovoltaic system installed for various applications by Engr. HasnainYousuf, Regd. No. 2009-ag-3145. Indigenous development and performance evaluation of 22 AMRI vegetable ridger seeder by Engr. Muhammad Umair, Regd. No. 2010-ag-2306. Development and performance evaluation of small self-operated boom sprayer by Engr. M. Asad Murad, Regd. No. 2010-ag-2318. Heat and mass balance in a downdraft biomass gasifier for CHP by Engr. Hafiz Muhammad Mubashar, Regd. No. 2011-ag-2786. Optimizing the solid-state sodium hydroxide pretreatment for enhancing biogas production potential of wheat straw by Engr. Shoaib Ahmad, Regd. No. 2001-ag-1274. Development and Performance evaluation of tractor rear mounted garlic planter by Engr. Shabazad Ahmad, Regd. No. 2011-ag-1274. Development and Performance evaluation of tractor rear mounted garlic planter by Engr. Shabazad Ahmad, Regd. No. 2018 Member Abubakar Bin Talat, Regd. No. 2011-ag-2721. Development and performance evaluation of tractor rear mounted garlic planter by Engr. Shabazad Ahmad, Regd. No. 2001-ag-1274. Designing and fabrication of prime mower for multipurpose use by Engr. Rao Muhammad Suhaib Akhtar. Regd. No. 2012-ag-3731. Modification and performance evaluation of ridge planter for pea plantation on raised bed by Engr. Muhammad 2018 Member Member Mudassar Wasim,		Sund Sharin Darwaiz, Dand No. 2000 and 2152		<u> </u>
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26 concentrator and evacuated tube collector by Engr. Abubakar Bin Talat, Regd. No. 2011-ag-2721. Development and Performance evaluation of tractor rear mounted garlic planter by Engr. Shahzad Ahmad, Regd. No. 2001-ag-1274. Designing and fabrication of prime mower for multipurpose use by Engr. Rao Muhammad Suhaib Akhtar. Regd. No. 2012-ag-3731. Modification and performance evaluation of ridge planter for pea plantation on raised bed by Engr. Muhammad Mudassar Wasim, Regd. No. 2001-ag-1327. Member	25	pretreatment for enhancing biogas production potential of wheat straw by Engr. Shoaib Ahmad, Regd. No. 2001-ag-1346.	2017	Member
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28 multipurpose use by Engr. Rao Muhammad Suhaib 2018 Member Akhtar. Regd. No. 2012-ag-3731. Modification and performance evaluation of ridge planter for pea plantation on raised bed by Engr. Muhammad 2018 Member Mudassar Wasim, Regd. No. 2001-ag-1327.	27	mounted garlic planter by Engr. Shahzad Ahmad, Regd.	2018	Member
for pea plantation on raised bed by Engr. Muhammad 2018 Member Mudassar Wasim, Regd. No. 2001-ag-1327.	28	multipurpose use by Engr. Rao Muhammad Suhaib	2018	Member
30 Design and development of solar powered diagonal air 2019 Member	29	Modification and performance evaluation of ridge planter for pea plantation on raised bed by Engr. Muhammad	2018	Member
	30	Design and development of solar powered diagonal air	2019	Member

	flow dryer for quality drying of perishables by Engr.		
	Farhat Mahmood, Regd. No. 2017-ag-2200 (ESE).		
31	Modification and testing of upright automated chapatti maker by Engr. Umair Zahid, Regd. No. 2013-ag-4586 (FE).	2019	Member
32	Development of solar assisted inline flow industrial dryer for uniform heat distribution by Engr. Muhammad Waseem, Regd. No. 2013-ag-4656 (ESE)	2019	Member
33	Design and development of solar assisted cold storage for preservation of perishables by Engr. Talha Ashraf, Regd. No. 2013-ag-4651 (ESE)	2019	Member
34	Surplus air wall turbine (SAWT) for harnessing energy from the exhaust air of industrial exhaust fans by Engr. Hafiz Muhammad Talha Siddiqui, Regd. No. 2013-ag-4649 (ESE).	2019	Member
35	An automated control system for multicrop grain dehydrator by Engr. Usman Maqsood, Regd. No. 2017-ag-2194 (ESE).	2019	Member
36	Design and performance evaluation of a grid-tied photovoltaic system installed on the rooftops of IT library and other allied buildings of UAF by Engr. Hafiza Aqsa Aslam, Regd. No. 2017-ag-2195 (ESE).	2019	Member
37	Development, fabrication and performance evaluation of solar desalination system assisted by solar flat plate collector by Engr. Safwan Ahmed, Regd. No. 2013-ag-4596 (FE).	2019	Member
38	Fabrication of a solar assisted dehydrator with the diagonal air flow pattern by Engr. Usman Abdul Qadir, Regd. No. 2013-ag-4669 (ESE).	2019	Member
39	Power generation through the gasification from selected biomass by Engr. Abubakar Nawaz, Regd. No. 2017-ag-2197 (ESE).	2019	Member
40	Development, fabrication and performance evaluation of graon drink processing machine by Engr. Suneel, Regd. No. 2013-ag-4580 (FE).	2019	Member