

# **DR. ASAD-UR-REHMAN**

## **CHAIRPERSON / ASSOCIATE PROFESSOR**

**DEPARTMENT OF MEDICAL LABORATORY TECHNOLOGY,  
DR IKRAM UL HAQ INSTITUTE OF INDUSTRIAL BIOTECHNOLOGY,  
GOVERNMENT COLLEGE UNIVERSITY LAHORE**

## ***CURRICULUM VITAE***

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### **QUALIFICATION/ EDUCATION**

1. Fulbright Post Doc, Utah State University, UNITED STATES OF AMERICA
2. Post Doc, Hamburg University of Technology, GERMANY.
3. PhD in BIOTECHNOLOGY, University of Tsukuba, Tsukuba, JAPAN.

### **POSITIONS**

**2023- Present: Chairperson and Associate Professor, Department of Medical Laboratory Technology, Dr Ikram ul Haq Institute of Industrial Biotechnology, Government College University (public sector), Lahore, *Pakistan*.**

**2019-2023: Associate Professor, Institute of Industrial Biotechnology, Government College University (public sector), Lahore, *Pakistan*.**

**2009- 2019: Assistant Professor, Institute of Industrial Biotechnology, Government College University (public sector), Lahore, *Pakistan*.**

## SCHOLARSHIPS

**Total 03 Scholarships received from the Governments of 03 countries** viz;

1. J. William Fulbright Scholarship from the Federal Government of the United States of America.
2. MEXT Scholarship (Ministry of Education, Sports, Culture, Science and Technology), Government of Japan
3. Scholarship from Higher Education Commission (HEC), Government of Pakistan under “Support to Scientific Talent”

## LIST OF RESEARCH PAPERS PUBLISHED

1. Kinza, Asad-Ur-Rehman, Ahmad, MU, Aftab MN, Ali S, Ahmed, S, Zainab G, Fawy KF Arshad M. (2025) Green Synthesis of Zinc Oxide Nanoparticles Using *Lysinibacillus macroides* and Applications as Nano-Biofertilizers for Enhanced Rice Yield. *BioNanoScience* (Accepted for Publication)
2. Khan BA, Sharif S, Mehdi A, Liaqat I, Ali S, Asad-Ur-Rehman, Peng L, Afzal S, Aftab MN. (2025) Hematological, Histological, and NMR Analysis of Meat Quality and Growth Performance of Broilers Fed with Probiotics *Bacillus licheniformis*-Supplemented Poultry Feed. *Probiotics Antimicrob Proteins*. doi: 10.1007/s12602-025-10677-1. 105
3. Saleem Ahmad, Muhammad Nauman Aftab, Muhammad Shahbaz Aslam, Asad Ur Rehman, Ikram Ul Haq, Sikandar Ali, Muhammad Usman (2025) Trehalose–abscisic acid pathway feedback loops in wheat – *Piriformospora indica* symbiosis: Mechanisms and drought resilience. *The Microbe*. 9.
4. Rauf F, Asad-Ur-Rehman, Shah SSH, Atta A and Ali S (2025). Exploring the Polyhydroxyalkanoates: Bioplastic for a Green Tomorrow. *The ScienceTech* 6(2): 45-68.
5. Aansa Naseem, Ijaz Rasul, Zulfiqar Ali Raza, Faizan Muneeer, Asad ur Rehman, Habibullah Nadeem (2024) Bacterial Production of polyhydroxyalkanoates (PHAs) using various waste carbon sources. *PeerJ* 12:e17936 <https://doi.org/10.7717/peerj.17936>
6. Sikander Ali, Faiza Shabbir Lodhi, M. Usman Ahmad, Qaiser Farid Khan, Asad-ur-Rehman, Abeera Ahmed, Iram Liaqat, M. Nauman Aftab, Tawaf Ali Shah, Ahmad Mohammad Salamatullah, Gezahign Fentahun Wondmie and Mohammed Bourhia (2024). Kinetics and synthesis of poly(3hydroxybutyrate) by a putative mutant of *Bacillus licheniformis*. *Bioresources and Bioprocessing*. 11:41. <https://doi.org/10.1186/s40643-024-00750-y>.

7. Noor-E-Hira, Ikram Ul Haq, Fatima Arshad, Muhammad Nauman Aftab, Asad Ur Rehman and Fatima Akram (2024). Isolation and Screening of Keratinase producing indigenous bacteria from keratin rich waste sites and slaughter-houses. *Journal of Xi'an Shiyou University Natural Science Edition*. 20(3): 20-27.
8. Sana Ashiq, Kanwal Ashiq and Asad ur Rehman (2024). Use of Polygenic and clinical risk scores in wide spectrum congenital heart malformations: A diagnostic and therapeutic perspective. *Pakistan Heart Journal*. 57 (01): 75-76.
9. Attia Hamid, Asma Zafar, Iram Liaqat, Muhammad Sohail Afzal, Liangcai Peng, Muhammad Khawar Rauf, Ikram ul Haq, Asad ur-Rehman, Sikander Ali and Muhammad Nauman Aftab (2022). Effective utilization of magnetic nano-coupled cloned b-xylanase in saccharification process. *RSC Advances*, 2022, 12, 6463 – 6475.
10. Attia Hamid, Zahid Hussain, Muhammad Tayyab, Asma Zafar, Muhammad Adnan Nawaz, Sikander Ali, Asad ur Rehman and Muhammad Nauman Aftab (2021). Production and characterization of a thermostable extracellular esterase from *Aspergillus niger*. *Revista Mexicana de Ingeniería Química*. 20 (2): 839-852.
11. Ammara Nasir, Kashif Rahim, Fuad Ameen, Waqas Ashraf, Asad ur Rehman, Faisal Shehzad, Suaad S Alwakeel, Muhammad Khalid Mansoor and Firasat Hussain (2021). Hepatitis C Virus and *Helicobacter pylori* infections in patients with pulmonary tuberculosis: A prevalence based study in Southern Punjab, Pakistan. *International Journal of Mycobacteriology*. 10(5):45. DOI:10.4103/2212-5531.307095.
12. Ikram-ul-Haq, Zannara Mustafa, Ali Nawaz, Asad-ur-Rehman and Hamid Mukhtar (2020). Effect of physical and chemical pre-treatment methods on saw dust for improved saccharification. *Pak J Bot*. 52 (4): 1-6.
13. Ikram-ul-Haq, Zinnia Mansoor, Ali Nawaz, Asad-ur-Rehman and Hamid Mukhtar (2020). Enzymatic depolymerization of wheat straw into fermentable saccharides by thermophilic cellulases. *Pak J Bot*. 52 (3): 1-5.
14. Ikram ul Haq, Mariyum Riaz, Ali Nawaz, Asad-ur-Rehman, Hamid Mukhtar and Quratulain Syed (2020). Enzymatic hydrolysis of *Saccharum officinarum* lignocellulosic biomass by genetically modified hyperthermophilic cellulases. *Pak J Bot*. 51 (1): 311-315.
15. Ikram-ul-Haq, Aneeqa Tahir, Ali Nawaz, Zannara Mustafa, Hamid Mukhtar and Asad-ur-Rehman (2020). Sustainable Bioconversion of saccharified agro residues into bioethanol by *Wickerhamomyces anomalus*. *Revista Mexicana de Ingeniería Química*. 19 (3): 1477-1491.

16. Ikram-ul-Haq, Ali Nawaz, Zoya Manzoor, Yesra Arshad, Asad-ur-Rehman, Muhammad Nauman Aftab and Hamid Mukhtar (2019). A new multi-stress resistant *Wickerhamomyces anomalus*: Isolation, identification and bioethanol fermentation potential. *Revista Mexicana de Ingeniería Química*. 18 (03): 841-849.
17. Ikram-ul-Haq, Yesra Arshad, Ali Nawaz, Muhammad Nauman Aftab, Asad-ur-Rehman, Hamid Mukhtar, Zinnia Mansoor and Quratulain Syed (2018). Removal of Phenolic compounds through overliming for enhanced saccharification of wheat straw. *J Chem Technol Biotechnol*. 93 (10): 3011-3017.
18. Ikram-ul-Haq, Syed Fahad Tahir, Muhammad Nauman Aftab, Fatima Akram, Asad-ur-Rehman, Ali Nawaz and Hamid Mukhtar (2018). Purification and characterization of a thermostable cellobiohydrolase from *Thermotoga petrophila*. *Protein and Peptide Letters* 25 (11): 1003-1014.
19. Chad Nielsen, Asif Rahman, Asad-ur-Rehman, Marie K. Walsh and Charles D. Miller (2017). Food waste conversion to polyhydroxyalkanoates. *Microbial Biotechnology*. 10 (6): 1338-1352.
20. Nauman Jamil Khan, Ikram-ul-Haq, Ali Nawaz, Asad-ur-Rehman and Hamid Mukhtar (2017). Kinetic and thermodynamic analysis of purified pectinases produced from nitrous acid mutant derivative of *Aspergillus niger* (H-97). *Pak J Bot*. 49 (6):2321-2324.
21. Asad-ur-Rehman, Alia Aslam, Rushda Masood, Muhammad Nauman Aftab, Rabia Ajmal and Ikram-ul-Haq (2016), Production and characterization of a thermostable bioplastic (Poly-  $\beta$ -hydroxybutyrate) from *Bacillus cereus* NRRL-B-371. *Pak J Bot*. 48 (1):349-356.
22. Anam Farid, Iram Naz, Asma Ashraf, Aamir Ali, Asad-ur-Rehman, Yasra Sarwar and Abdul Haque (2015). Molecular detection of antimicrobial resistance in local isolates of *Staphylococcus epidermidis* from urinary tract infections in Faisalabad region of Pakistan. *EXCLI J*. 14: 697-705.
23. Hamid Mukhtar, Madiha Hanif, Asad-ur-Rehman, Ali Nawaz and Ikram-ul-Haq (2015). Studies on the Lipase production by *Aspergillus niger* through solid state fermentation. *Pak J Bot*. 47(SI):351-354.
24. Sunila Daudi, Hamid Mukhtar, Asad-ur-Rehman and Ikram-ul-Haq (2015). Production of rennin-like acid protease by *Mucor pusillus* through submerged fermentation. *Pak J Bot*. 47 (3): 1121-1127.
25. Hamid Mukhtar, Iqra Khizer, Ali Nawaz, Asad-ur-Rehman and Ikram-ul-Haq (2015). Biodegradation of Endosulfan by *Aspergillus niger* isolated from cotton fields of Punjab, Pakistan. *Pak J Bot*. 47(SI): 333-336.

26. Ikram ul Haq, Ali Nawaz, Hamid Mukhtar and Asad-ur-Rehman (2015). Optimization of inoculum volume, fermentation medium and aeration rate for the production of glucose oxidase by UV mutant strain of *Aspergillus niger* AN-14. *Pak J Bot.* 47(SI): 329-332.

27. Irfana Iqbal, Muhammad Nauman Aftab, Mohammed Afzal, Asad ur-Rehman, Saima Aftab, Asma Zafar, Zia Ud-Din, Ateeque Rahman Khuharo, Jawad Iqbal and Ikram Ul-Haq (2014). Purification and characterization of cloned alkaline protease gene of *Geobacillus stearothermophilus*. *Journal of Basic Microbiology*. 54: 1-12.

28. Asad-ur-Rehman, Sunniya Rasool, Hamid Mukhtar and Ikram-ul-Haq (2014) Production of an extracellular lipase by *Candida utilis* NRRL-Y-900 using agro-industrial by-products, *Turkish Journal of Biochemistry*. 39 (2): 140-149.

29. Asad-ur-Rehman, Saman Wijesekara R.G, Nakao Nomura, Seigo Sato and Masatoshi Matsumura (2008) Pre-treatment and utilization of raw glycerol from sunflower oil biodiesel for growth and 1,3-propanediol production by *Clostridium butyricum*. *J Chem Technol Biot.* 83 (7): 1072-1080.

30. Rubina Mazhar, Asad-ur-Rehman, Sikander Ali and Ikram-ul-Haq (2003). Kinetics of citrate over-production by an *Aspergillus niger* mutant RABt-10. *Pak J Bot* 35 (4): 547-552.

31. Ikram-ul-Haq, Sikander Ali and Asad-ur-Rehman (2003). Re-use of fungal mycelium for the production of citric acid by *Aspergillus niger*. *Pak J Bot.* 35 (4): 553-556.

32. Mohsin Arshad, Muhammad Irfan, Asad-ur-Rehman, Muhammad Nadeem, Zile Huma, Hafiz Abdullah Shakir and Quratulain Syed (2017). Optimization of medium and substrate for CMCase production by *Bacillus subtilis*-BS06 in submerged fermentation and its applications in saccharification. *Punjab Univ J Zool.* 32 (2): 179-188.

33. Huda Fatima, Natasha Khan, Asad-ur-Rehman and Zahid Hussain (2014) Production and partial characterization of Lipase from *Pseudomonas putida*. *Fermentation Technology*. 4:112.

34. Hamad Ashraf, Asad-ur-Rehman and Ikran-ul-Haq. 2004. Effect of Alcohols on the production of citric acid using agricultural by-products. *J. Food. Tech.* 2 (1): 01-03.

35. Rubina Mazhar, Asad-ur-Rehman, Ambreen Sadiq, Sikander Ali, Abdul Waheed and Ikram-ul-Haq. 2004. Study of some kinetic parameters for citric acid biosynthesis by *Aspergillus niger* mutant NG-110 using shake flask technique. *Pak. J. Sci.Ind. Res.*, 47 (2): 157-159.

36. Asad-ur-Rehman, Sikander Ali and Ikram-ul-Haq. 2003. Phosphate limitation for enhanced citric acid fermentation using *Aspergillus niger* mutant UV-M9 on semi-pilot scale. *Pak J. Biol. Scis.* 6 (14): 1247-1249.

37. Umer farooq Awan, Kiran Shafiq, Shazia Mirza, Sikander Ali, Asad-ur-Rehman and Ikram-ul-Haq. 2003. Mineral Constituents of culture medium for Lipase production by *Rhizopus oligosporus* fermentation. *Asian. J. Plant. Scis.* 2 (12): 913-915.

38. Saima Karamat, Asad-ur-Rehman, Ambreen sadiq, Sikander Ali and Ikram-ul-Haq. 2003. Nitrogen limitation for citric acid accumulation by *Yarrowia lipolytica* NRRL-143 in shake flask. *J. Food. Tech.* 1 (4): 157-159.

39. Asad-ur-Rehman, Sikander Ali and Ikram-ul-Haq. 2003. Selection of fermentation medium for citric acid production in bio-reactor. *Biotechnology*. 2 (3) 178-184.

40. Asad-ur-Rehman, Saima Karamat, Sikander Ali and Ikram-ul-Haq. 2003. Submerged fermentation of citric acid by *Yarrowia lipolytica* NRRL-143 using cane molasses as basal medium. *Pak. J. Biochem. Mol. Biol.* 36 (1): 32-36.

41. Sikander Ali, Asad-ur-Rehman and Ikram-ul-Haq. 2003. Time course study of citrate fermentation by *Aspergillus niger* in stationary culture. *Pak. J. Biol. Scis.*, 6 (4): 331-333.

42. Amer Ishaq, Asad-ur-Rehman, Sikander Ali and Ikram-ul-Haq. 2003. Effect of polyalcohol on citric acid fermentation by filamentous fungi *Aspergillus niger*. *Indus J. Plant Scis.*, 2 (1): 96-99.

43. Sikander Ali, Asad-ur-Rehman, Amna Ehsan, Ikram-ul-Haq and Javed Iqbal. 2003. Effect of vegetative inoculum on submerged citric acid fermentation by *Aspergillus niger*. *Pak. J. Biol. Scis.*, 6 (4): 334-335.

44. Asad-ur-Rehman, Sikander Ali and Ikram-ul-Haq. 2002. Bio-production of citric acid by *Aspergillus niger* using agitator bioreactor. *Indus J Plant Sci.* 1 (4): 312-316.

45. Asad-ur-Rehman, Sikander Ali and Ikram-ul-Haq. 2002. Temperature optima for citric acid accumulation by *Aspergillus niger*. *Biotechnol.* 1(2-4): 108-110.

46. Sikander Ali, Asad-ur-Rehman and Ikram-ul-Haq. 2002. Optimization of nutrient parameters for the bio-production of citrate using black strap molasses. *Scic. Khyr.*, 15 (2): 63-70.

47. Misbah Kanwal, Sikander Ali, Asad-ur-Rehman, Hamad Ashraf, Waseem Ahmad Butt and Ikram-ul-Haq. 2002. Effect of phosphorus concentration on citric acid productivity by *Aspergillus niger* MIS-K1. *Scic. Khyr.* 15 (2): 71-75.

48. Ikram-ul-Haq, Asad-ur-Rehman and Sikander Ali. 2001. Biosynthesis of citric acid by *Aspergillus niger* using cane-molasses as basal substrate. *Pak. J. Biol. Scis.*, 4(6): 601-602.

## **RESEARCH PROJECTS APPROVED AS PRINCIPAL INVESTIGATOR (PI)**

1. The project entitled “Production, recovery and characterization of bioplastic (polyhydroxybutyrate) from indigenous bacteria”, approved by Higher Education Commission (HEC), Government of **Pakistan** for the grant of **5.1 million Pak Rs.**

## **RESEARCH PROJECTS COMPLETED**

1. Principal Investigator in “Production of a biodegradable plastic polyhydroxybutyrate from locally isolated bacteria using inexpensive carbon sources funded by ORIC (Office of Research Innovation and Commercialization), Government College University Lahore, **Pakistan**.
2. Member of the team that successfully completed project entitled “Secretion of bio-plastic polymers from methanotrophic bacteria grown using natural gas” funded by Utah State University, **United States of America**
3. Member of the team that successfully completed project entitled “Composite Polyhydroxybutyrate/ Algae bio-plastic” funded by Utah State University, **United States of America**
4. Member of the team that successfully worked on the project entitled “PROPANERGY- Integrated bioconversion of glycerin into value-added products and biogas at pilot plant scale” funded by European Union (EU) in **Germany**.
5. “Microbial conversion of glycerol to 1,3-Propanediol” funded by Ministry of Education, Sports, Culture, Science and Technology, Government of **Japan**

## **REVIEWER/ REFEREE OF THE INTERNATIONAL ISI IMPACT FACTOR JOURNALS**

1. Journal of Chemical Technology and Biotechnology.
2. Preparative Biochemistry

## **PROFESSIONAL/ SCIENTIFIC EXHIBITIONS**

1. The BIOPLASTIC, produced successfully was displayed and received appreciation in the 3<sup>RD</sup> INVENTION TO INNOVATION SUMMIT, 2014 EXHIBITION ON TECHNOLOGIES HAVING POTENTIAL FOR COMMERCIALIZATION held at the University of the Punjab, Lahore, Pakistan organized jointly by Pakistan Science Foundation (PSF), Government of Pakistan, University of the Punjab and Institute of Research Promotion (IPR).

## BOOKS

1. Edited a book entitled “**Biotechnology in Developing Countries: Prospects and Challenges**” published in **2010** and also contributed a chapter entitled “**Industrial Biotechnology**” in the same.
2. Written and edited a book entitled “**Food Microbiology and Preservation Technology**”. This book is being processed for publication in **2026**.

## Supervision of PhD Students

1. Iqra Jamil, 683-PhD-19. Studies on promiscuous plasmids encoding antibiotic resistance in *Salmonella typhi*.
2. Hafiz Khawar. 42-PhD-22. Cloning and expression of polyhydroxyalkanoate synthase gene from *Bacillus siamensis* for bioconversion of synthetic plastic waste into biodegradable plastic.

## M.Phil Research Students/ Theses Supervised

1. Afifa Zafar. **2025**. Influence of socioeconomic, hematological, biochemical and immunological determinants on HIV/TB co infection: a multidimensional analysis.
2. Faiza Arif. **2025**. Green Synthesis of Polymeric Silver-Coated Nanoparticles for Antibacterial and Antifungal Applications
3. Mehwish. **2025**. Pretreatment of *Spirulina sp.* biomass and its application as feed stock in Polyhydroxyalkanoates production.
4. Kinza Virk. **2025**. Eco-friendly approach to rice cultivation: utilizing *Lysinibacillus macroides* biofertilizer and zinc oxide nanoparticles as nano-biofertilizers for enhanced crop yield and sustainability.
5. Areej Atta. **2024**. Optimization of physiochemical parameters, extraction, and characterization of polyhydroxyalkanoates using *Bacillus siamensis*.
6. Javeria Iftikhar. **2024**. A comparative study approach on the production potential, optimization, and characterization of Polyhydroxyalkanoates from microalgae.
7. Dua Mujahid. **2023**. Immobilization of *Lysinibacillus macroides* and its effective utilization as biofertilizer.
8. Quratulain. **2022**. Isolation and screening of indigenous bacteria for production and characterization of polyhydroxybutyrate using inexpensive carbon sources.
9. Aqsa Iqbal. **2022**. Production, Recovery and Characterization of Polyhydroxyalkanoates from *Plectonema sp.*

10. Warda Ali. **2022**. Isolation, Screening and Production Optimization of Probiotics using Inexpensive Carbon Source.
11. Ayesha Nazir. **2022**. Isolation, screening and production optimization of phosphate solubilizing bacteria and its impact on plant growth.
12. Zarish Fatima. **2021**. Nanoceria: Production, Characterization and Antibacterial Activity Against Human Pathogens.
13. Nashmia Kamran. **2021**. Production, recovery and characterization of polyhydroxyalkanoates from fruit waste using *Bacillus sp.*
14. Anam Aftab. **2021**. Production and Optimization of Polyhydroxyalkanoates Utilizing Pyrolyzed Polypropylene Waste.
15. Zainab Atiq. **2021**. Production optimization and evaluation of probiotic characteristics of *Bacillus clausii*.
16. Iqra Sattar. **2021 (2018-2020)**. Production, recovery and characterization of Polyhydroxyalkanoates from Cyanobacteria.
17. Hafiz Khawar. **2020**. Isolation and Screening of Bacteria for the Production, Optimization and Characterization of Polyhydroxyalkanoates from Synthetic Plastic Waste Oil.
18. Amna Atta. **2020**. Production, Recovery and Characterization of Polyhydroxyalkanoates from Locally Isolated Microalgae.
19. Mubasher Latif. **2019**. Isolation and Screening of Microalgae for Optimization, purification and characterization of Polyhydroxyalkanoates (bioplastic).
20. Wajeeha Zafar. **2019**. Biosynthesis, recovery and characterization of a bioplastic (Polyhydroxyalkanoate) from indigenous bacteria.
21. Zobia Tabassun. **2019**. Isolation, optimization and characterization of phosphate solubilizing bacteria.
22. Afaq Ahmed. **2018**. Production, purification and characterization of microbial polyhydroxyalkanoates.
23. Anum Goraya. **2018**. Silver nanoparticles: production, characterisation and antibacterial activity against human pathogens.
24. Waseem Abid. **2018**. Insilico identification of novel vaccine targets from *Streptococcus pneumoniae*.
25. Ammara Nasir. **2018**. Prevalence of Hepatitis C virus and *Helicobacter pylori* infections in patients with pulmonary tuberculosis.
26. Saba Aslam Cheema. **2015**. Production, purification and characterization of Levan from immobilized *Bacillus subtilis*.

27. Hannan Shahid. **2015**. Production, Recovery and characterization of rhamnolipid from immobilized *Pseudomonas fluorescens*.
28. Muhammad Luqman. **2015**. Biodegradation Studies on bioplastic (Poly- $\beta$ -hydroxybutyrate) using various microorganisms.
29. Rida Kalsoom. **2015**. Effect of phosphate solubilizing bacteria on phosphate uptake and plant growth.
30. Ayesha Razzaq. **2014**. Production, recovery and characterization of poly- $\beta$ -hydroxy butyrate from *Bacillus subtilis*.
31. Roshan Mubeen. **2014**. Production and characterization of Levan, an exopolysaccharide from *Bacillus* spp.
32. Alia Aslam. **2013**. Biosynthesis, Recovery and characterization of a thermostable bioplastic (poly- $\beta$ -hydroxybutyrate) from *Bacillus* spp.
33. Rushda Masood. **2013**. Production, recovery and characterization of a biosurfactant (rhamnolipid) from *Pseudomonas putida*.
34. Rabia Ajmal. **2013**. Invitro antibacterial activity of honey, spices and herbs along with royal jelly.
35. Natasha Khan. **2013**. Production, optimization, partial purification and characterization of extracellular lipase from *Pseudomonas putida* NRRL-922.
36. Iffat Mehmooda. **2012**. Production and characterization of catalase by *Bacillus subtilis*.
37. Sunniya Rasool. **2012**. Production and characterization of an extracellular lipase from a lipolytic yeast culture.
38. Sadia Sadaf. **2012**. Tuberculosis and associated risk factors including HIV, HBV and HCV co-infections among the patients visiting a tertiary care hospital.
39. Imran Khan. **2012**. Microbiological analysis of drinking water from different areas of Lahore.
40. Saba Nisar. **2011**. Production of extracellular  $\beta$ -Amylase from *Alternaria* sp. using solid state fermentation.

#### **BSc (Hons) Research/ Internship Students supervised**

1. Muhammad Bilal. **2026**. Alternate Treatment Options for Carbapenem-Resistant Enterobacteriaceae: A Review (BoS Approved).
2. Muhammad Danish. **2025**. The Role of Biotechnology in Recycling Agricultural Waste.
3. Shaharyar Javed. **2025**. A Critical Review of Current Trends in the Detection, Prevention, and Control of foodborne pathogens.

4. Saffat Kaleem. **2025.** Microbial Fuel Cells for Concomitant Wastewater Treatment and Bioelectricity Production: Current Trends and Challenges
5. Fatima Waseem. **2025.** Microbial Fuel Cells for Concomitant Wastewater Treatment and Bioelectricity Production: Current Trends and Challenges
6. Rana Muhammad Abdullah Akram. **2025.** Comparative Analysis of DNA Methylation Based Biological Clocks as Prognostic Biomarkers across Breast Cancer, Type 2 Diabetes and Alzheimer's disease.
7. Chashman Jamil. **2025.** Survival and Mortality Outcomes among Post Kidney Transplant Patients at Shaikh Zayed Hospital, Lahore.
8. Husnain Ali. **2025.** AI driven quality control in clinical chemistry laboratory: Machine learning for real-time error detection.
9. Irfan Ali. **2025.** AI driven quality control in clinical chemistry laboratory: Machine learning for real-time error detection.
10. Tayyaba Tahir. **2025.** Iron Deficiency as a Key Driver of Microcytic Hypochromic Anemia in Children
11. Arika Imran. **2025.** Iron Deficiency as a Key Driver of Microcytic Hypochromic Anemia in Children
12. Muhammad Tayyab. **2025.** Correlation of Thyroid Dysfunction with recurrent miscarriages
13. Muneerah. **2025.** Correlation of Thyroid Dysfunction with recurrent miscarriages.
14. Ammarah. **2024.** Synthetic biology approaches to engineering microbial factories for biomanufacturing.
15. Munazza Fatima. **2024.** Cosmetics and their role in modulating skin microbiome health.
16. Laiba Javaid. **2024.** Study of bioplastic in relation to its capability of biodegradability and compostability.
17. Saad Khadim. **2024.** Antibacterial Activity of Honey Against Multi-Drug Resistant and Extensively-Drug Resistant Human Pathogens.
18. Abdullah Khan. **2024.** Microbial metabolic engineering for sustainable bioproduction of algae based biofuels.
19. Hiba Omer. **2024.** Controlling biofilm formation of foodborne pathogens utilizing probiotics in food industry.
20. Fareeha Rouf. **2024.** Production of polyhydroxy alkanoates using *Bacillus siamensis*.
21. Tahniat Ali. **2024.** Role of probiotics in combating colorectal cancer.

22. Faryal. **2024**. Algae based bioprocessing approach for enhanced nutrient recovery from waste water.

23. Sabika Arif. **2023**. Internship at Punjab Food Authority Lahore.

24. Eman. **2023**. Internship at the Children's Hospital Lahore.

25. Fareeha Sohail. **2023**. Internship at PCSIR Laboratories Complex, Lahore.

26. Khwaja Muhammad Umer. **2023**. Internship at Punjab Food Authority, Lahore.

27. Irba Zermeen. **2023**. Internship at Chughtai Laboratory, Lahore.

28. Syed Qualb e Abbas. **2023**. Internship at Punjab Authority, Lahore.

29. Atif Iqbal. **2022**. Internship at Department of Food Sciences, University of Punjab, Lahore.

30. Areej Fatima. **2022**. A Review on Spices as Antimicrobial Agents Against Multi Drug Resistant Human Pathogens.

31. Rimsha Haqqi. **2022**. A Review on Probiotics as immunomodulatory agent to fight COVID-19.

32. Huma Ijaz. **2021**. Recent Advances in the Production of Polyhydroxyalkanoates Bioplastic Using Microalgae.

33. Bakhtawar Bashir Nutkani Balouch. **2021**. Review Article Production of Polyhydroxyalkanoates Bioplastic From Waste Feedstock: A Review.

34. Fatima Iqbal. **2021**. Food and Biotechnology Research Center, PCSIR Laboratories Complex, Lahore.

35. Ayesha Tanveer. **2021**. Internship at University of Veterinary and Animal Sciences (UVAS), Lahore

36. Ayesha Nazir. **2020**. Internship at University of Veterinary and Animal Sciences, Lahore.

37. Zahra Rehman. **2020**. Isolation of Polyhydroxyalkanoates from Microorganisms.

38. Sarah Farooq. **2020**. Internship at PCSIR Laboratories Complex.

39. Maryam Fatima. **2019**. Isolation and screening of crude oil degrading bacteria for bioconversion of synthetic plastic into bioplastic.

40. Nishat Ashraf. **2019**. Isolation and screening of Microalgae for polyhydroxyalkanoate bioplastic production.

41. Komal Shahzadi. **2019**. Internship at University Diagnostic Laboratory, University of Veterinary and Animal Sciences Lahore.

42. Ghaniya Arif Ahmad. **2019**. Internship at PCSIR Laboratories Complex, Lahore.

43. Sania Naeem. **2018**. Isolation and screening of hydrocarbon degrading bacteria from crude oil contaminated soil.

44. Hira Maqsood. **2018.** Internship at University Diagnostic Laboratory, University of Veterinary and Animal Sciences, Lahore.

45. Waqar Khalid. **2018.** Internship at Quality Operations Laboratory, University of Veterinary and Animal Sciences, Lahore.

46. Hasnain Ali. **2018.** Internship at Quality Operations Laboratory, University of Veterinary and Animal Sciences, Lahore.

47. Razia Taskeen. **2018.** Internship at Quality Operations Laboratory, University of Veterinary and Animal Sciences, Lahore.

48. Ryana Farooq. **2015.** Isolation of bioplastic (poly  $\beta$ -hydroxy butyrate) producing bacteria.

49. Arun Asif. **2015.** Production of 1,3-Propanediol from Clostridia-A Review.

50. Memoona Javed. **2015.** Internship Report on Mutation Analysis of Tumor suppressor genes in German shepherd.

51. Hubba Chaudhary. **2015.** Internship at Sheikh Zayed Medical Complex. Lahore.

52. Tabeer Tajammul. **2015.** Internship at Shaukat Khanum Memorial Cancer Hospital Lahore.

53. Zulqarnain Shoukat. **2014.** Survey of fresh compressed yeast production plant and quality control lab at AB Mauri (Pvt) Limited, Lahore, Pakistan.

54. Malik Waseem Abbas Chun. **2014.** Survey of fresh compressed yeast production plant and quality control lab at AB Mauri (Pvt) Limited, Lahore, Pakistan.

55. Muhammad Hayat Haider. **2013.** Isolation, identification and antibiotics susceptibility testing of pyogenic bacteria.

56. Fareena Nadeem **2013.** Antimicrobial sensitivity pattern of blood pathogens.

57. Syeda Sadaf Zahra Zadi. **2012.** Production of L-lysine by *Bacillus megaterium* immobilized in calcium alginate gel beads.

58. Muhammad Atif Khan. **2012.** Production of single cell protein by submerged culture.

59. Nadia Nasim. **2012.** Microbial quality evaluation of processed drinking water in Lahore.

60. Sidra Kabir Khan. **2012.** Production of L-lysine by bacteria in shake flask.

61. Sayeeda Akbar. **2011.** Antimicrobial activity of bacteriocins from the *Enterococcus faecium* against common pathogenic microorganism isolated from dairy products.

62. Sana Naveed. **2011.** Antimicrobial activity of bacteriocins from the *Enterococcus faecium* against common pathogenic microorganism isolated from dairy products.

63. Mohsin Arshad. **2011**. Medium optimization for cellulase production by *Bacillus subtilis*.
64. Muneeb Haider Aftab. **2011**. A comparison of hematological parameters of people with different socioeconomic background.
65. Zara Gul. **2010**. Prevalence of hepatitis C among children in a tertiary care hospital.
66. Nimrah Nadeem. **2010**. General pathological tests for the diagnosis of different diseases using blood, urine and serum samples.
67. Zainab Qayyum Qureshi. **2010**. General pathological tests for the diagnosis of different diseases using blood, urine and serum samples.
68. Kiran Fatima. **2010**. General pathological tests for the diagnosis of different diseases using blood, urine and serum samples.
69. Shamim Khalid. **2010**. Citric acid production by *Candida lipolytica*.
70. Nosheen Anwar. **2010**. Optimization of culture conditions for the production of ethanol by *Saccharomyces cerevisiae*.
71. Hira Fahim. **2010**. Production of extracellular lipase from *Aspergillus niger* by solid state fermentation.
72. Mohsin Ali. **2010**. Production of an extracellular lipase from *Rhizopus oryzae* by solid substrate fermentation.
73. Maria Iqbal. **2010**. Prevalence of hepatitis B among children in a tertiary care hospital, Lahore.
74. Farhat Naz. **2009**. Isolation and characterization of ventilators associated pathogens.
75. Sahar Tariq. **2009**. Prevalence of hepatitis C among healthy blood donors following blood transfusion.

#### **NATIONAL & INTERNATIONAL MEETINGS / SYMPOSIA / CONFERENCES / SEMINARS ORGANIZED**

1. Chief Organizer of 8<sup>th</sup> Medical Laboratory Conference held on April 30, 2025 at Bukhari Auditorium, Government College University Lahore.
2. Chief Organizer of a seminar on “Good Laboratory Practices and Quality assurance” in collaboration with Pakistan Medical Laboratory Association held on May 21, 2024 at Government College University Lahore.
3. Hands-on Training session on “Application of Analytical Profile Index as Microbial Identification System” held on August 13, 2024 at Government College University Lahore.

4. 6<sup>th</sup> International Conference on Advances in Biosciences held on 18-19 April, 2024 at Government College University Lahore, Pakistan.
5. Chief organizer in organizing a “Lecture on Entrepreneurship” held on February 23, 2022 at Government College University Lahore.
6. 8<sup>th</sup> International and 17<sup>th</sup> National Conference in Plant Sciences on “Advances in Plant Sciences in the era of Climate change” held on 26-28 October, 2022 at Government College University Lahore and University of the Punjab Lahore.
7. 2<sup>nd</sup> international conference on Biotechnology for sustainable development held on 26-28<sup>th</sup> November, 2014 at GCU, Lahore.
8. 2<sup>nd</sup> international conference and 11<sup>th</sup> National meeting of plant scientists held on February 22-24, 2011 at GCU, Lahore.

#### **NATIONAL & INTERNATIONAL MEETINGS / SYMPOSIA / CONFERENCES / SEMINARS ATTENDED.**

1. 8<sup>th</sup> Medical Laboratory Conference held on April 30, 2025 at Bukhari Auditorium, Government College University Lahore
2. 6<sup>th</sup> International Conference on Advances in Biosciences held on 18-19 April, 2024 at Government College University, Lahore, **Pakistan**.
3. 5<sup>th</sup> National Symposium on Advances in Biotechnology: Towards Circular Bioeconomy, February 27-28, 2023 organized by Department of Bioinformatics and Biotechnology, Government College University, Faisalabad, **Pakistan**.
4. Entrepreneurship, Khorana Society of Biotechnology and Microbiology (KSBM) held on February 23, 2022 at Government College University, Lahore, **Pakistan**.
5. 4<sup>th</sup> National Symposium on “Advances in Biotechnology, Trends, Challenges and Opportunities” held on March 2-3, 2022 at GC University Faisalabad, **Pakistan**.
6. 8<sup>th</sup> International and 17<sup>th</sup> National Conference in Plant Sciences on “Advances in Plant Sciences in the era of Climate change” held on 26-28 October, 2022 at Government College University Lahore and University of the Punjab Lahore, **Pakistan**.
7. Regional Conference on Promotion of Safe and Secure Science in Middle East, Asia and South East Asia Region (MESA) held on February 5-9, 2018 at Kuala Lumpur, **Malaysia**.

8. 6<sup>th</sup> International Symposium on Biomedical Materials held on December 14-16, 2017 at Pearl Continental Hotel organized by Interdisciplinary Research Center in Biomedical Materials (IRCBM), COMSATS, Lahore, **Pakistan**.
9. American Society for Microbiology (ASM) Intermountain Branch Meeting held on April 23, 2016 at University of Utah School of Medicine at Salt Lake City, Utah, United States of America (**USA**).
10. Seattle: Where International Efforts to Combat Climate Change Converge, held on April 14-17, 2016 at Seattle, Washington, United States of America (**USA**).
11. 2<sup>nd</sup> international conference on Biotechnology for sustainable development held on 26-28<sup>th</sup> November, 2014 at Government College University, Lahore, **Pakistan**.
12. 2<sup>nd</sup> international conference and 11<sup>th</sup> National meeting of plant scientists held on February 22-24, 2011 at Government College University, Lahore, **Pakistan**.
13. Biocat 2008, International congress on Biocatalysis held on August 31<sup>st</sup> to September 4<sup>th</sup>, 2008. Hamburg University of Technology, Hamburg, **Germany**.
14. 58<sup>th</sup> Annual Meeting of The Society for Biotechnology, Japan Annual Meeting, November 15-17, 2005 Tsukuba International Congress Centre. Tsukuba Science City, **Japan**.
15. 2<sup>nd</sup> International symposium on Biotechnology held on 19-21 January, 2004 at Institute of Biotechnology and Genetic Engineering, University of Sindh, Jamshoro, **Pakistan**.
16. 1<sup>ST</sup> International and National symposium on Biotechnology, 22-23 March, 2003 at Centre for Advance Studies in Biotechnology, University of Sindh, Jamshoro, **Pakistan**.
17. 7<sup>th</sup> International Conference, Trends in Biotechnology and Molecular Biology, April 2-5, 2003. Institute of Biochemistry and Biotechnology, University of the Punjab, Lahore, **Pakistan**.
18. International Animal Nutrition Conference, March 19-20, 2003. University of Veterinary and Animal Sciences, Lahore, **Pakistan**.
19. 8<sup>th</sup> National Meeting of Plant Scientists, February 24-28, 2003. Pakistan Botanical Society, Department of Botany, University of Karachi, Karachi, **Pakistan**.
20. The 1<sup>st</sup> National Symposium on “FRONTIERS OF CHEMISTRY” held on 31<sup>st</sup> of October, 2002, at Department of Chemistry, Government College University, Lahore, **Pakistan**.

21. The 1<sup>st</sup> National Annual Conference of Biological Society held in March 28-30, 2002 at Biology Block, Government College University, Lahore, **Pakistan**.

22. The 7<sup>th</sup> Plant Science Conference held in November 2000, at Punjab University, Quaid-e-Azam Campus, Lahore, **Pakistan**.

### **MEMBERSHIPS OF THE SOCIETIES/ ORGANIZATIONS**

1. Member of Bioprocess and Bio-separation Engineering Scientific Division of Asian Federation of Biotechnology: PAKISTAN CHAPTER since October 01, 2022 till September 30, 2026.
2. American Society for Microbiology
3. The Biological Society of Pakistan.
4. Pakistan Botanical Society.
5. Pakistan Society for Biochemistry and Molecular Biology
6. The Horticultural Society, Government College University, Lahore (1999-2000).
7. The Biological Society, Government College University, Lahore (1999-2000).
8. Society for Biotechnology, Japan.

### **COMMUNITY SERVICES**

1. Evaluated about 70 PhD degree holding candidates for the permanent post of Assistant Professor in the discipline of MICROBIOLOGY as an EXPERT at University of Veterinary and Animal Sciences Lahore, Pakistan from July 9-12, **2024**.
2. Member, ISO (International Standards Organization) Technical Committee (TC 255) for Biogas production **since 2017**.
3. Referee in the national and international scientific journals.
4. Guiding school students about importance of Microbiology and Biotechnology at Darul Ilm Edu Care School.
5. Advising services to the Waste to Energy Department of the Lahore Waste Management Company (LWMC), City District Government, Lahore, Pakistan for the successful operation of their biogas plant using municipal waste as raw material.
6. Delivered lectures on “Communication Skills” to Medical Doctors, Engineers and other Professionals in the Skills Development Program (SDP) of University of the Punjab, Lahore, Pakistan.

## TRAININGS RECEIVED/ WORKSHOPS ATTENDED

Sr#	Course/ Diploma/ Certificate	Field	Organizing Institution
1	A series of Training entitled “Advanced Teaching and Learning Programme 2023” held on July 17 to August 16, <b>2023.</b>	Teaching and Learning	Directorate of Academics, Government College University Lahore, Pakistan.
2	Workshop on “A successful Journey from Research to Publication” held on February 17, <b>2022.</b>	Research Publication	ORIC (Office of Research Innovation and Commercialization), Government College University Lahore, Pakistan.
3	COMSTECH ICCBS International Workshop on “Chemical Safety and Security in Academic and Industrial Laboratories” held on August 24-25, <b>2021.</b>	Chemical Safety and Security in Academia and Industry.	COMSTECH (Commission on Science and Technology), Islamabad, Pakistan.
4	National workshop on Basic Tools in Bioinformatics. November 29, <b>2017.</b>	Bioinformatics	Government College University Lahore, Pakistan.
5	One Day Workshop on Biosafety and Biosecurity for Scientists. November 13, <b>2017</b>	Biosafety and Biosecurity	Government College University Lahore, Pakistan.
6	Advanced Rubrics. July 19, <b>2017</b>	Research Methodology	Forman Christian College (A charted University), Lahore, Pakistan
7	Research Proposal for Grants. July 18, <b>2017</b>	Research Process	Forman Christian College (A charted University), Lahore, Pakistan
8	Advanced Search Techniques. July 17, <b>2017</b>	Research Methodology	Forman Christian College (A charted University), Lahore, Pakistan
9	Research Study Design and Data Mining: Exploring Relationship. June 21, <b>2017</b>	Research Methodology	Forman Christian College (A charted University), Lahore, Pakistan
10	Quantitative Research. June 19, <b>2017</b>	Research Process	Forman Christian College (A charted University)
11	Research Ethics and Digital Age: Avoiding Plagiarism. June 14, <b>2017</b>	Research Process	Forman Christian College (A charted University), Lahore, Pakistan
12	Research Proposals for Social Sciences. June 12, <b>2017</b>	Research Process	Forman Christian College (A charted University), Lahore, Pakistan
13	Basic Introduction to SPSS and Graphical Display of Data. June 10,	Research Methodology	Forman Christian College (A charted University), Lahore, Pakistan

	<b>2017</b>		
14	Literature Review: Engaging with the Text. June 07, <b>2017</b>	Research Methodology	Forman Christian College (A charted University), Lahore, Pakistan
15	Qualitative Research. June 05, <b>2017</b>	Research Process	Forman Christian College (A charted University), Lahore, Pakistan
16	Writing for Publication. June 04, <b>2017</b>	Research Process	Forman Christian College (A charted University), Lahore, Pakistan
17	Fermentor Studies and End product Analysis. June 29-30, <b>2015</b>	Fermentation Technology	Government College University Lahore, Pakistan.
18	Indigenous On Campus Training Under Modern University Governance Program. May 25-29, <b>2015.</b>	Administration	Higher Education Commission (HEC), Government of Pakistan and Government College University Lahore, Pakistan.

### **RESOURCE PERSON in conducting WORKSHOPS/ TRAININGS.**

1. Lecturer Training Program held on July 4 to September 18, **2023** organized by Directorate of Academics, Government College University, Lahore, **Pakistan**.
2. Two days training workshop on “Research Grant Proposal Writing” for Faculty of Social Sciences held on July 19 & 20, 2017 organized by ORIC (Office of Research, Innovation and Commercialization), Government College University Lahore, **Pakistan**.
3. Two days training workshop on “Research Grant Proposal Writing” for Faculty of Languages and Oriental learning held on August 24 & 25, 2017 organized by ORIC (Office of Research, Innovation and Commercialization), Government College University Lahore, **Pakistan**.

### **NEW COURSE DEVELOPED AND INTRODUCED INTO THE CURRICULUM AS COMPULSORY COURSE**

1. **Applied Environmental Microbiology** (Course code: MicBio 3208) for BS Microbiology degree at Institute of Industrial Biotechnology, Government College University, Lahore, Pakistan.

### **COURSES TAUGHT**

#### **PhD**

1. Techniques in Biotechnology

#### **M. Phil Microbiology and M. Phil Biotechnology**

1. Principles of Food Microbiology
2. Advances in Food Microbiology

3. Enzymology
4. Bioremediation

#### **BS Microbiology and BS Biotechnology**

1. Fermentation Technology
2. Industrial Microbiology
3. Soil Microbiology
4. Food Microbiology
5. Food Preservation Technology
6. Environmental Biotechnology
7. Applied Environmental Microbiology
8. Food and Dairy Microbiology
9. Microbial Anatomy and physiology
10. Basic Biotechnology I
11. Biochemistry I
12. Biochemistry II
13. Cell Biology
14. General Microbiology III
15. General Microbiology II
16. General Microbiology I
17. Control of Microorganisms

#### **ADMINISTRATIVE AND ACADEMIC DUTIES AT DEPARTMENTAL AND UNIVERSITY LEVEL**

Performed the following Administrative and Academic duties at Government College University Lahore, Pakistan.

1. Chairperson (Head), Department of Medical Laboratory Technology, Dr. Ikram ul Haq Institute of Industrial Biotechnology, Government College University (**GCU**) Lahore.
2. Convener, Departmental Selection Committee for the recruitment of Senior Visiting Faculty and Visiting Faculty members at the Department of Medical Laboratory Technology, Dr. Ikram ul Haq Institute of Industrial Biotechnology, Government College University Lahore.
3. Convener, Admission Committee for M. Phil Microbiology Admissions of the year 2024.
4. Convener, Admission Committee for BS Medical Laboratory Technology Admissions of the year 2024.
5. Convener, Class Checking Committee at Institute of Industrial Biotechnology, GCU Lahore.
6. Member of the Committee at Dr. Ikram ul Haq Institute of Industrial Biotechnology, Government College University Lahore to allocate Research Supervisors to M. Phil and BS Research/ Internship students in separate disciplines of Microbiology, Biotechnology and Medical Laboratory Technology.
7. Program Coordinator for BS Medical Laboratory Technology
8. Program Coordinator for BS Microbiology

9. Program coordinator for M. Phil Biotechnology
10. Program coordinator for M.Phil Microbiology
11. Member Research Advisory Committee, Dr. Ikram ul Haq Institute of Industrial Biotechnology, GCU Lahore.
12. Member, Budgetary Sub-committee constituted by the Vice-Chancellor at university level to evaluate the financial matters of various science departments of Government College University Lahore for the purchase of required chemicals, glassware and scientific equipment.
13. Member, Selection Committee to conduct the interviews of Research Associate position in the research project entitled “Natural Essential oil loaded nanoparticles (nano-emulsion) incorporated in poultry feed as alternative to antibiotics” funded by Pakistan Science Foundation (PSF/431) in year 2024.
14. Member, Selection Committee to conduct the interviews of Research Associate position in the research project entitled “Antibiotic-free rearing commercial broilers comparative efficacy of bioactive peptides vs antibiotic growth promoters and alternatives in enteric disease management” funded by Pakistan Science Foundation (PSF) in year 2024.
15. Member, Selection Committee to conduct the interviews of Research Associate position in the research project entitled “Green active packaging of poultry, livestock meat, fruits and shrimps having nanoencapsulated natural preservatives to boost national economy” funded by Pakistan Science Foundation (PSF) in year 2023.
16. Member, Committee for setting question paper for GCU GAT admission test for M. Phil Microbiology and M. Phil Biotechnology.
17. Member, Committee for Oral Comprehensive Examination of PhD Scholars.
18. Teaching theory and conducting practical in several courses at BS, M.Phil (MS) and PhD level in separate degrees of Microbiology and Biotechnology.
19. Controller of Examinations of M.Phil both in separate degrees of Microbiology and Biotechnology.
20. Controller of Examinations of BS (4 years degree) both in separate degrees of Microbiology and Biotechnology.

21. Departmental Focal Person for Quality Enhancement Cell (Departmental Focal Person for GCU Prospectus, Annual Performance Reports of the Department, Faculty Evaluation and Self-Assessment reports of M.Phil program ).
22. Incharge Departmental Books Purchase (2009-2015).
23. Incharge Research Lab 02.
24. Incharge Research Lab 06.
25. Incharge Autoclave room.
26. Incharge Chemicals at Institute of Industrial Biotechnology (2014).
27. Member Board of Faculty, Faculty of Science and Technology (2013-2015 and 2017-2018).
28. Member Board of Studies in Microbiology and Biotechnology (2010 to date).
29. Member Departmental Admissions Committee for M.Phil and PhD admissions (2010-2015 and then 2017 to date).
30. Member Departmental Research Committee.
31. Member Departmental Scrutiny Committee.
32. Member Departmental Selection Committee for recruitment of Lecturers, Assistant Professors, Research Associate, etc on contract.
33. Member Departmental Purchase committee, Sustainable Development Study Centre (SDSC) till 2015.
34. Member Departmental Time Table Committee till 2015.
35. Member Departmental Technical Committee (2013 to date).
36. Proctor duties performed in GC University Lahore Annual Sports 2012, 2013, 2014 and 2015.
37. Duties performed as Row Incharge during GCU Lahore yearly Convocations since 2010 to 2015 and 2018.

#### **PROFESSIONAL REPORTS WRITTEN**

1. Annual Performance Evaluation Report (APER) from 2015.
2. Self Assessment Report (SAR) of M.Phil program in Microbiology during second cycle of self assessment for Quality Enhancement Cell (QEC) of Government College University, Lahore, Pakistan in 2013.

3. Annual Progress Report of Institute of Industrial Biotechnology, Government College University, Lahore, Pakistan in 2013, 2014 and 2015.
4. Standardized Annual Report of Institute of Industrial Biotechnology, Government College University, Lahore, Pakistan.
5. Report about contributions of Institute of Industrial Biotechnology in Institutional Performance Evaluation Report (IPER).
6. Reports about various Events held at Institute of Industrial Biotechnology, Government College University, Lahore, Pakistan.

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