

DR. HAMID MUKHTAR

PERSONAL DETAILS

- ❖ **Father's Name:** Ch. Mukhtar Ali
- ❖ **Date of birth:** June 22,1972
- ❖ **Home Address:** House # 476, Block P, Johar Town, Lahore Pakistan.
- ❖ **Work Address:** Institute of Industrial Biotechnology, Government College University, Lahore-54000, Pakistan.
- ❖ **E-mail:** hamidwaseer@yahoo.com ; hamidmukhtar@gcu.edu.pk
- ❖ **Telephone:** 0333-4245581; Fax: 042- 99211634
- ❖ **CNIC #** 35202-2906136-5
- ❖ **Present Status:** Professor of Biotechnology;
Director, Institute of Industrial Biotechnology,
GC University, Lahore.
- ❖ **Research Interests:** Bioprocess Technology / Protein Chemistry /
Bioremediation / Stem Cell Technology.

PUBLICATION STATS

- ❖ **Impact Factor** 183.6
- ❖ **Total Citations** 1168 (Google Scholar)
- ❖ **h-index** 17
- ❖ **i10-index** 43

ACADEMIC QUALIFICATION

- ❖ M.Sc. (Botany). **1995**. 1st position from Government College, Lahore.
 - ❖ Ph.D. (Botany / Biotechnology). **2006**. "Production of Alkaline Protease from
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Bacillus subtilis and its Application in Leather Processing”

- ❖ Post-Doc (Harvard Medical School, Harvard University, USA) **2010-11** “Genome Engineering in Human Induced Pluripotent Stem Cells”

HONOURS/AWARDS

- ❖ Won Fulbright Post-Doctoral Award in 2010
- ❖ Best University Teacher Award 2014

PATENTS

- ❖ Ikram-ul-Haq, Fatima Akram, **Hamid Mukhtar**. 2015. A novel hyperthermophilic and glucose tolerant β -glucosidase from *Thermotoga naphthophila* with highest (ever reported) specific activity submitted to IPO, The Patent Office, Govt. of Pakistan (Patent application No. 122/2015).
- ❖ Ikram-ul-Haq, Fatima Akram, Hamid Mukhtar, Ali Nawaz. 2017. Submitted to IPO, The Patent Office, Govt. of Pakistan, Application No. 247/2017

BOOKS AUTHORED/EDITED

- 1) **Book Chapter:** U. F. Gohar, I. Iqbal, Z. Shah, **H. Mukhtar**, M. Zia-Ul-Haq. **2021**. COVID-19: Recent Developments in Therapeutic Approaches, In: Zia-Ul-Haq, M., Bin-Jumah, M., Othman, S., Henidi, H.A. (Eds.), Alternative Medicine Interventions for COVID-19. Springer International Publishing (In press)
- 2) **Book Chapter:** Composition of *Nigella sativa* Seeds. **2020**. **Hamid Mukhtar**, Muhammad Waseem Mumtaz, Tooba Tauqueer, and Syed Ali Raza In Black cumin (*Nigella sativa*) seeds: Chemistry, Technology, Functionality, and Applications, Springer Nature Switzerland AG 2021.
- 3) **Book Chapter:** Green Synthesis of Biodiesel Using Microbial Lipases by Aroosh Shabbir, **Hamid Mukhtar**, Muhammad Waseem Mumtaz, and Umer Rashid In Applications of Nanotechnology for Green Synthesis edited by Inamuddin and

- Abdullah M. Asiri (2020) Springer Nature Switzerland AG 2020
- 4) **Book Chapter:** Microbial Alkaline Proteases: Production and Applications in Leather Industry by **Hamid Mukhtar** In Microbial Catalysis (Vol 1), 2019. Nova Science Publishers, New York, USA.
 - 5) **Book Chapter:** Biodiesel Production Through Chemical and Biochemical Transesterification: Trends, Technicalities and Future Perspectives In Clean Energy for Sustainable Development edited by Mohammad G. Rasul, Abul Kalam Azad, Subhash C. Sharma, (2017) Academic Press (Elsevier), ISBN 978-0-12-805423-9, <http://dx.doi.org/10.1016/B978-0-12-805423-9.00015-6>
 - 6) Biology for class 9 (English Medium) published by Khalid Book Depot, Urdu Bazar, Lahore
 - 7) Biology for class 9 (Urdu Medium) published by Khalid Book Depot, Urdu Bazar, Lahore
 - 8) Biology Practical Note Book for F.Sc. (I & II) 2009 published by Khalid Book Depot, Urdu Bazar, Lahore.
 - 9) Biology Practical Notebook for 9th & 10th (2007) Published by Alif Publishing House, Urdu Bazar, Lahore.
 - 10) A⁺ Current Biology (Objective Type) for Class 11 (2006) Published by Ch. Ghulam Rasul Publishers, Urdu Bazar, Lahore.
 - 11) A⁺ Current Biology for Class 11 (2005) Published by Ch. Ghulam Rasul Publishers, Urdu Bazar, Lahore.
 - 12) A⁺ Current Biology for Class 12 (2005) Published by Ch. Ghulam Rasul Publishers, Urdu Bazar, Lahore.

RESEARCH PROJECTS AWARDED/COMPLETED

1. Biosynthesis of alkaline proteases by *Bacillus sp.* and its application in leather industry. 2004-2006 (Awarded by GC University Lahore; completed as Co- PI).
2. Enhanced Production and Down Stream Processing of Taxol from Indigenous endophytic Fungi. 2016. (Awarded by HEC at total cost of Rs.1,554,638).
3. Genomic analysis of proteins involved in Focal Segmental Glomerulosclerosis.

2017. (Awarded by HEC at a cost of Rs.495,000/-) [As Co-PI]
4. Establishment of Microbial Culture Bank at Institute of Industrial Biotechnology. 2017-18. (Awarded by GCU at a total cost of Rs.295,000)
 5. Chromium uptake by Biofilms and planktonic cells of bacteria isolated from the indigenous environment. 2017. (Awarded by HEC at a cost of Rs.476,430/- completed as Co-PI).
 6. Green synthesis of nanoparticles and their applications for the immobilization of commercially important enzymes. 2017. Awarded by HEC, Pakistan worth Rs.480,000/- (As Co-PI).
 7. Isolation of endophytic fungi for the production of podophyllotoxin 2019-20 (Awarded by HEC at a cost of Rs 490,000 as Co-PI]

GenBANK SUBMISSIONS

1. Haq, I. U., Manzoor, Z., Nawaz A., **Mukhtar, H.** and Aftab M. N. **2016**. *Wickheramomyces anomalus* partial gene sequence. Accession No. KT883963.
2. Hussain, A., **Mukhtar, H.** and Aftab M.N. **2016**. *Bacillus megaterium* strain IIB187 16S ribosomal RNA gene, partial sequence. Accession No. KX014809.
3. Hussain, A., **Mukhtar, H.** and Aftab M.N. **2016**. Accession No. KX214608.
4. **Mukhtar, H.**, Gohar, U. F., Haq, I. U. and Nawaz, A. **2017**. *Aspergillus ruber* strain UH275 small subunit ribosomal RNA gene, partial sequence Accession No. KY249382.
5. Marium Munir, Roheena Abdullah, Ikram-ul-Haq, **Hamid Mukhtar** and Ali Nawaz. **2017** GenBank Accession No. MG 772816.
6. Shabbir, A. and **Mukhtar, H.** **2018**. *Bacillus pumilus* strain AH-19 16S ribosomal RNA gene, partial sequence. GenBank: MG256021.1
7. Shabbir, A. and **Mukhtar, H.** **2018**. *Aspergillus terreus* strain F-2 small subunit ribosomal RNA gene, partial sequence; internal transcribed spacer 1, 5.8S ribosomal RNA gene, and internal transcribed spacer 2, complete sequence; and large subunit ribosomal RNA gene, partial sequence. GenBank No. MG256022.1
8. **Hamid Mukhtar.** **2019**. *Geobacillus stearothermophilus* strain IIB-5 16S

- ribosomal RNA gene, partial sequence. GenBank Accession No. MH923508
9. **Mukhtar, H.** and Mushtaq, Z. 2020. *Pichia cecembensis* isolate 190716-027_C09_HM_2_P9_NS8.ab1 small subunit ribosomal RNA gene, partial sequence. GenBank Accession No. MN900530
 10. Mushtaq, Z. and **Mukhtar, H., 2020.** *Torulaspota delbrueckii* isolate HM2 P-1 small subunit ribosomal RNA gene, partial sequence. GenBank Accession No. MN932368.
 11. Mushtaq, Z. and **Mukhtar, H. 2020.** *Torulaspota delbrueckii* isolate HM2 P-2 small subunit ribosomal RNA gene, partial sequence. GenBank Accession No. MN932369.

CONFERENCES/SYMPOSIA ORGANIZED

1. International Conference on Energy, Environment and Storage of Energy, 19-21 November, 2020 organized by Erciyes University, Turkey (as Member International Scientific Committee)
2. 3rd International Conference on Biosciences (ICBS 2018) May 9-11, 2018 at GC University Lahore (As co-organizer)
3. 14th National and 5th International Conference of Botany held at University of Karachi, Pakistan from January 15-18, 2016 (As member of Organizing Committee)
4. 2nd International Conference on Biotechnology for Sustainable Development held on 26-28th November, 2014 at GC University, Lahore (As Organizing Secretary).
5. National Seminar on “Biomanufacture Technology of Enzymes for detergents and Leather Industries” April 20-21, 2007 at PCSIR Complex, Lahore (as member organizing committee).
6. International Conference on Opportunities in Industrial Biotechnology held from 17-19 January 2006 at GC University Lahore (as one of the main organizers and received **Letter of appreciation from HEC**).
7. 2nd National Conference on Biology organized by Biological Society of Pakistan held on 22-24 April 2004 in GCU Lahore (as member organizing committee).

8. 1st National Conference of Biology March 28-30, 2002 at Biology Block, Government College Lahore (as member organizing committee).
9. Symposium on Biotechnology for Sustainable Development Nov. 23-24, 1997 at Government College, Lahore (as member organizing committee).

WORKSHOPS ORGANIZED

1. Training Workshop on Biosafety & Biosecurity For Young Researchers, April 23rd , 2019 at GC University, Lahore (As Principal organizer)
2. 2nd National Workshop on Basic Tools in Bioinformatics: Molecular Modelling, 7-8th March, 2019 at GC University, Lahore (As Principal organizer)
3. Two days training workshop on “Fermenter Studies & End-Product Analysis by HPLC” held on 29-30th June, 2015 at GC University, Lahore.

MEMBER EDITORIAL/ADVISORY BOARD OF SCIENTIFIC JOURNALS

1. Academic Editor, BioMed Research International (<https://www.hindawi.com/journals/bmri/>) (2020 – date)
2. Managing Editor, Biologia-Lahore (2017 – date)
3. Academic Editor, International Journal of Biological & Chemical Research (<http://scienceassistinternational.org/editorial-Board.php?nid=46>) Jan 2020....
4. Editor, Arab Journal of Basic and Applied Sciences, Special Issue: COVID-19 Research and Analysis, 2020
5. Journal of Bacteriology and Mycology (May 2017 – date)
6. European Journal of Bioinformatics (2016 – date)
7. Editor, Biologia (Lahore) (2011-2012)
8. Associate Editor- The International Journal of Biotechnology Applications, ISSN: 0975–2943, (2010-2012)
9. Associate Editor – The International Journal of Bioinformatics Research, ISSN: 0975–3087, (2011-2012)
10. International Journal of Agro Veterinary and Medical Sciences (2010-2012)
11. International Journal of Chemical Sciences (2008-date)

12. Journal of Medicinal Plants Research (www.academicjournals.org/jmpr)
(2007- 2013)
13. Scientific Journals International (Biology Section) (2007 to date)
14. Research Journal of Agriculture and Biological Sciences (2006-date)
15. Asian Journal of Biochemistry (2006-date)
16. Biotechnology (2006-date)
17. Journal of Biological Sciences (2006-date)
18. Pakistan Journal of Biological Sciences (2006-date)
19. Research Journal of Microbiology (2006-date)

MEMBER REVIEW BOARD/REFEREE OF SCIENTIFIC JOURNALS

1. Letters in Applied Microbiology
2. Journal of Applied Microbiology
3. African Journal of Biotechnology
4. Pakistan Journal of Botany
5. African Journal of Microbiology
6. Asian Journal of Chemistry
7. Environmental Monitoring and Assessment
8. Research Journal of Agriculture and Biological Sciences
9. Biologia, Pakistan
10. World Journal of Microbiology & Biotechnology
11. Journal of Medicinal Plants Research
12. Scientific Journals International (SJI)
13. Journal of Cell and Animal Biology
14. Journal of Stored products and Post Harvest Research (JSPPR); Academic Journals Press
15. Journal of Pediatric Biochemistry

PROFESSIONAL POSITIONS/FELLOWSHIPS

1. National Representative IOBB (International Organization for Biotechnology and Bioengineering) since 2006
2. Life Fellow Pakistan Botanical Society since 2005
3. Senior Member APCBEES (Asia Pacific Chemical, Biological & Environmental Engineering Society; www.cbees.org) since 2012
4. Honorary Member, National Academy of Young Scientists (NAYS) since 2014
5. Chairman, Technical Committee on Biotechnology for Pakistan Standards and Quality Controls, PSQCA, Pakistan (2014-date).
6. Secretary FABA (Federation of Asian Biotech Associations) Pakistan Chapter (2014 – date).
7. Member, Technical Committee on Halal Foods for Pakistan Standards and Quality Controls, PSQCA, Pakistan (2014 – date).
8. E-member Society of Chemical Industry (SCI) (Jan 2015 to date)
9. Member SILAE (Società Italo-Latinoamericana di Etnomedicina) Since 2014
10. Member National Academic Committee of National Testing Services (NTS) since 2012.
11. Joint Secretary, Pakistan Botanical Society (2014-2016)
12. Member Association of Biosafety for Australia and New Zealand (ABSANZ) Jan 2017 – July 2018.
13. Member “International Society of Development and Sustainability (ISDS)” since 2016. (Membership ID: M171065).
14. Member ISO Technical Committee of PSQCA, Pakistan (2017 – date)
15. Member, Technical Committee of PSQCA on “Sterilization of Health Care Products” (2017 – date).
16. Member, European Peptide Society (2017 – date)
17. Member, Amnesty International (2016 – date)
18. Member, The Science Advisory Board (2017 – date)
19. Member, Technical Committee on Research Management on Sustainable Development (RMSD) for Pakistan Standards and Quality Controls, PSQCA, Pakistan (2020 – date).

MEMBER STATUTORY BODIES

1. Member, Committee to Improve Quality and Promotion of Research Journal constituted by PHEC (October 2020.....)
2. Member Syndicate, GC University, Lahore (2020.....)
3. Member, National Core Group on Biotechnology (Feb. 2019 to date...)
4. Member Board of Studies, Department of Biological Sciences, Virtual University of Pakistan (2016 to date)
5. Member Selection Board, Kinnaird College, Lahore.
6. Member Board of Studies, School of Biological Sciences, University of the Punjab, Lahore
7. Member Board of Studies, Department of Biotechnology, Kinnaird College, Lahore.
8. Member Board of Studies, Department of Science, University of Home Economics, Lahore.
9. Member Board of Studies, Department of Zoology, University of Gujrat, Gujrat.

CONFERENCES/ SEMINARS ATTENDED

1. International Webinar "COVID-19: Biochemical Perspectives And Preventive Measures, Jan 27-28, 2021 at University of Gujrat, Pakistan (As invited speaker)
2. International Conference on Energy, Environment and Storage of Energy (ICEESEN 2020) by Ericyes University held on 19-21 Nov, 2020 at Kayseri, Turkey (Chaired a Session).
3. 14th International conference on Chemistry and its role in Development (ICCRD'14), Mansoura-Hurghada, Egypt, 25-29 March, 2019 (Chaired a session and made a presentation).
4. 3rd International Symposium on Advances in Molecular Biology of Plants and Health Sciences held in CEMB, University of the Punjab from 19-21 December 2018 (chaired a session).
5. 1st International Conference on Natural Sciences"(ICNS) held on 4-5 December,

- 2018 at Govt. College of Women, Gulberg Lahore (as a keynote speaker).
6. International Conference of Biochemistry, Biotechnology and Biomaterials held University of Agriculture, Faisalabad from December 09-11, 2018 (as a keynote speaker and chaired a plenary session).
 7. Natural Sciences at the Interface of Climate Change, Food Security and Sustainability (NSICFSS)", going to be held on October 24 to 26, 2018 at University of Kotli Azad Jammu and Kashmir (as a keynote speaker).
 8. 1st International Symposium on Tissue Engineering: Building Linkages (Clinicians, Industry & Scientists) held at COMSATS, Lahore on 25th September, 2018 (as a keynote speaker).
 9. International Conference on Innovation and Commercialization in Biotechnology, 25-26th April, 2018 at PCSIR Laboratories Complex, Lahore (As a Keynote Speaker).
 10. Seminar on Bioreactor Design and Operation for Cultivation, 26th February, 2018 at Taj Samudra Hotel, Colombo, Sri Lanka.
 11. 7th Annual ABSANZ conference on Biosafety and Biocontainment conference 30 October – 3 November 2017 at Sea World Resort and Conference Centre, Gold Coast, QLD.
 12. Seminar on "Recent Trends in the Applications of Biotechnology for Functional Foods & Nutraceuticals" Oct 2, 2016 at Universiti Putra Malaysia. (as a keynote speaker).
 13. International Agricultural Development Seminar, Sep 1 – 2, 2017 at Linshu, Shandong, China.
 14. Seminar on "Chromatography-A Century Long Innovative Journey..... held on 6th August, 2015 at Pearl Continental Hotel, Lahore.
 15. "D-8 Expert Group Meeting on Halal Sector Development" 27th to 28th April, 2015 at Islamabad organized by Ministry of Science & Technology (participated as an expert).
 16. International Conference on Bioenergy: Challenges & Opportunities in Pakistan held on 20-21 November, 2014 at University of South Asia.
 17. 4th International & 13th National Conference of Botany held 26-28th August, 2014

- at SBBU, Sheringal, Upper Dir (Made two oral presentations).
18. One day Seminar on Green Chemistry organized by University of Sargodah on April 30, 2014 (as an invited speaker and delivered lecture on Green fuels)
 19. BioAsia 2014 held on 17-19 February, 2014 in Hyderabad, India (invited as Secretary FABA, Pakistan Chapter).
 20. 33rd Pakistan Congress of Zoology (International) held on April 2-4, 2013 at Convention Centre, Islamabad (made one oral presentation).
 21. National Symposium on “Chemical Handling, Utilization, Waste Disposal & Health Safety” held on January 09, 2013 at Institute of Chemical & Biological Sciences, University of Gujrat (as Resource Person and delivered lecture on Biochemical Safety).
 22. “BioMethods” held from July 14-15, 2011 at Harvard Medical School, Boston, MA, USA.
 23. Cambridge Biotech Day “Advances in Proteomics and Genomics” held on March 31, 2011 at Boston Marriott Cambridge, MA, USA.
 24. “Discoverx Technology Symposium” held on May 10th, 2011 at Boston Marriott Cambridge, MA, USA.
 25. “Harvard Genetics Retreat” held from Feb 28-March 01, 2011 at Broad Institute Cambridge, MA, USA.
 26. Bioprocess Asia Pacific held from 26th -28th July, 2010 at Intercontinental Hotel, Singapore (As invited Speaker and Expert).
 27. 28th Pakistan Congress of Zoology, March 18-20, 2008 at GC University, Faisalabad (one presentation).
 28. International Conference of Plant Scientists from 21-24 April, 2008 at University of Agriculture, Faisalabad (delivered a Plenary Lecture).
 29. 35th All Pakistan Science Conference held during December 20-23, 2008 in University of Karachi, Pakistan (Made one presentation).
 30. International Conference on Recent Advances in Agriculture Biotechnology organized by National Commission on Biotechnology from 18-19 March, 2008 at DreamLand Motel, Islamabad (Made one Presentation).

31. National Seminar on “Biomanufacture Technology of Enzymes for detergents and Leather Industries” April 20-21, 2007 at PCSIR Complex, Lahore and made two presentations.
32. 4th International Biotechnology Symposium (IBS) & 1st Pakistan-China–Iran International Conference on Biotechnology, Bioengineering and Biophysical Chemistry (ICBBB-2007) held from November 4 –8, 2007 in University of Sindh, Jamshoro, Pakistan and made two presentations.
33. 3rd International Conference on Plant Pathology from 19-21 November, 2007 at Department of Mycology & Plant Pathology, Punjab University, Lahore.
34. 9th National Conference of Plant Scientists held in University of Sindh, Jamshoro from 13 to 15 Feb, 2006 and made two presentations.
35. International Conference on Opportunities in Industrial Biotechnology held from 17-19 January 2006 at GC University Lahore.
36. 1st International conference on Biotechnology and Informatics held from 10-12 April, 2006 in BUITMS Quetta and made two presentations.
37. 2nd National Conference on Biology organized by Biological Society of Pakistan held on 22-24 April 2004 in GCU Lahore.
38. 2nd International Conference on the Application of Artificial Intelligence in Engineering and Technology, organized by Universiti Malaysia Sabah, Malaysia from 2-5 August 2004 (made one presentation).
39. Seminar on Sustainable Use of Water Resources and Book Launching ‘Water and New Technologies “March 26, 2003” at G.C. University, Lahore, Pakistan.
40. 7th International Conference “Trends in Biochemistry and Molecular Biology, April 2-5, 2003” organized by Pakistan Society for Biochemistry and Molecular Biology at Department of Biochemistry, University of the Punjab, Quaid-e-Azam Campus, Lahore and made one presentation.
41. International Conference on Bioprocessing and Bioengineering held in University Malaysia, Sabah on 27th to 29th August 2003 and made 2 presentations.
42. 4th National conference of plant pathologists held in University of Arid Agriculture, Rawalpindi on 14th-16th October 2003.
43. 2nd International Conference on Chemistry and its products in Doha, Qatar on 6th-

- 9th December 2003 and made two presentations.
44. 1st National Conference of Biology, March 28-30, 2002 at Biology Block, Government College Lahore and made one presentation.
45. 7th National Conference of Plant Scientists “November 14-16, 2000” at Department of Botany, University of the Punjab, Quaid-e-Azam Campus, Lahore and made one presentation.
46. 2nd National Symposium on Plant Tissue Culture and Genetic Engineering from 1-3 June 1999, at NARC, Islamabad and made one presentation.
47. Symposium on Biotechnology for Sustainable Development Nov. 23-24, 1997 at Government College, Lahore and made three presentations.

WORKSHOPS/TRAINING COURSES ATTENDED

1. Elsevier-HEC Workshop on Journal indexing in Scopus at Higher Education Commission of Pakistan, on Thursday 21 January, **2021**.
2. Increasing Biosecurity at Tissue Culture Collections Workshop, hosted by CRDF Global, at Imperial Hotel, Copenhagen, Denmark from September 16-19, **2019**.
3. Increasing Biosecurity at Tissue Culture Collections Workshop, hosted by CRDF Global, at Movenpick Hotel, Amsterdam, Netherlands from August 13-17, **2018**.
4. Two Days Professional Workshop on Risk Assessment and Emergency Response to Chemical, Biological and Environmental Hazards at Work Place, 27-28th March, 2018 at University of Gujrat, Pakistan (As a Resource Person)
5. PPE and Laboratory Biosafety, October 31, 2017 organized by ABSANZ at Gold Coast, Queensland, Australia.
6. One-day Training Workshop on “Approaching towards comprehensive elimination of Persistent Organic Pollutants (Pesticides) in Pakistan” organized by UNDP & Ministry of Climate Change, Pakistan on September 12, **2017** in Lahore.
7. Workshop on Tissue Culture Collection, Jan 22 to 26, **2017** organized by CRDF Global in Amsterdam, Netherlands.
8. Seminar on Agricultural Biotechnology for Developing Countries (Aug 19 – Sep.

- 8, **2016**) organized by NATESC, Ministry of Agriculture, Beijing, China.
9. Training course on “How to respond to reviewers' comments” May 23, **2015** by Researcher Academy, Elsevier.
10. Two days training workshop on “Fermenter Studies & End-Product Analysis by HPLC” held on 29-30th June, **2015** at GC University, Lahore (As Resource Person for Hands on Training on HPLC).
11. Training course on “Peer review in Asia: special tips for Reviewers” on May 23, 2015 by Researcher Academy, Elsevier.
12. Workshop on Biodiesel Technology: processing, potential feedstock, future prospects and challenges, 5-6th November, 2012 at University of Sargodha (Participated as Resource Person).
13. One Day National Technical Workshop on Air Pollution Assessment at University of Gujrat on June 07, 2012 (participated as Resource Person).
14. International workshop on Industrial Biotechnology at COMSTECH, Islamabad in July 2012.
15. Workshop on “Effective Scientific Writings” held on July 19th, 2011 at Harvard Medical School, Boston, MA, 02115 USA.
16. “Online Environmental Health and Safety Training” June 21, 2011 for Wyss Institute of Biologically Inspired Engineering, Boston, MA 02115, USA.
17. NIH rDNA Guidelines Training Course, January 20, 2011, Harvard School of Medicine, **Harvard University**, USA.
18. Training course “Environmental Health and Safety” January 2011, **Harvard University, Boston, MA, USA**.
19. Workshop on “Separation Science and The Omics” April 06-10, 2009 in School of Biological Sciences, University of the Punjab, Lahore.
20. Training Workshop on Human Resource Development held from 21-24 July, 2008 at GC University Lahore organized by Quality Enhancement Cell.
21. “Professional Development Programme” held from March 26-31, 2007 organized by Learning Innovation Division, Higher Education Commission & GC University, Lahore.
22. 4th National workshop on “Modern Techniques in Biotechnology” held in NIBGE

- Faisalabad from 26-31 March 2006.
23. Workshop on Biochemical Engineering and Fermentor Applications (Lecturing + Hands on training) organized by Institute of Biochemistry and Biotechnology, Punjab University, Lahore and Bioengineering, Switzerland on 19th August 2006.
 24. International Thematic workshop on “Industrial Biotechnology: Connecting Business, Academia” organized by COMSTECH-HEC from 6-17 November, 2006 in Islamabad.
 25. “Chromatography: Experience Derives Innovation” organized by Merck International, 11 Dec, 2006 at Pearl Continental Hotel Lahore.
 26. A Symposium-Workshop on the ‘Applications of Molecular Biology Research in Agriculture and Health’ March 27-31, 2004 at National Centre of Excellence in Molecular Biology (CEMB), University of the Punjab Lahore, under the auspices of CEMB Lahore, Pakistan and National Institute of Health, Bethesda, Maryland, USA.
 27. Workshop on “Identification, Maintenance and Preservation of Microorganisms” held in Quaid-i-Azam University from 10-12 May 2004.
 28. NIBGE-FAO workshop on “GMOs Detection: Capacity building in Biosafety of GM crops” held in NIBGE on 14-17 June 2004.
 29. Selected for International course “Microbial Biodiversity: Applications and Perspectives in Industrial and Environmental Biotechnology” held in Columbia from October 24-28, 2005 organized by Universidad Javariana and sponsored by ICGEB (Selected for grant as a participant but could not attend).

RESEARCH PUBLICATIONS

1. Haq, I., Mahmood, F., Qadeer, M. A. and **Mukhtar, H.** 1996. Microbiological examination of Khoa. *Biologia*, 41(2): 91-95.
2. Haq, I., Saleem, U. **Mukhtar, H.**, and Qadeer, M. A. 1997. Biosynthesis of alkaline proteases by *Bacillus* spp. and its evaluation in leather industries. *Biologia*, 43(2): 23-30.

3. Haq, I., **Mukhtar, H.** and Qadeer, M. A. **1997**. Production of alkaline proteases by *Bacillus* spp. in shake flask. *Biologia*, 43(1): 71-81.
4. Haq, I., Ali. U., Khurshid, S. and **Mukhtar, H.** **1998**. Studies on the production of alkaline proteases by locally isolated cultures of *Bacillus* spp. *Biologia*, 44(1&2): 101-109.
5. Haq, I., **Mukhtar, H.** and Qadeer, M. A. **1998**. Production of alkaline proteases by *Bacillus subtilis* and the recovery of silver from X-ray films. *Biologia*, 44(1&2): 250-258.
6. Ikram-ul-Haq, Tehreema Iftikhar, M. A. Qadeer, Muhammad Mohsin Javed, Hamad Ashraf and **Hamid Mukhtar, 2002**. Production of Extracellular Lipases by *Bacillus* sp.GCB-3 in relation to nutritional conditions. *Biologia*, 48 (1&2):257-265.
7. **Hamid Mukhtar** and Ikram-ul-Haq. **2003**. Nutritional studies for the production of protease by *Rhizopus oligosporous* IHS₁₃. Proceedings of International Conference on Chemical and Bioprocess Engineering, 27th –29th August 2003 (Vol 1). Pp. 199-201.
8. Tehreema Iftikhar, Ikram-ul-Haq and **Hamid Mukhtar. 2003**. Effect of additional nitrogen sources on the production of lipase by mutant strain of *Rhizopus* sp. T^{UV}31. Proceedings of International Conference on Chemical and Bioprocess Engineering, 27th –29th August 2003 (Vol 1):217-219.
9. Ikram-ul-Haq, **Hamid Mukhtar**, Sunila Daudi, Sikander Ali and M.A. Qadeer. **2003**. Production of proteases by locally isolated mould culture under lab conditions. *Biotechnol.*, 2(1): 30-36.
10. Ikram-ul-Haq, **Hamid Mukhtar**, Zahid Ali, and Nadia Riaz. **2004**. Proteases biosynthesis by mutant strain of *Penicillium griseoroseum* and cheese formation. *Pak. J. Biol. Sci.*, 7(9) 1473-1476.
11. **Hamid Mukhtar** and Ikram-ul-Haq. **2004**. Optimization of cultural conditions for the biosynthesis of alkaline proteases by *Bacillus* sp. in a bioreactor and fuzzy logic control, Proceedings of the second International Conference on Artificial

- Intelligence in Engineering and Technology, August 3-5, 2004, Kota Kinabalu, Sabah, Malaysia, Vol 2:971-974.
12. Ikram-ul-Haq, Maaidah Tasneem, Koukab Rana, Ayesha Khan, **Hamid Mukhtar** and Mohsin Javed. **2004**. Optimization of cultural conditions for the production of xylanase by chemically mutated strain of *Aspergillus niger* GCBCX-20, *Int. J. Agric. Biol.* 06-6-1115-1118.
 13. K. Raana, M. Tasneem, I. Haq and **H. Mukhtar**. **2004**. Effect of additional carbon and nitrogen on the production of xylanase by a mutant strain of *Aspergillus niger* GCBCX-20, *Int. J. Biol. Biotech.*, 1 (4): 529-533.
 14. Ikram-ul-Haq and **Hamid Mukhtar**. **2004**. Biosynthesis of proteases by *Rhizopus oligosporus* IHS₁₃ by solid-state fermentation in a low cost medium. *J. Basic Microbiol.* 44 (4):280-287.
 15. Ikram-ul-Haq and **Hamid Mukhtar** **2005**. Studies on the optimization of protease production by *Bacillus subtilis* IH-16. *Proceedings of Pak. Cong. Zoology*, 24: 67-74.
 16. Azam Mukhtar, Shabbir Ahmad and **Hamid Mukhtar**. **2005**. Arsenic, Mercury and Copper contents of commercially available organ meat of Beef, mutton and poultry, *Biologia*, 51 (1): 37-43.
 17. **Hamid Mukhtar** and Ikram-ul-Haq. **2006**. Simultaneous Production of Protease and Alpha Amylase by *Bacillus subtilis* in a Microprocessor Controlled Fermentor, *Proceedings of the 1st International Conference on Natural Resources Engineering & Technology 2006, 24-25th July 2006; Putrajaya, Malaysia*, 130-137.
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119. Laila Shahzad, Arifa Tahir, Faiza Sharif, Ikram ul Haq and **Hamid Mukhtar**. **2019**. Assessing the Impacts of Changing Climate on Forest Ecosystem Services and Livelihood of Balakot Mountainous Communities, *Pak. J. Bot.*, 51(4), DOI: [http://dx.doi.org/10.30848/PJB2019-4\(1\)](http://dx.doi.org/10.30848/PJB2019-4(1)). [IF. 0.8].
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- Syed Ali. **2019**. Metabolite profiling of *Cycas revoluta* leaf extract and docking studies on alpha-glucosidase inhibitory molecular targets by phytochemicals, *Pakistan Journal of Pharmaceutical Sciences*, 32:871-874 [IF. 0.804].
121. Umar Farooq Gohar, **Hamid Mukhtar**, Ali Nawaz, Ikram-ul-Haq and Asad Mehmood. **2019**. Studies on the Physical Parameters for Cephalosporin Biosynthesis from *Acremonium chrysogenum* by Submerged Fermentation, *Pak. J. Zool.*, 51(3):913-918. DOI: <http://dx.doi.org/10.17582/journal.pjz/2019>. [IF 0.547].
122. Sadia Akram, Muhammad Waseem Mumtaz, Muhammad Danish, **Hamid Mukhtar**, Ahmad Irfan, Syed Ali Raza, Zhen Wang, Muhammad Arshad. **2019**. Impact of Cerium Oxide and Cerium Composite Oxide as Nano Additives on the Gaseous Exhaust Emission Profile of Waste Cooking Oil Based Biodiesel at Full Engine Load Conditions, *Renewable Energy*, doi: 10.1016/j.renene.2019.05.025 [IF 4.9].
123. Ikram U. Haq, Ali Nawaz, Z. Mansoor, A. U. Rehman, **Hamid Mukhtar**, M. N. Aftab, Y. Arshad. **2019**. A new multi-stress resistant *Wickerhamomyces anomalus*: Isolation, Identification and Bioethanol Fermentation Potential, *Revista Mexicana de Ingeniería Química*, 18(3):841-849. [1.09]
124. James William, Peter John, Muhammad Waseem Mumtaz, Ayoub Rashid Ch, Ahmad Adnan, Hamid Mukhtar, Shahzad Sharif, Syed Ali Raza and Muhammad Tayyab Akhtar. 2019. Antioxidant activity, a-glucosidase inhibition and phytochemical profiling of *Hyophorbe lagenicaulis* leaf extracts, *Peer J.*, DOI 10.7717/peerj.7022 [IF 2.118]
125. Muhammad Nadeem, Muhammad Waseem Mumtaz, Muhammad Danish, Umer Rashid, **Hamid Mukhtar**, Farooq Anwar, Syed Ali Raza. **2019**. *Calotropis procera*: UHPLC-QTOF-MS/MS based profiling of bioactives, antioxidant and anti-diabetic potential of leaf extracts and an insight into molecular docking, *Journal of Food Measurement and Characterization*, <https://doi.org/10.1007/s11694-019-00243-z> [IF 1.415]

126. **Hamid Mukhtar**, Syed Fahad Tahir and Umar Farooq Gohar. **2019**. Isolation And Screening of Taxol Producing Endophytic Fungi, *International Journal of Biology & Biotechnology*, 16 (3): 661-666. [Y-category]
127. Ikram-ul-Haq, Mariyum Riaz, Ali Nawaz, Asad ur Rehman, **Hamid Mukhtar** and Qurrat ul Ain Syed. **2019**. Enzymatic hydrolysis of *Saccharum officinarum* Lignocellulosic biomass by genetically modified hyperthermophilic cellulases, *Pakistan Journal of Botany*, 52(1):..... [IF 0.8]
128. Ali Nawaz, **Hamid Mukhtar**, Ikram ul Haq, Zainab Mazhar, Muhammad Waseem Mumtaz. **2019**. Laccase: An Environmental Benign Pretreatment Agent for Efficient Bioconversion of Lignocellulosic Residues to Bioethanol, *Current Organic Chemistry*, 23(14): DOI : 10.2174/1385272823666190722163046 [IF 2.029]
129. Salma Siddique and **Hamid Mukhtar**. **2019**. Probing the Performance of Glucose Oxidase Treated Graphene-Based Field Effect Transistors, *Journal of Nanoscience and Nanotechnology*, 19 (12), 7442–7446, <https://doi.org/10.1166/jnn.2019.16723>, (IF 1.354)
130. Salma Siddique and **Hamid Mukhtar**. **2019**. Immobilization of Amino acids on Graphene Nanosheets for BioFETs, *Journal of Nanoelectronics and Optoelectronics*, DOI: <https://doi.org/10.1166/jno.2019.2571>, (IF:1.069)
131. Ghazala Rubi, Ali Javed and **Hamid Mukhtar**. **2019**. Variants in Chronic Myeloid Leukemia Patients Analysis of Breakpoint Cluster Region Abelson Oncogen, *Palgo Journal of Medicine and Medical Science*, 6(1):1-9.
132. Mariam Ahmed, Yesra Arshad & **Hamid Mukhtar**. **2019**. Isolation and screening of keratinase producing bacteria from soil, *Biologia-Lahore*, 65(II):
133. Ali Nawaz, A. Ashfaq, S. M. A. M. Zaidi, M. Munir, Ikram U. Haq, **Hamid Mukhtar**, S. F. Tahir. **2020**. Comparison of Fermentation and Medical Potentials of *Saccharomyces* with *Wickerhamomyces* Genera, *Revista Mexicana de Ingeniería Química*, 19(1): 33-47. [IF. 1.09]
134. Tooba Touqeer, Muhammad Waseem Mumtaz, Hamid Mukhtar, Ahmad Irfan, Sadia Akram, Aroosh Shabbir, Umer Rashid, Imededdine Arbi Nehdi and Thomas Shean Yaw Choong. **2020**. Fe₃O₄-PDA-Lipase as Surface Functionalized

- Nano Biocatalyst for the Production of Biodiesel Using Waste Cooking Oil as Feedstock: Characterization and Process Optimization, **Energies**, 13, 177; doi:10.3390/en13010177 [IF. 2.707]
135. Ikram ul Haq, Mariyum Riaz, Ali Nawaz Asad-Ur-Rehman, **Hamid Mukhtar** and Qurrat-ul-Ain Syed. **2020**. Enzymatic Hydrolysis of *Saccharum officinarum* Lignocellulosic Biomass by Genetically Modified Hyperthermophilic Cellulases, *Pak. J. Bot.*, 52(1): 311-315. [IF. 0.8]
136. Anam Fatima, Muhammad Waseem Mumtaz, **Hamid Mukhtar**, Sadia Akram, Tooba Touqeer, Umer Rashid, Muhammad Raza Ul Mustafa, Imededdine Arbi Nehdi and Mohd Izham Saiman. 2020. Synthesis of Lipase-Immobilized CeO₂ Nanorods as Heterogeneous Nano-Biocatalyst for Optimized Biodiesel Production from *Eruca sativa* Seed Oil, *Catalysts*, 10,231; doi:10.3390/catal10020231 [IF. 3.444]
137. Muhammad Umar Farooq, Muhammad Waseem Mumtaz, **Hamid Mukhtar**, Umer Rashid, Muhammad Tayyab Akhtar, Syed Ali Raza & Muhammad Nadeem. **2020**. UHPLC-QTOF-MS/MS based phytochemical characterization and anti-hyperglycemic prospective of hydro-ethanolic leaf extract of *Butea monosperma*, *Scientific Reports*, 10:3530. [IF: 4.012]
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140. Ikram ul Haq, Zinnia Mansoor, Ali Nawaz, Asad-ur-Rehman and **Hamid Mukhtar**, **2020**. Enzymatic Depolymerisation of Wheat Straw into Fermentable Saccharides By Thermophilic Cellulases, *Pak. J. Bot.*, 52(3), DOI: [http://dx.doi.org/10.30848/PJB2020-3\(45\)](http://dx.doi.org/10.30848/PJB2020-3(45)) [IF 0.8]

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142. Zuriat Jabbar, Ikram-ul-Haq, **Hamid Mukhtar**, Asima Tayyeb, Asma Manzoor. **2020**. Next-generation sequencing to elucidate adaptive stress response and plantaricin genes among *Lactobacillus plantarum* strains, *Future Microbiol.*, 15(5): <https://doi.org/10.2217/fmb-2019-0158> [IF 2.746]
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144. Muhammad Nadeem, Muhammad Waseem Mumtaz, Muhammad Danish, Umer Rashid, **Hamid Mukhtar**, Ahmad Irfan. **2020**. Antidiabetic functionality of *Vitex negundo* L. leaves based on UHPLC-QTOFMS/MS based bioactives profiling and molecular docking insights, *Industrial Crops & Products*, 152 <https://doi.org/10.1016/j.indcrop.2020.112445> [IF 4.191]
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146. Syed Ali Raza, Ayoub Rashid Chaudhary, Muhammad Waseem Mumtaz, Ahmad, **Hamid Mukhtar**. **2020**. Metabolite profiling and antidiabetic attributes of ultrasonicated leaf extracts of *Conocarpus*, *Asian Pacific Journal of Tropical Biomedicine*, [IF 1.587]
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148. Muhammad Nadeem, Muhammad Waseem Mumtaz, Muhammad Danish, Umer Rashid, **Hamid Mukhtar**, Ahmad Irfan, Farooq Anwar & Nazamid Saari. **2020**. UHPLC-QTOF-MS/MS metabolites profiling and antioxidant/antidiabetic attributes of *Cuscuta reflexa* grown on *Casearia tomentosa*: exploring phytochemicals role via molecular docking, *International Journal of Food Properties*, 23(1): 918–940, <https://doi.org/10.1080/10942912.2020.1764578> [IF 1.398]
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151. Umar Farooq Gohar, **Hamid Mukhtar**, Amir Mushtaq, Ayesha Farooq, Farooq Saleem, Malik Asif Hussain and Muhammad Usman Ghani. **2020**. Fungi: A Potential Source of Biopharmaceuticals, *Agrobiological Records*, 2: 49-62.
152. I. Haq, Z. Mustafa, A. Nawaz, **H. Mukhtar**, X. Zhou, Y. Xu. **2020**. Comparative assessment of acids and alkali based pretreatment on sawdust for enhanced saccharification with thermophilic cellulases, *Revista Mexicana de Ingeniería Química*, 19(Sup. 1):305-314 [IF 1.139]
153. Hussain, A., **H. Mukhtar** and I.U. Haq. **2020**. Biosynthesis of L-lysine by *Bacillus megaterium* through submerged fermentation. *Pak. J. Bot.*, 52(6): DOI: [http://dx.doi.org/10.30848/PJB2020-6\(35\)](http://dx.doi.org/10.30848/PJB2020-6(35)) [IF 0.8]
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155. Syeda Fatima Nadeem , Umar Farooq Gohar , Syed Fahad Tahir, **Hamid Mukhtar**, Soisuda Pornpukdeewattana, Pikunthong Nukthamna, Ali Muhammed Moula Ali, Sri Charan Bindu Bavisetty & Salvatore Massa. **2020**. Antimicrobial resistance: more than 70 years of war between humans and bacteria, *Critical Reviews in Microbiology*, DOI: 10.1080/1040841X.2020.1813687 [IF 7.349]
156. **Hamid Mukhtar***, Saima Yaqub and Ikram ul Haq. **2020**. Production of probiotic Mozzarella cheese by incorporating locally isolated *Lactobacillus acidophilus*, *Annals of Microbiology*, 70:56 <https://doi.org/10.1186/s13213-020-01592-7> [IF 1.528].
157. Saqib Sohail, Muhammad Waseem Mumtaz, **Hamid Mukhtar**, Tooba Touqeer, Muhammad Kafeel Anjum, Umer Rashid, Wan Azlina Wan Ab Karim Ghani and Thomas Shean Yaw Choong. **2020**. Spirogyra Oil-Based Biodiesel: Response Surface Optimization of Chemical and Enzymatic Transesterification and Exhaust Emission Behavior, *Catalysts*, 10, 1214; doi:10.3390/catal10101214 [IF 3.52]
158. Ikram Haq, Sheeba Shakoor, Ali Nawaz, Yesra Arshad and **Hamid Mukhtar**. **2020**. Purification and Characterization of Mannanase from *Aspergillus awamori* for Fruit Juice Clarification, *Protein & Peptide Letters*, 27, 1-0 [IF 1.156]
159. Zain Ul Aabideen, Muhammad Waseem Mumtaz, Muhammad Tayyab Akhtar, **Hamid Mukhtar**, Syed Ali Raza, Tooba Touqeer and Nazamid Saari. **2020**. Anti-Obesity Attributes; UHPLC-QTOF-MS/MS-Based Metabolite Profiling and Molecular Docking Insights of *Taraxacum officinale*, *Molecules*, 25, 4935; doi:10.3390/molecules25214935 [IF 3.267]
160. Ali Nawaz , Atiatul Hafeez , Syed Zaghum Abbas , Ikram ul Haq , **Hamid Mukhtar** & Mohd Rafatullah. **2020**. A state of the art review on electron transfer mechanisms, characteristics, applications and recent advancements in microbial fuel cells technology, *Green Chemistry Letters and Reviews*, 13(4):101–117 <https://doi.org/10.1080/17518253.2020.1854871> [IF 3.286]
161. Hadiqa Javaid, Ali Nawaz, Naveeda Riaz, **Hamid Mukhtar**, Ikram-ul-Haq, Kanita Ahmed Shah, Hooria Khan, Syeda Michelle Naqvi, Sheeba Shakoor,

- Aamir Rasool, Kaleem Ullah, Robina Manzoor, Imdad Kaleem, and Ghulam Murtaza. **2020**. Biosynthesis of Polyhydroxyalkanoates (PHAs) by the Valorization of Biomass and Synthetic Waste, *Molecules*, 25, 5539; doi:10.3390/molecules25235539 [IF 3.267]
162. Bisma Mudaser ,Muhammad Waseem Mumtaz ,Muhammad Tayyab Akhtar, **Hamid Mukhtar**, Syed Ali Raza, Anam Amin Shami, Tooba Touqeer, **2020**. Response surface methodology based extraction optimization to improve phar-macological properties and¹H-NMR based metabolite profiling of *Azadirachta indica*, *Phytomedicine Plus*, doi: <https://doi.org/10.1016/j.phyplu.2020.100015>
163. Rabia Iqbal Khan, Hamid Mukhtar, Umar Farooq Gohar and Syed Fahad Tahir. 2020. Random Mutagenesis of Endophytic Fungi for Enhanced Taxol Production, *Proceedings of the Pakistan Academy of Sciences: B. Life and Environmental Sciences*, 57 (2): 67-74 (Y-category).
164. Ali Nawaz, Rida Chaudhary, Zinnia Shah, Laurent Dufossé, Mireille Fouillaud, **Hamid Mukhtar** and Ikram ul Haq. **2021**. An Overview on Industrial and Medical Applications of Bio-Pigments Synthesized by Marine Bacteria, *Microorganisms*, 9(11). <https://doi.org/10.3390/microorganisms9010011> [IF 4.125]
165. Adeen Kiran, Umar Farooq Gohar, Ayesha Farooq, Malik Muhammad Asif and **Hamid Mukhtar**. **2021**. Redressal of Antibiotic Resistance using Plant Extracts, *Journal of Innovative Sciences*, 7(1): 18-27. (Y)
166. Anam Zulfiqar, Muhammad Waseem Mumtaz, **Hamid Mukhtar**, Jawayria Najeeb, Ahmad Irfan, Sadia Akram, Tooba Touqeer, Ghulam Nabi, **2021**. Lipase-PDA-TiO₂NPs: An emphatic nano-biocatalyst for optimizedbiodiesel production fromJatropha curcasoil, *Renewable Energy*, 169:1026-1037. [IF 6.274]
167. Ikram-Ul-Haq, Shanza Ashraf, Ali Nawaz, Yesra Arshad and **Hamid Mukhtar**, **2021**. Biosynthesis of β -Galactosidase From *Aspergillus oryzae* using Milk Powder as Substrate, *Pakistan Journal of Botany*, 53(1): DOI: <http://dx.doi.org/10.30848> [IF 0.8]

168. Abida Rafique, Ali Nawaz and Hamid Mukhtar. 2021. Optimization of fermentation parameters for enhanced APHE production from *Streptomyces griseocarneus* through submerged fermentation, *Pakistan Journal of Botany*, DOI:10.30848/PJB2021-2(28) [IF 0.8]

STUDENTS/ RESEARCH THESES SUPERVISED

B.Sc. (Hons)

1. Rameen Imran (2019-20) Inhibition of beta lactamases using plant extracts
2. Ali Haider (2019-20) Isolation of psychrophilic microbes and evaluation of their biotechnological potential
3. Muhammad Arslan Butt (2019-20) Isolation of thermophilic microbes and evaluation of their biotechnological potential
4. Muhammad Ahsan Kaleem (2018-19) Determination of antimicrobial activity of actinomycetes isolated from various soil samples
5. Syeda Zara Kazmi (2018-19) Isolation and screening of statin producing fungal cultures
6. Shaista Amin (2018-19) Isolation, and characterization of lactic acid bacteria from local yogurt samples
7. Rukhma (2018-19) Immobilization of proteases using nanoparticles
8. Muhammad Hassan Farooq (2017-18) Study of antimicrobial potential of sea-buckthorn
9. Maryam Mumtaz (2017-18) Isolation and screening of phosphatase producing fungi from soil
10. Aiman Fatima (2017-18) Isolation and screening of pectinase producing fungi from soil
11. Rabia Iqbal Khan (2017-18) Random Mutagenesis of endophytic fungi for enhancement of taxol production
12. Ayesha Imran (2017-18) Determining the role of podocin polymorphism in focal segmental glomerulosclerosis (FSGS)
13. Maira Javed (2017-18) Isolation of thermophilic bacteria and study of their

- biotechnological potential
14. Manahil Ghazi (2017-18) Biosynthesis of biodiesel by using lipase immobilized on nanoparticles
 15. Maria Najeeb (2016-17) Evaluation of different substrates for vinegar production by *Acetobacter* sp.
 16. Sadia Hassan (2016-17) Removal of chromium from industrial wastewater using indigenous microorganism.
 17. Hafiz Abdul Basit (2016-17) Studies on the purification of Glucose Oxidase from *Aspergillus niger*.
 18. Mariam Ahmad (2016-17) Isolation and screening of keratinase producing bacteria and fungi.
 19. Rimsha Waris (2016-17) Isolation and characterization of cellulolytic fungi from compost.
 20. Misha Naz (2015-16) Isolation & Screening of fungal cultures for Taxol production.
 21. Shabana Yousaf (2014-15) Kinetics and thermodynamics of alkaline protease isolated from *Aspergillus oryzae*.
 22. Arooj Fatima (2014-15) Isolation and screening of collagenase producing bacteria.
 23. Sobia Anjum (2012) Studies on the effect of activators and stabilizers on alkaline protease from *Bacillus subtilis*.
 24. Sara Rahman (2012) Antimicrobial activity of different antibiotics against *Escherichia coli*.
 25. Nazia Hassan (2012) Isolation and identification of phosphate solubilizing bacteria and their role as biocontrol.
 26. Mubeshrah Siddique (2012) Biosorption of chromium by bacterial isolates.
 27. Iqra Khizar (2012) Biodegradation of endosulfan by fungal isolates.
 28. Shanice Oquin (2011) Studies on growth optimization and cloning efficiency of induced pluripotent stem cells (Summer student at **Harvard Medical School** from University of Texas, Texas USA)
 29. Sadia Nazeer (2010) Biosorption of Chromium using fungal biomass.

30. Unaza Saqib (2010) Biosorption of Chromium using plant biomass.
31. Muhammad Bilal (2010) Studies on the Storage and stability of alkaline protease from *Bacillus subtilis*.
32. Sumera Rashid (2010) Isolation and purification of pancreatic proteases.
33. Madiha Hanif (2010) Production of extracellular lipase by *Aspergillus niger* using solid state fermentation.
34. Sadaf Hanif (2010) Production of keratinase by *Bacillus* species using solid state fermentation.
35. Javeria Shahzad (2010) Production of lipase by bacterial isolate under solid state fermentation.
36. Sumarish Riaz (2009) Isolation and screening of bacterial cultures for amino acid production.
37. Mehreen Akram (2009) Application of alkaline proteases in leather industry.
38. Sana Aslam (2009) Drug sensitivity patterns of the isolates from ventilator associated pneumonia in a tertiary care hospital.
39. Amna Butt (2009) Isolation & Characterization of urinary pathogen isolated from catheterized patients in a tertiary care hospital.
40. Mariam Ayub (2009) Methicilline Resistant *Staphylococcus aureus* (MRSA) frequency in health care workers.

M.Sc.

1. Uzma Ali (1995). Production of alkaline proteases by locally isolated *Bacillus* sp. using solid-state fermentation (as co-advisor)
2. Sunila Daudi (1996). Production of proteases by locally isolated mould culture. (as co-advisor)
3. Uzma Saleem (1997). Production of proteases from *Bacillus* and their uses in tannery & leather. (as co-advisor)
4. Humaira Yasmin (1998). Production of alkaline proteases by *Bacillus* species (as co-advisor)
5. Haiba Kaul (2001). Studies on the biosynthesis of protease by mutant strain of *Penicillium griseoseum* and its application to cheese formation (as co-advisor)

6. Hina Umber. (2005) Studies on the biosynthesis of protease from *Penicillium* spp.
7. Gul Fatima (2006) Production of acid protease from *Aspergillus niger*.
8. Nadeem Ullah (2006) Downstream processing of alkaline protease from *Bacillus subtilis*.
9. Syeda Sidra Ejaz (2007) Production of antitumor antibiotic by *Streptomyces capoamus* in batch fermentation.
10. Hina Bashir (2007) Optimization of growth conditions for *Azotobacter* species and their use as Biofertilizer.

M. Phil.

1. Rabia Iqbal Khan (2019-20) Isolation and screening of actinomycetes for their antimicrobial potential
2. Rabia Abid (2019-20) Production of lovastatin from locally isolated fungal strains
3. Fatima Jamil (2019-20) Isolation, Characterization and Evaluation of Plant Growth Promoting Rhizobacteria (PGPR) for their use as Biofertilizer
4. Wajeeha Mehak (2019-20) Development of Microbial Consortium for the treatment of Industrial Wastewater
5. Zinnia Shah (2019-20) Purification and characterization of human serum albumin from blood
6. Rukhsar Fatima (2019-20) Isolation, purification and characterization of taxol from an endophytic fungus
7. Saman Aftab (2019-20) Biodegradation of Plastics by locally isolated microorganisms
8. Syeda Tasmia Asma (2019-20) Fabrication of Cu Nanoclusters based Thiolated Chitosan Nanocarriers loaded with Lovefloxacin and their evaluation for antimicrobial analysis against MDR bacteria
9. Aiman Tahir Laghari (2018-19) Production and Characterization of Kefir using Indigenous Microflora
10. Mariam Ahmad (2018-19) Production of protease from thermophilic bacteria through submerged fermentation

11. Muhammad Faiq Ali (2018-19) Isolation, identification and characterization of calcite inducing microbes
12. Sameen Ashraf (2018-19) Bioremediation of arsenic by using locally isolated bacteria
13. Sonia Younas (2017-18) Study of the efficacy and side effects of Sofosbuvir and Daclatasvir in patients of chronic hepatitis C virus infection
14. Syed Sajid Jan (2017-18) Production, purification and application of alkaline protease from *Bacillus amyloliquefaciens*
15. Maryam Javid (2017-18) Studies on Chromium reduction potential of Biofilms and Planktonic bacterial cells
16. Yasmeen Ghulam Muhammad (2017-18) Synthesis, characterization and application of mesoporous silica nanoparticles (MSNs) in drug delivery
17. Fatima Iqbal (2017-18) Production of Glyoxal Oxidase from fungal isolates and its application in Ligno-cellulosic degradation
18. Manam Walait (2017-18) Studies on the biodegradation of atrazine by locally isolated microorganisms.
19. Khadija tul Kubra (2017-18) Designing the new drug (s) against antibiotic resistant strains of *Staphylococcus aureus*
20. Sabir Javed (2016-17) Growth optimization of various algal species for their biotechnological applications
21. Zunaira Shahzadi (2016-17) Purification and characterization of alkaline protease from *Bacillus* spp.
22. Nazish Ishaq (2016-17) Production of Podophylotoxin from endophytic fungi isolated from *Podophyllum* sp.
23. Anum Mushtaq (2015-16) Production and partial purification of Laccase from Basidiomycetous fungi
24. Abida Rafique (2015-16) Production of pyrazoloisoquinolinone (APHE) antibiotic from *Streptomyces griseocarneus* through submerged fermentation
25. Sana Mushtaq (2015-16) Production and application of proteases for the synthesis of peptides and amino acids using low cost sources of proteins (In Progress)

26. Aqsa Mujahid (2015-16) Biosynthesis of silver nanoparticles by *Aspergillus* sp. and their characterization.
27. M. Ammar Asghar (2015-16) Production and purification of bacteriocins from *Lactobacillus* species.
28. Wajeeha Jawad (2015) Studies on the immobilization of alkaline protease and its applications.
29. Huda Fatima (2015) Optimization of submerged fermentation for protease production from different *Aspergillus* sp.
30. Zaib-un-Nisa (2015) Rapid detection of rpoB gene mutation conferring Rifampicin resistance in pulmonary and extra-pulmonary MDR tuberculosis.
31. Zile Huma (2015) Production of bioethanol from pretreated and saccharified rice straw using *Saccharomyces cerevisiae*.
32. Aisha Ghazal Latif (2015) Emerging Carbapenem resistance in gram negative facultative aerobes isolated from the hospitals of Lahore.
33. Zoyea Rehman (2014) Production and purification of Rhamnolipids from microbial cultures using submerged fermentation.
34. Maryam Mushtaq (2014) Purification and characterization of protease from locally isolated *Aspergillus oryzae*.
35. Farzana Anwar (2014) Optimization of growth of *Mycoplasma gallisepticum* (MG) for vaccine production.
36. Sahar Zafar (2014) Development and optimization of in-house fluorescence quenching assay for the estimation of total glycosylated serum proteins.
37. Raheema Rasheed (2014) Biosynthesis of pectinase from fungal isolate using solid state fermentation.
38. Sana Rashid. 2013. Production & partial purification of extracellular ribonuclease from *Bacillus megaterium*.
39. Haniya Mazhar. 2013. Extracellular lipase production from *Bacillus* species; partial purification and characterization of enzyme.
40. Kiran Fatima (2013) Production and purification of L-Asparaginase from *Bacillus* species.

41. Madiha Khan (2013) Microbial lipases: production and application for biodiesel synthesis from non-conventional feedstock.
42. Gohar Ayub (2013) Production, formulation and application of bating enzymes.
43. Saima Yaqub (2013) Production of Mozzarella cheese by incorporation of probiotics.
44. Madiha Hanif (2013) Comparative predictive values of Rheumatoid arthritis factor (RAF) and Antinuclear antibodies (ANA) in hepatitis B surface antigen (HBsAG) positive cases.
45. Aroosh Shabir (2013) Biosynthesis of ethanol from cellulosic waste material using bacterial enzymes.
46. Wageha Talib (2013) Isolation, molecular diagnosis and antibiotic resistant profile studies of *Acinetobacter* from human and animal origin.
47. Rahat Zareen (2012) Evaluation of antibiotic resistance of the coliform bacilli isolated from various clinical samples.
48. Sumaira Majeed (2012) Blood borne viral infection among pregnant women visiting for their antenatal check up.
49. Mehwish Batool (2012) Synergistic effect of different organisms on the chromium bioremediation.
50. Zubaria Rehman (2012) Purification and characterization of human serum proteins.
51. Hafiz Syed Muhammad Suliman (2012) Isolation of oleaginous yeasts and evaluation of their potential as feedstock for biodiesel production.
52. Zunaira Hafeez, (2012) Cloning and expression of serine alkaline protease from *Bacillus subtilis*
53. Sidra Ijaz (2010) Enhanced production and downstream processing of Lovastatin.
54. Samreen Khursheed (2010) Enzymatic trans-esterification for Biodiesel Production
55. Shafia Rani (2010) Environment Friendly Leather Processing using Proteases
56. Mina Ilyas (2010) Production and immobilization of proteases from *Bacillus* spp.
57. Umar Farooq Gohar (2009) Production of Cephalosporin from *Acremonium chrysogenum* by submerged fermentation.

58. Arjumand Ahmad (2009) Isolation and screening of fungal strains for the production of statins.
59. Iram Hina (2008) Biosorption of chromium from water by *Aspergillus oryzae*.
60. Asma Saeed (2008) Simultaneous production of alpha amylase and protease from *Bacillus* species by submerged fermentation.
61. Shazia Javed (2008) Studies on the production of alkaline protease from *Pseudomonas* sp. and its application for the dehairing of goat skin.
62. Hina Umber (2007) Partial Purification and Characterization of Alkaline Protease produced by *Bacillus subtilis*.
63. Nadia Kanwal (2007) Optimization of cultural parameters for the production of Lincomycin from *Streptomyces* species.
64. Saba Imtiaz (2006) Optimization of process parameters for alkaline protease by *Bacillus subtilis* under solid state fermentation.
65. Sunila Daudi (2006) Production of Acid Proteases by *Mucor* spp. (as co advisor).

PhD.

1. Ammar Asghar (2019-22) Production, purification and characterization of bacteriocins from locally isolated Lactic acid bacteria
2. Syed Fahad Tahir (2019-22)
3. Salma Siddique (2016-19) Nanomaterials Based Biosensors and Biofets For Detection of Analytes of Biotechnological Interest (In Progress)
4. Farzana Anwer (2015-18) Development of microbial consortium to be used as biofertilizer (In Progress)
5. Zarina Mushtaq (2015-18) Biosynthesis of pyruvate decarboxylase from yeast isolates and its applications (In Progress)
6. Aroosh Shabir. Lipase mediated transesterification of non-conventional feed stock for the production of Biodiesel (Completed in 2018)
7. Amjad Hussain. Enhanced production of L-Lysine from bacterial species through metabolic and bioprocess engineering (completed in 2016).
8. Umar Farooq Gohar. Enhanced production of taxol from fungal culture. (Completed in 2016).

9. Muhammad Waseem Mumtaz (2012) Optimization of reaction parameters for Biodiesel production by chemical and enzymatic transesterification (Completed as Co-supervisor)

SPECIAL ACHIEVEMENTS

- ❖ Got **1st position** in M.Sc.
- ❖ Received Academic **Roll of Honour** from GCU Lahore.
- ❖ Academic **Certificate of Merit** from Government College Lahore.
- ❖ Co-curricular **Certificate of Merit** from Government College Lahore.

ADVISORY/ADMINISTRATIVE SERVICES AT DEPARTMENT LEVEL

1. Coordinator B.Sc. (Hons) Program (2015-)
2. Coordinator M. Phil (Microbiology) Program (2010-2013)
3. Coordinator M. Phil (Biotechnology) Program (2005-2013)
4. Secretary & Member of Board of Studies in Microbiology (2008-2010)
5. Incharge Non-teaching staff of IIB (2008-2013)
6. Incharge Stores IIB (2005 to 2014)
7. Purchase coordinator of IIB (2005 to 2014)
8. Incharge Departmental Library (2005-2009)
9. Team Leader, Quality Assurance IIB (2007 to 2012)

ADVISORY/ADMINISTRATIVE SERVICES AT UNIVERSITY LEVEL

1. Member Syndicate, GC University Lahore (2020-)
2. Convener University Medical Committee (2019-2020)
3. Member University Works Committee (2014-2019)
4. Member Service Statues Committee of GCU Employees (2015-2016)
5. Member, Staff Welfare Fund Committee (2014-15)
6. Advisor, Hiking and Mountaineering Club (2008-10)

7. Member, Convocation Committee (Organization, Invitation, Seating, Decoration) (2006 to date)
8. Advisor Scientific Ravi (2009 to date)
9. Co-Advisor Biological Society, GCU (2008-10)
10. Elected Member of Academic Council, GC University, Lahore (2013-2016)

SPORTS & EXTRA CURRICULAR ACTIVITIES

1. President Rowing Club, GCU Lahore (2013-...)
2. Member, Sports Board, GCU Lahore (2008- date)
3. Advisor, Scientific Ravi (University Magazine) (2007-10; 2012- date)
4. Member, Harvard Dragon Boating Team (Won Gold Medal & Bronze Medal at International Fingerlakes Dragon Boating Festival 2011, New York, USA,)
5. President GCU Weight Lifting Club (2008-10)
6. President GCU Biological Society (1995)
7. Associate-Editor of Scientific Ravi, GCU (1995)

PROFESSIONAL EXPERIENCE

1) Teaching Experience:

Twenty four (24) years of teaching experience to intermediate, graduate and post graduate classes in the subjects of Biology, Biochemistry, Microbial Genetics, Techniques in Biotechnology, Enzymology, Protein Purifications, Bioremediation, Microbial Enzyme Technology, Plant Physiology, Phycology, Mycology, Anatomy and Morphology of Vascular Plants.

2) Research Experience:

Twenty One (22) years research experience at Biotechnology Research Centre, Botany Deptt. and Institute of Industrial Biotechnology, Government College University, Lahore.



PROF. DR. HAMID MUKHTAR

Government College University,

Lahore.