

# DR. HAFIZ ABDULLAH SHAKIR

## Assistant Professor

Department of Zoology, University of the Punjab,

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### Personal Information:

Father's Name: Bashir Ahmed (Late)

Home address 134-Jinnah Colony Bastami Road Samanabad Lahore.

Date of Birth: 20-08-1980

N.I.C#: 35202-2443916-1

Passport #

Marital status: Married

Region: Islam

Languages: Urdu, Punjabi (Mother tongue), English (Fluent: Speaking, Writing and Reading), Arabi (Fluent: Reading, Good: Writing and Speaking)

Nationality: Pakistani

### Academic Record:

Degree	Institution	Year	Division	Subjects
Ph.D	Department of Zoology, University of the Punjab, Lahore.	2013	I <sup>st</sup>	Zoology
M.Sc. (Hons.)	Department of Zoology, University of the Punjab, Lahore.	2005	I <sup>st</sup>	Zoology
B.Ed	Allama Iqbal Open University, Islamabad	2008	I <sup>st</sup>	Science
B.Sc. (Hons.)	Department of Zoology, University of the Punjab, Lahore.	2003	I <sup>st</sup>	Zoology (major)
F.Sc.	Govt.College of Science, Wahdat Road, Lahore	2000	I <sup>st</sup>	Biology Chemistry Physics
Matriculation	Govt.Central Model School, Samanabad, Lahore.	1998	I <sup>st</sup>	Biology Chemistry

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**Research Experience as Student:**

<b>Research topic</b>	<b>Under the Supervision of</b>	<b>Degree</b>	<b>Completion year</b>
Enteric bacterial and heavy metals' load and health status of fishes from river Ravi, Pakistan	Prof. Dr. Javed Iqbal Qazi	Ph.D	2013
Biological characteristics of singhari, <i>Seperata sarwari</i> (Mirza)	Dr. M. Shafiq Ahmed	M. Sc. (Hons.)	2005
Study of avian fauna of punjab University, new campus, Lahore	Dr. M. Shafiq Ahmed	B. Sc. (Hons.)	2003

**Theses Evaluation**

- **Ph.D Thesis External Examiners**

**1-Katie N. Bertrand, Ph.D.**

Department of Natural Resource Management,  
College of Agriculture and Biological Sciences,  
South Dakota State University,  
SNP 138, Box 2140B  
Brookings, SD 57007-1696  
Phone: 605-688-5092  
Mobile: 605-690-8582  
Email: [Katie.bertrand@sdstate.edu](mailto:Katie.bertrand@sdstate.edu)

**2- Fevzi Yilmiz, Ph.D.**

Biology Department  
Science Faculty,  
Nagla University,  
Mugla, Turkey  
Phone: +902522111521  
Email: [yfevzi@mu.edu.tr](mailto:yfevzi@mu.edu.tr)

**3- Muhammad Afzal Ghauri, Ph.D.**

Senior Scientific Officer  
National Institute for Biotechnology and Genetic Engineering  
Faisalabad, Pakistan  
Phone: +92419201316-20  
Mobile: +923007231572  
Email: [maghauri@nibgi.org](mailto:maghauri@nibgi.org)

- **M.Sc. (Hons.) Thesis External Examiner**

**Dr. Muhammad Ramzan Mirza (Retired)**

69-Umer Block,  
Allama Iqbal Town  
Lahore

### **Professional Occupations:**

- **Assistant professor (TTS)**, Department of Zoology, University of the Punjab, Lahore (19.10.2017 – to date)
- **Assistant professor**, Department of Zoology, University of the Punjab, Lahore (18.07.2013 –18.10.2017)
- **Incharge**, Punjab University Fish Research Farm, University of the Punjab, Lahore (28.10.2013 to onward)
- **Assistant Editor**, Punjab University Journal of Zoology, Department of Zoology, University of the Punjab, Lahore. (1.1.12 to onward)
- **Incharge**, Punjab University Honey Bee Research Project, University of the Punjab, Lahore (24-2-17 to 4-3-2017).
- **Senior survey/investigation officer**, Contract DHP-12, Project title: Study on migration pattern and characteristics of fish habitats under low flow season for Dasu Hydropower Project funded by Dasu Hydropower Consultants-Wapda. (1.1.14 to 30.08.2014)
- **Lecturer**, Department of Zoology, University of the Punjab, Lahore (19.01.2012 –17.07.2013).
- **Jr. Fisheries Consultant**, Project title: Downstream fishing communities: baseline and impacts assessment, Dasu Hydropower Project funded by Dasu Hydropower Consultants-Wapda. (13.05.2013 to 12.07.2013).
- **Supervisor**, Punjab University Fish Research Farm, University of the Punjab, Lahore (07.03.2007 to 2009).

### **Thesis Supervised as Supervisor I**

#### **MS/M. Phil.**

1. SHAH, H., 2019. *Hippophae rhamnoides* mediate gene expression profiles against keratinocytes infection of *Staphylococcus aureus*. M.Phil thesis (Session 2017-19 Fall Morning). Department of Zoology, University of the Punjab, Lahore

2. YASEEN, I., 2019. Utilization of mango peel for xylanase production by *Bacillus firmus* in submerged fermentation. M.Phil thesis (Session 2017-19 Fall Morning). Department of Zoology, University of the Punjab, Lahore
3. IRUM, N., 2019. Statistical optimization of amylase production using grape fruit peels in submerged fermentation. M.Phil thesis (Session 2016-19 In-Service Programme). Department of Zoology, University of the Punjab, Lahore

### **M.Sc.**

1. YOUSAF, Z., 2019. Clarification of fruit juices using bacterial xylanase. M.Sc. thesis. Department of Zoology, University of the Punjab, Lahore
2. ALI, M., 2018. Extraction of chitin and chitosan from fish scales. M.Sc. thesis. Department of Zoology, University of the Punjab, Lahore
3. MEHMOOD, S., 2017. Evaluation of protease producing potential of bacteria isolated from fish gut. M.Sc. thesis. Department of Zoology, University of the Punjab, Lahore

### **BS**

1. NAZIR, A., 2019. Response surface methodology for optimization of amylase production by *Bacillus thuringiensis*. BS thesis. Department of Zoology, University of the Punjab, Lahore
2. ARSHAD, A., 2018. Screening and characterization of lead and antibiotic resistance bacteria isolated from fish gut. BS thesis. Department of Zoology, University of the Punjab, Lahore
3. FATIMA, K., 2017. Production of bacterial tannase using agro industrial waste by solid state fermentation. Department of Zoology, University of the Punjab, Lahore
4. ALI, A., 2016. Digestibility of food wastes as feed ingredients fed to silver carp. Department of Zoology, University of the Punjab, Lahore
5. SHABBIR, S., 2016. Optimization of amylase producing bacteria by *Bacillus cereus*. Department of Zoology, University of the Punjab, Lahore

### **Thesis Supervised as Supervisor II**

#### **MS/M. Phil.**

1. ANWAR, A., 2019. Optimization of medium concentration using central composite design for bacterial xylanase production. M.S thesis (Session 2017-19 Fall Morning). Department of Zoology, University of the Punjab, Lahore
2. SAEED, S., 2019. Application of statistical design for optimization of culture medium for amylase production. M.S thesis (Session 2017-19 Fall Morning). Department of Zoology, University of the Punjab, Lahore

3. ZAHID, M., 2019. Statistical optimization of protease production using mango peels in submerged fermentation. M.Phil thesis (Session 2016-19 In-Service Programme). Department of Zoology, University of the Punjab, Lahore
4. NASEER, M., 2018. *Effect of different processing methods on functional and antinutritional properties of Brassica napus meal*. M.Phil thesis (Session 2016-18 Fall Evening). Department of Zoology, University of the Punjab, Lahore
5. JAVED, I., 2018. Solid state fermentation of *Zea mays* for tannase production. M.Phil thesis (Session 2016-18 Fall Morning). Department of Zoology, University of the Punjab, Lahore
6. NASEEM, S., 2018. Effect of various conventional approaches on secondary metabolites and functional properties of *Glycine max* meal. M.Phil thesis (Session 2016-18 Fall Morning). Department of Zoology, University of the Punjab, Lahore
7. JAMIL, M., 2018. Improvement of secondary metabolites and functional properties of *Punica granatum* peel through traditional processing methods. M.Phil thesis (Session 2016-18 Fall Morning). Department of Zoology, University of the Punjab, Lahore
8. YOUSAF, S., 2018. Improvement of antinutritional and functional properties of *Brassica campestris* meal employing traditional processing treatments M.Phil thesis (Session 2016-18 Fall Morning). Department of Zoology, University of the Punjab, Lahore
9. QAMAR, A., 2018. Effect of physico-chemical treatments on functional and antinutritional properties of banana peels. M.Phil thesis (Session 2016-18 Fall Evening). Department of Zoology, University of the Punjab, Lahore
10. FAZAL, H., 2018. Utilization of *Citrus limetta* for bacterial tannase production. M.Phil thesis (Session 2016-18 Spring Evening). Department of Zoology, University of the Punjab, Lahore
11. FAROOQ, S., 2017. Histological Comparison of muscle tissue from pond raised and polluted riverine *Labeo rohita*. M.Phil thesis. Department of Zoology, University of the Punjab, Lahore

### **Administrative Experience/ Member of University/Departmental level committees**

- BS (Session 2016-20) Admission Committee vide letter No.
- Member, BS (Session 2016-20) Admission Committee
- Member, Purchase Committee, Office of Research, Innovation and Commercialization vide letter No.
- Secretary/member, Departmental Scholarship and Financial Assistance Committee vide letter No. D/1246/R dated 18-2-2017
- Secretary/Member, Selection committee of students for Zoological Character Building Society vide letter No. D/2226/UZ dated 15.12.2017
- Secretary/Member, Punjab University Fish Research Management Committee
- Secretary/Member, Zoology Museum Management Committee
- Secretary/Member, Departmental Purchase Committee

- Incharge, Departmental Office
- Incharge, Departmental Computer Lab.
- Member, Departmental Security issues
- Member, Departmental Account review committee
- Member, Honey bee Management committee
- Member, Annual Sports 2016 Management Committee
- Member, MS/M.Phil. (Fall Session 2016-18) Admission Committee
- Member, BS (Session 2016-20) Admission Committee
- Incharge, Department Admission Desk-2016
- Member, University Main admission Desk-2016
- Member, Departmental Committee for Dengue Eradication/Awareness
- Member, MS/M.Phil. (Regular) admission Committee (Session 2015-onward)
- Incharge, Department Admission Desk-2014
- Member, BS (Session 2014-18) Admission Committee
- Member, Ph.D. (Regular) admission Committee (Session 2014-onward)
- Member, University of the Punjab Monitoring Team-06 for B.Ed examination-A/2014.
- Member, University of the Punjab Monitoring Team-10 for M.A/M.Sc./B.Com examination-A/2014
- Member, old Ph.D. Scheme admission Committee (Session 2014-onward)
- Member, BS (Session 2013-17) Admission Committee
- Incharge, Admission Desk-2013
- Member, University of the Punjab, Monitoring team-04 for B.Ed examination-A/2013.
  - Member of Ph.D (Section 2013-onward) Admission Committee
  - Member, University of the Punjab, Monitoring team-05 for B.Com (Part II) examination-A/2013.
  - Member, University of the Punjab, Monitoring team-05 for B.Com (Part I) examination-A/2013.
  - Member, University of the Punjab, Monitoring team-05 for M.A/M.Sc. (Part II) examination-A/2013.
  - Member, University of the Punjab, Monitoring team-05 for LLB (Part III) examination-A/2013.
  - Member, University of the Punjab, Monitoring team-05 for LLB (Part I) examination-A/2013.
  - Member, University of the Punjab Monitoring team-10 for BA/B.Sc. Annual Examination-A/2013
  - Member of Sports 2013 committee
  - Member of Departmental committee for the distribution of Laptops on 24.12.12
  - Member of “Iqbal day-2012” organizing committee.
  - Incharge admission desk - 2012
  - Member of M. Sc. (Session 2012-14) Admission Committee
  - Member of M. Phil./M.S. (Section 2012-14) Admission Committee
  - Member of Sports 2012 committee

### Fields of specialization:

Fisheries & Aquaculture, Fish biology, Aquatic Toxicology and Environmental biology.  
Microbiology

### Research project sponsored by University of the Punjab:

Sr. No.	Project title	Fiscal year	Amount (Rs.)	Association
1	Statistical optimization of soaking conditions for improving floating potential of fish feed ingredients	2017-18	150000	Principal investigator
2	Determination of digestibility of agro-waste feed stuff in Grass carp	2015-16	150000	Principal investigator
3	Intraspecific genetic diversity in <i>Labeo rohita</i> populations evaluated through mtDNA cytochrome b sequences	2014-15	150000	Principal investigator
4	Antioxidative effect of apple peel on shelf life of fish meat	2013-14	150000/-	Principal investigator
5	Cellulase and heavy metals' resistance profiles of bacteria from fish collected from polluted river.	2012-13	125000/-	Principal investigator

### Research project sponsored other Than Punjab University

Sr. No.	Project title	Fiscal year	Amount (Rs.)	Association
1	Employing chitinolytic bacteria for biological control of termites	2015-17	985845/-	Co-Principle investigator
2.	Study on migration pattern and characteristics of fish habitats under low flow season for Dasu Hydropower Project	2013-14	3000000/-	Co-Principal Investigator/ Senior Survey/Investigation officer

## Sequences Submitted to Gene Bank/Accession Number

Sr. No.	Author(s)	Accession Number	Detail
1	Shakir, H.A. and Qazi, J.I.	KF625168	<i>Aeromonas bestiarum</i> strain DHR5-3 16S ribosomal RNA gene, partial sequence
2	Shakir, H.A. and Qazi, J.I.	KF625169	<i>Bacillus cereus</i> strain DHR2-2 16S ribosomal RNA gene, partial sequence.
3	Shakir, H.A. and Qazi, J.I.	KF625172	<i>Bacillus</i> sp. DLR3-1 16S ribosomal RNA gene, partial sequence
4	Shakir, H.A. and Qazi, J.I.	KF625178	<i>Bacillus pumilus</i> strain DHR6-4 16S ribosomal RNA gene, partial sequence.
5	Shakir, H.A. and Qazi, J.I.	KF625181	<i>Bacillus horikoshii</i> strain DLR1-5 16S ribosomal RNA gene, partial sequence.
6	Shakir, H.A. and Qazi, J.I.	KF625182	<i>Aeromonas allosaccharophila</i> strain AHR7-5 16S ribosomal RNA gene, partial sequence.
7	Shakir, H.A. and Qazi, J.I.	KF625184	<i>Serratia proteamaculans</i> strain CHR3-1 16S ribosomal RNA gene, partial sequence.
8	Shakir, H.A. and Qazi, J.I.	KF625187	<i>Obesumbacterium proteus</i> strain DHR5-1 16S ribosomal RNA gene, partial sequence
9	Shakir, H.A. and Qazi, J.I.	KF625189	<i>Achromobacter denitrificans</i> strain DLR10-1 16S ribosomal RNA gene, partial sequence.
10	Shakir, H.A. and Qazi, J.I.	KF625191	<i>Enterobacter aerogenes</i> strain BLR6-10 16S ribosomal RNA gene, partial sequence.
11	Shakir, H.A. and Qazi, J.I.	KF625192	<i>Bacillus weihenstephanensis</i> strain DHR8-2 16S ribosomal RNA gene, partial sequence
12	Shakir, H.A. and Qazi, J.I.	KF551974	<i>Bacillus aquimaris</i> strain AHR4-1 16S ribosomal RNA gene, partial sequence
13	Shakir, H.A. and Qazi, J.I.	KF551975	<i>Aeromonas salmonicida</i> strain BHR7-2 16S ribosomal RNA gene, partial sequence
14	Shakir, H.A. and Qazi, J.I.	KF551976	<i>Aeromonas hydrophila</i> strain BLR6-1 16S ribosomal RNA gene, partial sequence
15	Shakir, H.A. and Qazi, J.I.	KF551973	<i>Aeromonas veronii</i> strain AHR8-5 16S ribosomal RNA gene, partial sequence
16	Shakir, H.A. and Qazi, J.I.	KF625177	<i>Bacillus anthracis</i> strain CHR3-01 16S ribosomal RNA gene, partial sequence
17	Shakir, H.A. and Qazi, J.I.	KF625167	<i>Obesumbacterium proteus</i> strain CHT3-2 16S ribosomal RNA gene, partial sequence
18	Shakir, H.A. and Qazi, J.I.	KF625170	<i>Bacillus amyloliquefaciens</i> strain DHT6-1 16S ribosomal RNA gene, partial sequence
19	Shakir, H.A. and Qazi, J.I.	KF625171	<i>Enterobacter aerogenes</i> strain DLT5-1 16S ribosomal RNA gene, partial sequence
20	Shakir, H.A. and Qazi, J.I.	KF625175	<i>Bacillus flexus</i> strain AHT5-5 16S ribosomal RNA gene, partial sequence
21	Shakir, H.A. and Qazi, J.I.	KF625176	<i>Aeromonas bestiarum</i> strain BHT3-1 16S ribosomal RNA gene, partial sequence



22	Shakir,H.A. and Qazi,J.I.	KF625183	<i>Klebsiella oxytoca</i> strain BHT6-1	16S ribosomal RNA gene, partial sequence
23	Shakir,H.A. and Qazi,J.I.	KF625186	<i>Raoultella ornithinolytica</i> strain CHT2-2	16S ribosomal RNA gene, partial sequence
24	Shakir,H.A. and Qazi,J.I.	KF625188	<i>Klebsiella oxytoca</i> strain DHT3-1	16S ribosomal RNA gene, partial sequence
25	Shakir,H.A. and Qazi,J.I.	KF551981	<i>Bacillus amyloliquefaciens</i> strain CHT9-1	16S ribosomal RNA gene, partial sequence
26	Shakir,H.A. and Qazi,J.I.	KF625173	<i>Bacillus thuringiensis</i> strain AHM3-1	16S ribosomal RNA gene, partial sequence
27	Shakir,H.A. and Qazi,J.I.	KF625174	<i>Exiguobacterium mexicanum</i> strain ALM9-1	16S ribosomal RNA gene, partial sequence
28	Shakir,H.A. and Qazi,J.I.	KF625179	<i>Bacillus cereus</i> strain DHM5-1	16S ribosomal RNA gene, partial sequence
29	Shakir,H.A. and Qazi,J.I.	KF625180	<i>Bacillus atrophaeus</i> strain DLM3-1	16S ribosomal RNA gene, partial sequence
30	Shakir,H.A. and Qazi,J.I.	KF625185	<i>Bacillus licheniformis</i> strain CLM4-1	16S ribosomal RNA gene, partial sequence
31	Shakir,H.A. and Qazi,J.I.	KF625190	<i>Buttiauxella agrestis</i> strain AHM4-1	16S ribosomal RNA gene, partial sequence
32	Shakir,H.A. and Qazi,J.I.	KF551977	<i>Bacillus safensis</i> strain BHM1-1	16S ribosomal RNA gene, partial sequence
33	Shakir,H.A. and Qazi,J.I.	KF551978	<i>Aeromonas media</i> strain BLM4-1	16S ribosomal RNA gene, partial sequence
34	Shakir,H.A. and Qazi,J.I.	KF551979	<i>Bacillus subtilis</i> strain BLM5-1	16S ribosomal RNA gene, partial sequence
35	Shakir,H.A. and Qazi,J.I.	KF551980	<i>Aeromonas salmonicida</i> strain CHM5-2	16S ribosomal RNA gene, partial sequence
36	Shakir,H.A., Irfan, M., Deeba, F. and Qazi,J.I.	KY000519	<i>Bacillus subtilis</i> strain FD	16S ribosomal RNA gene, partial sequence

### Special trainings, Workshops and Short Courses attended:

Course title	Institute	Duration
Training workshop on patent database searches and development of technology and innovation support centers (TISCs) in Pakistan	Organized by WIPO, IPO and HEC at LUMS, Lahore	February 20-21, 2019
Train The (Pitching Research) Trainer workshop By Prof. Robert Faff	HEC, Islamabad	September 10 <sup>th</sup> , 2018
Faculty Development Orientation program	HRDC, IAS, University of the Punjab	One week (4 <sup>th</sup> to 7 <sup>th</sup> , 2018)
Patent	Organized by WIPO, IPO and	March

Technical Training of Skills Development in Animal; Keeping	HEC at NUST, Islamabad Organized by University of the Punjab & British Council at PC, Lahore	March 27-31, 2017
Quantitative Data Analysis using SPSS	Institute of Business Administration, PU, Lahore	Two days (24-25 February, 2016)
Use of Bioinformatics in High Throughput sequencing, Genomics, Proteomics and Transcriptomics	NIBGE, Faisalabad	One day (31 <sup>st</sup> March, 2015)
Water pollution and its Mitigation	GCU, Faisalabad	Two days (19-12-2012 to 20-12-2012)
HPLC	School of Physical sciences, University of the Punjab	One day (10-11-2012)
Research ethics, Endnote and Turnitin	Department of library & information Science, PU	2-10-2012 to 3-10-2012
PC-1 Preparation	MPPD, Govt. of Punjab , Lahore	One week (16-07-2012 to 20-07-2012)
In-Sessional English Language Course	Newcastle University, UK	Two weeks (28.11.2011 to 09-12-2011)
EndNote workshop	Glen Cluster-Walton Library, Newcastle University, UK	One-day (29-11-2011)
Introductory workshop on Data Management with SPSS	King George VI Building, Newcastle University, UK	5-days (21-11-2011 to 25-11-2011)
A short introductory application training programme	DSD, Punjab, Lahore	One week
Young Researchers' Skill Development	University of the Punjab, Lahore	One day (07-01-2012)
DNA BARCODING: A Promising tool for species identification and biodiversity digitization	NIBGE, Faisalabad	One day
Honey Bee Keeping & management	University of the Punjab, Lahore.	5-days (02-05-2005 to 06-05-2012)
Data Entry Operator	COMSATS	2-month (08-01-2001 to 4-3-2001)
HAEMCON 2010 Molecular Haematology	Department of Microbiology and Molecular genetics	8-days (9-02-2010 to 16-02-2010)
Literature Review & Managing Reference Using EndNote® Software	University of the Punjab, Lahore	2-days (31-03-2011 to 01-04-2011)

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**Distinction:**

- Newcastle University English Language Assessment (UELA) test qualified
- HEC Foreign (IRSIP) scholarship awardee for Ph. D research at Newcastle University, UK
- HEC Indigenous scholarship awardee for Ph. D Studies
- Throughout 1<sup>st</sup> division in educational career.
- Hafiz-e- Quran
- GRE, GAT (General) qualified
- GRE, GEE (Subject) Biology qualified
- GRE, GAT (Subject) Zoology qualified

### Journal Research/Review Articles:

1. SHAKIR, H.A., MAHMOOD, R., IRFAN, M., DEEBA, F., JAVED, I. AND QAZI, J.I., 2019. Protease production from *Bacillus safensis* in submerged fermentation using response surface methodology. *Revista Mexicana de Ingenieria Quimica*, **18**(1): 375-385
2. NAWAL, G., IRFAN, M., ASHFAQ, S. AND SHAKIR, H.A., 2019. An overview of bacterial lipases and their enormous applications. *Punjab Univ. J. Zool.*, **34**(1): 61-71. <http://dx.doi.org/10.17582/journal.pujz/2019.34.1.61.71>
3. KHAN, R., ALI, S., MUMTAZ, S., ANDLEEB, S., HAQ, M.-UL., TAHIR, H.M., KHAN, M.K. A., KHAN, M. A., SHAKIR, H. A., 2019. Toxicological effects of toxic metals (cadmium and mercury) on blood and the thyroid gland and pharmacological intervention by vitamin C in rabbits. *Environmental Science and Pollution Research*. **26**: 16727–16741 <https://doi.org/10.1007/s11356-019-04886-9>
4. MUMTAZ, S., ALI, S., KHAN, R., ANDLEEB, S., HAQ, M.-UL., KHAN, M.A., SHAKIR, H.A., 2019 The protective role of ascorbic acid in the hepatotoxicity of cadmium and mercury in rabbits. *Environmental Science and Pollution Research*, **26**:14087–14096
5. ALI, S., HUSSAIN, S., KHAN, R., MUMTAZ, S., ASHRAF, N., ANDLEEB, S., SHAKIR, H.A., TAHIR, H.M., KHAN, M.K.A. AND ULHAG, M., 2019. Renal toxicity of heavy metals (cadmium and mercury) and their amelioration with ascorbic acid in rabbits. *Environmental Science and Pollution Research*, <https://doi.org/10.1007/s11356-018-3819-8>
6. TABSSUM, F., IRFAN, M., SHAKIR, H.A. AND QAZI, J.I., 2018. RSM based optimization of nutritional conditions for cellulase mediated Saccharification by *Bacillus cereus*. *Journal of Biological Engineering*, **12**: 7 <https://doi.org/10.1186/s13036-018-0097-4>.
7. GHANZANFAR, M., IRFAN, M., TABSSUM, F. AND SHAKIR, H.A., 2018. Effect of different pretreatment conditions on *Saccharum spontaneum* for cellulase production by *B. subtilis* K-18 through Box-Bhenken Design. *Iran. J. Sci. Technol. Trans Sci.*, **42**: 313–320 [https://doi.org/10.1007/s40995-017-0463-y\(01](https://doi.org/10.1007/s40995-017-0463-y(01)
8. FATIMA, N., IRFAN, M., SHAKIR, H.A. AND QAZI, J.I., 2018. Dilute sulphuric acid pretreatment optimization of cotton stalk for cellulase production

- through Box-Bhenken design. *Punjab Univ. J. Zool.*, **33**(1): 77-85.  
<http://dx.doi.org/10.17582/pujz/2018.33.1.77.85>
9. REHMAN, H., MIRZA, S., HASAN, M., ALI, Q., SHAKIR, H.A. AND YASIR, M., 2018. Repellent potential of three medicinal plant extracts against *Tribolium castaneum* (Coleoptera: Tenebrionidae). *Punjab Univ. J. Zool.*, **33**(2): 121-126.  
<http://dx.doi.org/10.17582/pujz/2018.33.2.121>
  10. KHAN, M., MARYAM, A., SHAKIR, H.A., QAZI, J.I., AND LI, Y., 2018. Baohuoside I Inhibits Benzo(a)Pyrene-Induced Metastasis in A549 Lung Cancer Cells by Modulating STAT3 and EMT. *Pakistan J. Zool.*, **50**(6): 2357-2365. DOI: <http://dx.doi.org/10.17582/journal.pjz/2018.50.6.2357.2365>
  11. ALI, W., KARIM, A., IRFAN, M., SHAKIR, H.A., MUSTAFA, G., SHAFIQUE, Z. AND ANWAR, I., 2018. Study of induce histological and biochemical alterations in *Hypophthalmichthys molitrix* after acute exposure to deltamethrine. *Punjab Univ. J. Zool.*, **33**(2): 127-132. <http://dx.doi.org/10.17582/pujz/2018.33.2.127.132>
  12. MIRZA, S.S., QAMER, H.M. SHAKIR, H.A. AND AKRAM, R.S., 2018. Trend towards weaning process of infants visiting OPD pediatrics unit: An institutional based study. *Punjab Univ. J. Zool.*, **33**(2): 139-144.  
<http://dx.doi.org/10.17582/journal.pujz/2018.33.2.139.144>
  13. ALI, S., NELOFER, R., ANDLEEB, S., BAIG, S., SHAKIR, H. A. AND QAZI, J.I., 2018. Biosynthesis and optimization of bacitracin by mutant *Bacillus licheniformis* using submerged fermentation. *Indian Journal of Biotechnology*, **17**: 251-260
  14. ANJUM, A., IRFAN, M., TABBSUM, F., SHAKIR, H.A. AND QAZI, J.I., 2017. Optimization of sulphuric acid pre-treatment of Acacia saw dust through box-bhenken design for cellulase production by *B. Subtilis*. *Adv. Life Sci.* **5**(1): 19 -24
  15. ARSHAD, M., IRFAN, M., ASAD-UR-REHMAN, NADEEM, M., HUMA, Z., SHAKIR, H.A. AND SYED, Q., 2017. Optimization of medium and substrate for CMCase production by *Bacillus subtilis*-BS06 in submerged fermentation and its application in saccharification. *Punjab Univ. J. Zool.*, **32**(2): 179-188.
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## Book

SHAKIR, H.A. AND QAZI, J.I. 2013. *Metals, fatty acids and gut bacteria of fishes from river Ravi, Lahore*. Lambert Academic publishing GmbH & Co. KG. ISSN: 978-3-659-48351-6

## Journal Articles (Submitted for evaluation)



1. Shakir, H.A., Qazi, J.I., Chaudhry, A.S. and Ali, S., 2016. Metals' bioaccumulation levels and health risk assessment for consumption of fish from river Ravi, Pakistan Submitted for evaluation).
2. Shakir, H.A., Qazi, J.I., Chaudhry, A.S. and Ali, S., 2016. Bioaccumulation of metals in fishes' scales – A reliable non-lethal assessor of food security. (Submitted for evaluation).
3. Shakir, H.A. and Qazi, J.I. 2016. Alteration in biochemical response of Indian major carp *Labeo rohita* exposed to urban effluents discharged in river Ravi, Pakistan (Submitted for evaluation).
4. Shakir, H.A., Chaudhry, A.S. and Qazi, J.I. 2016. Urban pollutants affect proximate composition and fatty acid profiles of three carp species from river Ravi, Pakistan *Food Chemistry*, (Submitted for evaluation).
5. Shakir, H.A., Chaudhry, A.S. and Qazi, J.I. 2016. Seasonal variations in proximate and fatty acid composition of muscles of *Cirrhinus mrigala*, *Labeo rohita* and *Catla catla* from a selected site of river Ravi, Pakistan. *Food Chemistry*, (Submitted for evaluation)

### **Editor/Editorial Member/Member of Scientific Journal**

- **Assistant Editor**, Punjab University Journal of Zoology, Department of Zoology, University of the Punjab, Lahore. (1.1.12 to onward)
- **Editorial Board Member**, person ID: 10013250, Animal and Veterinary Science, Science Publishing Group  
<http://www.sciencepublishinggroup.com/journal/editorialboard.aspx?journalid=212>

### **Evaluation and examination of research theses of other institutes.**

#### ➤ **M. Phil research theses**

1. Evaluated thesis vide letter No. UOS/Secrecy 237 dated 6-2-17, and conducted public dense and viva voce exams of **Ms. Arjumand Bano** student of M.Phil in Biotechnology, session 2014-16 at Department of Biotechnology, University of Sargodha.
2. Evaluated thesis vide letter No. UOS/Secrecy 236 dated 6-2-17, and conducted public dense and viva voce exams of **Ms. Sidra Kanwal** student of M.Phil in Biotechnology, session 2014-16 at Department of Biotechnology, University of Sargodha.
3. Evaluated thesis vide letter No. 3055/Exams/2017 dated 18.04.2017, title “Evaluation of toxicological effects of cadmium chloride on heart and lungs of chicks” and conducted public defense and viva voce exams. Of **Ms. Saleha Bashir** on 22.05.2017 at Department of Zoology, The University of Azad Jammu & Kashmir, Chehlla Bandi campus, Muzaffarabad.
4. Evaluated thesis vide letter No. 3054/Exams/2017 dated 18.04.2017, title “Evaluation of toxicological effects of lead acetate on liver and kidneys of chicks” and conducted public defense and viva voce exams. of **Ms. Maria**

**Akram Minhas** on 22.5.2017 at Department of Zoology, The University of Azad Jammu & Kashmir, Chehlla Bandi campus, Muzaffarabad.

5. Evaluated thesis vide letter No. 1117/Exams/2016 dated 12.05.2016, title “*In vivo* study of extracts of *Artemisia vulgaris* against hepatocellular carcinoma induced by diethylnitrosoamine” and conducted public defense and viva voce exams. of **Mr. Mubashir Ejaz** at Department of Zoology, The University of Azad Jammu & Kashmir, Chehlla Bandi campus, Muzaffarabad.
6. Evaluated thesis vide letter No. 1116/Exams/2016 dated 12.05.2016, title “Induction of hepatocellular carcinoma by diethylnitrosoamine and pharmacological intervention in balb C mice” and conducted public defense and viva voce exams. of **Ms. Nahida Shafi** at Department of Zoology, The University of Azad Jammu & Kashmir, Chehlla Bandi campus, Muzaffarabad.
7. Evaluated thesis vide letter No. CE/42/M.T dated 14.06.2016, conducted viva voce exams. of **Mr. Muhammad Farooq (Reg. No. 2014-VA-554)** at Department of Wildlife and Ecology, University of Veterinary and Animal Sciences, Lahore, Pakistan.
8. Evaluated thesis vide letter No. 500/Exams/2015 dated 22.07.2015, title “*In vitro* and *in vivo* biological screening of organotin (IV) complexes” and conducted public defense and viva voce exams. of **Ms. Amna Shahnawaz (Reg. No. 2007-Gmdg-4525)** at Department of Zoology, The University of Azad Jammu & Kashmir, Chehlla Bandi campus, Muzaffarabad.
9. 2.Evaluated thesis vide letter No. 322/Exams/2015 dated: 11.06.2015, title “Pharmacological, pharmacological and microbiological studies of Khatimal (*Rumex hastatus*)” and conducted public defense and viva voce exams. of **Ms. Rozina Ghulam Mustafa (2007-Gmdg-4532)** at Department of Zoology, The University of Azad Jammu & Kashmir, Chehlla Bandi campus, Muzaffarabad.
10. Evaluated thesis vide letter No. 204/Exams/2015 dated: 18.04.2015, title “Pharmacological studies of *Polygonum amplexicaulis* (masloon) as antimicrobial and antioxidant agents Pakistan” and conducted public defense and viva voce exams. of **Ms. Irsa Shafique (2007-Gmdg-4965)** at Department of Zoology, The University of Azad Jammu & Kashmir, Chehlla Bandi campus, Muzaffarabad.

#### ➤ **BS Research Theses**

1. Evaluated thesis vide letter No. 389/C.Exams/2015 dated 21.07.2017, title “Spider silk as an esculent coating for preservation of perishable fruits” and conducted viva voce exams. of **Ms. Nishat Pervez (1275-BH-Z-13)** at Department of Zoology, GC University, Lahore.
2. Evaluated thesis vide letter No. 388/C.Exams/2015 dated 21.07.2017, title “Effect of spider silk on foraging behavior of herbivorous insects” and conducted viva voce exams. of **Ms. Nimra Khalid (1008-BH-Z-13)** at Department of Zoology, GC University, Lahore.
3. Evaluated thesis vide letter No. 387/C.Exams/2015 dated 21.07.2017, title “Non-consumptive effect of spiders on hervivory of insects” and conducted

viva voce exams. of **Ms. Anum Hafza (1010-BH-Z-13)** at Department of Zoology, GC University, Lahore.

### **External Examiner/Paper Setter at University/Board level**

- Appointed as paper-setter/External examiner for “Biological Techniques” ZOOL-407 BS 4 years Program (8th Semester-2014) by University of the Punjab vide letter No. 261-ASII dated 12.03.2015
- Appointed as paper-setter/External examiner for “Biological Techniques” ZOOL-407 BS 4 years Program (8th Semester-2014) by University of the Punjab vide letter No. 261-ASII dated 12.03.2015
- Appointed as paper-setter/External examiner for “Environmental Microbiology” ZOOL-431 BS 4 years Program (8th Semester-2014) by University of the Punjab vide letter No. 261-ASII dated 12.03.2015
- Appointed as paper-setter/External examiner for “Biological Techniques” ZOOL-407 BS 4 years Program (8th Semester-2014) by University of the Punjab vide letter No. 261-ASII dated 12.03.2015

### **Reviewer of research/review articles of different Journals.**

1. Review the research paper (Manuscript Number: 47-15) entitles “Morphological and Biochemical characterization of bacterial unknowns from milk products” for **Biologia (Pakistan)** on 18.08.2015.
2. Review the research paper (Manuscript Number: AFF\_1191100\_20150725) entitles “Physicochemical Characteristics of Lake Kabo to the reference of Fish” for **Agriculture, Forestry and Fisheries Journal** on 30.7.2015.

### **Membership of Scientific/Social Societies:**

- Member, Zoological Society of Pakistan
- Member, Fisheries Society of Pakistan
- Focal Person, Punjab University Zoological Alumni Association

### **Organizer of Workshop/Seminar/conference at National/International level**

1. Organized workshop entitled “How to approach and manage funded research projects?” on June 18, 2019 at Committee Room, Centre for Undergraduate Studies, University of the Punjab, Lahore.
2. Organized workshop entitled “Entrepreneurship Mindset and Digital Innovative Entrepreneurship” on June 19, 2019 at Old Building Seminar Hall, Hailey College of Commerce, University of the Punjab, Lahore.

3. Organized workshop entitled “Qualitative Research and Data analysis using NVIVO 12” on June 22, 2019 at Old Building Seminar Hall, Hailey College of Commerce, University of the Punjab, Lahore.
4. Organized 8<sup>th</sup> Invention to Innovation Summit on April 02-03, 2019 at University of the Punjab, Lahore
5. Organized one day International Symposium on “Integrated Pest Management for food safety on January 30, 2019 at Department of Zoology, University of the Punjab, Lahore with the collaboration of C-Shine group.
6. Organized one day workshop on Entrepreneurship “Use of Business Intelligence for development” on October 11, 2018 at centre for undergraduate studies, University of the Punjab, Lahore.
7. Organized 4<sup>th</sup> Invention to Innovation Summit, KP on November 22-23, 2018 at CECOS University, Peshawar
8. Organized Awareness seminar on HEC Research Projects under Technology Development Funds (TDF) on August 10<sup>th</sup>, 2018 at centre for undergraduate studies, University of the Punjab, Lahore.
9. Organized 14<sup>th</sup> National Honeybee Farming and Management Training Workshop on March 12-16, 2018 at Department of Zoology, University of the Punjab, Lahore with sponsorship of Higher Education Commission, Islamabad, Pakistan.
10. Organized 38<sup>th</sup> Pakistan Congress of Zoology on February 27-March 01, 2018 at at Department of Zoology, University of the Punjab, Lahore with collaboration of Zoological Society of Pakistan.
11. Organized one day National workshop on “Potential of Sericulture for Employment and Income Generation” on February 15, 2018 at Department of Zoology, University of the Punjab, Lahore with collaboration of Punjab Forest Research Institute, Faisalabad.
12. Organized 3<sup>rd</sup> one day workshop on “Hands on practice of Basic Lab. Instruments” on February 3, 2018 at Department of Zoology, University of the Punjab, Lahore
13. Organized one day workshop on “Effective Time Management” with collaboration with Department of Career Counseling & Placement Centre, University of the Punjab on January 8, 2018 at Department of Zoology, University of the Punjab, Lahore
14. Organized one week training “Technical Training of Skills Development in Animal Keeping” on April 27-31, 2017 Sponsored by University of the Punjab and British Council at Pearl Continental Hotel, Lahore
15. Organized 2<sup>nd</sup> one day workshop on “Hands on practice of Basic Lab. Instruments” on April 01, 2017 at Department of Zoology, University of the Punjab, Lahore
16. Organized 13<sup>th</sup> National Honeybee Farming and Management Training Workshop on March 13-17, 2017 with sponsorship of Higher Education Commission, Islamabad, Pakistan at Department of Zoology, University of the Punjab, Lahore
17. Organized 2<sup>nd</sup> one day work shop on “Hands on practice of Basic molecular techniques” on March 4<sup>th</sup>, 2017 at Department of Zoology, University of the Punjab, Lahore

18. Organized 1<sup>st</sup> one day work shop on “Hands on practice of Basic microbiological techniques” on February 18, 2017 at Department of Zoology, University of the Punjab, Lahore
19. Organized 1<sup>st</sup> one day work shop on “Hands on practice of Basic molecular techniques” on February 11, 2017 at Department of Zoology, University of the Punjab, Lahore
20. Organized 1<sup>st</sup> one day work shop on “Hands on practice of Atomic Absorption Spectrophotometer” on April 9<sup>th</sup>, 2016 at Department of Zoology, University of the Punjab, Lahore
21. Organized 2<sup>nd</sup> one day work shop on “Hands on practice of Atomic Absorption Spectrophotometer” on April 23<sup>th</sup>, 2016 at Department of Zoology, University of the Punjab, Lahore
22. Organized one day work shop on “Hands on practice of Basic Lab. Instrument” on May 21<sup>st</sup>, 2016 at Department of Zoology, University of the Punjab, Lahore

**Resource person/invited speaker in National/international training workshop/seminar/conferences:**

1. Delivered a lecture during technical session of 14<sup>th</sup> National Honeybee Farming and Management Training Workshop on March 12-16, 2018 at Department of Zoology, University of the Punjab, Lahore with sponsorship of Higher Education Commission, Islamabad, Pakistan
2. Delivered a lecture during technical session of 13<sup>th</sup> National Honeybee Farming and Management Training Workshop on March 13-17, 2017 with sponsorship of Higher Education Commission, Islamabad, Pakistan at Department of Zoology, University of the Punjab, Lahore

**Research work presented/ published in Abstract form in proceeding of National/international conferences:**

1. Anwar, A., Shakir, H. A., Irfan, M., and Qazi, J.I., 2018. Banana waste: an efficient cheap substrate for xylanase production. 38<sup>th</sup> Pakistan Congress of Zoology (International), Department of Zoology, University of the Punjab, Lahore (February 27- March 01, 2018) Abstract CBGP-40 pp. 30.
2. Saeed, S., Shakir, H. A., Irfan, M., and Qazi, J.I., 2018. Effect of Soaking on flotability of fish feed ingredients. 38<sup>th</sup> Pakistan Congress of Zoology (International), Department of Zoology, University of the Punjab, Lahore (February 27- March 01, 2018) Abstract FEWFM-36 pp. 290.
3. Shakir, H. A., Qazi, J.I., Ali, A., Irfan, M. and Javed, I., 2018. Digestibility of food wastes as feed ingredients fed to silver carp. 38<sup>th</sup> Pakistan Congress of Zoology (International), Department of Zoology, University of the Punjab, Lahore (February 27- March 01, 2018) Abstract FEWFM-37 pp. 291.
4. Fatima, K., Shakir, H. A., Irfan, M., Qazi, J.I. and Saeed, S., 2018. Optimization for tannase production by Klebsiella oxytoca in solid state fermentation of musami peels. 38<sup>th</sup> Pakistan Congress of Zoology (International), Department of

- Zoology, University of the Punjab, Lahore (February 27- March 01, 2018) Abstract CBGP-42 pp. 31.
5. Mahmood, R., Shakir, H.A., Irfan, M. and Qazi, J.I., 2018. Statistical optimization of *Bacillus safensis* for protease production. 38<sup>th</sup> Pakistan Congress of Zoology (International), Department of Zoology, University of the Punjab, Lahore (February 27- March 01, 2018) Abstract CBGP-43 pp. 31.
  6. Shakir, H.A. and Qazi, J.I., 2015. Migratory pattern of the fish, *Schizothorax plagiostomus*, inhabiting Indus river mainstream and its tributaries. 5<sup>th</sup> International Fisheries Symposium “Fisheries, Trade and Investment Opportunities” organized by Department of Fisheries, Government of the Punjab and Pakistan Fisheries Society on February 24<sup>th</sup> - 25<sup>th</sup> , 2015 at Pearl Continental hotel, Lahore. Abstract IFS-2015-D-5 pp. 71.
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  9. Shakir, H. A., Qazi, J. I., Hussain, A. and Aslam, S., 2013. Hepatic responses of three carp fish species against metals’ pollution in river Ravi, Pakistan. 33<sup>rd</sup> Pakistan congress of Zoology (International), Pakistan Museum of Natural History, Islamabad, PMAS ARID Agriculture University, Rawalpindi (April 2<sup>nd</sup> - 4<sup>th</sup> ) Abstract pp.142.
  10. Ali, S., Hussain, A., Qazi, J.I. and Shakir, H.A., 2013. Ichthyofaunal survey of the river Ravi stretch flowing along the Jhok Reserve Forest, Pakistan. 33<sup>rd</sup> Pakistan congress of Zoology (International), Pakistan Museum of Natural History, Islamabad, PMAS ARID Agriculture University, Rawalpindi (April 2<sup>nd</sup> - 4<sup>th</sup> ) Abstract pp. 286.
  11. Siddiqui, S., Qazi, J. I. and Shakir, H. A., 2013. Economic cultivation of *Saccharomyces cerevisiae* and potential of fruit wastes for generation of single cell protein. 33<sup>rd</sup> Pakistan congress of Zoology (International), Pakistan Museum of Natural History, Islamabad, PMAS ARID Agriculture University, Rawalpindi (April 2<sup>nd</sup> -4<sup>th</sup> ) Abstract pp.29.
  12. Batool, N., Shakir, H. A. and Qazi, J. I. 2013. Cultivation of different heavy metals resistant *Bacillus* species on fruit peels. 33<sup>rd</sup> Pakistan congress of Zoology (International), Pakistan Museum of Natural History, Islamabad, PMAS ARID Agriculture University, Rawalpindi (April 2<sup>nd</sup> -4<sup>th</sup> ) Abstract pp. 90.
  13. Hussain, A., Qazi, J.I., Ali, S. and Shakir, H.A., 2013. Occupational exposure to metallic dust among workers of cutlery industries in Wazirabad, Pakistan: a preliminary survey. 33<sup>rd</sup> Pakistan congress of Zoology (International), Pakistan Museum of Natural History, Islamabad, PMAS ARID Agriculture University, Rawalpindi (April 2<sup>nd</sup> -4<sup>th</sup> ) Abstract pp.138.

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15. Hussain, A., Ali, K., Shakir, H. A., Qazi, J. I. and Ali, S., 2013. Prevalence of *Escherichia coli* in milk and different milk products sold under market conditions at Lahore, Pakistan. 33<sup>rd</sup> Pakistan congress of Zoology (International), Pakistan Museum of Natural History, Islamabad, PMAS ARID Agriculture University, Rawalpindi (April 2<sup>nd</sup> -4<sup>th</sup>) Abstract pp.93.
16. Aslam, S., Qazi, J.I., Shakir, H.A. and Hussain, A., 2013. Assessment of spatial distribution of chromium in tannery effluent contaminated soil and its bioaccumulation in associated plants 33<sup>rd</sup> Pakistan congress of Zoology (International), Pakistan Museum of Natural History, Islamabad, PMAS ARID Agriculture University, Rawalpindi (April 2<sup>nd</sup> -4<sup>th</sup>) Abstract pp.278.
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18. Shakir, H. A., Chaudhry, A. S. and Qazi, J. I. 2012. Seasonal variations in proximate and fatty acids' composition of muscles of *Cirrhinus mrigala*, *Labeo rohita* and *Catla catla* from river Ravi, Pakistan. 32<sup>nd</sup> Pakistan congress of Zoology (International), Government College University, Lahore. March (6<sup>th</sup>-8<sup>th</sup>) Abstract pp. 76 (CBGP-131).
19. Shakir, H. A., Qazi, J. I. and Chaudhry, A. S. 2012. Impact of anthropogenic activities on heavy metals and minerals uptake in muscle of *Catla catla* from river Ravi, Pakistan. 32<sup>nd</sup> Pakistan congress of Zoology (International), Government College University, Lahore. March (6<sup>th</sup>-8<sup>th</sup>) Abstract pp. 74 (CBGP-127).
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21. Shakir, H. A. and Qazi, J. I. 2012. Nutritional comparison of three farmed fish species raised under the same conditions. 32<sup>nd</sup> Pakistan congress of Zoology (International), Government College University, Lahore. March (6<sup>th</sup>-8<sup>th</sup>) Abstract pp. 287 (FEWFM-77).
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- Ravi 31<sup>st</sup> Pakistan congress of Zoology (International), University of Azad Jammu and Kashmir, Muzaffarabad. April (19<sup>th</sup>-21<sup>st</sup>) Abstract pp. 208 (FEWFM-69).
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  32. Shakir, H. A. and Qazi, J. I. 2011 Urban pollutants load affects growth factor of rohu in river Ravi negatively. 31<sup>st</sup> Pakistan congress of Zoology (International), University of Azad Jammu and Kashmir, Muzaffarabad. April (19<sup>th</sup>-21<sup>st</sup>) Abstract pp. 26 (CBGP-45).

**Poster presented in National/International Conferences/  
Symposium/Seminars:**

1. Deeba, F., Shakir, H.A., Irfan, M. and Qazi, J.I., 2018. Chemical and UV mutagenesis for enhanced production of chitinase from *Bacillus subtilis*. 38<sup>th</sup> Pakistan Congress of Zoology (International), Department of Zoology, University of the Punjab, Lahore (February 27- March 01, 2018) Poster 37 pp. 376.
2. Javed, I., Shakir, H.A., Irfan, M. and Qazi, J.I., 2018. Optimization of tannase production by *Bacillus amyloliquefaciens* in submerged fermentation. 38<sup>th</sup>



- Pakistan Congress of Zoology (International), Department of Zoology, University of the Punjab, Lahore (February 27- March 01, 2018) Poster 36 pp. 375.
3. Shakir, H. A., Qazi, J. I. and Hussain, A., 2013. Biochemical profile of *Cirrhinus mrigala* from downstream locations of river Ravi: effect of municipal and industrial discharges. 33<sup>rd</sup> Pakistan congress of Zoology (International), Pakistan Museum of Natural History, Islamabad, PMAS ARID Agriculture University, Rawalpindi (April 2<sup>nd</sup> -4<sup>th</sup> ) Poster-7, pp. 415
  4. Shakir, H. A., Qazi, J. I. and Chaudhry, A. S. 2012. Urban pollutants affect negatively the fatty acid profiles of rohu from river Ravi. 32<sup>nd</sup> Pakistan congress of Zoology (International), Government College University, Lahore. March (6<sup>th</sup>-8<sup>th</sup>) Poster-20 pp. 331.
  5. Shakir, H. A. and Qazi, J. I. 2012. Altered physico-chemical parameters of river Ravi, segment subjected to urban pollutants. 32<sup>nd</sup> Pakistan congress of Zoology (International), Government College University, Lahore. March (6<sup>th</sup>-8<sup>th</sup>) Poster-18 pp. 330.
  6. Shakir, H. A., Chaudhury, A. S. and Qazi, J. I. 2011. Urban pollution affects fatty acid profiles of *Cirrhinus mrigala* from the river Ravi. HNRC Research Day and Annual Lecture, Newcastle University, UK. 19<sup>th</sup> October.

### **National/International Conferences/Symposium/Seminars attended:**

1. Web of Science Conference on International Scholarly Publishing from Pakistan: framework for Fast-Paced Progress organized by CEMB, University of the Punjab, Lahore held on March 11, 2019.
2. 7<sup>th</sup> Invention to Innovation Summit 2018 Buy and Sell Technology organized by ORIC University of the Punjab, Lahore on March 8-9, 2017.
3. 6<sup>th</sup> Invention to Innovation Summit 2017 Buy and Sell Technology organized by ORIC University of the Punjab, Lahore on March 8-9, 2017.
4. 38<sup>th</sup> Pakistan congress of Zoology (International) organized by Zoological Society of Pakistan on February 27-March 01, 2018 at Department of Zoology, University of the Punjab, Lahore
5. 6<sup>th</sup> Invention to Innovation Summit 2017 Buy and Sell Technology organized by ORIC University of the Punjab, Lahore on March 8-9, 2017.
6. 1<sup>st</sup> international conference on emerging trends in Zoology (1<sup>st</sup> ICETZ 2017) organized by Department of Zoology, University of Sargodha, Sargodha on December 8-9, 2017.
7. Second International Conference on “Innovative Biological And Public Health Research” organized by Department of Zoology, GCU, Lahore on December 6-7, 2017 at Government College University, Lahore
8. Celebrating 20<sup>th</sup> Anniversary of IBB International Conference on Trends & Prospects in Molecular Biosciences. Organized by Institute of Biochemistry & Biotechnology, University of the Punjab, Lahore with collaboration of Pakistan Society for Biochemistry and molecular Biology on October 23-24, 2017 at Institute of Biochemistry & Biotechnology, University of the Punjab, Lahore

9. 5<sup>th</sup> International Fisheries Symposium “Fisheries, Trade and Investment Opportunities” organized by Department of Fisheries, Government of the Punjab and Pakistan Fisheries Society on February 24<sup>th</sup> - 25<sup>th</sup> , 2015 at Pearl Continental hotel, Lahore
10. Techniques for Biodiversity Assessment and Aerobiological Monitoring for Ecosystem Health organized by University of the Punjab on February 6<sup>th</sup> -7<sup>th</sup>, 2015 at Department of Zoology, University of the Punjab, Lahore.
11. 32<sup>nd</sup> Pakistan congress of Zoology (International) organized by Zoological Society of Pakistan on March 6<sup>th</sup>-8<sup>th</sup> ,2012 at Department of Zoology, Government College University, Lahore
12. Food, Technology and Society, one day seminar organized by Newcastle University, UK at School of Agriculture, Food and Rural Development, Newcastle University, UK on October 21, 2011
13. Next Generation Sequencing Workshop organized by Jana Vandrovcova and Xose Fernandez at trust Genome campus Hinxton, Cambridgeshire CB10 1SD, UK on October 18-20, 2011.
14. 4<sup>th</sup> International conference on Marine Research for Environmental sustainability organized by Newcastle University and Lloy’s Register at Newcastle upon Tyne on September 12-13, 2011.
15. Climate Change Adaptation workshop organized by Transport Newcastle, UK at Bamburgh room, Kings Road Centre, Newcastle University, UK at September 6, 2011
16. Strategies for future research, one day seminar organized by Marine Newcastle, UK at Newcastle institute for research on sustainability, Newcastle University, UK on July 15<sup>th</sup>, 2011.
17. 31<sup>st</sup> Pakistan congress of Zoology (International) organized by Zoological Society of Pakistan on April 19<sup>th</sup> -21<sup>st</sup>, 2011 at University of Azad Jammu and Kashmir, Muzaffarabad
18. “1<sup>st</sup> Wildlife Talks Series” Seminar organized by Department of Zoology on May 04, 2011, at University of the Punjab, Lahore
19. Fish and Fisheries of Pakistan. One day seminar organized by GC University, University of Aberdeen, UK, HEC and British Council at GC University, Lahore, June 22, 2009
20. Fish Health Management. One day seminar organized by GC University, University of Aberdeen, HEC and British Council at GC University, Lahore on March 12, 2009.
21. 26<sup>th</sup> Pakistan congress of Zoology (International) organized by Zoological Society of Pakistan on April 4-6,2006 at Department of Zoology, PU Lahore
22. 3<sup>rd</sup> Symposium on Fisheries organized by Fisheries Society of Pakistan on April 25-26, 2005 at Department of Zoology GCU Lahore

### **Computer Skills:**

- Familiar with Window environment
- Familiar with MS office (Word, Excel, Power point) and Internet explorer

### **Managerial Skills:**

- Ability to handle multiple tasks.
- Good interpersonal skills.
- Good communication skills

### **References:**

- Prof. Dr. Javed Iqbal Qazi, Chairman, Department of Zoology, University of the Punjab, Lahore.
- Prof. Dr. Muhammad Naeem Khan, Dean, Faculty of Life Sciences, University of the Punjab, Lahore