

CURRICULUM VITAE OF DR. AGHA ASAD NOOR

PERSONAL

Name: Dr. Agha Asad Noor
Father's Name: Agha Noorullah Khan, Pathan
Family / Surname: Pathan
Religion Islam
C.N.I.C. No: 43304-0590732-9
D.O.Birth: December 8, 1964
Nationality: Pakistan
Domicile: Shikarpur Sindh Rural
Email: aanpathan@usindh.edu.pk, aanpathan@gmail.com



ADDRESS FOR CORRESPONDENCE

(Off.) **Professor**, Institute of Microbiology, University of Sindh, Allama I. I. Kazi Campus, Jamshoro Pakistan.

ACADEMIC

2008 **Ph.D. in Biotechnology** from the University of Sindh, Jamshoro, Pakistan.
1997 **M.Phil. in Microbiology** from Quaid-i-Azam University, Islamabad, Pakistan.
1986 **M.Sc.** in Microbiology from University of Sindh, Jamshoro, Pakistan.
1984 **B.Sc. (Hons.)** in Microbiology from University of Sindh, Jamshoro, Pakistan.
1980 **H.S.C. (Intermediate, Pre-Medical)** from Board of Intermediate & Secondary Education, Hyderabad.
1978 **S.S.C. (Matriculation)** from Board of Intermediate & Secondary Education, Hyderabad.

PROFESSIONAL EXPERIENCE

1986-1997 **Lecturer** in Microbiology at Shah Abdul Latif University (SALU), Khairpur.
1997-1999 **Assistant Professor** in Microbiology at Shah Abdul Latif University, Khairpur.
1999-2001 **Assistant Professor** in Microbiology at University of Sindh, Jamshoro (**on deputation basis**).
2001-2002 **Assistant Professor** at Shah Abdul Latif University, Khairpur
2002 -2011 **Assistant Professor** in Microbiology at University of Sindh Jamshoro, Pakistan
2011-2013 **Associate Professor** in Microbiology at University of Sindh, Jamshoro.
2013-To date **Professor** in Microbiology at University of Sindh, Jamshoro.
2021-To-date **Focal Person**, University of Sindh, KBSAS Campus, Naushahro Feroze, Sindh, Pakistan

EXPERIENCE

1. Teaching Microbiology and Biotechnology since 1986
2. Research activities since 1995 in multi-dimensional studies of life sciences

MEMBERSHIP

1. **Member** Board of Studies of in Microbiology, University of Sindh, Jamshoro, Pakistan.
2. **Member** Board of Science Faculty, University of Sindh Jamshoro, Pakistan.

3. **Member** Senate, University of Sindh Jamshoro, Pakistan.
4. **Member** Academic Council, University of Sindh, Jamshoro, Pakistan.
5. **Member** IAENG International Association of Engineers (**Membership No. 123106**).
6. **Member** American Society for Microbiology, USA (**Membership No. 57439986**).
7. **Member** SCIENCE PAKISTAN (**Membership No. SP-243**).
8. **Member** Pakistan Biological Society of Pakistan (**Membership No. 1163**)
9. **Member** Editorial Board of FUUAST Journal of Biology.
10. **Member** Editorial Board of the International Journal of Biology and Biotechnology.
11. **Member** Advisory Committee as member Editorial Board of RADS Journal of Biological Research and Applied Sciences, Jinnah University for Women, Karachi, Pakistan
- 12- **Member** National Advisory Editorial Board of GC Journal of Phytosciences, Ghazi University, Dera Ghazi Khan, Pakistan.
12. **Life member** Pakistan Society for Microbiology.
- 13 **Registration** Registered in Reviewer's Credit for International Journal of Maternal and Child Health and AIDS (IJMA), USA

DISTINCTIONS

- 1984 First stood Second in B.Sc. honors.
- 1986 First stood Second in M.Sc. final.
- 1997 Secured **FIRST PRIZE** in poster presentation in Second International Biennial Conference of Pakistan society for Microbiology.
- 2019 Google impact factor 6.29 (Dated 13-03-2019)

RESEARCH ACTIVITIES

1. Research on alcohol production from molasses by *Saccharomyces cerevisiae*
2. Research on viability and growth rate of bacteria
3. Research on poisonous Planktonic Cyanobacteria
4. Research on Protease producing Bacteria
5. Research on In-vitro investigation of *E.coli*
6. Research on physical, chemical and biological studies of soil of Larkana District
7. Research on routine analysis of fresh water and water logged area of Manchar lake
8. Research on antifungal activities of herbal extracts.
9. Research on enhancement of yeast growth for bioethanol fermentation
10. Research on patho-clinical studies of Coliforms *E.coli*
11. Research on isolation, identification and antibiotic Susceptibility of G+ve cocci
12. Research on pure culture study of *Pseudomonas aeruginosa*
13. Research on epidemiological and clinical studies of *Streptococcus pneumoniae*
14. Research on surveillance of nosocomial infections.
15. Research on isolation of major pathogens from body fluids
16. Research on growth biotechnology of yeast strain
17. Research on dose response curve of herbal extracts.
18. Research on micro-algal biodiesel (Review)
19. Research on phosphate solubilization by bacteria
20. Research on Molecular detection of the Hepatitis C virus genotypes
21. Research on Frequency Distribution of Hepatitis C Virus Genotypes
22. Research on Epidemiological study of HCV genotypes
23. Research on Molecular detection of *Entamoeba histolytica*

24. Research on Emergence of carbapenems resistance in *Escherichia coli*
25. Research on Antibacterial activities of tobramycin-nanoparticles
26. Research on microbial spoilage of commercially available fruits
27. Research on ethanol production by yeast from dry date-water
28. Research on *Staphylococcus aureus* and *Klebsiella pneumoniae*
29. Research on Prevalence of nosocomial candiduria
30. Research on Alkaline protease production from indigenous bacterial isolates
31. Research on Epidemiology of risk factor of MRSA and its resistance to vancomycin.
32. Research on Antibiotic based synthesis of silver nitrate nanoparticles and their applications
33. Research on Epidemiological and clinical studies of *Streptococcus pneumoniae*
34. Research on Antibacterial activities of *Coriandrum sativum* and *Mentha arvensis* extracts
35. Research on Comparative study of typhoid fever in different age groups
36. Research on Surveillance of potential gram negative pathogens in rural areas
37. Research on Bioethanol production by thermotolerant and chemotolerant yeast
38. Population based studies of multidrug resistance bacteria.
39. Quantitative studies on microbial contamination of some commercial fruits and vegetables
40. Serodiagnostic investigation of various infections in Taluka Gambat.
41. Isolation and identification of pathogenic bacteria from biofluids of teen age hospitalized patients.
42. Determination of synergetic effects of *Momordica charantia* L. and *Citrus limon* L. on bacteria and yeast.
43. Studies of physico-chemical and bacteriological properties of water from Tandoadam canal.
44. Gender wise studies of bacterial otitis media in patients with hearing loss.
45. Physico-chemical and microbiological assessment of water samples of hadero lake, Thatta, Pakistan.
46. Isolation and identification of isolation and identification of potential pathogens from pleural effusion of hospitalized patients of Bahawalnagar.
47. Population based study of food borne antibiotic resistant bacterial isolates from consumers' food.

CURRENT ONGOING RESEARCH

1. Epidemiological studies of various environmental pathogens
2. Epidemiological studies and antibiogram of uropathogens.
3. Comparative studies of the effects of some commercial antibiotics and *Medicago sativa* (alfalfa) extract on *Pseudomonas* and *Staphylococci*.
4. Isolation, identification and in-vitro growth of bacteria and yeast from different exogenous sources and their sensitivity pattern against antibiotics and some indigenous natural products,
5. Isolation and characterization of bacteria from pus samples of patients in hospital environment.
6. Serodiagnosis of HBV, HCV and HIV in blood donors and patients in Moro, District Nousharo Feroz.
7. Prevalence of Colibacillosis and Salmonellosis coinfection and in slaughtered chickens.
8. *In-vitro* determination of growth and sensitivity pattern of bacterial isolates and yeast against antibiotics and some selected fruits and vegetable extracts.
9. Quality assessment of Manchar Lake and Stream water of Lucky Shah Saddar, Sehwan.
10. Detection of most potent bacterial flora from sewage water and soil
11. Isolation and identification of pathogenic bacteria from pus samples.
12. Epidemiological studies and bio-chemical investigations of post-operative wound infections.
13. *In-vitro* studies of the antibacterial activity of *Ocimum sanctum* and *Azadirachta indica* on MRSA, MSSA and VRSA.
14. Isolation and identification of aquatic microbes from various sources of water of Hyderabad city
15. Epidemiological studies, isolation, identification and antibiotic profiling of uro-pathogens.
16. Epidemiological studies and bio-chemical investigations of post-operative wound infections.
17. Epidemiological studies of potent bacterial pathogens in periodontitis.
18. Microbial investigations and chemical assessment of breast abscess of hospitalized patients.
19. Galactomannan and (1-3)- β -DGlucan based detection of invasive Aspergillosis in elderly age patients.
20. Investigation and antibiotic profiling of uropathogens in Jamshoro.

SUPERVISION & COSUPERVISION OF BS BASED PROJECTS

Name of the Candidate & Institution	Research topic	Status of Degree
Sadia Hanif and Shazia Baloch , Institute of Microbiology, University of Sindh Jamshoro, Pakistan	Patho-clinical studies of Coliforms <i>E.coli</i> : A Model Pathogen of Human Infections	Completed
Saima Jawed and Farhina Khan , Institute of Microbiology, University of Sindh Jamshoro, Pakistan	Isolation, Identification and Antibiotic Susceptibility of G+ve cocci in various Clinical Specimens	Do
Meher-un-Nisa Samo , Institute of Microbiology, University of Sindh Jamshoro, Pakistan	Pure Culture Study of <i>Pseudomonas aeruginosa</i> from Clinical Specimens.	Do
Nazir Ahmed Brohi , Institute of Microbiology, University of Sindh Jamshoro, Pakistan	Epidemiological and Clinical Studies of <i>Streptococcus pneumoniae</i>	Do
Rakhshanda Parveen, Shagufta Bano, Razia Muneer and Muhammad Faisal , Institute of Microbiology, University of Sindh Jamshoro, Pakistan	Surveillance of nosocomial infections in Hyderabad city	Do
Alia Shaikh, Mehwish Fatima, Sabeen Ghouri and Samina Channar , Institute of Microbiology, University of Sindh Jamshoro, Pakistan	Isolation of major pathogens from body fluids	Do
Abdul Ghaffar Memon, Adnan Ahmed Memon, Iftikhar A. Kalwar and Gulab Das , Institute of Microbiology, University of Sindh Jamshoro, Pakistan	Studies on Dose Response Curve of various herbal extracts and commercially available antibiotics on clinical isolates	Do
Hira Mustafa and Farheen Mustafa , Institute of Microbiology, University of Sindh Jamshoro, Pakistan	Micro-algal biodiesel: A new trend towards biofuel technology (Review)	Do
Abdul Rehman Khaskhely, Munawar Ali Khaskhely and Salman Muhammad Soomar , Institute of Microbiology, University of Sindh Jamshoro, Pakistan	Some studies on microbial spoilage of commercially available fruits	Do
Ammar Ali Awan, Mujeeb-ur-Rehman Khohro, Kashif Ali Arain, Sanaullah Bhatti , Institute of Microbiology, University of Sindh Jamshoro, Pakistan	In-vitro studies of <i>Staphylococcus aureus</i> and <i>Klebsiella pneumoniae</i> from clinical isolates	Do
Ifra Khan and Fatima Noor Institute of Microbiology, University of Sindh Jamshoro, Pakistan	Isolation and characterization of major bacterial isolates from garden soil and sewage water	Do
Bisma Aziz and Rattan Kumar Menghwar Institute of Microbiology, University of Sindh Jamshoro, Pakistan	Detection of potent bacterial pathogens from post operated pus samples from hospitalized patients.	Do
Sajad Ali Bhugio Institute of Microbiology, University of Sindh Jamshoro, Pakistan	Epidemiological survey of HIV, HBV, HCV and Co-infection of Diabetes: A Review Report.	Do

BS BASED GROUP REVIEW REPORTS		
Afifa Hallo. Institute of Microbiology, University of Sindh Jamshoro, Pakistan	Review on Antibiotics and its classification	Do
Sania Arain. Institute of Microbiology, University of Sindh Jamshoro, Pakistan	Review on uses, mode of action of antibiotics	Do
Tayyaba Siddiqui. Institute of Microbiology, University of Sindh Jamshoro, Pakistan	Review on antibiotic resistance and its types	Do
Wadiha Shaikh. Institute of Microbiology, University of Sindh Jamshoro, Pakistan	Review on resistance pattern of Gram positive and Gram negative bacteria	Do
Darpan Kumar. Institute of Microbiology, University of Sindh Jamshoro, Pakistan	Review on molecular detection of antibiotic resistance gene	Do

HONOURARY CO-SUPERVISION OF MS / M.PHIL. PROJECTS

Name of the Candidate & Institution	Research topic	Status of Degree
Mr. Shafique Ahmed Rind Shah Abdul Latif University, Khairpur, Sindh, Pakistan.	Isolation, Identification and Occurrence of Medically Important Fungi Keratinophilic Fungi from the soil of District Larkana.	Completed
Ms. Shahida Mangi, Shah Abdul Latif University, Khairpur, Sindh, Pakistan.	Effect of Herbal Medicinal Plants on Dermatophytes.	Do
Mr. Muhammad Ali Bhatti Center for Environmental Studies, University of Sindh, Jamshoro, Sindh, Pakistan.	Physico-Chemical and Bacteriological Studies of Pharmaceutical Effluents from Hyderabad Division".	DO

RESEARCH SCHOLARS COMPLETED / UNDER PROGRESS THEIR HIGHER DEGREES UNDER SINGLE SUPERVISION

S. No.	Name of the Candidate	Research topic	Degree	Year (From-To)
1	Kashif Ali Jandan	Ethanol production by yeast from dry date-water with and without sodium formaldehyde sulfoxylate / runkaat	M.Phil.	2013-15
2	Muhammad Ashraf Sial	Prevalence of nosocomial candiduria in Khairpur District	Do	Do
3	Barkat Ali Solangi	Alkaline protease production from indigenous bacterial isolates by shake flask method	Do	Do
4	Sayed Zaheer Abbass	Extraction of some natural food preservatives from various indigenous plants and determination of their anti-bacterial activities	MS	2015-17
5	Muhammad Waqar	Detection of Hepatitis-D Virus RNA in Hepatitis-B Virus DNA Positive Patients Using Modern Molecular Techniques	MS	2015-17

6	Bashir Ahmed Mahar	Surveillance of potential gram negative pathogens in various clinical specimens of rural areas of Shikarpur.	M. Phil.	2015-18
7	Mubarak Zeb	Frequency and antifungal susceptibility pattern of <i>candida species</i> in different clinical isolates	Do	2015-18
8	Zaheer Ahmed Shaikh	Determination of synergetic effects of <i>Momordica charantia</i> L. and <i>Citrus limon</i> L. on bacteria and yeast	Do	2017-21
9	Sajid Ali Yousufzai	Isolation and identification of pathogenic bacteria from biofluids of teen age hospitalized patients in Peshawar.	Do	2016-21
10	Rana Asgher Ali	Quantitative studies on microbial contamination of some commercial fruits and vegetables	Do	2016-21
11	Rizwana Khanzada	Gender wise studies of bacterial otitis media in patients with hearing loss	Do	2018-21
12	Muhammad Zulqarnain	Isolation and identification of potential pathogens from pleural effusion of hospitalized patients of Bahawalnagar	Do	2016-21
13	Sagheer Hussain Shah	Serodiagnostic investigation of common infections in Taluka gambat	2016	Thesis submitted
14	Zohaib Ali Jatoi	Serodiagnosis of HBV, HCV and HIV in blood donars and patients of taluka Moro, District Noushahro Feroz	2017	Do
15	Nazir Ahmed Brohi	Molecular study and epidemiology of risk factor of methicillin resistant <i>staphylococcus aureus</i> (mrsa) and its resistance to vancomycin	Ph.D.	2015-19
16	Ms. Sanam Dehraj	<i>In-vitro</i> determination of growth and sensitivity pattern of bacterial isolates and yeast against antibiotics and some selected fruits and vegetable extracts.	Do	2016 Under progress
17	Muhammad Ashraf Sial	A population based study of persistence, antibiogram and determination of antibacterial activity of <i>Azadirachta indica</i> and <i>Ocimum tenuiflorum</i> extracts on multidrug resistant gram negative bacteria isolated from urinary tract infections in Khairpur District.	Do	2017 Under progress
18	Rasheed Ahmed Soomro	Epidemiological studies, isolation, identification and antibiotic profiling of uro-pathogens of hospitalized patients of hyderabad and jamshoro.	Do	2016 Under progress
19	Altaf Hussain Ghumro	Epidemiological studies and bio-chemical investigations of post-operative wound infections of hospitalized patients at Nawabshah.	Do	2017 Under progress
20	Azizullah Qureshi	Epidemiological studies of potent bacterial pathogens in periodontitis and antibacterial activity of commercial antibiotics and natural products on clinical isolates.	Do	2019 Under progress
21	Inayat Ali Zardari	Microbial investigations and chemical assessment of breast abscess of hospitalized patients and antibiotic profiling of multidrug resistance bacteria	Do	2021 Under progress
22	Mubarak Zeb	Galactomannan and (1-3)- β -DGlucan based detection for the early diagnosis of invasive Aspergillosis in elderly age patients.	Do	2021 Under progress

RESEARCH SCHOLARS COMPLETED / UNDER PROGRESS THEIR HIGHER DEGREES UNDER CO-SUPERVISION

S. No.	Name of the Candidate	Research topic	Degree	Year (From-To)
1	Maqsood Masih	A comparative study of typhoid fever in different age groups at Hyderabad city	M.Phil.	2013-17
2	Jan Muhammad Bughio (Center for Env. Sciences,	Some studies of physicochemical and bacteriological properties of water from Tando Adam canal.	Do	2014-21
3	Atif Hussain Soomro	Isolation and identification of aquatic pathogens from various sources of water of Hyderabad city	Do	Under progress
4	Zahid Hussan Mirani	Quality assessment of Manchar Lake and stream water of Lucky Shah Saddar, Sehwan, District Jamshoro, Sindh.	Do	2018 Under progress
5	Vivik Ananad	Comparative studies of the effects of some selected commercial antibacterial antibiotics and <i>Medicago sativa</i> (Alfalfa) extract on <i>Pseudomonas</i> and <i>Staphylococcus</i> species	Do	2019 Under progress
6	Zahoor Ahmed Bhambhro (Center for Env. Sciences)	Isolation and characterization of bacteria from pus samples of patients in hospital environment.	Do	2017 Under progress
7	Saima Chandio (Center for Env. Sciences)	Eco-biological assessment of Hadero lake water district Thatta, Sindh, Pakistan	Do	2014-21
8	Yasmeen Junejo (CEAC)	Antibiotic based synthesis of silver nanoparticles and their applications	Ph.D.	2009-14
9	Shafique Ahmed Rind (SALU, Khairpur)	Bio-ethanol production by thermotolerant and chemo tolerant yeast from sugar substrates	Do	2012-21
10	Wajahat Hussain Shah. (Center for Env. Sci, SUJ)	Epidemiological studies of various environmental pathogens among the patients of various age groups in Karachi city	Do	Waiting for Award

ORCID.

<https://orcid.org/0000-0002-2530-0857>

Web of Science Researcher ID.

ACL-2954-2022

PROFESSIONAL ACTIVITIES

2007-08 External examiner at Sindh Agriculture University (SAU) Tandojam, Pakistan.

2009

Research guide for postgraduate studies at the Department of Microbiology, Shah Abdul Abdul Latif University, Khairpur (SALU-KHP.).

Research guide / supervisor for postgraduate studies in Microbiology at University of Sindh, Jamshoro (UoS-JAM).

Co-guide / co-supervisor for postgraduate studies in National Center of Excellence in Analytical

Co-guide / co-supervisor for postgraduate studies in the Center for Environmental Sciences, UoS-JAM, Sindh

Postdoctoral fellow in the yeast Research Group at Abertay University, Dundee, Scotland with Professor Graeme M. Walker.

- External Examiner** to conduct the subject GRE examination at SALU-KHP., Sindh.
Appointed as **In-charge Chairman**, Department of Microbiology, University of Sindh, Jamshoro.
- 2010** **External Examiner** at the Department of Environmental Engineering, MUET, Jamshoro.
- 2011-12** **External Examiner** for assessment of 02 M.Phil. thesis of the Center for Advanced Vaccinology and Biotechnology, University of Balochistan, Quetta, (CASVAB-UoB-QTA).
External Examiner to conduct subject GRE examination SALU-KHP., Sindh.
External Examiner at the Department of Environmental Engineering, MUET, Jamshoro
External Examiner of the Department of Microbiology, UoB-QTA.
Appointed as **Associate Professor** in the Microbiology, University of Sindh Jamshoro, Pakistan.
Appointed as **Chairman**, Department of Microbiology, University of Sindh, Jamshoro.
External expert and **Member** of the Selection Board of SAU, Tandojam, Sindh Pakistan.
External Examiner at CASVAB-UoB-QTA
External Examiner at **MUET**, Jamshoro
External Examiner of Faculty of Pharmacy, Gomal University, D.I.Khan, KPK
External Examiner at SAU, Tandojam, Sindh.
Conducted Ground water Analysis of *E.coli* and total coliforms on the request of Abdul Ghaffar & sons, Government Contractor for 132 kV Tando Bago Grid Station, Hyderabad, Pakistan.
Invited as member of Development and Peer review of content for NTS databank by National Testing Service.
Member of the Selection Board committee of the University of Sindh, Jamshoro.
- 2013** **External Examiner** at CASVAB-UoB-QTA.
External Examiner at SAU, Tandojam, Sindh.
External Examiner at MUET, Jamashoro, Sindh.
Member of the Selection Board Committee of the University of Sindh, Jamshoro.
Member of the Selection Board Committee of the University of Sindh, Jamshoro.
Appointed as **Professor** in the Department of Microbiology, University of Sindh Jamshoro, Pakistan.
Nominated as member of the **Panel of Examiners** for Federal Public Service Commission, Islamabad.
- 2014** Services up-graded from the **Chairman** to **Director**, Institute of Microbiology, UoS-JAM., Sindh.
External Examiner at CASVAB-UoB-QTA.
External Examiner at MUET, Jamshoro, Sindh.
- 2015** **External Examiner** at SAU, Tandojam, Sindh, Pakistan.
External Examiner at SALU-KHP.
Subject Specialist for the Selection Board of the University of Haripur, Khyber Pakhtunkhwa.
Expert for the assessment of service profile of faculty members of CASVAB-UoB-QTA.
- 2016** **External Examiner** SALU-KHP.
External Examiner at SAU, Tandojam, Sindh.
- 2017** **External Examiner** at SALU-KHP.
External Examiner at CASVAB-UoB-QTA.
External Examiner at University of Karachi, Karachi, Sindh.
External Examiner at SAU, SAU, Tandojam, Sindh.
Taught Microbiology I and II at Center of Environmental Sciences, UoS, Jamshoro, Sindh.

- 2018** **External Examiner** at CASVAB-UoB-QTA.
External Examiner SAU, Tandojam, Sindh.
External Examiner at SALU-KHP., Sindh.
External Examiner at MUET, Jamshoro, Sindh.
Taught Medical Microbiology & Immunology and Applied Microbiology (Minor Courses) at Center of Environmental Sciences, University of Sindh, Jamshoro, Sindh.
- 2019** **External Examiner** at CASVAB-UoB-QTA.
External Examiner at Sardar Bahadur Khan Women's University, Quetta.
External Examiner at Jinnah University for Women, Karachi, Sindh.
External Examiner SAU, Tandojam, Sindh.
Paper setter and Examiner of Sindh Public Service Commission, Hyderabad
External Examiner at Dadabhoy Institute of Higher education, Karachi.
Appointed as paper setter for Fedral Public Service Commission.
Appointed as Book reviewer by HEC Islamabad
- 2020** **External Examiner** at CASVAB-UoB-QTA
External Examiner at Federal Urdu University of Art, Science and Technology, Karachi, Pakistan
External Examiner of M.Phil. thesis evaluation of the University of Karachi.
Paper setter and Examiner of Sindh Public Service Commission, Hyderabad
- 2021** **Internal Examiner** S. A. L. University, Kairpur, Sindh, Pakistan (**Final Ph.D. open defense**).
External Examiner S. A. L. University, Kairpur, Sindh, Pakistan (**Final Ph.D. open defense**).

REVIEWED MANUSCRIPTS

2014

- PJAC-231209-03 of Pakistan Journal of Analytical and Environmental Chemistry, (NCEAC), University of Sindh, Jamshoro, Sindh, Pakistan.
- Solulization of phosphate in the rhizosphere of wheat of National Institute of Agriculture, Sindh Agriculture University, Tandojam, Sindh, Pakistan.
- Production and Purification of Pyocin from a Soil Associated *Pseudomonas Aeruginosa* Strain SA 188, of Pakistan Journal of Agricultural Sciences, University of Agriculture, Faisalabad, Pakistan (No. PJAS: 2108).
- Pesticide Lambda-Cyhalothrin Degradation By *Mesorhizobium* Sp. (S1b) And *Bartonella Elizabethae* (S2b) Strains Isolated From Cotton Crop.

2015

- ◆ Value addition of agro-residues for alpha-amylase production through bioconversion of University of Agriculture Faisalabad, Punjab, Pakistan.
- ◆ Production of Isoprenoid Advanced Biofuels on Synthetic Biology and Metabolic Engineering of University of Sargodha, Punjab, Pakistan.
- ◆ Bioassay screening, standardization and phytochemical investigation of *Desmodium podocarpum* of University of Peshawar, Khyber Pakhtoon Khwa, Pakistan.
- ◆ Value addition of agro-residues for alpha-amylase production through bioconversion

2017 Molecular and serological study of Caprine and Ovine Brucellosis in District Peshawar”.

2018

- Microbial cellulases production, applications and challenges.
- Isolation and characterization of bacteria isolated from the rice crop in lower Sindh.

2019

- Estimation of Executive Extension Needs of Rural Women in the field of Rationalizing Food Consumption Using Broach's.
- Assessment of oral health related knowledge, attitude, and self-reported Practices of families residing in Peshsawar, Pakistan

2020

- Frequency of bacterial microorganisms in exudative pleural effusion.
- Effects of organic and inorganic fertilizers on Sweet Potato Production in Iwo, Nigeria.

2021

- ✓ Influences of Fertilizer Timing on Performance of Sesame Yield and Yield Components in Niger, Nigeria.
- ✓ Comparative evolution of animal and human corona viruses, its varieties and their virulence
- ✓ Antioxidant and antimicrobial activity of citrus and other fruit plants: A review
- ✓ Surgical outcomes after obstetric fistula repair among HIV positive women: Obstetric fistula repair among HIV positive women.
- ✓ Frequency of isolation of coagulase negative staphylococci from blood cultures and its antibiogram.
- ✓ Effects of organic and inorganic fertilizers on Sweet Potato Production in Iwo, Nigeria.

2022

- ❖ Combining ability and single cross performances of tropical highland maize inbred lines under optimum and Low nitrogen environments
- ❖ Effects of fertilizer level on yield and yield components of different food barley Varieties at Arsi Zone, Ethiopia
- ❖ Isolation and identification of coliform bacteria from the drinking water of Shah Abdul Latif Universty Khairpur Mirs
- ❖ Phytochemical profile and antibacterial photodynamic activity of *Centella asiatica* L. (Apiaceae), *Citrus grandis* L. (Rutaceae) and *Zanthoxylum gillettii* De Wild. (Rutaceae) leaves extracts
- ❖ Significance of various diagnostic methods for the detection of *Helicobacter pylori* infection.
- ❖ A review on antiurolithiatic (pashanabada) effects of herbal and marine resources
- ❖ Preliminary phytochemical screening and reported biological activity from the leaves extract of selected indigenous and local medicinal plants
- ❖ Aerobic bacteriological profile and antimicrobial susceptibility pattern of pus isolates from tertiary care hospital.
- ❖ Cognitive-Enhancing and Anti-Oxidant Activities of Garlic and Ginger Mixture in Wistar Rats.
- ❖ The Combine Antioxidant Effect of *Allium sativum* and *Tamarix aphylla*
- ❖ The Diversity of Medicinal Plants of the Himalayan Kingdom of Bhutan.

2023

- Isolation and screening of keratinase enzyme producing *Bacillus mojavensis* par01 from poultry farm
- Role of Yava (Barley) based diet in lifestyle disorders w.s.r. to Diabetes Mellitus
- Development of Herbal Germicide-Aided Natural Solution for Women's Hygiene without any side and adverse effect in laboratory
- Understanding fish marketing in the inland fishing sector: Evidence from Niger Delta, Nigeria.
- A review of antioxidants in fruit berries and immune system

REVIEWED RESEARCH PROJECTS (NRPU-2016)

Reviewed **17 research projects** of National Research Program for Universities (**NRPU**) as peer reviewer; appointed by Higher Education Commission (HEC), Islamabad, Pakistan.

REVIEWED RESEARCH PROJECTS (NRPU-2017-18)

Reviewed **14 research projects** of National Research Program for Universities (**NRPU**) as peer reviewer; appointed by Higher Education Commission (HEC), Islamabad, Pakistan.

REVIEWED ANNUAL REPORTS

1. Reviewed annual report of NRPU project Enhancement of methane production in two stage anaerobic digestion by a novel process using recirculation of biogas along with hydrogen supply.
2. Reviewed annual report of NRPU project investigation of modified metal sulfide composites for hydrogen production from water splitting
3. Development of microbial enzyme based biosensors for monitoring pollutants in industrially linked
4. Agricultural areas. Molecular and biochemical studies of rhizobial strains to Improve growth and yield of chickpea
5. Design, fabrication and performance evaluation of Bio-IETS: Biofilm-based industrial effluent treatment systems, for the treatment of Sugar Mill Effluents (SMEs)
6. Utilization of poultry feather waste by keratinases producing microorganisms for production of sustainable value-added products and biogas.
7. Development of Microbial Enzyme Based Biosensors for Monitoring Pollutants in Industrially Linked Agricultural Areas.
8. Development of diagnostic biomarker for circulating varicella Strains in Pakistan.
9. Biodegradation potential of cellulytic bacteria isolated from termite gut for organic waste management.

CONTRIBUTIONS

1989

- ✓ **8th Pre service training** at NAHE-U.G.C. Islamabad, Pakistan.
- ✓ **4th regional workshop on cloned gene products** (a DNA recombinant technology) at the Centre for Advanced Molecular Biology (CAMB, now CEMB), University of the Punjab, Lahore, Pakistan.

1994

- **22nd Postgraduate training** course at National Institute of Agriculture and Biology (NIAB), Faisalabad, Pakistan.
- **6th National Chemistry Conference** at Shah Abdul Latif University, Khairpur, Sindh, Pakistan.

1996

- **Delivered a seminar** on “Merits and demerits marine microorganism” at Quaid-i-Azam University, Islamabad.
- **7th International Symposium** on Non-Legumes (BNF) at National Institute of Biotechnology and Genetic Engineering (NIBGE), Faisalabad, Pakistan.

1997

- **Presented poster** in second international biennial conference of Pakistan Society for Microbiology (SIBC-PSM) at Bhurbhan, Pakistan, in September 24-26, 1997.
- **Lecture series.** Seminars on rational approach to the treatment of male infertility at Quaid-i-Azam University, Islamabad, Pakistan.
- **Post PSM workshop** on Tissue culture techniques: Viral isolation and characterization at National Institute of Health, Islamabad, Pakistan
- **Inaugural International Conference** on Genetics of Pakistan Genetical Society, National Agriculture Research Center, Islamabad, Pakistan.
- **4th LMC Symposium** on Globalization of Health, Care a Multisectorial approach at Liaquat Medical College, (now Liaquat University of Medical and Health Sciences), Jamshoro, Pakistan.

1999

6th Congress of Asia Pacific Association of Societies of Pathologists (APASP) and 23rd Annual conference of Pakistan Association of Pathologist (PAP) at the Aga Khan University, Karachi, Pakistan.

2000

- ◆ **Workshop** on the technology for products development from medicinal plants at Haji Ebrahim Jamal (H.E.J) Research Institute of Chemistry, Karachi, Pakistan
- ◆ **6th National Symposium** on Analytical and Environmental Chemistry at National Center of Excellence in Analytical Chemistry (NCEAC), University of Sindh Jamshoro, Pakistan.
- ◆ **Dental Symposium** at Jinnah Medical and Dental College, Karachi, Pakistan.

2002

- ✓ **2nd International and 12th National Chemistry Conferences** at National Center of Excellence in Analytical Chemistry, University of Sindh, Jamshoro, Pakistan.
- ✓ **In-service training program** of *Biotechnology* at University of Sindh Jamshoro, Pakistan.
- ✓ **National Health Sciences Research Symposium** on Early Childhood Care and Development at the Aga Khan University, Karachi, Pakistan.

2003

- **7th National Symposium** on Analytical and Environmental Chemistry at the University of Sindh Jamshoro, Pakistan.
- **Pakistan-Bangladesh-Iran International Seminar** on Analytical Sciences at National Center of Excellence in Analytical Chemistry, University of Sindh, Jamshoro, Pakistan.
- **1st International and National Symposium** on Biotechnology at University of Sindh, Jamshoro, Pakistan.

2004

In-service training program of Biochemistry at the University of Sindh, Jamshoro, Pakistan.

2005

- **Presented research article** (poster) in 9th International Symposium on Natural Product Chemistry at H.E.J. Institute of Chemistry, University of Karachi, Pakistan.
- **5th International Biennial Conference** of Pakistan Society for Microbiology, Karachi, Pakistan.
- **University-Industry Interaction Seminar** on Prospects of University Research for the Development of Oil and Soap Industry at National Center of Excellence in Analytical Chemistry, University of Sindh, Jamshoro, Pakistan.
- **8th Symposium** on Analytical and Environmental Chemistry at National center of Excellence in Analytical Chemistry, University of Sindh, Jamshoro, Pakistan.
- **Pre-symposium workshop** on Continuous Quality Improvement in Health Sciences Education at the Aga Khan University, Karachi, Pakistan.
- **10th National Health Sciences Research Symposium** on Health Sciences Education Trends, Opportunities and Challenges at the Aga Khan University, Karachi, Pakistan.

- **Presented poster** in 3rd International Symposium on Biotechnology at the University of Sindh of Sindh Jamshoro, Pakistan.
- **Presented poster** in International Conference on Environmental Horizons at the Department of Chemistry and International Center for Chemical sciences, University of Karachi, Pakistan.

2006

- **1st International Conference** on Informatics and Biotechnology at Balochistan University of Information Technology and Management Sciences, Quetta, Pakistan.
- **National Workshop** on Biotechnology Training Activities in Allergy Vaccines Development in Pakistan at Dr. Panjwani Center for Molecular Medicine & Drug Research, University of Karachi.
- **Successfully completed on-line examination** on Human Participant Protections Education for Research of National Cancer Institute, U.S. National Institute of Health during National Workshop on Biotechnology Training Activities in Allergy Vaccines Development in Pakistan at Dr. Panjwani Center for Molecular Medicine & Drug Research, University of Karachi.
- **Workshop** on “Advances in Mycology” at the Institute of Botany, University of Sindh, Jamshoro.

2007

- ❖ **1st International symposium** and workshop-cum-training course on Molecular Medicine and Drug Research at Karachi and Islamabad.
- ❖ **1st National workshop** on “Food Processing” at the Chemical Engineering Department, Mehran University of Engineering and Technology, Jamshoro.
- ❖ **6th International Biennial Conference** of Microbiology at Quaid-i-Azam University, Islamabad.
- ❖ **2nd International Seminar** on Analytical Sciences at University of Sindh Jamshoro.

2009

- ◆ **Attended 5th International Symposium** on Biotechnology at Institute of Biotechnology & Genetic Engineering, University of Sindh Jamshoro, Pakistan.
- ◆ **Attended 1st National Conference** of Microbiology at Shah Abdul Latif University, Khairpur, Sindh Pakistan.
- ◆ **Attended one day seminar** on Recovery of Value Added Products from Waste at the Department of Chemical Engineering, Mehran University of Engineering & Technology, Jamshoro in collaboration of the Institute for the Environment, Brunel University, UK.

2012

- ✚ Invited as a Resource Person to deliver a talk on “**Microbes: The Need of Today**” in 1st National Symposium on New Horizons of Microbiology (***Steps of Microbes on the Ladder of Life***) at Fedral Urdu University of Arts, Science and Technology, Karachi, Pakistan.

2013

- ✓ Attended **HEC International workshop on curriculum development** at the Department of Environmental Sciences, University of Karachi, Karachi, Pakistan.
- ✓ Attended **16th PHL Annual Symposium** “Hypertension encountering the silent killer”.
- ✓ Successfully completed **ASM-KU National Microbiology Teachers Training Workshop** at Karachi-University Bioresource Center, University of Karachi, Karachi, Pakistan.

2014

- Successfully completed **International workshop on modern techniques in structural biology** at Dr. Panjwani Center for Molecular and Drug Research (International center for Chemical and Biological Sciences), University of Karachi, Karachi, Pakistan.
- Invited as a **Guest Speaker** to deliver a talk on “**Microbial Technology**” with emphasis of the future development of Pakistan” at Sargodhian Spirit Public School, Rashidabad, Tando Allahyar, Sindh Pakistan.

2016

- **Attended** 13th Annual conference of Medical Microbiology and Infectious Disease Society 25-26th March, 2016 at Lahore.
- Invited as **“Visiting Speaker”** in Guest Hour to deliver a talk on Applications of Biotechnology and Applied Sciences at the Department of Chemical Engineering, Mehran University of Engineering & Technology, Jamshoro, Pakistan.
- Invited as **“HEC-Resource Person”** to deliver a talk on Biotechnology in prospective of disease diagnosis and vaccine development at the Center for Advanced Vaccinology and Biotechnology (**CASVAB**), University of Balochistan, Quetta, Pakistan.
- **Presented Poster** on Frequency of the occurrence of MRSA infections in 13th Medical Microbiology & Infectious Disease Conference 25-26 March at Lahore.
- **Attended** 4th International LUMHS Dental Conference 28-29, October, 2016.

2017

- ✚ Invited as **Guest Speaker** to talk on “Environmental Issues” on Earth Day Celebration on 18th April, 2017 at the Institute of Environmental Engineering, Mehran University of Engineering & Technology, Jamshoro, Pakistan.
- ✚ **Participated** in 3-day interactive skill development workshop on quality assurance procedures, plagiarism and advanced ICT skills for researchers from 2-4 August, 2017 at University of Sindh, Jamshoro, Pakistan.
- ✚ Invited as **Guest Speaker** to talk on “Biotechnology of genetically modified foods” during three days training workshop on Bio & Food Processing from 23-25th August, 2017 at the Institute of Environmental Engineering, Mehran University of Engineering & Technology, Jamshoro, Pakistan.
- ✚ **Invited** as **“Key note speaker”** to deliver a talk on “Food Microbiology and Biotechnology” in 11th International Conference of Pakistan Society for Microbiology “Applied Microbial Genomics in Public Health, Food, Pharma and Agriculture 18-20 December, 2017 at Bahahuddin Zakariya University Multan, Pakistan.
- ✚ **Attended** 11th International Biennial Conference of Pakistan Society for Microbiology “Applied Microbial Genomics in Public Health, Food, Pharma and Agriculture 18-20 December, 2017 at Bahahuddin Zakariya University Multan, Pakistan.
- ✚ **Chaired** a full session in 11th International Conference of Pakistan Society for Microbiology “Applied Microbial Genomics in Public Health, Food, Pharma and Agriculture 18-20 December, 2017 at Bahahuddin Zakariya University Multan, Pakistan.
- ✚ **Invited as Reviewer** of Journal of Liaquat University of Health and Medical Sciences (JLUMHS).

2018

- **Submitted research project** on “Emergence of the risk factors of life threatening bacterial and viral diseases and multidrug resistance bacteria in Hyderabad division” in NRPU-2018.

2019

- **Presented** research article “Antibacterial activity of *Momordica charantia* L. and *Citrus limon* L. on Gram positive and Gram negative bacteria” in 12th International Conference of Pakistan Society for Microbiology February 20-22, 2019 at Abbottabad University of Science and Technology, Abbottabad.
- **Delivered** a key note a talk on “Epidemiological studies and prevalence of Nosocomial Candidiasis in Khairpur District” in 12th International Conference of Pakistan Society for Microbiology February 20-22, 2019 at Abbottabad University of Science and Technology, Abbottabad.
- **Completed** three-days WHO Training on Laboratory Quality Management System (LQMS) and Biosafety from 27-29 August, 2019.
- **Presented** poster in the International Conference on Applied Biosciences *ICAB-2019) at Muhammad Ali Jinnah University, Karachi on 5-6 December, 2019.

- **Delivered** a talk in the International Conference on Applied Biosciences *ICAB-2019) at Muhammad Ali Jinnah University, Karachi on 5-6 December, 2019.
- **Facilitated three-days** Training on Laboratory Quality Management System (LQMS) and Biosafety Oct. 8-10, 2029 at University of Sindh Jamshoro.
- **Successfully completed** One Day Biosafety & Biosecurity Workshop of PBSA Sindh Chapter on 15th Dec., 2019

2020

- ❖ **Completed** three-day Hands-on workshop on “Development of snake bite diagnostic” at Barret Hodgson University, Karachi Pakistan from 22-24 January, 2020.

❖ **EXPERIENCE**

- 1999** Worked as Supervisor in the Diagnostic and Research Laboratory, Department of Microbiology, Shah Abdul Latif University, Khairpur, Sindh, Pakistan (SALU-KSP).
- 1987-1990** In-charge Departmental Seminar Library for four years at (SALU-KSP).
- 1987-1994** In-charge Pakistan Study Tours of Department of Microbiology, (SALU-KSP).
- 1992-1994** Ex-Officio (Quiz & debates) of the Department of Microbiology, (SALU-KSP).
- 1997-1999** In-charge, scientific store of the Department of Microbiology, (SALU-KSP).
- 1999** Arranged a blood donation camp with the collaboration of Khairpur Health Education & Environmental Society (KHEES), Khairpur and the Diagnostic and Research Center of Microbiology Department (SALU-KHP).
- 1999-2001** In-charge Seminar Library, Laboratories, Ex-officio activities of the Department of Microbiology, University of Sindh, Jamshoro, Pakistan.

EVENTS ORGANIZED

- 2005** Organized **1st National Symposium on Microbiology** “Microbes: Foes or Friends” as Organizing Secretary.
- 2010** Organized **2nd National Symposium on Microbiology** “New Trends and Advancement in Microbiology” as Organizing Secretary at University of Sindh Jamshoro from 18-20th March 2010.

COURSES TAUGHT TO BS (Four years Program)

- 1) General Microbiology, General Immunology, Microbial Taxonomy, General Virology
- 2) Soil Microbiology, Mycology, Environmental Microbiology, Industrial Microbiology
- 3) Microbial Anatomy & Physiology, Medical Bacteriology
- 4) Dermatology (Mycosis), Food & Dairy Microbiology, Clinical Bacteriology
- 5) Epidemiology, Applications of Biotechnology

MS / M.PHIL. & PH.D. STUDENTS

- 1) Environmental Biotechnology, Applied Biotechnology, Infectious Disease Epidemiology
- 2) Clinical Lab. Technology, Environmental Science and Management, Microbial Biotechnology
- 3) Advances in Food & Fermentation Technology, Project Report & Thesis Writing,
- 4) Infectious Diseases, Management and Safe Practices.

REFERENCES

- 1- **PROF. DR. AIJAZ AHMED SOOMRO**, Institute of Food Science, Nutrition and Technology, Sindh Agriculture University, TandoJam, Sindh, Pakistan. Email. aijaz68@hotmail.com, Cell No. +92-300-3099560.
- 2- **PROF. (Rtd.) DR. FARMAN ALI SHAH**, Department OF Chemical Engineering, Mehran Universtiy of Engineering and Technology, Jamshoro. Email. farman.shah@faculty.muuet.edu.pk, Cell No. +92-300-3798620.
- 3- **PROF. (Rtd) DR. GHULAM QADIR SHAR**, Department of Chemistry, Shah Abdul Latif University, Khairpur, Sindh, Pakistan, Email.ggadir.shar@salu.edu.pk, Cell No. +92-300-7086023.
- 4- **DR. ABDUL HAMEED SOLANGI**, Principal Scientific Officer, Southern Agriculture Center, Pakistan Agricultural Research Council, Old Blocks 9 and 10, University of Karachi, Karachi, Email. drahsolangi@gmail.com, Cell No. +92-333-2240616.
- 5- **PROF. (Rtd.) DR. FERHAT ABBASS**, Center for Advanced Studies in Vaccinology and Biotechnology (CASVAB), Brewery Road, Quetta, Balouchistan, Pakistan, Email. ferhatcasvab@yahoo.com, Cell No. +92-300-3814832.
- 6- **PROF. (Rtd.) DR. SAGHEER AHMED SHAIKH**, Institute of Food, Technology and Nutrition, Faculty of Crop Protection, Sindh Agriculture University, TandoJam, Sindh, Pakistan. Email. sasheikhsau@gmail.com, Cell No. +92-300-3063464.
- 7- **PROF. DR. KHALIDA FARYAL ALMANI**, Center for Environmental Sciences, University of Sindh, Jamshoro, Pakistan, Email. falmani@hotmail.com, Cell No. +92-333-2633835.
- 8- **PROF. DR. MUKHTIAR AHMED MAHAR**, Dept. of Fresh water Biology & Fisheries, University of Sindh, Jamshoro, Pakistan, Email. mukhtiar.mahar@usindh.edu.pk Cell No. +92-333-7255153.