



## CV

### A) Personal and contact details

**Surname:** Rahman

**First name:** Asim ur

**Date and place of Birth:** 01-10-1993, Pakistan

**Researcher ID, if applicable (e.g. ORCID, Researcher ID):** Not Applicable

**Date of the CV:** 05-05-2022

### B) Education/Degrees

**Date of awarding of the degree certificate:** 22/02/2015 – 25/09/2017

**Research discipline:** Environmental Microbiology

**Degree title:** Master of Philosophy in the Subject of Microbiology (M.Phil.)

**Name of the educational institution and faculty/department:** Department of Microbiology,  
Faculty of Biological Sciences, Quaid-i-Azam University, Islamabad, Pakistan

**Country where the degree was completed:** Pakistan

**Major subjects of study/degree programme:** Microbiology, Molecular Biology, Structural  
Chemistry

**Score:** CGPA: 4.0 out of 5.0 (80% marks)

**Thesis title:** “Extraction of Bioactive Compounds from Newly Isolated Marine Bacteria”.

**Supervisor/tutor name and contact details:** Dr. Mohammad Adil Nawaz Khan, (Ph. No # +92-  
300-9563667), (Email: [manawaz@bs.qau.edu.pk](mailto:manawaz@bs.qau.edu.pk))

**Date of awarding of the degree certificate:** 02/09/2010 – 04/08/2014

**Research discipline:** General Microbiology

**Degree title:** Bachelor Studies in Microbiology (BS Hons)

**Name of the educational institution and faculty/department:** Centre for Biotechnology and  
Microbiology, University of Peshawar, Peshawar, Pakistan

**Country where the degree was completed:** Pakistan

**Major subjects of study/degree programme:** Microbiology, Biochemistry, Molecular Biology,  
Genetic Engineering, Bioinformatics, and Computer Science

**Score:** CGPA: 3.4 out of 4.0 (78% marks)

**Supervisor/tutor name and contact details:** Dr. Kafeel Ahmad, (Ph. No # +92-342-9143809),  
(Email: [kafeelpbg@gmail.com](mailto:kafeelpbg@gmail.com))

**C) Other Education, qualifications and/or supplementary training**

**Dates of completion:** 01/09/2008 – 05/07/2010

**Name of the certificate/diploma:** F.Sc (Pre-Medical group) (Higher Secondary School Certificate)

**Name of the provider of the education or training (name and locality) with contact details:**

Government College Peshawar, Peshawar, Pakistan. (<http://gcp.kp.gov.pk/>)

**Main subjects or modules of study:**

Biology, Chemistry, Physics, and Social Science

**Score:** 73% marks (807 out of 1100 marks)

**Dates of completion:** 12/09/2005 – 04/07/2008

**Name of the certificate/diploma:** Matric (General Science group) (Secondary School Certificate)

**Name of the provider of the education or training (name and locality) with contact details:**

Al-Karim Public High School, Charsadda (24420), Pakistan.

**Main subjects or modules of study:**

Biology, Chemistry, Physics, Maths and Social Sciences

**Score:** 81% marks (737 out of 900 marks)

**Dates of completion:** 01/12/2020 – 31/05/2021

**Name of the certificate/diploma:** International Research Internship

**Name of the provider of the education or training (name and locality) with contact details:**

Dr. Andreas Schramm, Centre for Electromicrobiology, Department of Biosciences, Aarhus

University, Aarhus (8000), Denmark. (Ph. No # +45 6020 2659, Email:

[andreas.schramm@bios.au.dk](mailto:andreas.schramm@bios.au.dk)).

This fully funded internship was provided by the **Higher Education Commission of Pakistan.**

**Main subjects or modules of study:**

1. Acquired training in Molecular Biology techniques (DNA extraction and purification from pure and mixed microbial cultures, Heterologous expression, PCR reactions, Gel electrophoresis).
2. Acquired training in 16S rRNA sequencing, Library preparation for Next Generation Sequencing (MiSeq) and their results analysis.
3. Acquired training in Genome Annotation, Genome Exploration, Metabolic Pathways development, and analysis using web-based servers, Novel secondary metabolites analysis (Anti-smash), and Phylogenomic analysis for bacterial isolates.

**Score:** Not Applicable



#### **D) Current employment**

**Start date of employment:** 09/09/2021 – 31/08/2022

**Job title:** Research Assistant

**Employer name, contact details and place of work:** Dr. Cigdem Moral laboratory, Department of Environmental Engineering, Faculty of Engineering, Akdeniz University, Antalya (07058), Turkey. (Ph. No # +90 242 3106354, Email: [cigdemmoral@akdeniz.edu.tr](mailto:cigdemmoral@akdeniz.edu.tr)).

**Short description of your role and main responsibilities:**

**Main duties performed:**

1. Sampling and Isolation of bacterial strains from faecal polluted water samples collected from Akdeniz's University Hospital wastewater stream.
2. Screening for antibacterial resistance in the isolated bacterial strains via antibiogram profiling.
3. Morphological, Biochemical, and Molecular identification of the selected bacterial strains (both sensitive and resistant ones).
4. Statistical analysis for representation of the selected strains using high-quality draft genome sequencing with resistant genes exploration.
5. Investigation of the flow of resistant genes from related resistant strains to sensitive strains using bioinformatic and statistical tools.

**Stage /years to be counted for research career:** 1 year

#### **E) Previous work experience**

**Start date of employment:** 01/04/2019 – 30/04/2020

**Job title:** Medical Laboratory Assistant-II

**Employer name, contact details and place of work:** Dr. Wasim Sajjad (Gut-microbe interaction laboratory) Department of Biological Sciences, National University of Medical Sciences, Rawalpindi (46000), Pakistan. (Ph. No # +92 (051) 9270677 ext 124, Email: [sajjadw@numspak.edu.pk](mailto:sajjadw@numspak.edu.pk)).

**Short description of your role and main responsibilities:**

**Main duties performed in assisting research students:**

1. Sampling (for gut Microbiome study) from the indigenous population of Hunza Valley (Remote Himalayan Range), Gilgit, Pakistan.
2. Isolation of Bacterial species from human faeces, and their morphological and molecular identification to investigate the microbial diversity dedicated to the indigenous population of Hunza Valley.

3. Extraction and purification of bioactive metabolites from the 2 abundant classes of the identified bacteria.
4. Evaluation of their antagonism and synergism (antimicrobial and antioxidant effects) on other indigenous microbial flora (same from the sample). As we were expecting exploitation competition among the microbial species for the bioavailable iron (A hunt for a new Biocontrol and microbiome modulation strategies).

**Stage /years to be counted for research career:** Not Applicable

#### F) Previous work experience

**Start date of employment:** 01/09/2017 – 31/08/2018

**Job title:** Lecturer (Academic)

**Employer name, contact details and place of work:** Al-Karim Public High School & College, Charsadda (24420), Khyber Pakhtunkhwa, Pakistan. Ph. No # +92-091-6513615.

**Short description of your role and main responsibilities:**

I worked as an O-level and A-level biology tutor.

**Stage /years to be counted for research career:** Not Applicable

**Career /study breaks (if any):** No

Dates (from-to)	Reason
November 2018 – March 2019	I was looking for internships and Ph.D. positions to get myself connected to research environment.

#### G) Language skills

**Mother tongue**

**Other language(s)**

UNDERSTANDING		SPEAKING		WRITING
Listening	Reading	Spoken interaction	Spoken production	
B-2	C-1	B-2	B-1	C-1
Independent User	Proficient User	Independent User	Independent User	Proficient User

**H) Any scientific publications or published book? (Yes)**

1. Antioxidative and Radioprotective Properties of Glycosylated Flavonoid, Xanthorhamnin from Radio- Resistant Bacterium Bacillus indicus Strain TMC-6.

**2020** <https://link.springer.com/article/10.1007/s00284-020-01930-7>

Three research articles are already in pipeline and will be published soon If I could secure some financial support.

**I) Communication skills:**

So far, I've been exposed to various research environments (Pakistan, Denmark, and Turkey), which have allowed me to tap into my hidden potential for excellent communication skills, a pre-requisite for adaptation to any research setting. I am skilled at evaluating options, developing solutions, timely delegation of tasks and responsibilities. I am a convulsive speaker and a convulsive listener with a good sense of humour and seriousness to maintain a healthy research environment.

**J) Organisational/managerial/Team leadership skills:**

During my master's programme, I worked as a laboratory manager, where I was responsible for performing lab documentation for ordering and replacing new chemicals, taking care of lab instruments, including cleaning and maintenance, and assisting other researchers in the laboratory. I've also been a vice-captain for the university cricket team, and we've won one national level cup (inter-universities) and two intra-university tournament cups under my leadership. In addition, I was a member of the Quaidian Blood Donor Society, which was dedicated to collecting blood donations for poor and needy thalassemia patients.

**K) Any international experience, including presentations at international conferences, or any other mobility period**

1. I have completed six months of research training at the Centre for Electromicrobiology, Department of Bioscience, Aarhus University, Denmark, as part of the Higher Education Commission of Pakistan's Fully Funded International Research Internship programme.
2. I am currently employed as a research assistant at the Department of Environmental Engineering, Faculty of Engineering, Akdeniz University, Turkey, where I have worked since September 9, 2021.
3. I have given an oral presentation on the topic "Emerging Superbugs-Standardizing Antimicrobial Susceptibility Testing, Surveillance, and Lab Biosafety" at the Pearl Continental Bhurban, Pakistan, as part of the Second International Biennial Conference organised by the Pakistan



Society for Microbiology, the National Core Group in Life Sciences (NCGLS), and the International Council for Life Sciences (ICLS). (September 24–September 26, 2017)

**L) Prizes/awards or other societal merits and honours (if any) (Yes)**

1. Fellowship achievement worth 15,000 Pakistani rupees from the university administration at Quaid-i-Azam University, Islamabad, Pakistan, for three consecutive semesters (2016-2017).
2. On achieving high grades in course work, I received a Haier laptop from Pakistan's Prime Minister Laptop Scheme at Quaid-i-Azam University (2017).
3. Second prize winner of 30,000 Pakistani rupees in an oral presentation competition on "Staphylococcus as superbug" at the NIBGE in Faisalabad, Pakistan (5 April 2017).
4. Also achieved a Dell Laptop from Chief Minister of Khyber Pakhtunkhwa Laptop Scheme on performing well in terminal exams (2013).
5. Academic excellence award of 50,000 Pakistani rupees from the Department of Microbiology at the University of Peshawar for two semesters of high grades (2011).

**M) Methods, software, infrastructures, materials, guides, and tools developed or published (if any)**

**N) Research Interests**

Microbial Diversity.  
Microbial Bioactive Products.

**O) Job-related skills**

**1. Microbiological Skills:**

- Sampling and isolation of bacterial and fungal species from different sampling sources, Microbial culturing techniques, and Purification of bacterial and fungal colonies by various techniques.
- Morphological, biochemical, and molecular identification of microorganisms (Bacteria and Fungi).
- Antimicrobial assays, Antioxidant assays, Anticancer assays, Cytotoxic assays, Biofilm assay, Enzyme assay.
- Basic skills required in the microbiological research lab: Microscopy (light & fluorescence), Incubation, Centrifugation, Sterilization techniques, Autoclave, Laminar Air Flow Hood, Spectrophotometric analysis, pH meter, lyophilization.

**2. Industrial Microbiological Skills:**

- Fermentation, solvent-phase extraction, solid-phase extraction, purification, and structural characterization techniques of Bioactive secondary metabolites (Extracellular and Intracellular).



◦ Lipids, and proteins extraction from bacterial and fungal cells, Gel permeation chromatography, thin layer chromatography, SDS-page analysis, FT-IR, UV-Vis spectroscopy, GC-MS, HPLC, LC-MS.

**3. Molecular Biology and Bioinformatics Skills:**

◦ DNA extraction and purification from bacteria and fungi, PCR, qPCR, and Agarose Gel Electrophoresis, Heterologous expression of recombinant proteins, Next-generation Sequencing results analysis using genome annotation, genome exploration, pathway analysis, and phylogenomics.

A handwritten signature in blue ink, appearing to read "A. R. ...".

**Date: 05/05/2022**

**Signature**