

## Fazal Adnan

Associate Professor

Atta-Ur-Rahman School of Applied Biosciences

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## About

Dr. Fazal Adnan is working as Associate Professor in the Atta-Ur-Rahman School of Applied Biosciences. Dr. Fazal Adnan has a PhD in Bacterial Gene Expression/Regulation. Dr. Fazal Adnan has published 53 research articles & conference papers having a citation count of 654, carried out 7 projects and filed 1 intellectual property.

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## Qualifications

<b>PhD in Bacterial Gene Expression/Regulation</b> Justus Liebig Universität Gießen , Germany	2010 - 2015
<b>MPhil in Enzymology</b> Government College University Lahore , Pakistan	2006 - 2009
<b>B.Sc (Hon) in Biotechnology</b> University of Peshawar , Pakistan	2001 - 2006

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## Experience

<b>Associate Professor</b> Atta-Ur-Rahman School of Applied Biosciences	2021- Present
<b>Assistant Professor</b> Atta-Ur-Rahman School of Applied Biosciences	2019 - 2021
<b>Assistant Professor</b> Atta-Ur-Rahman School of Applied Biosciences	2016 - 2019
<b>Assistant Professor</b> Atta-Ur-Rahman School of Applied Biosciences	2016 - 2016
<b>Assistant Professor</b> Atta-Ur-Rahman School of Applied Biosciences	2016 - 2016
<b>Assistant Professor</b> Atta-Ur-Rahman School of Applied Biosciences	2015 - 2016
<b>Analytical Microbiologist</b> Pakistan Standards and Quality Control Authority (PSQCA) , PSQCA head office, Opposite PCSIR Lahore	2008 - 2009
<b>Research Officer</b> Center of Excellence in Molecular Biology (CEMB), Punjab University , 87 west canal bank road, Tokar niaz baig Lahore	2007 - 2008

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## Awards

<b>As. Prof. Dr. Fazal Adnan</b> Best Teacher of the Year 2017-2018 award	2019
<b>Lab Rotation</b> I was selected among 15 PhD scholars who were awarded with two months lab rotation fellowship to Australia.	2012

Research Projects

National Projects

Establishment of Phage Therapy Center at NUST	2024
Funding Agency: NUST	
Amount: PKR 1,000,000.00	
Status: Approved_inprocess	
Therapeutic phage cocktails to combat colibacillosis in poultry	2023
Funding Agency: ZHAW Leading House Switzerland	
Amount: PKR 5,806,178.00	
Status: Approved_inprocess	
Investigating resistome, virulence and zoonotic potential of Mammary Pathogenic E. coli (MPEC) strains isolated from mastitic dairy and Machine Learning approach for risk factors assessment	2023
Funding Agency: Helmholtz Association of German Research Centers	
Amount: PKR 12,255,506.00	
Status: Approved_inprocess	
Training and awareness sessions for dairy farmers regarding various zoonotic infections in the hotspot areas of Pakistan	2022
Funding Agency: Swiss Universities Development and Cooperation Network (SUDAC)	
Amount: PKR 1,165,615.00	
Status: Completed	
CROP RESIDUE TO REVENUE AT THE FARM (R2R)	2022
Funding Agency: The swiss global network for education, research and innovation	
Amount: PKR 1,105,000.00	
Status: Completed	
CRISPR-CAS3 Mediated Whole Genome Excision of the Avian Pathogenic E. coli (APEC); Designing Precision Antibacterial against Colibacillosis in Poultry	2019
Funding Agency: HEC	
Amount: PKR 3,027,409.00	
Status: Completed	
Silencing of the Antibiotic Resistant Gene MecA in Staphylococcus Aureus by a Synthesis sRNA	2016
Funding Agency: HEC	
Amount: PKR 500,000.00	
Status: Completed	

International Projects

Research Articles

Complete genome sequences of three avian pathogenic Escherichia coli strains isolated from colibacillosis-affected poultry in Pakistan	2025
Jing zhang Jeremy D. R. Cherbuin Muhammad Khan Hira Niaz Fazal Adnan	
Microbiology Resource Announcement , Volume 14, Issue 8, Pages 1-5	
Impact Factor: 2.700   Quartile: 1	
DOI: <a href="https://doi.org/10.1128/mra.00307-25">https://doi.org/10.1128/mra.00307-25</a>	
Genomic and proteomic characterization of four novel Schitoviridae family phages targeting uropathogenic Escherichia coli strain	2025
Hira Niaz Mikael Skurnik Fazal Adnan	
Virology Journal , Volume:22, Issue:1, Article Number: 83	
Impact Factor: 4.000   Quartile: 2   Citations: 2	
DOI: <a href="https://doi.org/10.1186/s12985-025-02691-0">https://doi.org/10.1186/s12985-025-02691-0</a>	
Promising antibacterial performance of Ag-nanoparticles intercalated Nb2CTx MXene towards E. coli and S. aureus	2024
Aamen Nasir Imran Haider Sajid Arooma Syed Fazal Adnan Syed Rizwan Hussain	
Nano-Structures and Nano-Objects , Volume:40, Article Number 101415	
Impact Factor: N/A   Citations: 3	
DOI: <a href="https://doi.org/10.1016/j.nanoso.2024.101415">https://doi.org/10.1016/j.nanoso.2024.101415</a>	

<b>Imidazolium, pyridinium and pyrazinium based ionic liquids with octyl side chains as potential antibacterial agents against multidrug resistant uropathogenic E. coli</b> <i>Sidrah Hafeez Zamar rasool Awan Samia Hafeez Rehan Zafar Paracha Mudassir Iqbal Dilawar Khan Fazal Adnan Heliyon</i> , Volume 10, Issue 22, Article Number e39829 <b>Impact Factor:</b> 3.400   <b>Quartile:</b> 1   <b>Citations:</b> 2 <b>DOI:</b> 10.1016/j.heliyon.2024.e39829	2024
<b>Effects of imidazole derivatives on cellular proliferation and apoptosis in myeloid leukemia</b> <i>Bazla Binte Nadeem Aysha Bibi Mudassir Khan Gul Rukh Sajjad Fazal Adnan Zaheer Ahmad Dilawar Khan BMC Cancer</i> , Volume 24, Article Number 1200 <b>Impact Factor:</b> 3.400   <b>Quartile:</b> 2 <b>DOI:</b> 10.1186/s12885-024-12958-4.	2024
<b>Synthesis, evaluation, and in silico studies of imidazolium and pyridinium-based ionic liquids with Dioctyl succinamic acid anion for enhanced antibacterial applications</b> <i>Syeda Hadeesa Kazmi Amina Arshad Sidrah Hafeez Fazal Adnan Uzma Habib Ali Haider Muhammad Adil Mansoor Mudassir Iqbal Journal of Molecular Liquids</i> , Volume 401, Article Number 124714 <b>Impact Factor:</b> 6.00   <b>Quartile:</b> 1   <b>Citations:</b> 5 <b>DOI:</b> <a href="https://doi.org/10.1016/j.molliq.2024.124714">https://doi.org/10.1016/j.molliq.2024.124714</a>	2024
<b>Mycorrhizosphere bacteria inhibit greenhouse gas emissions from microplastics contaminated soil by regulating soil enzyme activities and microbial community structure</b> <i>Zeeshan Khan Ghulam Haider Fazal Adnan Zeshan Muhammad Faraz Bhatti Tariq Shah Parvaiz Ahmad Journal of Environmental Management</i> , Volume 356, Article Number 120673 <b>Impact Factor:</b> 8.700   <b>Quartile:</b> 1   <b>Citations:</b> 8 <b>DOI:</b> <a href="https://doi.org/10.1016/j.jenvman.2024.120673">https://doi.org/10.1016/j.jenvman.2024.120673</a>	2024
<b>Biominerallization and corrosion inhibition of steel in simulated bio-inspired self-healing concrete</b> <i>Maria Kanwal Fazal Adnan Rao Arsalan Khushnood Amna Jalil Hammad Anis Khan Abdul Ghafar Wattoo Sajid Rasheed Journal of Building Engineering</i> , Volume 82, Article Number 108224 <b>Impact Factor:</b> 6.4   <b>Quartile:</b> 1   <b>Citations:</b> 7 <b>DOI:</b> <a href="https://doi.org/10.1016/j.jobbe.2023.108224">https://doi.org/10.1016/j.jobbe.2023.108224</a>	2024
<b>Combating Cariogenic Streptococcus mutans Biofilm Formation and Disruption with Coumaric Acid on Dentin Surface</b> <i>Syed Sohail Ahmad Muhammad Faisal Siddiqui Farhana Maqbool Ihsan Ullah Fazal Adnan Aqel Albutti Noorah Alsowayeh Ziaur Rahman Molecules</i> , Volume: 29, Issue: 02, Article Number: 397 <b>Impact Factor:</b> 4.6   <b>Quartile:</b> 2   <b>Citations:</b> 6 <b>DOI:</b> 10.3390/molecules29020397	2024
<b>Designing of fragment based inhibitors with improved activity against E. coli AmpC <math>\beta</math>-lactamase compared to the conventional antibiotics</b> <i>Sidrah Hafeez Rehan Zafar Paracha Fazal Adnan Saudi Journal of Biological Sciences</i> , Volume 31, Issue 1, Article Number 103884 <b>Impact Factor:</b> 4.400   <b>Quartile:</b> 1 <b>DOI:</b> <a href="https://doi.org/10.1016/j.sjbs.2023.103884">https://doi.org/10.1016/j.sjbs.2023.103884</a>	2024
<b>Biochar alleviated the toxic effects of PVC microplastic in a soil-plant system by upregulating soil enzyme activities and microbial abundance</b> <i>Attia Rubab Khalid Tariq Shah Muhammad Asad Ahmad Ali Eisha Samee Fazal Adnan Muhammad Faraz Bhatti Sven Marhan Claudia I. Kammann Ghulam Haider Environmental Pollution</i> , Volume 332, Article Number 121810 <b>Impact Factor:</b> 8.9   <b>Quartile:</b> 1   <b>Citations:</b> 55 <b>DOI:</b> <a href="https://doi.org/10.1016/j.envpol.2023.121810">https://doi.org/10.1016/j.envpol.2023.121810</a>	2023
<b>High resistance of fluoroquinolone and macrolide reported in avian pathogenic Escherichia coli isolates from the humid subtropical regions of Pakistan</b> <i>Amna Jalil Saleha Masood Qurtaul Ain Saadia Andleeb Edward G. Dudley Fazal Adnan Journal of Global Antimicrobial Resistance</i> , Volume 33, Pages 5-17 <b>Impact Factor:</b> 4.349   <b>Quartile:</b> 2   <b>Citations:</b> 3 <b>DOI:</b> 10.1016/j.jgar.2023.01.009	2023
<b>Functional annotation and comparative analysis of four Botrytis cinerea mitogenomes reported from Punjab, Pakistan</b> <i>Tehsin Fatma Haris Ahmed Khan Aqeel Ahmed Fazal Adnan Zeshan Nasar Um Minullah Muhammad Faraz Bhatti</i>	2023

**Assessment of the MICP potential and corrosion inhibition of steel bars by biofilm forming bacteria in corrosive environment**

2023

Maria Kanwal Rao Arsalan Khushnood Fazal Adnan Abdul Ghafar Wattoo Amna Jalil

Cement and Concrete Composites, Volume 137, Article Number 104937

Impact Factor: 9.930 | Quartile: 1 | Citations: 29

DOI: <https://doi.org/10.1016/j.cemconcomp.2023.104937>

**Feasibility assessment of newly isolated calcifying bacterial strains in self-healing concrete**

2023

Nafeesa Shaheen Rao Arsalan Khushnood Shazim Ali Memon Fazal Adnan

Construction and Building Materials, Volume 362, Article Number 129662

Impact Factor: 7.693 | Quartile: 1 | Citations: 29

DOI: <https://doi.org/10.1016/j.conbuildmat.2022.129662>

**High Occurrence of Multidrug-Resistant Escherichia coli Strains in Bovine Fecal Samples from Healthy Cows Serves as Rich Reservoir for AMR Transmission**

2022

Amna Jalil Shabana Gul Muhammad Faraz Bhatti Muhammad Faisal Siddiqui Fazal Adnan

Antibiotics-Basel, Volume 12(1), Article Number 37

Impact Factor: 5.222 | Quartile: 1 | Citations: 11

DOI: <https://doi.org/10.3390/antibiotics12010037>

**Targeting Microbial Biofouling by Controlling Biofilm Formation and Dispersal Using Rhamnolipids on RO Membrane**

2022

Zahidullah Muhammad Faisal Siddiqui Shamas Tabraiz Farhana Maqbool Fazal Adnan Ihsan Ullah Muhammad Ajmal Shah Waqar Azeem Jadoon Tariq

Mehmood Sadia Qayyum Ziaur Rahman

Membranes, Volume 12, Issue 10, Article Number 928

Impact Factor: 4.562 | Quartile: 1 | Citations: 3

DOI: <https://doi.org/10.3390/membranes12100928>

**Synthesis, anticancer evaluation and molecular docking studies of methotrexate's novel Schiff base derivatives against malignant glioma cell lines**

2022

Aifa Nemat Ishaq Naseeb Khan Saima Kalsoom Shoaib Ahmad Malik Shahid Ayub Fazal Adnan Muhammad Amjad Mudassir Iqbal

Journal of Biomolecular Structure and Dynamics, Volume 40, No. 7, Pages 2865-2877

Impact Factor: 5.235 | Quartile: 1 | Citations: 3

DOI: [10.1080/07391102.2020.1844053](https://doi.org/10.1080/07391102.2020.1844053)

**Prevalence and assessment of associated risk factors of hepatitis B and C infections in low-socioeconomic communities**

2022

Aisha Noreen Naik Alam Zainab Syed Aroosa Aftab Farah Shamim Syed Najeebullah Dilawar Khan Salik Javed Kakar Tahir Ahmed Fazal Adnan

Future Virology, Volume 17, Issue 5, Pages 291-303

Impact Factor: 1.831 | Quartile: 3 | Citations: 1

DOI: [10.2217/fvl-2021-0060](https://doi.org/10.2217/fvl-2021-0060)

**Extensively Drug-Resistant Klebsiella pneumoniae Counteracts Fitness and Virulence Costs That Accompanied Ceftazidime-Avibactam Resistance Acquisition**

2022

Elias Eger Michael Schwabe Lukas Schulig Nils-Olaf Hübner Jürgen A. Bohnert Uwe T. Bornscheuer Stefan E. Heiden Justus U. Müller Fazal Adnan Karsten

Becker Carlos L. Correa-Martinez Sebastian Guenther Evgeny A. Idevlevich Daniel Baecker Katharina Schaufler

Microbiology Spectrum, Volume 10, Issue 3, Pages 1-21

Impact Factor: 7.171 | Quartile: 1 | Citations: 25

DOI: <https://doi.org/10.1128/spectrum.00148-22>

**Synthesis of non-cytotoxic Co3O4 nanocatalysts for thermocatalytic methane decomposition by resource recovery**

2022

Sheeza Mughal Hafiz Ali Haider Sehole Asad Mumtaz Muhammad Bilal Khan Niazi Fazal Adnan Hongbo Zhao Hussnain Ahmed Janjua

Biomass Conversion and Biorefnery, Pages 1-19

Impact Factor: 4.987 | Quartile: 1

DOI: <https://doi.org/10.1007/s13399-022-02606-x>

**Targeting Acyl Homoserine Lactones (AHLs) by the quorum quenching bacterial strains to control biofilm formation in Pseudomonas aeruginosa**

2022

Sayed Javariya Khalid Quratul ain Sher Jamal Khan Amna Jalil Muhammad Faisal Siddiqui Tahir Ahmed Malik Badshah Fazal Adnan

Saudi Journal of Biological Sciences, Volume 29, Issue 3, Pages 1673-1682

- Impact Factor:** 4.219 | **Quartile:** 2 | **Citations:** 29  
**DOI:** <https://doi.org/10.1016/j.sjbs.2021.10.064>
- Silencing of Curlin Protein via M13 Phagemid-Mediated Synthetic sRNA Expression Reduces Virulence in the Avian Pathogenic E. coli (APEC)** 2022  
*Sayed Abdullah Quratul Ain Amna Jalil Dilawar Khan Arsalan Khan Muhammad Qasim Malik Badshah Fazal Adnan*  
*Current Microbiology* , Volume 79, Article Number: 105  
**Impact Factor:** 2.188 | **Quartile:** 4  
**DOI:** <https://doi.org/10.1007/s00284-022-02791-y>
- Enrichment of the hydrogenotrophic methanogens for, in-situ biogas up-gradation by recirculation of gases and supply of hydrogen in methanogenic reactor** 2022  
*Alam Khan Sedrah Akbar Valentine Okonkwo Cindy Smith Samiullah Khan Aamer Ali Shah Fazal Adnan Umer Zeeshan Ijaz Safia Ahmed Malik Badshah*  
*Bioresource Technology* , Volume 345, Article Number 126219  
**Impact Factor:** 11.4 | **Quartile:** 1 | **Citations:** 41  
**DOI:** <https://doi.org/10.1016/j.biortech.2021.126219>
- Lactobacillus reuteri and Enterococcus faecium from Poultry Gut Reduce Mucin Adhesion and Biofilm Formation of Cephalosporin and Fluoroquinolone-Resistant Salmonella enterica** 2021  
*Abubakar Siddique Sara Azim Amjad Ali Fazal Adnan Maryum Arif Muhammad Imran Erika Ganda Abdur Rahman*  
*Animals* , Volume 11(12), Article Number 3435  
**Impact Factor:** 2.752 | **Quartile:** 1 | **Citations:** 19  
**DOI:** <https://doi.org/10.3390/ani11123435>
- Combating Biofilm by Targeting Its Formation and Dispersal Using Gallic Acid against Single and Multispecies Bacteria Causing Dental Plaque** 2021  
*Aqeel Albutti Muhammad Shoaib Gul Muhammad Faisal Siddiqui Farhana Maqbool Fazal Adnan Ihsan Ullah Ziaur Rahman Sadia Qayyum Muhammad Ajmal Shah Muhammad Ajmal Shah Muhammad Salman*  
*Pathogens* , Volume 10(11), Article 1486  
**Impact Factor:** 3.492 | **Quartile:** 2 | **Citations:** 13  
**DOI:** <https://doi.org/10.3390/pathogens10111486>
- Computational Assessment of Botrytis cinerea Lipase for Biofuel Production** 2021  
*Tehsin Fatma Zeeshan Zafar Sidra Fatima Rehan Zafar Paracha Fazal Adnan Zeshan Nasar Virk Muhammad Faraz Bhatti*  
*Catalysts* , Volume 11(11), Article Number 1319  
**Impact Factor:** 4.146 | **Quartile:** 2 | **Citations:** 5  
**DOI:** <https://doi.org/10.3390/catal11111319>
- Starved Spirodela polyrrhiza and Saccharomyces cerevisiae: a potent combination for sustainable bioethanol production** 2021  
*Qurrat ul ain Rana Muhammad Adil Nawaz Khan Muhammad Irfan Aamer Ali Shah Fariha Hasan Samiullah Khan Safia Ahmed Fazal Adnan Weizun L Meiting Ju Malik Badshah*  
*Biomass Conversion and Biorefinery* , Volume 11, Pages 1665–1674  
**Impact Factor:** 4.050 | **Quartile:** 2 | **Citations:** 9  
**DOI:** [10.1007/s13399-019-00540-z](https://doi.org/10.1007/s13399-019-00540-z)
- Hepatitis E virus genotyping in Pakistan: a regional study to explore the implications for pregnant females** 2021  
*Mahnor Nadeem Tahir Ahmed Salik Javed Kakar Fazal Adnan Sadia Anjum*  
*Future Virology* , Volume 16(9), Pages 611-617  
**Impact Factor:** 1.831 | **Quartile:** 4 | **Citations:** 2  
**DOI:** [10.2217/fvl-2020-0337](https://doi.org/10.2217/fvl-2020-0337)
- Virulence profiling of Shigella flexneri and emergence of serotype 2b as a highly virulent shigellosis causing strain in Pakistan** 2021  
*Iqbal Nisa Muhammad Qasim Arnold Driessen Jeroen Nijland Fazal Adnan Malik Nawaz Shuja Hazir Rahman*  
*Infection, Genetics and Evolution* , Volume 93, Article Number 104922  
**Impact Factor:** 3.342 | **Quartile:** 3 | **Citations:** 1  
**DOI:** [10.1016/j.meegid.2021.104922](https://doi.org/10.1016/j.meegid.2021.104922)
- TRAP transporter TakP; A key player in the resistance against selenite-induced oxidative stress in Rhodobacter sphaeroides** 2021  
*Fazal Adnan Amna Jalil Tahir Ahmed Afra Rahman Nawal Dawood Ghulam Haider Muhammad Faisal Siddiqui Leon Rostock Sebastian Guenther Katharina Schaeffler*  
*Microbiological Research* , Volume 252, Article Number 126828

<b>Impact Factor:</b> 5.415   <b>Quartile:</b> 1   <b>Citations:</b> 4 <b>DOI:</b> <a href="https://doi.org/10.1016/j.micres.2021.126828">https://doi.org/10.1016/j.micres.2021.126828</a>	
<b>AXL Receptor Tyrosine Kinase: A Possible Therapeutic Target in Acute Promyelocytic Leukemia</b> <i>Mariam Fatima Salik Javed Kakar Fazal Adnan Khalid Khan Afsar Ali Mian Dilawar Khan</i> <i>BMC Cancer</i> , Volume 21, Article Number 713 <b>Impact Factor:</b> 4.430   <b>Quartile:</b> 2   <b>Citations:</b> 4 <b>DOI:</b> 10.1186/s12885-021-08450-y	2021
<b>Photodynamic Therapy: A Rational Approach Toward COVID-19 Management</b> <i>Roha Tariq Usama Ahmed Samra Kanwal Fazal Adnan Muhammad Qasim</i> <i>Journal of Exploratory Research in Pharmacology</i> , Volume 6(2), Pages 44-52 <b>Impact Factor:</b> N/A <b>DOI:</b> 10.14218/JERP.2020.00036	2021
<b>Isolation of alkaliphilic calcifying bacteria and their feasibility for enhanced CaCO<sub>3</sub> precipitation in bio-based cementitious composites</b> <i>Amna Jalil Nafeesa Shaheen Fazal Adnan Rao Arsalan Khushnood</i> <i>Microbial Biotechnology</i> , Pages 1-16 <b>Impact Factor:</b> 5.813   <b>Quartile:</b> 1   <b>Citations:</b> 39 <b>DOI:</b> <a href="https://doi.org/10.1111/1751-7915.13752">doi.org/10.1111/1751-7915.13752</a>	2021
<b>Phage-Encoded Endolysins</b> <i>Fatma Abdelrahman Maheswaran Easwaran Oluwasegun I. Daramola Samar Ragab Stephanie Lynch Tolulope J. Oduselu Fazal Mehmood Khan Akomolafe Ayobami Eduard Torrents Swapnil Sanmukh Ayman El-Shibiny Fatma Abdelrahman Maheswaran Easwaran Oluwasegun I. Daramola Samar Ragab Stephanie Lynch Tolulope J. Oduselu Fazal Mehmood Khan Akomolafe Ayobami Fazal Adnan Eduard Torrents Swapnil Sanmukh Ayman El-Shibiny</i> <i>Antibiotics</i> , Volume 10(2), Article Number 124 <b>Impact Factor:</b> 4.639   <b>Quartile:</b> 2   <b>Citations:</b> 158 <b>DOI:</b> <a href="https://doi.org/10.3390/antibiotics10020124">https://doi.org/10.3390/antibiotics10020124</a>	2021
<b>Encapsulated virgin coconut oil as a nanoscale in vitro solution against multiple drug resistant Staphylococcus aureus</b> <i>Ayesha Talib Fazal Adnan K N Manzoor A. Ijaz Farukh Javed Abid ali khan</i> <i>Micro &amp; Nano Letters</i> , Pages 1-7 <b>Impact Factor:</b> 1.102   <b>Quartile:</b> 4   <b>Citations:</b> 3 <b>DOI:</b> DOI: 10.1049/mna2.12001	2020
<b>Tannic acid treatment to deter microbial biofouling in flow cell system and on RO membrane in drip flow reactor</b> <i>Muhammad Faisal Siddiqui Harvey Winters Farhana Maqbool Sadia Qayyum Lakhveer Singh Ihsan Ullah Zia Ur Rahman Fazal Adnan Abdul Rehman</i> <i>Desalination and Water Treatment</i> , Vol.171, Pages 62–66 <b>Impact Factor:</b> 0.854   <b>Quartile:</b> 4   <b>Citations:</b> 3 <b>DOI:</b> 10.5004/dwt.2019.24767	2019
<b>Assessment of the risk for human health of Enterovirus and Hepatitis A virus in clinical and water sources from three metropolitan cities of Pakistan</b> <i>Tahir Ahmad Fazal Adnan Mahnoor Nadeem Salik Javed Kakar Sadia Anjum Ayesha Saad Abdul Waheed Najma Arshad</i> <i>Annals of Agricultural and Environmental Medicine</i> , Volume 25, Issue 4, Pages 708-713 <b>Impact Factor:</b> 1.030   <b>Quartile:</b> 4   <b>Citations:</b> 14 <b>DOI:</b> 10.26444/aaem/99590	2018
<b>Association of Metronidazole with Cancer: A Potential Risk Factor or Inconsistent Deductions?</b> <i>Fazal Adnan Muhammad Adil Waheed Iqbal Shabnam Wazir Imran Khan M. Umar Khayam Mohammad Amjad Kamal Shafiq Ahmad Ahmed Jawad Ishaq N. Khan</i> <i>Current Drug Metabolism</i> , Volume 19(11), Pages 902-909 <b>Impact Factor:</b> 2.277   <b>Quartile:</b> 3   <b>Citations:</b> 18 <b>DOI:</b> 10.2174/1389200219666180329124130	2018
<b>Use of Effective Micro-organisms (EM) technology and self-compacting concrete (SCC) technology improved the response of cementitious systems</b> <i>Hasnain Khan Syed Rizwan Ali Thomas A. Bier Fazal Adnan</i> <i>Construction and Building Materials</i> , Volume 152, Pages 642-650 <b>Impact Factor:</b> 3.485   <b>Quartile:</b> 1   <b>Citations:</b> 18 <b>DOI:</b> 10.1016/j.conbuildmat.2017.05.102	2017

- Prevalence of rotavirus, adenovirus, hepatitis a virus and enterovirus in water samples collected from different region of Peshawar, Pakistan** 2016
- Tahir Ahmad Najma Arshad Fazal Adnan Najam-us-Sahar Sadaf Zaidi Muhammad Talha Shahid Usman Zahoor Muhammad S Afzal Sadia Anjum*  
*Annals of Agricultural and Environmental Medicine*, Volume 23, Issue 4, Pages 576-580
- Impact Factor:** 0.829 | **Quartile:** 4 | **Citations:** 17  
**DOI:** 10.5604/12321966.1226849
- The sRNA SorY confers resistance during photooxidative stress by affecting a metabolite transporter in *Rhodobacter sphaeroides*** 2015
- Fazal Adnan Gabriele Klug Lennart Weber*  
*RNA Biology*, Volume 12, Pages 569-577
- Impact Factor:** 4.076 | **Quartile:** 2 | **Citations:** 33  
**DOI:** 10.1080/15476286.2015.1031948
- DegS and RseP Homologous Proteases Are Involved in Singlet Oxygen Dependent Activation of RpoE in *Rhodobacter sphaeroides*** 2013
- Aaron Nuss Fazal Adnan Lennart Weber Bork Berghoff Jens Glessner Gabrielle Klug*  
*Plos ONE*, Volume 8(11), Article Number e79520
- Impact Factor:** 3.534 | **Quartile:** 1 | **Citations:** 23  
**DOI:** 10.1371/journal.pone.0079520
- Production of alpha amylase from a randomly induced *Bacillus amyloliquefaciens* and its application as a desizer in textile industry** 2010
- Ikram Ul Haq Sikandar Ali Muhammad Mohsin Javed Uzma Hameed Ayesha Saleem Fazal Adnan MA Qadeer*  
*Pakistan Journal of Botany*, Volume 42 (1), Pages 473-484
- Impact Factor:** 0.947 | **Quartile:** 3  
**DOI:** <http://www.pakbs.org/pjbot/>
- Kinetics & thermodynamic studies of alpha amylase from *Bacillus licheniformis* mutant** 2010
- Ikram ul haq Fazal Adnan Muhammad Mohsin Javed Uzma Hameed*  
*Pakistan Journal of Botany*, Volume 42 (5), Pages 3507-3516
- Impact Factor:** 0.947 | **Quartile:** 3  
**DOI:** [http://www.pakbs.org/pjbot/PDFs/42\(5\)/PJB42\(5\)3507.pdf](http://www.pakbs.org/pjbot/PDFs/42(5)/PJB42(5)3507.pdf)

## Conference Proceedings

- Keynote speaker: The culprit shared genome of E. coli** 2024  
*Fazal Adnan*  
*One Health AMR Conference*, res.country(177,)  
**Citations:** N/A  
**DOI:** [https://www.facebook.com/story.php?story\\_fbid=451280207989592&id=100093228485876&\\_rdr](https://www.facebook.com/story.php?story_fbid=451280207989592&id=100093228485876&_rdr)
- ANTIBIOTICS; A POSSIBLE ALTERNATE TREATMENT OPTION FOR MYELOID LEUKEMIA** 2023  
*Syeda Maham Saba Naseem Awan Fazal Adnan Salik Javed Kakar Afsar Ali Mian Dilawar Khan*  
*European Hematology association congress 2023*, res.country(57,)  
**Citations:** N/A  
**DOI:** 10.1097/01.HS9.0000974192.13131.11
- Pathogenicity Evaluation of Crispr-Cas Mediated Mutants Lacking Ligase Associated with O-Antigen Polysaccharide in The Avian Pathogenic Escherichia Coli (Apec O1) Causing Colibacillosis** 2022  
*Anza Abbas Qurat ul Ain Afra Amna Jalil Mashkoor Mohsin Gilani Dr. Fazal Adnan*  
*14th International Conference on emerging trends in Bioinformatics and Biosciences*, res.country(177,)  
**Citations:** N/A  
**DOI:** <https://www.hu.edu.pk/news/398>
- Therapeutic and Prophylactic Evaluation of Phage Cocktail In Combating Mild and Severe Colibacillosis in Poultry** 2022  
*Hira Niaz Andleeb Khizar Anza Abbas Saleha Masood Dr. Fazal Adnan*  
*4th International Conference on emerging trends in Bioinformatics and Biosciences (ICETBB-2022)*, res.country(177,)  
**Citations:** N/A  
**DOI:** Nil
- Understanding the Diversity of Antibiotic Resistance and Emergence of Hybrid e. Coli Strains; a Cross-Sectional Study of Mammary Pathogenic e. Coli (MPEC) Isolates from Mastitic Milk** 2022  
*Amna Jalil Sahibzadi Noor Nisa Yezhi Fu Qurat ul Ain Edward G. Dudley Dr. Fazal Adnan*  
*Fourth International Conference on emerging trends in Bioinformatics and Biosciences*, res.country(177,)  
**Citations:** N/A  
**DOI:** Nil

## Book Chapters

- Biocatalysts in Biohydrogen Production** 2023  
*Junaid Ahmad Muhammad Faisal Siddiqui Lakhveer Singh Farhana Maqbool Ihsan Ullah Fazal Adnan Muhammad Ajmal Shah*  
In: *Book on Transition Metal-Based Electrocatalysts: Applications in Green Hydrogen Production and Storage* Chapter 8, Pages 205-217  
**Citations:** 1  
**DOI:** 10.1021/bk-2023-1435.ch008
- Role of bioelectrochemical systems for bioremediation of wastewaters and bioenergy production** 2020  
*Muhammad Faisal Siddiqui Zahid Ullah Lakhveer Singh Farhana Maqbool Sadia Qayyum Ihsan Ullah Ziaur Rahman Fazal Adnan*  
In: *Book on Delivering Low-Carbon Biofuels with Bioproduct Recovery*, Chapter 4, Pages 85-100  
**Citations:** 2  
**DOI:** <https://doi.org/10.1016/B978-0-12-821841-9.00010-4>
- Microbial Biofilm Cell Systems for Bioremediation of Wastewater** 2020  
*Muhammad Faisal Siddiqui Lakhvir Singh Farhana Maqbool Ziaur Rahman Fazal Adnan Ajmal Khan Abdul Rehman Sadia Qayyum sadia Qayyum*  
In: *Book on Bioremediation and Biotechnology*, Chapter 14, Pages 293-303  
**Citations:** 4  
**DOI:** [doi.org/10.1007/978-3-030-35691-0\\_14](https://doi.org/10.1007/978-3-030-35691-0_14)



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