

ZAKARIA AHMED, Ph.D.

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SciProfiles homepage: <https://sciprofiles.com/profile/zakaria>Researchgate: <https://www.researchgate.net/profile/Zakaria-Ahmed-4>Google Scholar: <https://scholar.google.com/citations?user=9K1ULJcAAAAJ&hl=en>Kudos: <https://www.growkudos.com/projects/zakaria-ahmed-researcher-in-microbiological-field>LinkedIn: <https://www.linkedin.com/in/zakaria-ahmed-0668b531/?originalSubdomain=bd>Loop in: <https://loop.frontiersin.org/people/2028585/overview>**PERSONAL DATA**

Date of Birth: December 14, 1970.
 Marital Status: Married.
 Religion: Islam (Sunni).
 Mailing Address: 22/5 Red Quarter (Dhakeshory Area), BUET, Lalbagh, Dhaka.

HIGHLIGHTS OF QUALIFICATIONS

- Project Co-IP entitled “Application of Enzyme Technology for improvement of jute fibre and jute based products” funded by Government of the Peoples Republic of Bangladesh under the Agriculture Ministry;
- Post Graduate degree in microbiology;
- Post Doc in Genetic Engineering and Food Biotechnology;
- Extensive teaching and research experiences in home and abroad;
- Supervised undergraduate and post graduate students (University Level) in their mini projects in home and abroad;
- Attended local and international scientific seminars and conferences;
- Member of different Microbiological Societies in home and abroad;
- Editorial Board Members of various internationally reputed research journals;
- Outstanding experience in basic and applied microbiological methodology and research, microbial enzyme and genetics,
- Microbial cultures preparation and routine microbiological laboratory techniques;
- Participated in interdisciplinary research and development projects in home;
- Demonstrated ability in writing excellent in research papers ;
- Knowledge of MS Office, Chem Draw and the Internet;
- Flexible, responsible and hard working team player;

EDUCATIONAL QUALIFICATION

LEVEL	NAME OF DEGREE	UNIVERSITY / COLLEGE / SCHOOL / INSTITUTION	DATE OF JOINING	DATE OF LEAVING	MARKS / GRADES
Doctoral Degree	Ph.D. (Applied Microbiology & Biotechnology)	Ehime University, Japan.	1997	2000	Passed
Master's Degree	M.Sc. (Microbiology)	Dhaka University, Bangladesh.	1993	1995	First Class
Bachelor's Degree	B.Sc. (Microbiology)	Dhaka University, Bangladesh.	1989	1993	First Class
Higher School Leaving	Higher Secondary Certificate (Science Group)	Dhaka College, Dhaka Board, Bangladesh.	1986	1988	First Division (Two Letters)
Lower School Leaving	Secondary School Certificate (Science Group)	Udayan Biddalaya, Dhaka Board, Bangladesh.	1976	1986	First Division (Five Letters)
Ph.D. Thesis Title	<i>Production Of Various Rare Aldopentoses From D-Glucose By Microbial And Enzymatic Methods.</i>				
M.Sc. Thesis Title	<i>Microbiological Aspects Of Radiation Sterilization Of Medical And Pharmaceutical Raw Materials.</i>				
Post Doctoral Research Title	<i>Preparation Of Chimeric Enzymes By Dna Shuffling.</i>				

CAREER HISTORY

Position Held	Employer's Name	Employer's Address	Date From	Date To

Principal Scientific Officer	Bangladesh Jute Research Institute, Bangladesh	Bangladesh Jute Research Institute, Technology Wing, Manik Mia Avenue, Dhaka-1207; Ministry Of Agriculture, Bangladesh	January 17, 2022.	Till to date
Senior Scientific Officer	Bangladesh Jute Research Institute, Bangladesh	Bangladesh Jute Research Institute, Technology Wing, Manik Mia Avenue, Dhaka-1207; Ministry Of Agriculture, Bangladesh	September 07, 2016	January 16, 2022.
Associate Professor	Primeasia University, Bangladesh	Microbiology Department, Hbr Tower, 9 Banani, Dhaka-1213. Bangladesh.	2012	2016
Lecturer (Contract)	Universiti Teknologi Mara, Malaysia (UTIM)	Medical Faculty, Shah Alam Campus, 40450 Shah Alam, Selangor, Malaysia.	2010	2011
Assistant Professor	Primeasia University, Bangladesh	Microbiology Department, Hbr Tower, 9 Banani, Dhaka-1213. Bangladesh.	2007	2012
Post Doctoral Researcher (Jsp's Fellow)	National Food Research Institute, Japan	Biological Function Division, National Food Research Institute, 2-1-12 Kannondai, Tsukuba, Ibaraki 305-8642, Japan.	2003	2005
Scientific Officer (Microbiology & Biochemistry Division)	Bangladesh Jute Research Institute, Bangladesh	Bangladesh Jute Research Institute, Agricultural Wing, Manik Mia Avenue, Dhaka-1207; Ministry Of Agriculture, Bangladesh.	1996	2003
Teaching And Research Assistant (Part Time)	Kagawa University, Japan	Faculty Of Agriculture, Miki-Cho, Kagawa Ken, Japan.	1998	2000
Research Fellow (Part Time)	BCSIR, Dhaka, Bangladesh	NST Fellowship Program, Ministry Of Science And Technology, Bangladesh.	1995	1995

TEACHING EXPERIENCE

List the courses taught / teach at graduate / post-graduate levels

GRADUATE LEVEL (B.Sc.) – MICROBIOLOGY (PAU, BANGLADESH)
 POST GRADUATE LEVEL (M.Sc.)- MICROBIOLOGY (PAU, BANGLADESH)
 POST GRADUATE LEVEL (MBBS) – MEDICAL MICROBIOLOGY (UiTM, MALAYSIA)

RESEARCH EXPERIENCES

Senior Scientific Officer (September 2016 to present), Participated in interdisciplinary research and development projects; Worked with scientists; prepared scientific reports and manuscripts and published papers in reputed scientific journals. Gained experience: *Enzyme Production ; Softening For Barky Root End; Softening Of Fibre For Better Spinning; Biochemical Analysis Of Jute Plants; Value Added Product*

Post Doctoral Researcher (June 2003- June 2005), extensive research was carried out under the project title "Preparation of Chimeric enzymes by DNA Shuffling" on identification and activity of enzyme isolated from *Xanthomonas* sp.; gained experience on: *Isolation And Purification Of Dna; Amplification Of Gene By Polymerase Chain Reaction (Pcr); Obtaining Several Enzymes To Produce Special Carbohydrates, Such As Phosphorolytic Enzymes; Amplified A Gene Of A Member Of Glycoside Hydrolases Family 94; Optimization Of The Annealing Temperature For Dna Amplification In Vitro; Gel Electrophoresis; Topo Cloning Reaction And Sequencing Of The Desired Dna; Etc.*

Doctoral Student (October 1997- September 2000), Gained experience in many microbiological and enzymatic techniques including: *Isolation And Identification Of Microbes; Isolation, Purification, Immobilization And Characterization Of The Enzyme; Optimization Of Transformation Reactions; Separation Of The Product Using Various Column Chromatography; Identification Of The Product By Analyses The High Performance Liquid Chromatography (Hplc), Infra-Red (Ir) Spectra, Nuclear Magnetic Resonance (Nmr) Spectra Melting Point And Optical Rotation Measurements.*

Masters Student (June 1993-July 1995), gained experience in the field of Radiation Biology and various aspects of radiation sterilization techniques such as: *Radiation Dose Determination, D10 Value; Hplc Analysis; Uv Spectrophotometric Analysis; Potency Determination Of Various Pharmaceutical Products, Etc.*

Research Fellow (July 1995- October 1995), under the title "Microbial production of Enzymes (cellulase or hemicellulase by fermentation process utilizing the agriculture wastes", gained experience in the field of: *Fermentation Process, Cultivation And Identification Of Microbial Samples Having Cellulase And Hemicellulase Activity; Hplc Analysis; Isolation And Purification Of Enzyme, Etc.*

Scientific Officer (June 1996 to February 2003), Participated in interdisciplinary research and development projects; Worked with soil scientists and biochemists; prepared scientific reports and manuscripts and published papers in reputed scientific journals. Gained experience : *Development Of Mixed Microbial Inoculum For The Acceleration Of Retting Speed And Production Of Good Quality Jute And Allied Fibre; Non-Aqueous Retting Of Dry Ribbons Of Jute With Promising Fungus ; Comparative Studies Of Retting And Fibre Properties Of Different Pipeline And Pre-Released Varieties Of Jute (C. Capsularis And C. Olitorius); Studies Of The Enzyme Activities Of Promising Retting (Bacteria And Fungus) With Special Reference To Cellulase And Pectinase And Their*

Impact On Dry Ribbon Retting; Effect Of Retting On Environment And Its Control; Isolation Of Microbes From Different Natural Sources And Studies Of Their Retting Properties; Studies Of The Factor Affecting Jute Retting And Fibre Quality; Effect Of Using Different Weighing / Covering Materials In The Ret During Jute Retting On The Fibre Quality; Extraction Of Enzymes From The Isolated Promising Microbes Capable Of Jute Retting And Determining Their Enzymatic Activities; Selection Of Appropriate Media For Some Promising Microbes So Far Isolated In Order To Improve Growth And Retting Properties.

AREAS OF RESEARCH

1. Environmental and natural product microbiology with particular reference to:
 - Search for bio-pesticides for the control of crop and animal pests as a strategy of improving food security
 - Search for antimicrobial agents from medicinal plants
 - Synthesis of bioactive Natural Products
2. Bacterial enzyme and its application
3. Medical microbiology
4. Jute and its related research

RESEARCH GUIDANCE

MS THESIS

Sl. No	Description of research conducted	Name of the student	Graduation date
1	Isolation and identification of microbes from GONOSATHO PHARMACEUTICAL waste materials and determination of their antibiotic resistance pattern	Md. Shahidul Islam, Primeasia University, Dhaka, Bangladesh	2011
2	Bacteriological study of post-operative abdominal wound infection	Fatema--tuz-johora Tamanna, Primeasia University, Dhaka, Bangladesh	2011
3	Prevalence rate of tuberculosis in Bangladesh among different age group by conventional and flurosence microscopy	Ohiuddin Ahmed, Primeasia University, Dhaka, Bangladesh	2012
4	Microbiological status of sweets and sweet-products in Dhaka City, Bangladesh”	Mesbeh Uddin, Primeasia University, Dhaka, Bangladesh	2012
5	Study on Methicillin Resistance Staphylococcus aureus (MRSA) in Pus and Wound Swab In BIRDEM General Hospital	Ummey Nahor, Primeasia University, Dhaka, Bangladesh	2013
6	Detection and identification of tubercle bacilli by different methods from sputum and blood samples of hospitalized patients in Bangladesh	Md. Alamgir Hossain, Primeasia University, Dhaka, Bangladesh	2013
7	Isolation, Identification And Antimicrobial Sensitivity Pattern Of Bacterial Isolates From Tracheal Aspirate Of Icu Patients of Central Dhaka, Bangladesh	Lamiya Haque, Primeasia University, Dhaka, Bangladesh	2013
8	Study of the Incidence of pathogens and their drug susceptibility pattern among UTI patients in Bangladesh	Md. Kamal Hossain, Primeasia University, Dhaka, Bangladesh	2013
9	Detection and Identification of Tubercle Bacilli as well as with MDR by Gene X-pert methods from Sputum samples	Manas Kumar Nath, Primeasia University, Dhaka, Bangladesh	2013
10	Comparative Analysis Of Mycobacterium Tuberculosis Detection By Different Methods	Jafurullah, Primeasia University, Dhaka, Bangladesh	2013
11	Microbiological analysis and Antimicrobial Sensitivity pattern of Pus and Wound Samples	Lovely Akter, Primeasia University, Dhaka, Bangladesh	2014
12	Microbiological Study Of Different Vegetables	Jahanara Akhter, Primeasia University, Dhaka, Bangladesh	2014
13	Isolation , Identification And Antimicrobial Sensitivity Pattern Of Bacterial Isolates From Tracheal Aspirate Of Icu Patients Of Central Dhaka, Bangladesh	Sk. Tahir Ahmed, Primeasia University, Dhaka, Bangladesh	2015
14	Distribution pattern of pathogenic E.Coli in different medical samples and then antibiotic sensitivity pattern	Asik Mostofa, Primeasia University, Dhaka, Bangladesh	2015
15	Study Of Antimicrobial Properties Of Some Organic Tea	Mohammed Rejaul Karim, Primeasia University, Dhaka, Bangladesh	2015
16	Effect Of Black And Tulsi Tea On Different Microorganisms	Md. Abdullah Al Joad, Primeasia University, Dhaka, Bangladesh	2015
17	Microbiological Status Of Street Foods In Dhaka City, Bangladesh	Mithun Chandra Biswas, Primeasia University, Dhaka, Bangladesh	2015
18	Pattern Of Different Bacterial Wound Infection And Their Antimicrobial Resistance	Md. Joynal Abedin Khan, Primeasia University, Dhaka, Bangladesh	2015
19	Study of etiological agents of urinary tract infections and their antibiotics sensitivity patterns in Bangladesh	Nusrat Jahan, Primeasia University, Dhaka, Bangladesh	2015
20	Prevalence of Microorganisms on the quality of some pharmaceutical raw materials	Md. Golam moktadir Khan, Primeasia University, Dhaka, Bangladesh	2015
21	Urinary Tract Infection in Tertiary care Hospital of Dhaka city	Shepherd Sawon Sarker, Primeasia University, Dhaka,	2015

		Bangladesh	
22	Microbiological analysis of cosmetics and ayurvedic products OF EMAMI and its antimicrobial assay	Md. Anowar Hossen, Primeasia University, Dhaka, Bangladesh	2015
23	Study of resistant pattern and comparative analysis of different generation of antibiotics against various pathogens	Ishrat Jahan Khan, Primeasia University, Dhaka, Bangladesh	2015

B.Sc. Level

Sl. No	Description of research conducted	Name of the student	Graduation date
1	Antimicrobial Textiles: How Effective In Our Daily Usage	Final year group of students of Textile Engineering, Primeasia University, Dhaka, Bangladesh	2007
2	Microbiological And Chemical Analysis Of Waste Water From Different Knit Dyeing Industries Around Dhaka City	Final year group of students of Textile Engineering, Primeasia University, Dhaka, Bangladesh	2008
3	A Comparative Analysis Of The Drug Resistance In Staphylococcus Aureus Isolated From Various Sources In Dhaka, Bangladesh	Tashfina Mirza, Primeasia University, Dhaka, Bangladesh	2008
4	Microbiological Quality Assessment Of Vegetable Containing Fast Foods, Salad And Sauce	Asma Biswas, Primeasia University, Dhaka, Bangladesh	2008
5	Enzymatic Treatment On Jute-Cotton Blend (25/7) Fabric	Final year group of students of Textile Engineering, Primeasia University, Dhaka, Bangladesh	2009
6	Study Of Antimicrobial Properties Of Some Natural Products	Ummey Nahor, Primeasia University, Dhaka, Bangladesh	2011
7	Microbiological Study And The Prevalence Of Microbial Association In Different Soil Environment	Lamiya Haque, Primeasia University, Dhaka, Bangladesh	2012
8	Prevalence, Antibiotic Sensitivity Pattern And Serological Identification Of Salmonella Typhi And S. Paratyphi Of Different Samples Isolated From Hospitalized Infected Patients	Lovely Akter, Primeasia University, Dhaka, Bangladesh	2012
9	Microbiological Status Of Chicken Meat Collected From Different Retailshop In Bangladesh	Tahir Ahmed, Primeasia University, Dhaka, Bangladesh	2012
10	The Recent Study On Secondary Infection Of Pulmonary Tuberculosis Patients In Bangladesh	Joynal Abedin, Primeasia University, Dhaka, Bangladesh	2013
12	Effect Of Temperature, Ph And Media On Microbial Growth And Comparative Analysis Of Growth Pattern Of Different Bacteria	Md. Abdullah Al-Joad, Primeasia University, Dhaka, Bangladesh	2013
13	Study Of Antimicrobial Activity Of Ayurvedic And Unani Medicine And Their Comparative Analysis With Commercial Antibiotic	Sajib Chakraborty, Primeasia University, Dhaka, Bangladesh	2013
14	Isolation And Characterizationof <i>E.Coli</i> 0157:H7 From Rectal Swab Of Apparently Healthy Cattle	Tazrin Kamal, Primeasia University, Dhaka, Bangladesh	2013
15	Study Of Multidrug Resistant Pattern Of Isolated Bacteria From Different Source Of Waste Water	Md. Nahidul Islam, Primeasia University, Dhaka, Bangladesh	2013
19	Isolation And Identification Of Bacteria From Burned Wound Sample And Multi Drug Resistant Against Isolated Bacteria	Md. Aowrongo Zeb, Primeasia University, Dhaka, Bangladesh	2014

RESEARCH PROPOSAL CONDUCTED (2017-2019)

Worked as a Co- Principal Investigator (Co-PI) in a research proposal entitled “*Application of Enzyme Technology for improvement of jute fibre and jute based products*” funded by Government of the Peoples Republic of Bangladesh under the Agriculture Ministry; Research Area was Post Harvest Technology (Biotechnology Area) and the duration of the project was 2 years (From July 2017 to June 2019).

OFFICIAL ADMINISTRATIVE DUTIES

- Act as a **member-secretary**, a five members committee for the progress of Sustainable Development Goal (SDG Target 23); Ref. No.: 12.23.0000.015.14.283.30682 (5), dated- 10/09/2020.
- Act as a **convener**, a two members committee for certification of the purchased chemicals of Microbiology Department; Ref. No.: 12.23.2680.006.07.073.18/4702 (1), dated- 17/06/2019.
- Act as a **member**, a three members committee for certification of the procured equipments for project “Application of enzyme technology for improvement of jute fibre and jute based product (ID-0321014)”; Ref. No.: 12.23.2680.006.07.075.18/4944 (2), dated- 27/06/2019.
- Act as a **member**, a three members committee for certification of estimated cost price of purchasing equipments with specification for project “ Application of enzyme technology for improvement of jute fibre and jute based product (ID-0321014); Ref. No.: 12.23.2680.006.07.075.18/3493(2), dated- 31/03/2019.
- Act as a **convener**, a two members committee for certification of estimated cost for purchasing laboratory equipment for the project “Application of enzyme technology for improvement of jute fibre and jute based product (ID-0321014)”; Ref. No.: 12.23.2680.006.085/19/3023 (1), dated- 24/02/2019.
- Act as a **member**, a three members committee for submission of the administrative confidential report against Mr. Md. Mahbulul Haque, scientific officer (In-charge), industrial chemistry department; Ref. No.: 12.23.2680.004.31.051.12.1924 (2), dated- 02/12/2018.

7. Act as a **member**, a two members committee for certification of estimated cost price of purchasing equipments with specification for project “ Application of enzyme technology for improvement of jute fibre and jute based product (ID-0321014); Ref. No.: 12.23.2680.006.07.075.1878 (2), dated- 27/11/2018.
8. Act as a **member**, a three members committee for assessing the suitable allotter officer member and rent for newly built flat in BJRI Monipuripara residential area; Ref. No.: 12.23.0000.004.05.027.19.3037 (2), dated- 27/02/2022.

TRAINING

2016

1. **Teaching-Learning, Curriculum and Quality Assurance**, Two (2) days organized by Institutional Quality Assurance Cell (IQAC), Primeasia University, Banani, Dhaka, Bangladesh (27-28 August.2016).

2017

1. **Training of trainers (TOT) for the dissemination of industrial technologies on jute**; Three (03) days training organized by Bangladesh Jute research Institute, Head Office, Dhaka, Bangladesh (March 05 to March 07, 2017)
2. **Procurements of goods, works and services**; Three (03) days training organized by Bangladesh Jute research Institute, Head Office, Dhaka, Bangladesh (June 19 to June 21, 2017)

2018

3. **Project Development and Management**; Five (05) days training workshop organized by Bangladesh Agriculture Research Council (BARC), Firm Gate, Dhaka (January 14 to January 18, 2018).
4. **Technical Report Writing and Editing**; Three (03) days training organized by Bangladesh Jute research Institute, Head Office, Dhaka, Bangladesh (June 02 to June 04, 2018)
5. **Agricultural Project Management**; Three (03) days training organized by Bangladesh Jute research Institute, Head Office, Dhaka, Bangladesh (June 06 to June 08, 2018)
6. **Data Analysis by Micro-computer**; Three (03) days training organized by Bangladesh Jute research Institute, Head Office, Dhaka, Bangladesh (June 10 to June 12, 2018)
7. **Research Methodology**; Three (03) days training organized by Bangladesh Jute research Institute, Head Office, Dhaka, Bangladesh (June 26 to June 28, 2018).

2019

8. **Quality Control on Jute Goods**; Two (02) days training organized by Bangladesh Jute research Institute, Head Office, Dhaka, Bangladesh (May 26 to May 27, 2019).
9. **Jute Industrial Product Research and Development**; One (01) day training organized by Bangladesh Jute research Institute, Head Office, Dhaka, Bangladesh (August 4, 2019).
10. **Jute Textile Product Research and Development**; One (01) day training organized by Bangladesh Jute research Institute, Head Office, Dhaka, Bangladesh (August 5, 2019).

2020

11. **Right to Information Act**; One (01) day training organized by Bangladesh Jute research Institute, Head Office, Dhaka, Bangladesh (September 29,, 2020).
12. **Public Procurement Procedures (Goods, Works & Services)**, Two (02) days training organized by Bangladesh Jute research Institute, Head Office, Dhaka, Bangladesh (November 7-8, 2020).

2021

13. **Annual performance agreement (APA)**, One (01) day training organized by Bangladesh Jute research Institute, Head Office, Dhaka, Bangladesh (January 21, 2021).
14. **Gem Research: A hope in agriculture**, One (01) day seminar; organized by Basic & Applied Research on Jute (BARJ), Bangladesh Jute research Institute, Head Office, Dhaka, Bangladesh (February 10, 2021).
15. **E-filing**, One (01) day training organized by Bangladesh Jute research Institute, Head Office, Dhaka, Bangladesh (September 13, 2021).
16. **Complain taken and solve**, One (01) day training organized by Bangladesh Jute research Institute, Head Office, Dhaka, Bangladesh (November 09, 2021).

2022

17. **Challenge on Forth Industrial Revolution**, One (01) day training organized by Bangladesh Jute research Institute, Head Office, Dhaka, Bangladesh (June 09, 2022).
18. **E-Governess and Innovative work plan**, One (01) day training organized by Bangladesh Jute research Institute, Head Office, Dhaka, Bangladesh (June 14, 2022).
19. **Office Management and Skill Development**, One (01) day training organized by Bangladesh Jute research Institute, Head Office, Dhaka, Bangladesh (June 27, 2022).

NATIONAL DUTY (ELECTION DUTY)

1. **Presiding Officer**, Vote centre of 309 Mirpur Laboratory High School, Golartech Branch, 105/1/B Golartech, Darus Salam, Mirpur, Dhaka (Gents); Local Government (City Corporation) Election 2020 (30/01/2020, 8:00 am- 4:00 pm.
2. **Presiding Officer**, Vote centre of 623 Government Kalachand High School and College, Gulshan, Dhaka (1st floor), New Building (Ladies); Local Government (City Corporation) Election 2019 (28/02/2019, 8:00 am- 4:00 pm.

COMMITTEE

1. **Technical Committee Member**, International Conference on Medical Engineering, Health Informatics and Technology (MediTec 2016) organized first time by School of Science and Engineering of United International University, held in Dhaka, Bangladesh on 17-18 December 2016. Theme of the Conference- “Smart Systems for Healthcare”. Website: <http://meditec.uui.ac.bd/program-schedule/>

2. **Convener, Bill Certified Committee (2 member committee)**, Tk. 2,98,227/= Chemicals supplied by Kuri & Company (Pvt.) Ltd. 78, Motijheel Commercial Area, Dhaka 1000 to Microbiology and Biochemistry department, Bangladesh Jute Research Institute (Issue No. 12.23.2680.006.07.073.18/2650(1-9), dated 27-01-2019.
3. **Member, Bill Certified Committee (3 member committee)**, Tk. 49,24,000.015/= Equipments supplied by Overseas Marketing Corporation (Pvt.) Ltd. Unique Trade Center, 15th Level, 8 Panthapath, Dhaka 1215 to the Project entitled Application of Enzyme Technology for improvement of jute fibre and jute based products” of Microbiology and Biochemistry department, Bangladesh Jute Research Institute (Issue No.12.23.2680.006.07.075.18/4944(2), dated 27-6-2019.
4. **Member, Estimated Cost Evaluation Committee (3 member committee)**, Equipments specification and departmental estimated cost re-evaluation for fiscal year 2018-19 for Research proposal of the Project entitled Application of Enzyme Technology for improvement of jute fibre and jute based products” of Microbiology and Biochemistry department, Bangladesh Jute Research Institute (Issue No.12.23.2680.006.07.075.18/3493(2), dated 31-03-2019.
5. **Convener, Estimated Cost Evaluation Committee (2 member committee)**, Equipments specification and departmental estimated cost evaluation for the Project entitled Application of Enzyme Technology for improvement of jute fibre and jute based products” of Microbiology and Biochemistry department, Bangladesh Jute Research Institute (Issue No.12.23.2680.006.07.085.19/3023(1), dated 24-02-2019.
6. **Member, Estimated Cost Evaluation Committee (2 member committee)**, Equipments specification and departmental estimated cost evaluation for fiscal year 2018-19 for Research proposal of the Project entitled Application of Enzyme Technology for improvement of jute fibre and jute based products” of Microbiology and Biochemistry department, Bangladesh Jute Research Institute (Issue No.12.23.2680.006.07.075.18/1878(2), dated 27-11-2018.
7. **Member, Disciplinary action investigating committee** for Mr. Mahbul Haque, SO (in-charge), industrial chemistry department, Bangladesh Jute Research Institute (Issue No.12.23.2680.004.31.051.12.1924(2), dated 02-12-2018; 12.23.2680.004.31.051.12.2217(4), dated 24-12-2018).
8. **Member, SDG Committee (5 member committee)**, DPP Project, Bangladesh Jute Research Institute (Issue No.12.23.0000.015.14.283.20.682(5), dated 10-09-2020..

OTHER PROFESSIONAL DUTY

1. Conducted Assistant Proctor (invigilators) duty for Japanese-Language Proficiency Test (JLPT) exam on July3, 2022, Bangabandhu Sheikh Mujib Academy, Taltola, Dhaka, Bangladesh.
2. Worked as volunteer in Toronto Western Hospital, University Health Network, Department of Volunteer Resources, McLaughlin Pavilion 2-474, 399 Bathurst Street, Toronto, Ontario MST 2S8, Canada.

AWARDS / DISTINCTION

- i) **Junior High School Governmental Scholarship** for academic feat in class eight (Awarded for the period of 1983 to 1986).
- ii) **Departmental Scholarship** for the academic feat in undergraduate level (Awarded for the period 1989 to 1993).
- iii) **Governmental General Scholarship** in graduate level for scholastic result in undergraduate level, Government of the Peoples Republic of Bangladesh (Awarded for the period 1993 to 1995).
- iv) **Japanese Governmental Scholarship (MONBUSHO)** in doctoral course, Government of Japan (Awarded for the period 1997 to 2000).
- v) **Japanese Society for the Promotion of Science (JSPS) Fellowship** in Post-doctoral level, Government of Japan (Awarded for the period 2003 to 2005).
- vi) **Mawlana Abdul Hamid Khan Bhashani Award 2017**; Sponsered by Bangladesh Unnoyon Shongsod, 14 Purana Polton, Darus Salam Arched, (8th Floor), Dhaka 1000. Email: kaziakhai82@gmail.com (September 19, 2017).

RECOGNITION

1. **IBC Insignia of Recognition** (Ref: INS/INV; 4th January 2002); International Biographical Centre (IBC) Cambridge CB2 SQP England; Telephone: +44 (0) 1553 646600 Facsimile: +4-I (0) 1555 646601.
2. **International Scientist Of The Year 2002** (Ref: TSCA/INV; 12th April 2002), International Biographical Centre (IBC) Cambridge CB2 SQP England; Telephone: +44 (0) 1553 646600 Facsimile: +4-I (0) 1555 646601.
3. **Man of Achievement Award 2002**. (Ref: M/ACH; 1st February 2002), International Biographical Centre (IBC) Cambridge CB2 SQP England; Telephone: +44 (0) 1553 646600 Facsimile: +4-I (0) 1555 646601.
4. **IBC's 21st Century Award for Achievement** (Ref: 21st/ INV; 7th September 2001). International Biographical Centre (IBC) Cambridge CB2 SQP England; Telephone: +44 (0) 1553 646600 Facsimile: +4-I (0) 1555 646601.
5. Selected for biography inclusion in the new **18th Edition of 'Who's Who in the World**, 121 Chanlon Road ' New Providence, NJ 0797-I USA. ' 1-800-521-8110 ext. 7003 - Outside the U.S.: 1—908-464-6800 ' Email: World@renp.com
6. Selected for biographical profile for inclusion in the **6th Edition of Who's Who in Science and Engineering**, the first edition of the 21st century. 121 Chanlon Road ' New Providence, NJ 0797-I USA. 1-800-521-8110 ext. 7003 - Outside the U.S.: 1—908-464-6800 ' Email: World@renp.com
7. Selected for biographical profile for inclusion in **20th Edition of Who's Who in the World**, published in December 2002. 21st century. 121 Chanlon Road ' New Providence, NJ 0797-I USA. 1-800-521-8110 ext. 7003 - Outside the U.S.: 1—908-464-6800 ' Email: World@renp.com
8. Selected for biographical profile for inclusion in the **19th Edition of Who's Who in the World**, 121 Chanlon Road ' New Providence, NJ 0797-I USA. ' 1-800-521-8110 ext. 7003 - Outside the U.S.: 1—908-464-6800 ' Email: World@renp.com
9. Selected for biographical profile for inclusion in the **21st Edition of Who's Who in the World**, 121 Chanlon Road ' New Providence, NJ 0797-I USA. ' 1-800-521-8110 ext. 7003 - Outside the U.S.: 1—908-464-6800 ' Email: World@renp.com
10. Selected for biographical profile for inclusion in the **4th Edition of Who's Who in Medicine and Healthcare**, 121 Chanlon Road ' New Providence, NJ 0797-I USA. 1-800-521-8110 ext. 7003 - Outside the U.S.: 1—908-464-6800 ' Email: World@renp.com

MEMBERSHIP OF PROFESSIONAL ASSOCIATIONS

1. Member, American Society for Microbiology, USA.

2. Member, International Society for Rare Sugar (ISRS), Japan
3. Member, Canadian Society of Microbiologist (CSM), Canada.
4. Member, Canadian College of Microbiologist (CCM). Canada.
5. Member, Bangladesh Society of Microbiology, Bangladesh.
6. Member, Asiatic Society of Bangladesh ((ASB), Bangladesh.
7. Associate Member, Bangladesh Botanical Society (BBS), Bangladesh.
8. Graduate Member, Bangladesh Computer Society (BCS), Bangladesh.
9. Registered Graduate, Dhaka University (DU), Bangladesh.
10. Life Member, Dhaka University Alumni Association (DUAA), Bangladesh.
11. Member, Bangladesh Association for Plant Tissue Culture and Biotechnology (BAPTC&B), Bangladesh.
12. Member, Bangladesh Association of Scientists and Scientific Professions (BASSP), Bangladesh.
13. Member, Bangladesh Association for the Advancement of Science (BAAS), Bangladesh.
14. Life Member, Bangladesh JSPS Alumni Association (BJSPSAA), Bangladesh.
15. Life Member, Japanese University Alumni Association (JUAAB), Bangladesh.
16. Life Member, Bangladesh Society of Microbiology (BSM), Bangladesh.

MEMBERS AS EDITORIAL BOARD MEMBER / REVIEWER IN INTERNATIONAL SCIENTIFIC JOURNALS

Editorial Board Member:

- American Scientific Research Journal for Engineering, Technology, and Sciences (ASRJETS), Global Society of Scientific Research and Researchers (GSSRR), Amman - Jordan
- International Journal of Science: Basic and Applied Research (IJSBAR)
- American Academic Scientific Research Journal for Engineering, Technology, and Sciences
- International Journal of Food Science and Biotechnology (IJFSB), SciencePG group, USA.
- Research Journal of Agriculture and Biological Sciences, Pakistan.
- Journal of Biomedical Engineering and Technology
- American Journal of Advances in Medical Science (ARNACA)
- Infectious Diseases Research, TMR publishing group, New Zealand.
- Environmental Science Archives
- European Modern Studies Journal
- Journal of Microbes and Research, Medires Publishing LLC, USA.

Reviewer

- International Journal of Science: Basic and Applied Research (IJSBAR).
- American Academic Scientific Research Journal for Engineering, Technology, and Sciences
- American Scientific Research Journal for Engineering, Technology, and Sciences (ASRJETS),
- Global Society of Scientific Research and Researchers (GSSRR),
- Journal of Agricultural Science and Technology B, David Publishing Company, USA.
- International Journal of Research and Scientific Innovation.
- Journal of Complementary and Alternative Medical Research.
- Medical Science Monitor.
- Science and Education Publishing, USA.
- Asian Journal of Research and Report in Gastroenterology.
- European Journal of Medicinal Plant.
- International Greener Journals.
- Journal of Applied Life Sciences International.
- The MedCrave online Journal (<https://medcraveonline.com/MOJBM/reviewer-board>).
- International Academy of Science, Engineering and Technology
- Journal of Pharmaceutical Research.
- Academia Letter.
- International Journal of Research and Scientific Innovation (IJRSI) (<https://www.rsisinternational.org/journals/ijrsi/reviewer/zakaria-ahmed/>).
- International Journal of Latest Technology in Engineering, Management & Applied Science (IJLTEMAS)
- Asian Journal of Advances in Medical Science, MB International Media and Publishing House.
- International Journal of Pharmaceutica Analytica Acta.
- Asian Journal of Biochemistry, Genetics and Molecular Biology.
- International Research Journal of Gastroenterology and Hepatology
- Asian Journal of Research and Review in Agriculture.
- Journal of Pharmaceutical Research International.
- International Journal of Research and Analytical Reviews (IJRAR)
- Journal of Emerging Technologies and Innovative Research (JETIR)

Science Ambassador

- Bentham Science Ambassador (2020-2021).

LANGUAGES

Bengali:	Fluent in speaking, writing and reading. Native Speaker.
English:	Fluent in speaking, writing and reading.
Japanese:	Fair in speaking only.

RESEARCH PAPER REVIEWED

1. Act as a **REVIEWER** for reviewing the manuscript 0513014231 Gyar et al with the title "BACTERIOLOGICAL QUALITY ASSESSMENT OF NIGERIAN NON ALCOHOLIC BEVERAGE (KUNUN-ZAKI) SOLD IN KEFFI METROPOLIS, NIGERIA" in International **Greener Journals**; May 19, 2014.
2. Act as a **REVIEWER** for reviewing of "THE DIVERSITY AND UTILIZATION OF WILD MEDICINAL PLANT SPECIES FOUND IN THE MIOMBO WOODLANDS OF UVINZA, TANZANIA", **Academia letter**; Oct 28, 2021
3. Act as a **REVIEWER** for reviewing of "THE PROLIFERATION OF ANTIMICROBIAL RESISTANCE DUE TO COVID-19 STERILIZATION PRACTICES" by Jeremy Steenin **Academia Letters**; Nov 4, 2021.
4. Act as a **REVIEWER** for reviewing - "MICROSATELLITE MARKER BASED ASSESSMENT OF GENETIC INTEGRITY OF COMMERCIAL RICE SEED LOTS IN RELATIONS TO THE EARLY GENERATION SEEDS IN NIGERIAN SEEDS INDUSTRY" for **International Journal of Research and Scientific Innovation**; Oct 3, 2021.
5. Act as a **REVIEWER** for reviewing - "STUDY ON ACALCULOUS CHOLECYSTITIS IN CRITICALLY ILL PATIENTS" in **Journal of Pharmaceutical Research International**, 23-Oct-2021.
6. Act as a **REVIEWER** for reviewing -"VIRULENCE ANALYSIS OF BACTERIA ISOLATED FROM WASTEWATER IRRIGATED LANDS" by CH Goraya in **Academia Letters**; Nov 25, 2021.
7. Act as a **REVIEWER** for reviewing -"MEASURING THE EFFECTS OF COVID-19 ON WOMEN'S DAILY LIVES AND WELL-BEING: A NATIONAL SURVEY'S PRELIMINARY RESULTS" by Terrell L. Strayhorn; in **Academia Letters**; Nov 25, 2021.
8. Act as a **REVIEWER** for reviewing - "AN ASSESSMENT ON THE PHYSIOCHEMICAL AND MICROBIOLOGICAL PARAMETERS IN SELECTED SACHET WATER SOLD FOR CONSUMPTION IN OLD ROAD GAYE TOWN COMMUNITY MONTERRADO, COUNTY JANUARY 2019 – APRIL 2019" in **International Journal of Research and Scientific Innovation**; Dec 9, 2021.
9. Act as a **REVIEWER** for reviewing-"EXTRACTION OF CHITIN FROM AMERICAN COCKROACH (*PERIPLANETA AMERICANA* (LINNAEUS) USING HPLC" by Padmavathi Sriram; **Academia Letters**, Dec 12, 2021.
10. Act as a **REVIEWER** for reviewing - "EFFECT OF ANTIBIOTICS EXTRACTED FROM FUNGI" by Girma Waktola, **Academia letter**; Dec 4, 2021.
11. Act as a **REVIEWER** for reviewing - "MICROBIAL QUALITY OF RAW MEAT FROM DIFFERENT BUTCHERIES IN MEKELLE CITY, TIGRAY, ETHIOPIA" by Zekeriye Fure, **Academia letter**; Dec 24, 2021.
12. Act as a **REVIEWER** for reviewing of "FOOD PRODUCTS QUALITY AND NUTRITION IN RELATION TO PUBLIC - BALANCING HEALTH AND DISEASE" by Loai Aljerf; **Academia letter**; Dec 12, 2021.
13. Act as a **REVIEWER** for reviewing- "AN ASSESSMENT ON THE PHYSIOCHEMICAL AND MICROBIOLOGICAL PARAMETERS IN SELECTED SACHET WATER SOLD FOR CONSUMPTION IN OLD ROAD GAYE TOWN COMMUNITY MONTERRADO, COUNTY JANUARY 2019 – APRIL 2019" in **International Journal of Research and Scientific Innovation**; Dec 9, 2021.
14. Act as a **REVIEWER** for reviewing- "VIRULENCE ANALYSIS OF BACTERIA ISOLATED FROM WASTEWATER IRRIGATED LANDS" by CH Goraya, **Academia letter**; Nov 25, 2021.
15. Act as a **REVIEWER** for reviewing - "Shelf Life of Homeopathic Medicine," by Papiya Nandy; **Academia letter**; Dec 29, 2021.
16. Act as a **REVIEWER** for reviewing "Antibacterial Activities of *Azadirachta indica* and *Syzygium guinense* on Bacteria Associated with Urinary Schistosomiasis," for International Journal of Research and Scientific Innovation (IJRSI) ISSN: 2321-2705; January 1, 2022.
17. Act as a **REVIEWER** for reviewing - "Antibacterial Resistance and Medicinal Plants," by Rida Tanveer. **Academia letter**; Jan 5, 2022.
18. Act as a **REVIEWER** for reviewing - "Antimicrobial Activity of N-(4-Chlorobenzilidene)-1-phenylethanolamine and N-(4-Chlorobenzilidene) benzoic acid hydrazide ," by Dr. Barakat Shabsoug. **Academia letter**; Jan 8, 2022.
19. Act as a **REVIEWER** for reviewing - "Determination of the antibacterial activity of various parts of habanero pepper (leaves, fruit, root and stalks) against *Escherichia Coli*, *Staphylococcus Aureus*, *Salmonella Enterica* Isolated From Food Samples," by Oboh J. Emmanuel. **Academia letter**; Jan 11, 2022.
20. Act as a **REVIEWER** for reviewing - "Gene edition capacity of estrogen signal is capable of curing cancer and further human diseases," by Zsuzsanna Suba. **Academia letter**; Jan 21, 2022.
21. Act as a **REVIEWER** for reviewing "Combination of phytotherapy by using herbal medicine from *Paederia thouarsiana* leaf crude extract and conventional therapy for the care of painful oral conditions in a clinical dentistry practice" (IRJMBS-22-004). **International Research Journal of Medicine and Biomedical Sciences** (January 19, 2022).
22. Act as a **REVIEWER** for reviewing "Antibacterial and Antifungal Activities of a Medicinal Soap Made from Ginger (*Zingiber Officinale*) and Clove (*Syzygium Aromaticum*) Essential Oils" (Ms_JALSI_81787), **Journal of Applied Life Sciences International** (January 28, 2022).
23. Act as a **REVIEWER** for reviewing "Immunity to intestinal tapeworms: Does antibody protect the parasite?," by Elsayed Elowni; **Academia letter**; Jan 12, 2022.
24. Act as a **REVIEWER** for reviewing –"Significant role of nanotechnology in cancer and molecular genetics" by Tansukh Barupal. **Academia letter** February 6, 2022.
25. Act as a **REVIEWER** for reviewing "Formulation and antimicrobial analysis of polyherbal wash in Ambikapur Surgujia Chhattisgarh" (AEES_8000212002), **Applied Ecology and Environmental Sciences** (February 15, 2022).
26. Act as a **REVIEWER** for reviewing " Plants and plant components with Cytoprotective property in West Africa sub region – Systematic Review" (Ms_APRJ_83197), **Asian Plant Research Journal** (February 15, 2022).

27. Act as a **REVIEWER** for reviewing "Effective Halophile Identification in Tannery Raceways," by Tabin Brooks. **Academia letter** February 18, 2022.
28. Act as a **REVIEWER** for reviewing "Accelerating the screening and development of drugs for the treatment of breast cancer" (MOJBM-21-RA-329), **The MedCrave online Journal**, February 23, 2022.
29. Act as a **REVIEWER** for reviewing "Analysis of the methods of obtaining bioethanol", by Maria Esther Bautista Vargas, **Academia letter** February 24, 2022.
30. Act as a **REVIEWER** for reviewing "Benefits for human health: soybean and okara; amaranth, chia and quinoa seeds in the diet. An article.," by Hugo Genta. **Academia letter** April 5, 2022.
31. Act as a **REVIEWER** for reviewing "A Mini Review On Enzyme Based Biosensors and Their Biomedical Applications," by Gaser S Shahin. **Academia letter** April 6, 2022.
32. Act as a **REVIEWER** for reviewing "Kitchen garden: a curb to menace malnutrition and potential access to safe food," by Vinod Dhangra. **Academia letter** April 14, 2022.
34. Act as a **REVIEWER** for reviewing "Evaluation of Phytochemical contents and antioxidant activity of Mentha spicata (spearmint) Grown in Kano, Nigeria" (Manuscript Number: Ms_AJBGMB_86396); **Asian Journal of Biochemistry, Genetics and Molecular Biology**; April 15, 2022.
35. Act as a **REVIEWER** for reviewing "Evaluating the Antimicrobial Activity of Guava and Locust Bean Stem Extracts," by Emmanuel Ofose Mensah; **Academia letter** April 29, 2022.
36. Act as a **REVIEWER** for reviewing "Ayurveda crops as superfoods for export, conservation & farmers' benefit," by Utkarsh Ghate; **Academia letter** May 05, 2022.
37. Act as a **REVIEWER** for reviewing "Antimicrobial resistance: Its medical and legal vantage point," by Omotosho O Marvellous; **Academia letter** May 23, 2022.
38. Act as a **REVIEWER** for reviewing "Comparative study of bio-efficacy of 4 medicinal plants against *Callosobruchus maculatus* on *Cajanus cajan*"; **Applied Ecology and Environmental Sciences**, May 24, 2022.
39. Act as a **REVIEWER** for reviewing "A Mineral Fibre: Basalt ," by Jyoti Joshi. **Academia letter** May 28, 2022.
40. Act as a **REVIEWER** for reviewing "Obtaining the interspecific hybrid in Nicotiana with resistance to Peronospora hyosciamy f.sp. tabacina (blue mold) from the seedbed.," by Humberto García Cruz. **Academia letter** May 29, 2022.
41. Act as a **REVIEWER** for reviewing "Benefits for human health: soybean and okara; amaranth, chia and quinoa seeds in the diet" by Hugo Genta's. **Academia letter**, June 9, 2022.
42. Act as a **REVIEWER** for reviewing "An Assessment of COVID-19 Related Stigma and It's Association with Informal Health Care Utilisation Among Corona Virus Survivors" (Ms_AJMAH_90463), **Asian Journal of Medicine and Health**, July 31, 2022.

PUBLICATIONS IN SCIENTIFIC JOURNALS (LOCAL / INTERNATIONAL)

RESEARCH ARTICLES

LOCAL JOURNAL:

1996

1. **Ahmed, Z.**, Chowdhury, N.A. and Choudhury, N. Microbiological Status and Radiosterilization of Cotton Based Medical Products in Bangladesh, *Journal of Asiatic Society, Bangladesh, Science*, 22: 163-169 (1996).
2. **Ahmed, Z.**, Chowdhury, N.A., Khan, A.R. and Choudhury, N. Sterilization of Thiamine Hydrochloride by Radiation: A New Approach, *Bangladesh Journal of Life Science*, 8: 71-78 (1996).
3. **Ahmed, Z.**, Chowdhury, N.A., Khan, A.R. and Choudhury, N. Microbiological and Physicochemical Aspects of radiation sterilization of Oxytetracycline-HCl powder, *Bangladesh Journal of Microbiology*, 13: 29-34 (1996).

1997

4. **Ahmed, Z.**, Choudhury, N. and Akhter, F. Sterilization of lactose by Gamma Radiation, *Bangladesh Journal of Microbiology*, 14: 49-50, (1997).

1998

5. Haque, S., Alamgir, M. and **Ahmed, Z.** Fungal efficiency on retting of green ribbon of jute, *Journal of Asiatic Society, Bangladesh, Science*, 24: 303-307 (1998).
6. **Ahmed, Z.** and Rashid, M. H. Radiosensitivity and low temperature storage behavior of microbes associated with ice packed Rita fish (Rita rita), *Journal of Asiatic Society, Bangladesh, Science*, 24: 329-337 (1998).
7. Rashid, M. H., **Ahmed, Z.**, Rashid, H. -O., Fakhruddin, A.N.M and Choudhury, N. Combination effect of irradiation and low temperature on the survival of microbes of Rita fish kebab, *Journal of Asiatic Society, Bangladesh, Science*, 24: 309-318 (1998).
8. **Ahmed, Z.** and Rahman, M. Study of the prevalence of bacteria in different kinds of wound infection in Bangladesh, *Bangladesh Journal of Scientific Research*, 16: 245-248 (1998).

1999

9. Haque, M. S., Asaduzzaman, M., Alamgir, M., **Ahmed, Z.** and Islam, M. R. Role of microorganisms obtained from jute in the retting of dry ribbons of jute. *Bangladesh Journal of Jute and Fibre Research*, 23: 34-39 (1998-99)
10. **Ahmed, Z.**, Akhter, F. and Alamgir, M. Isolation of some jute retting fungi from natural source and their effect on dry ribbon retting of CVL-1 jute (*Chorchorus capsularis*), *Bangladesh Journal of Scientific Research*, 17: 107-109 (1999).

2000

11. **Ahmed, Z.**, and Izumori, K. Bacterial L-ribose and L-arabinose isomerase: Production, isolation, immobilization and characterization. *Bangladesh Journal of Scientific Research*, 35(1-4): 90-104 (2000).

2007

12. Haque, M. S., Akhter, F., Halim, A., **Ahmed, Z.**, and Dewan, K.H. Study Of Agrochemical Retting And Extraction Of Jute Through The Application Of Agro-Waste. *Bangladesh J. Prog. Sci. & Tech.*, 5(2): 465-468 (2007).

2008

13. Shahidullah, M., **Ahmed, Z.**, Akhter, F., Halim, A. and Hossain, H. M. Z. Use Of Cassava (*Manihot Esculanta*) As Natural And Indigenous Thickener For Preparation Of Textile Printing Paste. *Bangladesh J. Prog. Sci. & Tech.*, 6(2): 507-510 (2008).

2011

14. Uddin, M.A., **Ahmed, Z.**, Datta, S. Microbiological Analysis Of Medical Textiles And Effectiveness Of Antimicrobial Finished Fabrics. *J. Primeasia University*. 1 (1): 1-4 (2011).

15. Molla, M. A. M., **Ahmed, Z.**, Shahidullah, M., Sayeed, M. M. A., and Lutfar L. B. Lustre Variation Of The Fibre Of Tossa Jute Cultivated In Major Growing Areas Of Bangladesh. *J. Primeasia University*. 1 (1): 47-52 (2011).

16. Molla, M. A. M., Shahidullah, M., Anwer, M. M., Sayeed, M. M. A., Mollah M. A. K. and **Ahmed Z.** Quality Assessment Of Tossa Jute Fibre Grown In Different Districts Of Bangladesh. *J. Primeasia University*. 1(1): 53-58 (2011).

2013

17. Ahmed, O. and **Ahmed, Z.** Comparative Analysis For The Detection Of Tuberculosis By Conventional And Flurescence Microscopy. *Bangladesh J. Medi. Sci.* 12(3): 315-19 (2013); DOI: 10.3329/BJMS.V12I3.11104

18. Tamanna F. and **Ahmed, Z.** Bacteriological Study Of Post-Operative Abdominal Wound Infection- A Case Study. *Bangladesh J. Medi. Sci.* 12(1): 86-90 (2013); DOI: 10.3329/bjms.v12i1.10982

INTERNATIONAL JOURNAL:

1998

19. Bhuiyan, S. H., **Ahmed, Z.**, Utamura, M., and Izumori, K. A New Method For The Production Of L-Lyxose From Ribitol Using Microbial And Enzymatic Reactions, *Journal of Fermentation of Bioengineering*, 85: 513-516 (1998). DOI: 10.1016/S0922-338X(98)80163-3

1999

20. **Ahmed, Z.**, Shimonishi, T., Bhuiyan, S. H., Utamura, M., Takada, G. and Izumori, K. Biochemical Preparation Of L-Ribose And L Arabinose From Ribitol: A New Approach, *Journal of Bioscience and Bioengineering*, 88: 444-448 (1999); DOI: 10.1016/s1389-1723(99)80225-4; PMID: 16232643.

21. **Ahmed, Z.**, Sasahara, H., Bhuiyan, S. H., Saiki, T., Shimonishi, T., Takada, G. and Izumori, K. Production Of D-Lyxose From D-Glucose By Microbial And Enzymatic Methods, *Journal of Bioscience and Bioengineering*, 88: 676-678 (1999); DOI:10.1016/S1389-1723(00)87100-5.

2000

22. **Ahmed, Z.**, and Bhowmik, P. K. Studies On The Oxidation Of Ribitol And D-Arabitol by *Acetobacter aceti* IFO 3281, *Pakistan Journal of Biological Science*, 3: 1492-1495 (2000); DOI: 10.3923/pjbs.2000.1492.1495.

2001

23. Haque, M. S., Asaduzzaman, M., Akhter, F., Samad, M. A., Baksh, T. and **Ahmed, Z.** Effect Of Nature Of Harvest Of Jute Plants On The Production Of Cuttings And Improvement Of Fibre Quality. *Online Journal of Biological Science*, 1: 563-564 (2001); DOI: 10.3923/jbs.2001.563.564.

24. Bhowmik, P. K., Matsui, T. and **Ahmed, Z.** Changes In The Activities Of Sucrose Metabolizing Enzymes During The Germination Of Wheat Seeds. *Pakistan Journal of Biological Science*, 4: 1264-1266 (2001); DOI: 10.3923/pjbs.2001.1264.1266.

25. Haque, S. M., Asaduzzaman, M., Akhter, F., Hossain, M. M. and **Ahmed, Z.** Impact Of Stem-Water Ratio And Separately Retting The Top And Basal Parts Of Jute On The Quality Of Fibre. *Pakistan Journal of Biological Science*, 4: 1191-1193 (2001); DOI:10.3923/pjbs.2001.1191.1193

26. Haque, M. S., **Ahmed, Z.**, Akhter, F., Asaduzzaman, M., Rahman, M. M. and Hannan, M. A. Comparative Studies Of Retting Properties Of Different Released Varieties Of Jute. *Online Journal of Biological Science*. 1:998-1000 (2001); DOI:10.3923/jbs.2001.998.1000

27. **Ahmed, Z.**, Banu, H., Akhter, F. and Izumori, K. A Simple Method For D-Xylose Extraction From Jute Stick And Rice Husk. *Online Journal of Biological Science*, 1: 001-1004 (2001); DOI: 10.3923/jbs.2001.1001.1004

28. Akhter, F., Tahmida, Z. N., Mondal, R. and **Ahmed, Z.** Physico-Chemical Changes Of Different Varieties Of Rice As Influenced By The Application Of Blue-Green Algae. *Pakistan Journal of Biological Science*, 4:1306-1311(2001); DOI: 10.3923/pjbs.2001.1306.1311.

29. **Ahmed, Z.** The Properties Of *Candida famata* R28 For D-Arabitol Production From D-Glucose. *Online Journal of Biological Science*, 1:1005-1008 (2001); DOI: 10.3923/jbs.2001.1005.1008.

30. Gani, M. N., Alam, M. M., Alam, A. K. M. M., Khandker, S. and **Ahmed, Z.** Influence Of City Waste Compost On Soil Properties, Growth And Yield Of Jute. *Pakistan Journal of Biological Science*. 4:1484-1486 (2001); DOI: 10.3923/pjbs.2001.1484.1486.

31. Talukder, F. A. H., M. M. Islam, S. C. Chanda, Ahmed, I. and **Ahmed, Z.** Phenology Of Jute, Kenaf And Roselle Seed Crops At Different Date Of Sowing. *Pakistan Journal of Biological Science*, 4:1316-1318 (2001); DOI: 10.3923/pjbs.2001.1316.1318.

32. Haque, M. S., Asaduzzaman, M., Akhter, F. and **Ahmed, Z.** Retting Of Green Jute Ribbons (*Corchorus Capsularis* Var. Cvl-1) With Fungal Culture. *Online Journal of Biological Science*, 1:1012-1014 (2001); DOI:10.3923/jbs.2001.1012.1014.

2002

33. Akhter, F., **Ahmed, Z.**, Tahmida, Z. N. and Mondal, R. Increase Of Macro-Nutrients In Soil By The Application Of Blue Green Algae In Rice Production. *Pakistan Journal of Biological Science*. 5:19-24 (2002); DOI: 10.3923/pjbs.2002.19.24.

34. Haque, M. S., **Ahmed, Z.**, Asaduzzaman, M., Quasham, M. A. and Akhter, F. Distribution And Activity Of Microbial Population For Jute Retting And Their Impact On Water Of Jute Growing Areas Of Bangladesh. *Pakistan Journal of Biological Science*, 5: 704-706 (2002); DOI: 10.3923/pjbs.2002.704.706.

35. Hussain, M. A., Huq, M. E., Rahman, S. M. and **Ahmed, Z.** Estimation Of Lignin In Jute By Titration Method. *Pakistan Journal of Biological Science*, 5: 521-522 (2002); DOI: 10.3923/pjbs.2002.521.522.

36. Mahabubuzzaman, A.K.M., Lutfar, L. B., Kabir, M. K. and **Ahmed, Z.** A Comparative Study On The Quality Control Of Jute Yarn – Conventional Drawing Method Vs Modern Drawing Method. *Asian Journal of Plant Sciences*, 1: 646-647 (2002); DOI: 10.3923/ajps.2002.646.647.

2003

37. Mahabubzaman, A.K.M., Lutfar, L. B., Asaduzzaman, M., Miaz, M. O. G., Dilruba, F. A. and **Ahmed, Z.** Study On The Quality Of Gardella Fine Yarn In Comparison To Modified Ring Spinning Frame Fine Yarn. *Pakistan Journal of Biological Science*, 6: 76-77 (2003); DOI: 10.3923/pjbs.2003.76.77
38. Mahabubzaman, A.K.M., Lutfar, L. B., Asaduzzaman, M., Dilruba, F. A. and **Ahmed, Z.** Comparative Study On The Effect Of Jute Seed Oil Emulsions With That Of Conventional Emulsions Using Mineral Oil On Yarn Quality In Jute Processing. *Pakistan Journal of Biological Science*, 6: 78-79 (2003); DOI: 10.3923/pjbs.2003.78.79
39. Akhter, F., **Ahmed, Z.**, Banu, H. and Haque, M. S. Utilization And Feasibility Of Retting Effluent As Fertilizer In Vegetable Crops Production. *Pakistan Journal of Biological Science*, 6:341-343 (2003); DOI: 10.3923/pjbs.2003.341.343
40. Haque, M. S., **Ahmed, Z.**, Biswas, A. K. and Akhter, F. Identification Of Micrococcus Sp. Responsible For The Acceleration Of Jute Retting. *Pakistan Journal of Biological Science*, 6: 686-687 (2003); DOI: 10.3923/pjbs.2003.686.687
41. **Ahmed, Z.**, Haque, M. S., Akhter, F. and Begum, M. Study Of The Chemical Composition Of Different Pipeline Varieties Of Jute Fibres. *Pakistan Journal of Biological Science*, 6:1463-1469 (2003);DOI: 10.3923/pjbs.2003.1463.1467

2006

42. **Ahmed, Z.** Optimization Of Pcr Conditions In Vitro For Maximum Amplification Of Dna From *Xanthomonas Campestris* 13551. *Journal of Applied Sciences Research*, 2(3): 112-122 (2006).

2009

43. Shahidullah, M., Uddin, M. M., Sayeed, M. M. A., Shahinur, S. and **Ahmed, Z.** Effect Of Different Pretreatment On Various Properties Of Undyed And Dyed Jute Fabrics. *Journal of Textile and Apparel Technology and Management*, North Carolina State University, USA. 6 (1): 1-9 (2009).

2010

44. Mirza, T., Datta, S., **Ahmed, Z.** and Biswas, S. A Comparative Analysis Of The Drug Resistance In *Staphylococcus Aureus* Isolated From Various Sources In Dhaka, Bangladesh. *Journal of Pure and Appl Micro* (2010); DOI: 0000-0001-9274-6018.

2012

45. Nahor, U. and **Ahmed, Z.** Antimicrobial Activity Of *Phyllanthus Emblica* And *Allium Sativum*: Comparative Analysis Of Antimicrobial Action Of Crude And Ethanolic Extract Of These Natural Plant Products. *IOSR Journal of Pharmaceutical Biological Science*, 4(3): 21-26 (2012); DOI:10.9790/3008-0432126.
46. Akhter, L. and **Ahmed, Z.** Present Status And Antibiotic Sensitivity Pattern Of *Salmonella Typhi* And *S. Paratyphi* In Different Age Group Hospitalized Patients In Dhaka City, Bangladesh. *IOSR Journal of Pharmaceutical Biological Science.*, 4(3): 27-30 (2012); DOI:10.9790/3008-0432730

2013

47. Nayem, M. U. M. R. and **Ahmed, Z.** Microbiological Status Of Different Sweet And Sweet Products In Dhaka City, Bangladesh. *International Journal of Bio-Technology and Research (IJBT)*, 3(1), 1-10, (2013).
48. Khan, M. J. A. and **Ahmed, Z.** Study On The Current Status Of Secondary Infection Of Pulmonary Tuberculosis Patients In Bangladesh. *International Journal of General Medicine and Pharmacy (IJGMP)*, 2(2): 11-16 (2013).
49. Chakraborty, S. and **Ahmed, Z.** Study Of Antimicrobial Activity Of Ayurvedic And Unani Medicine And Their Comparative Analysis With Commercial Antibiotics, *IMPACT: International Journal of Research in Applied, Natural and Social Sciences (IMPACT: IJRANSS)*, 1(3): 63-74 (2013).
50. Magnet, M.M.H., Arongozeb, M., Muktedir, G. and **Ahmed, Z.** Isolation And Identification Of Different Bacteria From Different Types Of Burn Wound Infections And Study Their Antimicrobial Sensitivity Pattern. *IMPACT: International Journal of Research in Applied, Natural and Social Sciences (IMPACT: IJRANSS)*, 1(3): 125-132 (2013).
51. Magnet, M.M.H., Sarkar, D. and **Ahmed, Z.** Isolation And Identification Of Bacteria And Fungi From Soil Samples Of Different Industry Side In Dhaka City, Bangladesh. *International Journal of Innovative Research & Development*, 2(8): 338-339 (2013).
52. Quddus A.S.M R., Hossain S.M. and **Ahmed Z.** Study Of Atherosclerosis In Normal And Diabetic Patients. *BEST: International Journal of Humanities, Arts, Medicine and Sciences (BEST: IJHAMS)*, 1(1): 27-36 (2013).
53. Haque L. and Ahmed, Z. Isolation, Identification And Antimicrobial Sensitivity Pattern Of Bacterial Isolates From Tracheal Aspirate Of Icu Patients Of Central Dhaka, Bangladesh *International Journal of Research in Applied, Natural and Social Sciences (IMPACT: IJRANSS)* 1(7), 11-16 (2013).
54. Hossain M. A. and **Ahmed Z.** Detection And Identification Of Tubercle Bacilli By Different Methods From Sputum And Blood Samples Of Hospitalized Patients In Bangladesh. *American Journal of Advances in Medical Science* (www.arnaca.com), 1(2): 13-21 (2013).

2016

55. **Ahmed Z.** and Ali M. J. B. MRSA Infection In Pus And Wound Swab Samples In Hospitalized Patients In Bangladesh. *European Journal of Biomedical and Pharmaceutical Sciences*. 3(4), 289-294 (2016); Corpus ID: 212539243.

2017

56. Khan I. J., **Ahmed Z.** Study Of Resistant Pattern And Comparative Analysis Of Different Generation Of Antibiotics Against Various Pathogens. *Journal of Innovations in Pharmaceutical and Biological Sciences (JIPBS)*, 4 (4), 127-131 (2017).

2018

57. Shakil K., **Ahmed Z.**, Dilruba F.A., Jafarin, S and Rahman, M. Sulphur Black Dyeing Of Raw White Stretch Denim Fabrics Using Continuous Mercerizing Machine- A Novel Approach. *Journal of Textile and Apparel Technology and Management*, North Carolina State University, USA. 5(8): 68-70, (2018).

2019

58. **Ahmed, Z.**, Rahman, T. and Sarker, S. Study Of The Antimicrobial Properties Of *Emblica Officinalis*, *Terminalia Chebula*, *Terminalia Belerica*, *Syzygium Cumini*, *Cinnamomum Verum*, *Lawsonia Inermis* and *Cuminum Cyminum*, *International Journal of Research Publication*, 40(1), <http://ijrp.org/paper-detail/784> (2019).
59. **Ahmed, Z.**, Rahman, T. and Sarker, S. Antimicrobial Analysis Of Some Selected Ayurvedic And Unani Medicines. *International Journal of Scientific Research and Engineering Development*, 2 (6): 561-569 (2019)

2020

60. Das N.C., Abony M., Banik A., Akhi M.A., Hossain N. and **Ahmed Z.** Optimization Of Bacteriocin Producing Probiotic *Lactobacillus* Spp. Isolated From Broiler Chicken Gut. *Forefront Journal of Engineering and Technology*, 2(3): 1-8 (2020); DOI: 10.2139/ssrn.3557717
61. Nondi S, Talukder B, Abony M, Banik A and **Ahmed Z.** Prevalence Of Phytopathogenic *aspergillus Niger* And *Aspergillus Flavus* Isolated From Various Samples In Bangladesh. *International Journal of Development Research*, 10(8): 38693-38697 (2020); DOI:10.37118/ijdr.19632.08.2020.
62. Aurin SA, Chowdhury SP, Abony M, Rifa J, Banik A, Fatema AN, Ghurnee O and **Ahmed Z.** Characterization of Multi-Drug Resistant Gram-Negative Bacteria Present in Fresh Leafy & Salad Vegetables in Dhaka, Bangladesh. *European Journal of Engineering Research and Science* 5(11): 1-6 (2020); DOI: 10.24018/ejers.2020.5.11.2212

2021

63. Nasreen A., **Ahmed Z.**, Ali M. and Shimu T. (2021) Jute leaves: A potential sources of lycopene. *International Journal of Vegetable Science*, 1-9. DOI: 10.1080/19315260.2021.1931619.
64. Rukhsana, Abony M., Jafrin S., Fateema A.N., Ghurnee O., Nondi S., Akhi M.A., Banik A., Das N.C. and **Ahmed Z.** Optimization Of Bioactive Products Produced By *Pseudomonas* Fluorescence Isolated From Farm Soil In Gazipur City, Bangladesh. *World Journal Of Pharmacy And Pharmaceutical Sciences*, 10(7): 134-146 (2021); DOI:10.20959/wjpps20217-19314.
65. Shahinur S., Hasan M., Ahsan Q., Sultana N., **Ahmed Z.**, Haider J. (2021) Effect of Rot-, Fire-, and Water-Retardant Treatments on Jute Fiber and Their Associated Thermoplastic Composites: A Study by FTIR. *Polymers*, 13, 2571, 1-21. DOI: 10.3390/polym13152571
66. **Ahmed, Z.** Prevalance Of Microorganisms On The Quality Of Some Pharmaceuticals Raw Materials. *Academia Letters*, Article 3000. (2021). DOI: org/10.20935/AL3000.
67. Ghurnee O., Ghosh AK , Abony M , Aurin SA, Fatema AN , Banik A, **Ahmed Z** (2021) Isolation of Multi-Drug Resistant (MDR) and Extensively Drug Resistant (XDR) *Salmonella typhi* from Blood Samples of Patients Attending Tertiary Medical Centre in Dhaka City, Bangladesh. *Advances in Microbiology*. 11, 488-498. DOI: 10.4236/aim.2021.119036.
68. **Ahmed, Z.** (2021) Vaginal Infection-Prevalence And Antimicrobial Sensitivity Pattern Among Different Age Group Patients In Dhaka City, Bangladesh. *Academia Letters*, Article 3590. DOI: 10.20935/AL3590.
69. **Ahmed Z.** and Rahman T (2021) Incidence And Pathogenesis Of Urinary Tract Infection- Bangladesh Perspective – Short Communicatiuon. *Gobal Scientific Journal*, 9(11): 2109-2121. Electronic Object Identifier (EOI):10.11216/GSJ.2021.11.55802.
70. **Ahmed Z.** and Rahman T (2021) An Epidemiological And Prevalence Study Of *Salmonella Typhi* And *Salmonella Paratyphi* With Antibiotic Sensitivity Pattern Of Different Age Group Patients In Dhaka City, Bangladesh. *International Journal of Scientific & Engineering Research*, 12(11): 1124- 1129.
71. Nasreen A, **Ahmed Z.**, Ali M, Rahman T and Tahmina (2021) Effect of processing and preservation on L-ascorbic acid content in commercially cultivated jute leaves. *GSC Advanced Research and Reviews*, 09(03), 063–069. DOI: 10.30574/gscarr.2021.9.3.0261.

2022

72. Gupta M, Rahman T , **Ahmed Z** and Kabir MH (2022) Effect of nitrogen and naphthalene acetic acid on the growth and yield of summer onion. *GSC Advanced Research and Reviews*, 10(01), 166–176. DOI: <https://doi.org/10.30574/gscarr.2022.10.1.0033>.
73. Sarkar S and **Ahmed Z** (2022) Jute Stick- A suitable and economical source as charcoal and activated carbon preparation. *American Journal of Polymer Science and Technology*; 8(1): 11-15. DOI: 10.11648/j.ajpst.20220801.13.
74. Sarkar S, **Ahmed Z** , Hossain MS and Uddin MM (2022) Charcoal Preparation From Jute Stick: A New Approach For Sustainable Economy. *GSC Advanced Research and Reviews*, 10(02), 014–019. DOI: <https://doi.org/10.30574/gscarr.2022.10.2.0045>.
75. Nasreen MA, **Ahmed Z.**, Ali MM and Tahmina (2022) Determination of β -carotene in jute leaves by spectrophotometry and thin layer chromatography. *World Journal of Biology Pharmacy and Health Sciences*, 9(2): 11–20. DOI: <https://doi.org/10.30574/wjbps.2022.9.2.0038>.
76. Morshed N, **Ahmed Z.**, Alam A, Talukder P and Rahman T (2022) Application and Fastness Analysis of Natural Dyes on Cotton Knitted Fabric. *Environ Sci Arch* 1(1):23-33. DOI: 10.5281/zenodo.7133115
77. **Ahmed Z** and Sarkar S (2022) Review on jute leaf –a powerful biological tool. *International Journal of Scientific Research Updates*, 4(1), 64–085. DOI: 10.53430/ijrsru.2022.4.1.0088.
78. Rahman T, **Ahmed Z** and Sarkar S (2022) Analysis of antibacterial properties of jute leaf. *Open Access Research Journal of Life Sciences*, 4(1), 51–55. DOI: <https://doi.org/10.53022/oarjls.2022.4.1.0059>.
79. **Ahmed Z** and Sarkar S (2022) Microbial Consortium: A new approach in jute retting of preserved dry ribbons. *International Journal of Scientific Research Updates*, 4(1), 126–137. DOI: <https://doi.org/10.53430/ijrsru.2022.4.1.0106>.
80. Sarkar S, **Ahmed Z** and Dilruba FA (2022) Jute Stick a Suitable Biomaterial and Economical Viable Resource for the Preparation of Microcrystalline Cellulose. *World J Pharma. Medi.l Res.* **8(9): 07-13**
81. Morshed N, **Ahmed Z.**, Alam A, Talukder P and Rahman T (2022) Improvement of dust resistance properties on the surface of jute knitted fabrics. *Research and Scientific Innovation Society (IJRISS)*. *International Journal of Latest Technology in Engineering, Management & Applied Science (IJLTEMAS)*, XI(VIII): 11-16.
82. Alam MM, Hossain HMZ, **Ahmed Z** and Khatun M (2022) Effect of Process Variables on Chemical Treatment of Jute Fibers. *Environ Sci Arch* 2(1):74-80. DOI: 10.5281/zenodo.7133172.
84. Alam A , Morshed N, **Ahmed Z.**, Rahman T and Talukder P (2022) A Potential Option of Salt and Alkali Free Reactive Dyeing on Cotton. *Trends in Textile & Fash Design* 5(2)-2022. DOI: 10.32474/LTTFD.2022.05.000207.
85. Sarkar S, Sarkar S, **Ahmed Z.** Highly Promising an Anti-Cancer Drugs: Metal Complex Bearing Sulfur Chelating Ligand, A Hypothetical Design, *Journal of Drug Delivery and Therapeutics*. 2022; 12(4):60-63. DOI: <http://dx.doi.org/10.22270/jddt.v12i4.5437>

INTERNATIONAL JOURNAL:**2001**

1. **Ahmed, Z.** and Akhter, F. Jute Retting: An Overview. Online Journal of Biological Science, 1: 685-688 (2001);DOI: 10.3923/jbs.2001.685.688
2. **Ahmed, Z.** Production Of Natural And Rare Pentoses Using Microorganisms And Their Enzymes. Electronic Journal of Biotechnology, 4:1-9 (2001); DOI:10.4067/S0717-34582001000200008
3. **Ahmed, Z.,** Banu, H., Akhter, F., Faruquzzaman, A. K. M. and Haque, M. S. Concept On Sugar- A Review. Online Journal of Biological Science, 1: 883-894 (2001); DOI: 10.3923/jbs.2001.883.894
4. **Ahmed, Z.,** Banu, H., Rahman, M. M., Akhter, F. and Haque, M. S. Microbial Activity On The Degradation Of Lignocellulosic Polysaccharides. Online Journal of Biological Science, 1: 993-997 (2001); DOI: 10.3923/jbs.2001.993.997
5. **Ahmed, Z.,** Akhter, F., Haque, S. H., Banu, H., Rahman, M. M. and Faruquzzaman, A. K. M. Novel Micropropagation System. Online Journal of Biological Science, 1:1106-1111 (2001); DOI: 10.3923/pjbs.2001.117.120
6. **Ahmed, Z.** and Ahmed, I. Endocrine Disruptor: Its Role And Remedy. Sciences, 1: 145-151(2001); DOI: 10.3923/jms.2001.343.349.

2002

7. **Ahmed, Z.,** Akhter, F., Hussain, M. A., Haque, M. S., Sayeed, M. M. A. and Hossain, M. M. Researches On Jute And Allied Fibre Plants. Pakistan Journal of Biological Science, 5: 812-818 (2002); DOI: 10.3923/pjbs.2002.812.818.

2012

8. **Ahmed, Z.** and Nahor, U. Beneficial Uses And Antimicrobial Activity Of Phyllanthus Emblica, Achyranthes Aspera And Allium Sativum- A Mini Review. IOSR IOSR J. Phar. Biol. Sci., 3(4): 28-32 (2012); DOI:10.9790/3008-0342832.

2013

9. **Ahmed, Z.** and Nahar, K. Application Of Microbes And Enzymes In The Advancement Of Medical Science- Mini Review. International J. Innovative Research and Development, 2(1): 677-717 (2013); Corpus ID: 84052144.
10. **Ahmed, Z.** Mushrooms- Its Nutritional, Medicinal And Antimicrobial Properties. A scientific journal of Comsats – Science Vision 19 (1&2), 41-48 (2013); doi:10.1111/j.1442-. 2050.2012.01397.x. PMID 22947091. INIS Repository : RN:46005387.

2014

11. **Ahmed Z.,** Magnet M.M.H. and Nayem M.U.M.R. Medicinal Value And Antimicrobial Activity Of *Adhatoda Vasica* And *Cinnamomum Zeylanicum* - A Mini Review. Journal of Medical and Pharmaceutical Innovation; 1 (6): 24-29 (2014).

2016

12. **Ahmed Z.,** Haque M. M., Sayeed N., Uddin M. E., Akter T. Reviews On Probiotics–It's Uses And Applications. World Journal of Pharmaceutical Research, 5(5), 24-34 (2016); DOI:10.20959/wjpr20165-6067.

2019

13. **Ahmed, Z.** Antimicrobial And Antioxidant Activities Of Tea Plant. Novel Research in Microbiology Journal, 3(6): 485-492 (2019); DOI: 10.21608/nrmj.2019.66740.
14. Ali M.M., Ray B., Rokeya B., Nasreen M.A. and **Ahmed Z.** Potential Healing Powers with Jute Plant- A Review. International Journal of Sciences: Basic and Applied Research. 48(5): 10-23 (2019).

2022

15. **Ahmed Z** (2022) Various Applications of Eco-friendly Jute and as an Alternative of Environmentally Hazardous Plastic- A Review. Environ Sci Arch, 1(2): 64-73. DOI: 10.5281/zenodo.7133166.

LOCAL JOURNAL:**2008**

1. **Ahmed, Z.** and Nizam, S. A. Jute- Microbiological And Biochemical Research. Plant Tissue Cult. & Biotech. 18(2): 197-220 (2008); DOI: 10.3329/ptcb.v18i2.3651.

CHAPTER**2013**

Name of the Book: We the Microbiologist, Bangladesh
Chapter: Abstract
Page: 5-6. **Publication Year:** 2013.

2014

1. **Name of the Book:** We the Microbiologist, Bangladesh
Chapter: Microbiology- Paving a long way
Page: 5-7. **Publication Year:** 2014.

2021

1. **Name of the Book:** Innovations in Microbiology and Biotechnology
Chapter 2: Determination of Antimicrobial properties of Trifala, Java Plum, Cinnamon, Henna and Cumin.
Author(s): Zakaria Ahmed, Taslima Rahman, Sanchita Sarker.
Vol. 2, 3 November 2021, Page 15-27.
Publication Year: 2021

ISBN: 978-93-5547-103-1 (Print), 978-93-5547-117-8 (eBook).

DOI: <https://doi.org.10.9734/bpi/imb/v2/4953F>

2. Name of the Book: Innovations in Microbiology and Biotechnology

Chapter 10: Determination of Antimicrobial analysis of some selected Ayurvedic and Unani medicines.

Author(s): Zakaria Ahmed, Taslima Rahman, Sanchita Sarkar.

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Publication Year: November 2021

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3. Name of the Book- Challenges and advances in chemical science

Chapter 1- Study on Biochemical Preparation of Natural and Rare Carbohydrate (Pentoses)

Author(s): Zakaria Ahmed, Shuranjan Sarkar and Taslima Rahman.

DOI: [10.9734/bpi/cacs/v7/2135C](https://doi.org/10.9734/bpi/cacs/v7/2135C)

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2022

5. Name of the Book: Practices & Research On Horticulture

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POPULAR ARTICLES

ENGLISH

2007

1. "CONTACT LENS- PREVENTION OF INFECTION AND EYE INJURY"; **Dhaka Courier** - page 35; An independent newsweekly (<http://www.dhakacourier.net>); Friday July 20-26, 2007/ Vol. 23/ issue 52/ regn. No. 592.
2. "KNOW ABOUT TRAVELLOR'S DIARRHOEA"; **Holiday-** page miscellany; An independent newsweekly (<http://www.weeklyholiday.net>); Friday July 27, 2007.
3. "MICROBES IN OUR EVERYDAY LIFE"; **Star Campus-** page 29; Sunday August 26, 2007/Vol. 2/issue 4

4. "HOW CAN WE PROTECT OURSELVES FROM FOOD BORNE ILLNESS"; **Star Campus**- page 21-22; Sunday September 23, 2007/Vol. 2/issue 8

2008

5. "AVIAN INFLUENZA (BIRD FLU)"; **Star Campus**- page 20; Sunday March 16, 2008/Vol. 2/issue 12

6. "SPACE: A BAD INFLUENCE ON MICROBES?"; **Star Campus**- page 30; Sunday July 10, 2008/Vol. 2/issue 47

2009

7. "JUTE AND KENAF- PROPERTIES AND APPLICATION IN TEXTILE INDUSTRIES"; Published in Three parts. **Bangladesh Textile Today (A comprehensive Magazine for the Textile and Apparel Industry)**

www.textiletodaybd.com

(Part-1) 36-38, Volume 1, Issue 4, October 2008.

(Part-2) 62-63, Volume 2, Issue 1, January 2009.

(Part-3) 35-38, Volume 2, Issue 2, April 2009.

8. "GENETIC ENGINEERING- THE FUTURE OF FOOD AND MEDICINE"; **Star Campus**- page 20; Sunday February 22, 2009/Vol. 2/issue 107

BANGLA

2007

1. **MICROBES IN OUR EVERYDAY LIFE (BANGLA)**; **Daily Ittafaq** (Bangla Daily Newspaper), Sunday, October 21, 2007. page 09.

2. **HOW CAN WE PROTECT OURSELVES FROM FOOD BORNE ILLNESS (BANGLA)**; **Daily Ittafaq** (Bangla Daily Newspaper), Sunday, December 17, 2007. page 09.

2008

3. **IMPORTANT INFORMATION ABOUT CHOLERA AND DIARRHOEA (BANGLA)**; Weekly Magazine **Britter Bairay** (Bangla Weekly Magazine), Monday, August 25, 2008, page 29-30.

4. **HUMAN CONTAGIOUS DISEASES (BANGLA)**; Weekly Magazine **Britter Bairay** (Bangla Weekly Magazine), Monday, September 29 2008, page 30.

2009

5. **JUTE- RETTING METHOD AND ITS QUALITY (BANGLA)**; **Krishi Kotha** (Bangla Monthly Magazine); 2009.

PRESENTATION IN SCIENTIFIC CONFERENCES

LOCAL

1995

1. Microbiological and Physicochemical Aspects of radiation sterilization of Oxytetracycline-HCl powder..... **Ahmed, Z.**, N. A. Chowdhury, A. R. Khan and N. Choudhury. **Annual Science Conference of Bangladesh Society of Microbiologist, Bangladesh**, March 31, 1995, Bangladesh Agricultural Research Council (BARC), Dhaka, Bangladesh (Abstract No. 04).

1996

2. Sterilization of Lactose by Gamma irradiation.....**Ahmed, Z.**, N. A. Chowdhury and F. Akhter. **Annual Science Conference of Bangladesh Society of Microbiologist, Bangladesh**, July 18, 1996, Bangladesh Council of Scientific Research, Dhaka, Bangladesh (Abstract No.07).

3. Feasibility study of radiation sterilization of some pharmaceutical raw materials.....**Ahmed, Z.**, N. A. Chowdhury, A. R. Khan and N. Choudhury. **19th Bangladesh Science Conference**, organized by Bangladesh Association for Advancement of Science (BAAS), October 29-31, 1996, Jahangirnagar University, Savar, Dhaka, Bangladesh (Abstract No.56).

1997

4. Comparative studies of chemical and microbial jute retting.....M. Alamgir, S. Haque, F. Akhter and **Ahmed, Z.** **Annual Science Conference of Bangladesh Society of Microbiologist, Bangladesh**, September 4-5, 1997, Bangladesh Agricultural University, Mymensingh, Bangladesh (Abstract No. 54).

5. Influence of microorganisms in the retting of jute and allied fibres.....**Ahmed, Z.**, S. Haque, F. Akhter and M. Alamgir. **Annual Science Conference of Bangladesh Society of Microbiologist, Bangladesh**, September 4-5, 1997, Bangladesh Agricultural University, Mymensingh, Bangladesh (Abstract No. 55).

6. Sterilization of Thiamine Hydrochloride by Radiation: A new approach.....**Ahmed, Z.**, N. A. Chowdhury, A. R. Khan and N. Choudhury. **Annual Science Conference of Bangladesh Chemical Society, Bangladesh**, March 14-16, 1997 Jahangirnagar University, Savar, Dhaka, Bangladesh (Abstract No. PRC 02).

2000

7. Changes in the activities of sucrose metabolizing enzymes during the germination of wheat seed.....Bhowmik, P. K., **Ahmed, Z.** and Matsui, T. **21st Bangladesh Science Conference organized by Bangladesh Association for Advancement of Science (BAAS)**, July 30-August 01, 2000, Dhaka University, Dhaka, Bangladesh (Abstract No. 29(ii)).

8. Physico-chemical changes of different varieties of rice as influenced by the application of cyanobacteria.....Akhter, F., Tahmida, Z. N., Mondal, R. and **Ahmed, Z.** **21st Bangladesh Science Conference organized by Bangladesh Association for Advancement of Science (BAAS)**, July 30-August 01, 2000, Dhaka University, Dhaka, Bangladesh (Abstract No. 031ii).

9. Studies on the properties of Candida famata R28 for D-arabitol production from D-glucose.....**Ahmed, Z.**, Akhter, F., Haque, M. S., and Izumori, K. **Annual Botanical Science Conference-2000**, Bangladesh Botanical Society, University of Chittagong, Chittagong-4331, Bangladesh (Abstract No. 12).

2001

10. A simple chemical method for D-xylose extraction from jute stick and rice husk..... **Ahmed, Z.** and Izumori, K. **21st Bangladesh Science Conference organized by Bangladesh Association for Advancement of Science (BAAS)**, July 30-August 01, 2001, Dhaka University, Dhaka, Bangladesh (Abstract No. **30(ii)**).

11. Determination of the stem-water ratio of jute and allied fibre plants for proper retting.... Haque, M. S., Akhter, F., and **Ahmed, Z.** **Annual Botanical Science Conference-2001**, Bangladesh Botanical Society, University of Chittagong, Chittagong-4331, Bangladesh (Abstract No. **40**).

2002

12. Distribution and Activity of microbial population for jute retting in jute growing areas of Bangladesh.... Asaduzzaman, M., Haque, M. S., **Ahmed, Z.** and Akhter, F. **Annual Botanical Conference-2001, Bangladesh Botanical Society** and University of Rajshahi, Department of Botany, Rajshahi-6205, Bangladesh; January 12, 2002 (Abstract No. **74**).

13. Study of the acceleration of jute retting speed and production of good quality jute and allied fibres by the application of microbial inoculum.... Akhter, F., **Ahmed, Z.**, Asaduzzaman, M. and Haque, M. S. **Annual Botanical Conference-2002**, Bangladesh Botanical Society and University of Rajshahi, Department of Botany, Rajshahi-6205, Bangladesh; January 12, 2002 (Abstract No. **75**).

14. Increase of macro-nutrients in soil by the application of blue green algae in rice production.... Akhter, F. and **Ahmed, Z.** **Annual Botanical Botanical Conference-2002**, Bangladesh Botanical Society and University of Rajshahi, Department of Botany, Rajshahi-6205, Bangladesh; January 12, 2002 (Abstract No. **56**).

15. Effect of Sulphex WP on microbial population in soil of jute field.....Akhter, F., Asaduzzaman, M., Farukuzzaman, A. K. M. and **Ahmed, Z.** **19th Annual Science Conference of Bangladesh Society of Microbiologist, Bangladesh**, Auditorium of the department of Microbiology, University of Dhaka, Dhaka-1000, Bangladesh; July 14, 2002 (Abstract No. **06**).

16. Utilization of Jute retting effluent as fertilizer in production of vegetable crops....Akhter, F., Asaduzzaman, M., **Ahmed, Z.** and Haque, M. S. **19th Annual Science Conference of Bangladesh Society of Microbiologist**, Bangladesh, Auditorium of the department of Microbiology, University of Dhaka, Dhaka-1000, Bangladesh; July 14, 2002 (Abstract No. **07**).

2003

17. Study of the biochemical composition of different pipeline varieties of jute fibres.....**Ahmed, Z.**, Haque, M. S., Akhter, F. and Begum, M. **International Botanical Conference 2002**. Department of Botany, University of Dhaka, Bangladesh; January 12-14, 2003 (Abstract No. **59**).

18. Influence of water level on the retting of jute and allied fibre plant....Haque, M. S. and **Ahmed, Z.** **International Botanical Conference 2003**. Department of Botany, University of Dhaka, Bangladesh; January 12-14, 2003 (Abstract No. **90**).

19. Enrichment of old effective retting bacteria for the retting of jute and allied plants.....Akhter, F. and **Ahmed, Z.** **International Botanical Conference 2002**. Department of Botany, University of Dhaka, Bangladesh; January 12-14, 2003 (Abstract No. **91**).

2012

20. Screening and antibacterial activity of different extracts of some medicinal plants and plant products in Bangladesh.....Nahor, U., Azad, T. and **Ahmed, Z.** **2012. National Biofair 2012, North South university**, Plt 15, Block B, Bashundhara R/A, Dhaka 1229. June 27, 2012. Poster presentation (Awarded **3rd position** among the inter-university competi

21. Isolation and identification of soil microflora from different soil samples and effect of commercially available pesticides on Klebsiella spp.....Haque, L. and **Ahmed, Z.** **Annual Plant Tissue Culture and Biotechnology Conference**, Shahjalal University of Science & Technology (SUST), Sylhet; November 30- December 01, 2012.

INTERNATIONAL

1998

1. Production of L-lyxose from ribitol using microbial and enzymatic reactions.....S.H. Bhuiyan, **Ahmed, Z.**, M. Utamura, Y. Itami, K. Izumori. **Annual Meeting of the Society for Fermentation and Bioengineering**, September 28-30, 1998, Hiroshima University, Higashi-Hiroshima, Japan (Abstract No. **930**).

2. Production of D-lyxose from D-glucose by microbial and enzymatic method..... **Ahmed, Z.** T. Saiki, S.H. Bhuiyan, H. Sasahara, T. Shimonishi, K. Izumori. 1998. **Annual Meeting of the Society for Fermentation and Bioengineering**, September 28-30, 1998, Hiroshima University, Higashi-Hiroshima, Japan (Abstract No. **929**).

2008

3. A comparative analysis of the multi-drug resistance patterns in Staphylococcus aureus isolated from various sources in Dhaka, Bangladesh.....Mirza, T., Datta, S., **Ahmed, Z.**, and Biswas, S. **Annual Meeting of American Society for Microbiology (ASM)**, Conference on Antimicrobial Resistance in Zoonotic Bacteria and Foodborne Pathogens, June 15-18, 2008, Copenhagen, Denmark (Abstract No. **A31**).

4. Relationship of jute retting and climatic changes.....Haque, M. S., Akhter, F., Asaduzzaman, M., Khandker, S. and **Ahmed, Z.** **International symposium on climatic changes and food security in South Asia**. August 25-30, 2008 Dhaka, Bangladesh (page **64**).

2010

5. Utilization of agricultural wastes for the production of biologically important rare sugars with medicinal value..... **Ahmed, Z.** **3rd IIUM-iCAST 2010, International Conference on Advancement in Science and Technology**, 26-29, 2010; Vistana Hotel, Kuantan, Malaysia.

2012

6. Study of antibacterial activity of Neem, Garlic, Amla and Ginger extracts to avoid secondary infection in diabetes patients.....Nahor, U. and **Ahmed, Z.** **2012. 3rd Indian National Seminar of Asian Network of Research on Antidiabetic Plants (ANRAP)**; Prevention & Management of diabetes: Prospects & Challenges. September 14-16, Kolkata, India (Abstract No. **PP 21**; page 61).

7. Comparative analysis for the detection of Tuberculosis by Conventional and Fluorescence Microscopy..... Ahmed, O. and **Ahmed, Z.** **First ASLM (African Society for Laboratory Medicine) International Conference** held in Cape Town, South Africa, from 1 to 7 December 2012. Poster Exhibit Hall under the Session titled "Opportunities for Improved Diagnosis of Tuberculosis". (Poster No. **152**).

8. Screening and antibacterial activity of different extracts of some medicinal plants and plant products in Bangladesh..... Nahor, U. and **Ahmed, Z.** 2012. **6th American Society for Microbiology (ASM) International Conference on Biofilms**, Hyatt Regency Miami in Miami, Florida, USA on September 29-October 4, 2012. Poster presentation (Poster No. 97).

2013

9. Determination of antimicrobial activity of Ayurvedic (Srakharishta, Kanakasava, Jierbacyarishta), Unani (Aluvasin and Carmina syrup) and medical plants (*Phyllanthus embilica* and *Allium sativum*) against some potential pathogenic microbes in Bangladesh.....**Ahmed, Z.** **6th international conference on drug discovery and therapy**, Dubai, UAE, February 10-12, 2014, organized by Eureka Science under the patronage of the Higher Colleges of Technology, Saif Zone, Sharjah, UAE.

10. Study on the current status of tuberculosis in Bangladesh..... **Ahmed, Z.** **3rd Biotechnology World Congress** February 10th - 12th, 2014, Dubai, organized by Eureka Science with the support of the Higher Colleges of Technology, Saif Zone, Sharjah, UAE.

2014

14. Study of multidrug resistant pattern of isolated bacteria from different source of waste water.....Islam, M. N. and **Ahmed, Z.** **7th International Plant Tissue Culture & Biotechnology Conference 2013** held on 01- 03 March, 2014 at the Department of Botany, University of Dhaka, Bangladesh.

WORKSHOP

1. Participated in the "Enteric Vaccine" workshop 2013; **American Society for Microbiology (ASM)**, Centre for Vaccine Sciences (CVS), International Centre for Diarrhoeal Disease Research, Bangladesh (icddr,b) 68 Shaheed Tajuddin Ahmed Sarani, Mohakhali, Dhaka 1212, Bangladesh.
2. Participated in the Workshop on "**Initiatives in Science Education, Research and Capacity Building**"; 14-15 September 2013, Dhaka, Bangladesh; Organized by **Bangladesh Academy Of Sciences (BAS) and The World Academy Of Sciences- Regional Office For Central & South Asia (TWAS-ROCASA)**. Post No. 17.
3. The International Workshop "**Strategic Cooperation in Higher Education in Pandemic context: experiences, challenges, and perspectives**" held online, on 9th of December, 2021. The workshop was supported by the INTENS-0 II project, code CNFIS-FD!-2021-0387, financed by the Ministry of Education, Ovidius University of Constanta, Romania.
4. **Gemone BJRI**

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