



Department of Mathematics
School of Sciences
Maulana Azad National Urdu University (Central University)
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Dr. Afroz | Associate Professor

CURRENT DESIGNATION/ INVOLVEMENT	Currently working as an Associate Professor in the Department of Mathematics, School of Sciences, Maulana Azad National Urdu University (Central University), Hyderabad, Telangana-500032, India.
AREA OF SPECIALIZATION	Wavelets Applications in Biomedical Signal Processing, Image Processing and Solving Differential Equations using wavelets.
RESEARCH PROJECTS AWARDED/DONE	1. PROJECT ENTITLED “APPLICATIONS OF WAVELETS IN BIOMEDICAL SIGNAL PROCESSING” AWARDED FROM UNIVERSITY GRANT COMMISSION, GOVT. OF INDIA OF AMOUNT 6 LAKHS FOR THE DURATION OF 2016-18.
BOOKS /BOOK CHAPTERS PUBLISHED	1. Afroz, (2019). Emerging Security Algorithms and Techniques (Ch – 1 Modular Arithmetic). CRC Press Taylor and Francis Group. 1, 1-10. 2. Afroz, (2019). Emerging Security Algorithms and Techniques (Ch -2Modular Arithmetic). CRC Press Taylor and Francis Group. 1, 11-26. 3. Afroz and Basharat Hussain (2020). Machine Learning and Big Data (Ch - 1Mathematical Foundation). Wiley. 4. Afroz and Basharat Hussain (2020). Machine Learning and Big Data (Ch-2 Theory of Probability). Wiley.
ACADEMIC AND ADMINISTRATIVE EXPERIENCE	5. HEAD & ASSOCIATE PROFESSOR, DEPARTMENT OF MATHEMATICS, MANUU HYDERABAD SINCE 15-05-2020. 6. ASSISTANT PROFESSOR, DEPARTMENT OF MATHEMATICS, MANUU HYDERABAD FROM 25-09-2014 TO 26-02-2020. 7. ASSISTANT PROFESSOR, ZAKIR HUSAIN DELHI COLLEGE, DELHI UNIVERSITY FROM 03-03-2011 TO 21-09-2014. DYAL SINGH COLLEGE, DELHI UNIVERSITY 8. ASSISTANT PROFESSOR, DYAL SINGH COLLEGE, DELHI UNIVERSITY FROM AUGUST, 2009 TO APRIL, 2010. 9. LECTURER, ALFALAH SCHOOL OF ENGINEERING AND TECHNOLOGY, FARIDABAD, HARYANA FROM 2006 TO 2007. 10. C AND C++ -PROGRAMMING DURING M.SC. (MATHEMATICS). MATLAB, MATHEMATICA, MS-OFFICE, WINDOWS.

EDUCATIONAL QUALIFICATION

- **DOCTOR OF PHILOSOPHY (Ph.D.), 2011**
Department of Mathematics, Jamia Millia Islamia, New Delhi.
- **M. PHIL MATHEMATICS, 2007.**
Alagappa University, Karaikudi, Tamilnadu.
- **M.SC. MATHEMATICS WITH COMPUTER SCIENCES, 2002.**
Department of Mathematics, Jamia Millia Islamia, New Delhi-110025.
- **B.SC., 2000.**
Department of Mathematics, Jamia Millia Islamia, New Delhi-110025.

TEACHING PROFICIENCY

Algebra, linear algebra, differential equations, complex analysis, calculus, numerical analysis, co-ordinate geometry, operations research, advanced calculus, probability and statistics.

RESEARCH PUBLICATION DETAILS

- **Afroz**, Imtiyaz Ahmad Wani, (2019). Denoising of Electrocardiogram Based on Norm Parameter Using Wavelet Packet Transform. International Journal of Engineering and Advanced Technology. 9, 3377-3383.
- **Afroz**, Imtiyaz Ahmad Wani, (2019). Comparison of SNR Values for Different Wavelet Functions using Wavelet Packet Transformation. International Journal of Research in Advent Technology. 7, 1436-1442.
- Abdullah, **Afroz**, (2019). Sufficient Condition for Wavelet Frame on Positive Half-Line. International Journal for Research in Applied Science & Engineering Technology. 7, 2503-2507.
- **Afroz**, Imtiyaz Ahmad Wani, (2018). Comparison of ECG Denoising Threshold Estimators through Wavelet Packet Analysis. International Journal of Advance Research in Science and Engineering. 7, 103-108.
- Abdullah, **Afroz** (2018). Semi- orthogonal wavelet frames on positive half-line using the Walsh Fourier Transform. New Trends in Mathematical Sciences. 6, 175 -183.
- Abdullah, **Afroz**, (2017). Detection of ECG R- Waves using Wavelet Transform. European Journal of Scientific Research. 145, 181-187.
- **Afroz**, (2016). Selection of Best Wavelet Filter for Denoising of ECG Signal. Journal of Applied Mathematics in Science and Technology, 31-39.
- **Afroz**, Jaffery Z.A., Khalil Ahmad (2014). ECG Baseline Drift Elimination Using Wavelet Packets Transform. Australian Journal of Basic and Applied Sciences, 8, 459-466.
- **Afroz**, Jaffery Z.A., Khalil Ahmad (2013). Applications of Wavelet Packets in ECG Signal Denoising. Journal of Wavelet Theory and Applications. 1, 35-44.

- Khalil Ahmad, Jaffery Z. A. and **Afroz** (2011). Denoising of ECG Signal using Wavelet Transform. JMI International Journal of Mathematical Sciences. 2, 26- 33.
- M. Ausif Padder, **Afroz**, Ayub Khan. Analysis of Tumor-Immune Response Model by Differential Transformation Method. J. Sci. Res. **14** (1), 243-256 (2022).

DETAILS OF
CONFERENCE/SEMINAR
/WORKSHOP/ FDP
(ATTENDED/PRESENTED
)

1. Participated in the International Conference on Modelling of Engineering and Technological Problems (ICMETP-2009) held at BMAS Engineering College, Keetham, Agra during 14-16 January, 2009.
2. Participated and presented a paper entitled “Denoising of ECG Signal using Wavelet Transform using Wavelets” in the International Conference on Recent Trends in Mathematics and its Applications (ICRTMA-09) held at Jamia Millia Islamia, New Delhi during 30-31 March, 2009.
3. Participated and presented a paper entitled “Performance Comparison of Wavelet Threshold Estimators for ECG Signal Denoising” in the International Conference on Advances in Recent Technologies in Communication and Computing, (IEEE2010) held at Kottayam, Karla, India, oct 15-16, 2010.
- 4.

FDP/Workshops:

(1) “Fourth Online One Month Faculty Induction Program” Organized by UGC-HRDC, Jamia Millia Islamia, New Delhi, from 10th February to 11th March, 2021.

DETAILS OF KEYNOTE
SPEAKER/RESOURCE
PERSON/ SESSION CHAIR
ETC.

Delivered lectures in CSE- UGC as Resource person in MANUU

ACHIVEMENTS

1. First Position in B. Sc. (JMI, New Delhi).

DETAILS OF SUPERVISION
(M.PHIL/M.TECH/PHD.)

1. Guided one Ph.D. Student

PROFESSIONAL

- **LIFE MEMBER OF INDIAN SOCIETY OF INDUSTRIAL & APPLIED MATHEMATICS**

MEMBERSHIPS

PERSONAL DETAILS

Father's Name : Fakhruddin
Date of Birth :
Gender : Male
Marital Status : Married
Nationality : Indian
Language Known : English, Urdu, Hindi
Etc..

Date: 05.02.2022

Place: Hyderabad

(Dr. Afroz)