Personal Information:

Name: Dr M Anita

Designation: professor and HOD, BS&H

Years of experience: Teaching- 25 years

Research-15 years

Contact: bsh.hod@bvrithvderabad.edu.in

Areas of Specialization: Algebraic number theory, linear algebra, differential equations, Mathematics applications in IOT and ML.



Educational Qualifications:

Doctoral Degree: PhD (Mathematics)

Jawaharlal Nehru Technological University, Hyderabad,

Awarded in March 2007

PG Degree: M Phil (Mathematics)- 2004

Alagappa University, karaikudi, Tamilnadu.

: M.Sc (Mathematics)-1997

Osmania University, Hyderabad.

UG Degree: B Sc (M.P.Cs)-1995

Osmania University, Hyderabad

Books Published:

- 1. "Engineering Mathematics-I "Textbook-Everest Publishers, Pune; R-13 Syllabus, JNTUH September, 2015.
- 2. "Linear Algebra and Calculus" Textbook-Spectrum university press, Hyderabad; R-18 Syllabus, IARE-Autonomous, Syllabus, 2018.
- 3. "Mathematical Transform Techniques" Textbook-Spectrum university press, Hyderabad; R-18 Syllabus, IARE-Autonomous, Syllabus, 2018.

Book Chapters:

 An IOT-Based smart pet food dispenser"- Intelligent Manufacturing and Energy Sustainability systems 1st edition 2021-Springer SIST Series ISSN: 2190-3018; 21 August 2020.

Patents published:

1. TITLE OF THE INVENTION: Different approaches to probability as explored through analyzing card tricks.

Application number: 202341088594

Publication date: 19/01/2024

2. TITLE OF THE INVENTION: Strategies for effective mathematics pedagogy with technology.

Application No.202441046404 Publication Date: 21/06/2024

3. TITLE OF THE INVENTION: Methods for enhancing problem –solving and critical thinking in mathematics

Application No.202441046405 Publication Date: 21/06/2024

Papers Published:

International Journal Publications:

- 1. On Explorations of the Spectra of Pisot Numbers", Indian journal of mathematics and mathematical Sciences, Volume II, Number I: 81-91 June 2006.
- 2. "Some Properties of Pisot Numbers", International Journal of Applied Mathematical Analysis and Applications, Volume -I, Number II, PP. 225-237, December, 2006.
- 3. "Pisot Numbers property by Fibonacci Sequence" International journal of Engineering Technology Science and Research ISSN 2394 3386, Volume 4, Issue 11, November, 2017.
- 4. "Numerical estimation of non-relativistic vlasov N-body model using semi lagrangian schemes" Journal of mechanics of continua and mathematical sciences ISSN (online):2454-7190 vol-14.No-6. November December (2019) 347-353 ISSN (print) 0973-8975. {WEBOF SCIENCE} https://doi.org/10.26782/jmcms.2019.12.00024
- 5 "Period doubling bifurcation analysis of a simple nonlinear differential equation using numerical scheme". Paper published in a September 2020 special issue in Advances in Mathematics: Scientific Journal. (Scopus)
- 6. "An IOT-Based smart pet food dispenser" published as book chapter Intelligent Manufacturing and Energy Sustainability: proceedings of ICIMES 2020 {smart innovation, systems and technologies, 213}1st edition.2021-Springer SIST Series ISSN: 2190-3018; 21August 2020.
- 7. "An ICT TRENDS IN ELT" CONFLUX Journal of Education, volume 11, Issue 2, June2023 https://cjoe.naspublishers.com
- 8. "Using Machine Learning to Analyze Twitter's Sentiment" IEEE Journal Advances in Computing, Communication and Applied informatics (ACCAI), August 2023. httpseexplore.ieee.org/document/10199230

Coursera:

1. Completed a course "Differential Equations for Engineers" from The Hong Kong

University of Science and Technology.

- 2. Completed a course "Vector calculus for Engineers" from The Hong Kong University of Science and Technology.
- 3. Completed a course "Matrix Algebra for Engineers" from The Hong Kong University of Science and Technology.

NPTL Courses:

- 1. Completed Advanced Engineering Mathematics in April 2024
- 2. Completed Linear Algebra in AI and ML in April 2024

International conferences attended:

- 3. International Conference on "Number Theory" SASTRA, Kumbakonam, Tamilnadu, in2004.
- 4. National Conference on "New Trends in Number Theory", Osmania University, Hyderabad, 2006, Osmania University.
- 5. International conference emanate& innovative trends in engineering, management and sciences" ICEITEMS-2019, Malla Reddy Institute of Technology, 8 & 9 November 2019.
- 6. "Seventh International conference on Transformations in Engineering Education", Anurag Group of Institutions, Hyderabad, 5 to 8 January 2020

FDPs/Workshops / conferences- Conducted:

- 1) A Two-Day International virtual conference on ELT in India: Tradition vs. Innovation on6th &7th July 2023, BVRIT HYDERABAD College of Engineering for Women.
- 2) A Three day FDP 4C'S-NEED OF THE HOUR (Critical thinking, creativity, collaborating communication) on 8th to 10th JUNE 2022,BVRIT HYDERABAD College of Engineering for Women.
- 3) National level online workshop on origin software on 28 th May 2022, *BVRIT HYDERABAD College of Engineering for Women.*\

FDPs/Workshops - Attended:

- 1. Advance Operation Management techniques, Refresher Course, JNTUH, and March, 2004.
- 2. APSMS, Kakatiya University, Warangal, December 2006, University.
- 3. "Advanced Engineering Materials and Applications", VNR, VJIET Hyderabad, 31 January, 2017.
- 4. "Advanced Numerical Modeling Techniques for Engineering", VNR, VJIET, Hyderabad,27 to 31 March, 2017.
- 5. "Engineering Mathematics", Refresher Course, CMR Engineering College, 12 to 17, June 2017.
- 6. Research among youth -2020, FDP-Vardhaman College of engineering, Hyderabad, 28May to

- 3 June.
- 7. SCi lab-FDP- St.Peters Engineering College, Hyderabad, 15 to 19 June 2020.
- 8. Optimization Techniques for mechanical Engineering- FDP- Sreenidhi Institute of Scienceand technology. Hyderabad, 22 to 27 June 2020.
- 9. Application of mathematics- Online FDP-Karunya Institute of Technology and Sciences, Coimbatore, TN, 20 to 24 July 2020.
- 10. Orienting Applications & Conceptualized Aspects of Sciences & Humanities-BalajiInstitute of Technology & Science, Narasampet, Warangal, Telangana, 21 to 25 July 2020.
- 11. Five day online FDP on "Numerical Techniques For Real World Engineering Applications" VIT, Chennai, from 3rd to 7th June 2023.
- 12. One week online FDP on "Mathematics and its applications in technology and science", Madanapalle institute of technology and science, Madanapalle. 5th to 9^{th June} 2023.
- 13. An international workshop on "Recent trends in mathematics" VIT, Chennai from 29thApril to 1st May 2023.
- 14. National Education Policy 2020 Challenges In Implementation In Higher Education National Level One Week Hybrid FDP conducted by Chaitanya Bharathi Institute of Technology, Hyderabad, Telangana in association with IEEE Education Society Student Branch Chapter CBIT and IEEE Young Professional from 18th March 2024 to 23rd March 2024.
- 15. Empowering Educators in the Age of Artificial Intelligence (One Week Online Workshop Event Report) Dates: 12th to 18th February 2024. Duration: 1 week Conducted By: Kannur Salafi B.Ed. College -Kannur, Kerala, Tamilnadu Teachers Education University Chennai, Gandhi Shikshan Bhavan'S Smt. Surajba College Of Education Mumbai

Short term training program (STTP):

1. Mat lab and mathematic for scientific research conducted by Arul Anandar college, Madurai, TN.

Life membership

1. Life member of Andhra Pradesh and Telangana society for mathematical sciences

Webinars: Resource person

 A One Day National Webinar on "Mental Health & Quality of Life of Married Working Women in India." Organized by Institute of Aeronautical Engineering, Dindigal, and Hyderabad and sponsored by National Commission For Women on 21 December, 2020 (Monday) 10.00 Am – 1.30 pm.