

Name: Dr. Aditi Sunil Phadke

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Educational Qualifications and Current Affiliation:

- Graduated from Fergusson College, Pune in May 1996.
- Completed M.Sc. in Mathematics From IIT Bombay in May 1998.
- Cleared GATE-98 Mathematics examination with an All India Rank of 41.
- Cleared December 97 NET exam and was awarded scholarship(JRF And SRF) by UGC for 5 years to pursue Ph.D. in Mathematics.
- Was awarded the Ph.D degree in May 2006 for the thesis titled ‘Uniform Cyclotomy and Related Zeta Functions’ under the guidance of Prof. S.A. Katre submitted to Savitribai Phule Pune University(formerly, University of Pune).
- Was awarded **Gold Medal** by SPPU for the above thesis as the Best Thesis of the year in Mathematics.
- Currently working as an Assistant Professor in the Department of Mathematics, Nowrosjee Wadia College, Pune.

Important Co curricular Activities:

- Worked as the **Deputy Leader of the Indian Team** for the **International Mathematical Olympiad(IMO 2013)** that was held at Santa Marta, Colombia in July 2013. More than 100 countries participate in this prestigious championship for High School Students.
- Worked as the **Observer of the Indian Girls Team** for the **European Girls Mathematical Olympiad (EGMO, 2015)**. The competition was held at Minsk, Belarus from April 14, to April 20, 2015.
- Both these important responsibilities were assigned by the National Board for Higher Mathematics(NBHM).
- I have been selected to be the **Leader of the Indian Girls team** that will be participating in the **European Girls Mathematical Olympiad (EGMO 2022)** to be held in Eger, Hungary in April 2022.
- Taught at the International Mathematical Olympiad Training Camp, held at Homi Bhabha Centre for Science Education, Navi Mumbai for more than 10 years. This camp is aimed at training and selection of the Indian Team for the prestigious International Mathematical Olympiad Competition.
- Am working in the core committee of the Madhava Mathematics Competition for more than 10 years. This competition is a **National level undergraduate mathematics competition** funded by NBHM.
- Worked as Guest/Visiting faculty for several workshops/courses for Undergraduate and Olympiad students for more than 15 years.
- Have actively participated in several Workshops, Conferences, Refresher Courses and Orientation Programme.

- Guided a student from American University, Washington DC who worked as an intern for one month at the Department of Mathematics, Nowrosjee Wadia College, Pune in April 2015.
- Worked in the panel of authors to write an **online textbook** for F.Y.B.Sc. And another for S.Y.B.Sc. Both these books were prescribed by Savitribai Phule Pune University as text book. This book is freely available online.
- Worked as member of subcommittees for framing syllabus of courses in SPPU, for B.A./B.Sc. Mathematics, M.Sc. (Industrial Mathematics with Computer applications).

Important Organizational Responsibilities:

- Worked as Co-coordinator for a workshop sponsored by NBHM, for training and orientation of teachers in the Western Region for Mathematical Olympiad Competitions in February 2010.
- Worked as the **Regional Coordinator** (Mathematical Olympiad Competition) of the **Maharashtra and Goa Region** for the year 2011-12 and **joint regional coordinator** for (Mathematical Olympiad Competition) of the Maharashtra and Goa Region for the year 2015-16.
- Worked to coordinate and conduct the **Asian Pacific Mathematical Olympiad** competition at the center Bhaskaracharya Pratishthana, Pune in March 2016.
- Worked as a Local Coordinator for the prestigious **Mini MTTTS (Mathematics training and talent search programme)** organized at Bhaskaracharya Pratishthana, Pune in Nov. 2018 and also delivered lectures in the same.
- Worked as Co-ordinator for a one week training programme for IIT JAM for T.Y.B.Sc. Students organized at Bhaskaracharya Pratishthana in the year 2019 and also delivered a talk in the same.

Publications:

- Explorations of the Multi-peg Tower of Hanoi Problem, *Pramod N. Shinde and Aditi Phadke* Proceedings of the International Conference on Perspectives of Computer Confluence with Sciences 2012, (2012), 122-126. (ISBN : 978-93-82062-76-9)
- Generating MDS Code Using Vandermonde Matrix, *Aditi Phadke, Pramod N. Shinde and S. A. Katre*, Proceedings of the International Conference on Perspectives of Computer Confluence with Sciences 2012, (2012), 127-131. (ISBN : 978-93-82062-76-9)
- Some Interesting Numbers, *Aditi S. Phadke, Pramod N. Shinde, Vikas S. Jadhav*, Proceedings of the 2nd National Conference on Recent Trends in Computer Science & Applications and Computational Mathematics 2013, 172-174. (ISBN: 978-93-83414-29-1)
- Option trading strategies on Union Budget Day, Pramod N. Shinde, Aditi S. Phadke, Conference Proceedings of Recent Trends in Mathematics and Statistics with Applications to Commerce, Economics, Finance and Management held at Ness Wadia College of Commerce on 21-22 March 2016

Paper Presentation:

- Generating MDS Code Using Vandermonde Matrix,; Presented at *ICPCSS – 2012* held at Nowrosjee Wadia College, Pune – 411 001, India.
- Using Jacobi Sums to Generate MDS Codes; Presented at *National Conference on Discrete Mathematics* held at Department of Mathematics, University of Pune, India from 22nd to 24th December 2012.
- Some Interesting Numbers, Presented at the 2nd National Conference on Recent Trends in Computer Science & Applications and Computational Mathematics held at Indira College of Commerce & Science, Pune held in December 2013.
- Presented paper entitled Option trading strategies on Union Budget Day at the UGC sponsored Late Prin. Dr. B.S. Bhanage Memorial National conference Recent Trends in Mathematics and Statistics with Applications to Commerce, Economics, Finance and Management held at Ness Wadia College of Commerce on 21-22 March 2016
- Presented a paper entitled “A combinatorial identity about the set of presumed minimal solutions of the multipeg Tower of hanoi problem” in a National Conference on Pure and Applied Mathematics organized by the Department of Mathematics, Nowrosjee Wadia College, Pune.

Invited Talk

- Delivered an Invited Talk at the International Conference on Algebra and Analysis held at the Department of Mathematics, Savitribai Phule Pune University during December 19-22, 2017.

Teaching Experience

- Worked as a Lecturer (mainly for the P.G. Section) and Co-ordinator of M.A/M.Sc Mathematics at S.P. College, Pune from July 2009 to April 2011.
- Training the students for the Regional and National level Mathematical Olympiad examinations at Bhaskaracharya Pratishthana from July 2003 to May 2011.
- Currently working as Assistant Professor at the Department of Mathematics, Nowrosjee Wadia College, Pune since 15th June 2011.

Date: October 28, 2021, Pune.