

Dr. Sanjay Madhukar Chinchole

✉ mr.sanjaymaths@gmail.com

📌 Mathematics Education

🌐 <https://sites.google.com/view/sanjaychinchole-myprofile/home>

📺 <https://www.youtube.com/c/MathematicsEducationSanjayChinchole>

🆔 0000-0003-1670-4814



Employment History

- 21 January 2023 – ···· **Associate Professor of Mathematics.**
Mahatma Gandhi Vidyamandir's Arts, Science and Commerce College, Manmad, Dist. Nashik, Maharashtra.
- 27 June 2016 – 20 January 2023 **Assistant Professor of Mathematics.**
Mahatma Gandhi Vidyamandir's Arts, Science and Commerce College, Manmad, Dist. Nashik, Maharashtra.
- 17 September 2008 – 26 June 2016 **Assistant Professor of Mathematics.**
Mahatma Gandhi Vidyamandir's Loknete Vyankatrao Hiray Arts, Science and Commerce College, Panchavati, Nashik, Maharashtra.
- 01 April 2004 – 16 September 2008 **Assistant Teacher of Mathematics.**
Jamner Taluka Education Society's New English School and Science Junior College, Jamner, Dist. Jalgaon, Maharashtra.

Education

- 2015 – 2022 **Ph.D., Savitribai Phule Pune University** in Mathematics.
Thesis title: *Some Contribution to Special Functions using Fractional Calculus.*
- 2004 – 2005 **UGC-CSIR, NET** qualified in Mathematical Sciences.
Exam Date: 19 December 2004, Result Date: 01 June 2005.
- 2002 – 2003 **B.Ed. (Mathematics and Science), North Maharashtra University.**
College Name: *D. E. Society's College of Education, Dhule.*
Aggregate Marks: **887/1100**
- 2000 – 2002 **M.Sc. Mathematics, Savitribai Phule Pune University.**
College Name: *Department of Mathematics, University of Pune, Pune.*
Aggregate Marks: **1735/2000**

Skills

- Languages **Strong** reading, writing and speaking competencies for English, Hindi, Marathi and Ahi-rani.
- Coding **Proficient** in \LaTeX , Maxima, Python, GeoGebra, MATLAB, Scilab, R, ...
- Misc. **Experienced** in Academic research, teaching, training, consultation, \LaTeX typesetting and publishing.

Administrative Experience

- Nodal Officer **Worked** as a Nodal Officer in **Arts, Science and Commerce College, Manmad** for B. Voc. Degree and Diploma Courses Approved by UGC-NSQF.

Representation in Academic Bodies

- 2014 – 2015 **Member** Syllabus Restructuring Committee of T. Y. B. Sc. Mathematics (2013 Pattern) formed by Savitribai Phule Pune University, Pune.
- 2020 – 2021 **Member** Syllabus Restructuring Committee of T. Y. B. Sc. Mathematics (2019 Credit Pattern) formed by Savitribai Phule Pune University, Pune.
- 2021 – 2022 **Member** of Board of Studies of Mathematics formed by Mahatma Gandhi Vidyamandir Institute.
- Member** of Board of Studies of Vocational Courses formed by Mahatma Gandhi Vidyamandir Institute.
- 2022 – 2023 **Member** of Board of Studies of Mathematics formed by Mahatma Gandhi Vidyamandir Institute.
- Chairman** of Board of Studies of Vocational Courses formed by Mahatma Gandhi Vidyamandir Institute.
- 2023 – 2024 **Member** of subcommittee for Syllabus Restructuring of F. Y. B. Sc. Mathematics (as per NEP 2020) formed by Savitribai Phule Pune University, Pune.

Research Publications

Journal Articles

- 1 S. M. Chinchole, "A new special function with applications to quantum mechanics," *Communications in Mathematics and Applications*, vol. 14, no. 5, pp. 1479–1492, 2023.
- 2 S. M. Chinchole, "A new integral transform with applications to fractional calculus," *Communications in Mathematics and Applications*, vol. 13, no. 3, pp. 1003–1012, 2022.
- 3 S. M. Chinchole, "Modified definitions of $sabc$ and $sabr$ fractional derivatives and applications," *International Journal of Difference Equations (IJDE)*, vol. 17, no. 1, pp. 87–112, 2022.
- 4 S. M. Chinchole and A. P. Bhadane, "A new definition of fractional derivatives with mittag-leffler kernel of two parameters," *Communications in Mathematics and Applications*, vol. 13, no. 1, pp. 19–27, 2022.
- 5 S. M. Chinchole and A. P. Bhadane, "A new family of special polynomials with fractional integrals," *International Journal of Difference Equations (IJDE)*, vol. 17, no. 1, pp. 65–73, 2022.
- 6 S. M. Chinchole and A. P. Bhadane, "On properties of new fractional derivative with mittag-leffler kernel of two parameters," *International Journal of Difference Equations (IJDE)*, vol. 17, no. 1, pp. 47–52, 2022.
- 7 S. M. Chinchole and A. P. Bhadane, "Lu factorization method to solve linear programming problem," *Intern. J. Emerging Technology and Advanced Engineering*, vol. 4, no. 4, pp. 176–180, 2014.

Ph. D. Thesis

- 1 S. M. Chinchole, "Some contribution to special function using fractional calculus," Ph.D. dissertation, Savitribai Phule Pune University, Pune, 2022.

Books and Chapters

- 1 S. M. Chinchole, A. S. Khairnar, N. M. Phatangare, and R. P. Puranik, *Algebra and Calculus-I*. Nirali Prakashan, 2024.
- 2 S. M. Chinchole, A. R. Medhekar, and R. P. Puranik, *Basic Mathematics-I*. Nirali Prakashan, 2024.
- 3 S. M. Chinchole, *A Simplified Book on Metric Spaces*. Lambert Publishing House, 2021.

Paper Presentations










- January 27-29, 2011 ■ A research paper entitled **A Metric Space defined on Set of Positive Prime Numbers**, was presented in "National Workshop on Recent Trends In Mathematics", organized by L. V. H. College, Panchavati, Nashik-3.
- February 6-8, 2012 ■ A research paper entitled **Pythagorean Theorem-A Vector Approach**, was presented in "Recent Developments In Graduate Mathematics", organized by L. V. H. College, Panchavati, Nashik-3.
- February 14-16, 2013 ■ A research paper entitled **Local Fractional Fourier's Transform Based on the Local Fractional Calculus**, was presented in "National Conference On Recent Developments in Mathematics and Statistics", organized by T. C. College, Baramati (Dist. Pune).
- November 02-04, 2020 ■ A research paper entitled **An Introduction to New Special Function Using Fractional Calculus**, was presented in "International Conference on Mathematical Analysis and Applications (MAA)", organized by Department of Mathematics, National Institute of Technology, Jamdeshpur.
- April 01-02, 2022 ■ A research paper entitled **A New Approach to Derivative of Gamma Function**, was presented in "International Conference on Recent Advances in Science (ICRAS-2022)", organized by Invertis University, Bareilly.

Work Experience

Resource Person


- June 19, 2006 ■ A lecture on "**Numerical Methods**", was delivered in "Special Summer Coaching Classes on Basic Mathematics for F.Y., S.Y. and T.Y.B.Sc.", organized by *M.S.G. Arts, Science & Commerce College Malegaon Camp*.
- February 22, 2012 ■ A lecture on "**Metric Spaces**", was delivered in one day workshop on "Emerging Trends in Metric Spaces & Its Applications", organized by *M.S.G. Arts, Science & Commerce College Malegaon Camp*.
- September 13, 2012 ■ A lecture on "**Competitive Examinations for UG & PG Students**", was delivered in "Lecture Series", organized by *L. V. H. College, Panchavati, Nasik*.
- January 23, 2014 ■ A lecture on "**NET/SET Preparation**", was delivered in "Lecture Series", organized by *L. V. H. College, Panchavati, Nasik*.

Work Experience (continued)

- June 03, 2015  A lecture on “**Numerical Analysis**”, was delivered in "NET SET Lecture series of Mathematics ", organized by *K. T. H. M. College, Nashik*.
- February 10, 2017  A lecture on “**Topology**”, was delivered in "NET/SET workshop ", organized by *L. V. H. College, Panchavati, Nasik*.
- April 01, 2017  A talk on “**Numerical Analysis** ”, was delivered in National Workshop on “Techniques and Methods to Crack Problems in Mathematics”, organized by *The Institute of Science, Mumbai*.
- June 01 - 11, 2017  A lecture on “**Methods and Techniques to solve problems in Mathematics** ”, was delivered in National Workshop, organized by *K. T. H. M. College, Nashik*.
- March 07, 2018  A lecture on “**Linear Algebra** ”, was delivered in "NET/SET workshop", organized by *L. V. H. College, Panchavati, Nasik*.
- December 03, 2019  A lecture on “**Research in Social Sciences and Applications of Statistics** ”, was delivered in the certificate course on “Research Methodology and Application of Mathematical and Statistical Techniques in Economics”, organized by *Arts, Commerce and Science college, Chandwad* .
- March 05, 2021  A lecture on “**Puzzles and Mathematics**”, was delivered in the seminar, organized by *GMD Arts, BW Commerce and Science College, Sinnar*.
- August 25, 2021  A lecture on “**Linear Algebra**”, was delivered in the "NET/SET Guidance for Paper II", organized by *L. V. H. College, Panchavati, Nasik*.
- October 08, 2021  A lecture on “**Mathematics for F. Y. B. Sc./ F. Y. B. Sc. (Computer Science) students**”, was delivered in "online bridge course ", organized by *Samajshree Prashant-dada Hiray Arts, Science and Commerce College, Nampur* .

Training Programmes Completed


Training Programme

- May 21 - June 16, 2001  **Mathematics Training and Talent Search Programme-2001**, funded by *National Board for Higher Mathematics*, organized by IIT Pawai (Mumbai).


Orientation programme


- December 03-30, 2012  **General Orientation Programme**, organized by *UGC-Academic Staff College, University of Pune, Pune 411007*.

Refresher Courses


- June 24 - July 13, 2013  **Refresher Course in Mathematics**, organized by *UGC-Academic Staff College, Himachal Pradesh University, Shimla - 5*.

Training Programmes Completed (continued)

February 18 - March 02, 2019  **Refresher Course on Analysis**, organized by *Department of Mathematical Sciences, Tezpur University*.


May 30 - June 13, 2019  **Robotics and Internet of Things**, organized by *RUSA and conducted by University of Mumbai under HRDC*.


Two - Week Faculty Development Programme

May 18 - June 03, 2020  **Managing Online Classes and Co- creating MOOCS 2.0**, organized by *Teaching Learning Centre, Ramanujan College, University of Delhi*.


One Week Faculty Development Programmes

June 08 - 14, 2020  **Open Source Tools For Research**, organized by *Teaching Learning Centre, Ramanujan College, University of Delhi*.

July 01 - 06, 2020  **One Week Pedagogical Training for Teachers on Tools for Online Teaching, Learning and Evaluation** , organized by *Swami Ramanand Teerth Marathwada University, Nanded*.


July 20 - 25, 2020  **Waste Management and its Impact on the Environment** , organized by *G. H. Raisoni College of Engineering, Nagpur*.

July 19 - 23, 2021  **Faculty Development Program on QUANTUM COMPUTING** , organized by *AICTE Training And Learning (ATAL) Academy, IIIT Dharwad*.


October 18 - 22, 2021  **Advanced Mathematical Techniques in Engineering and Technology** , organized by *Maharshi Dayanand University Rohtak*.

October 16 - 21, 2023  **Funded Research Projects** , organized by *ATLAS SkillTech University, Mumbai*.


UGC Paramarsh Faculty Development Programme

July 13 - July 18, 2020  **ICT in Teaching and Evaluation** , organized by *MSP Mandal's Shri Shivaji College, Parbhani (Maharashtra)*.

Two Week International Faculty Development Programme



October 26 - November 07, 2020  **Multidisciplinary Research Innovation in Engineering, Science and Technology for Sustainable Development** , organized by *Computer Science and Engineering Department, Bipin Tripathi Kumaon Institute of Technology Dwarahat Almora (Uttarakhand), INDIA*.

One Week International Faculty Development Programme


May 12 - 18, 2021  **Online Teaching Metrics** , organized by *SRM Institute of Science and Technology, Chennai*.

Seminars/Workshops/Conferences

Seminars/Workshops/Conferences Organized

- February 06 - 08, 2012  Coordinated a **National Conference on “Recent Developments in Graduate Mathematics”**, organized by *L. V. H. College, Panchavati, Nashik.*
- March 10 - 11, 2016  Coordinated a **National Conference on “Recent Trends in Fractional Calculus: Theory and Applications”**, organized by *L. V. H. College, Panchavati, Nashik.*











Seminars/Workshops/Conferences Participated

- December 24, 2008  A University level **Seminar on “Teaching Methods in Calculus”**, organized by *R.B.N.B. College, Shrirampur, Dist-Ahmednagar.*
- July 04 - 07, 2009  A National level **Workshop on “scilab”**, organized by *Bhaskaracharya Pratishthana, Pune* and *IIT Bombay.*
- January 18 - 19, 2010  A University level **Workshop on “Restructuring of T.Y.B.Sc. Syllabus in Mathematics”**, organized by *K.T.H.M. College, Nashik* and *Board of Studies in Mathematics, University of Pune.*
- February 06, 2010  A University level **Workshop on “Discussion on Practical Courses included in F.Y./S.Y.B.Sc. Mathematics Syllabus”**, organized by *Agasti College, Akole.*
- March 13, 2010  A University level **Workshop on “Mathematics, Statistics and Computer Application on T.Y.B.Com. New Syllabus”**, organized by *L. V. H. College, Panchavati, Nashik.*
- September 27 - October 1, 2010  A National level **National Workshop on “Scilab Advanced”**, organized by *Bhaskaracharya Pratishthana, Pune.*
- January 24, 2011  A University level **Workshop on “Discussion of Practical Course in S. Y. & T. Y. B. Sc. Mathematics Syllabus”**, organized by *R.B.N.B. College, Shrirampur, Dist-Ahmednagar.*
- January 27 - 29, 2011  A National level **National Workshop on “Recent Trends in Mathematics”**, organized by *L. V. H. College, Panchavati, Nashik.*
- February 22, 2012  A University level **Workshop on “Emerging Trends in Metric Spaces & Its Applications”**, organized by *M. S. G. College, Malegaon Camp, Malegaon (Dist:- Nasik).*
- February 14 - 16, 2013  A National level **National Conference on “Recent Developments in Mathematics & Statistics”**, organized by *T. C. College, Baramati (Dist. Pune).*

Seminars/Workshops/Conferences (continued)

- September 23 - 24, 2013  A National level **National Programme on Technology Enhanced Learning (NPTEL Workshop) on “Riemann Surfaces”**, organized by *IIT Madras*.
- August 07 - 08, 2015  A National level **National Conference on “Archetypes of Innovations for Student-Centric Learning”**, organized by *K.T.H.M. College, Nashik*.
- March 10 - 11, 2016  A National level **National Conference on “Recent Trends in Fractional Calculus: Theory and Applications”**, organized by *L. V. H. College, Panchavati, Nashik*.
- February 03, 2018  A State level **Seminar on “Recent Applications of Mathematics and Statistics”**, organized by *S. P. H. Mahila Mahavidyalaya Malegaon Camp*.
- December 27 - 29, 2018  A National level **National Conference on “Recent Trends in Mathematics and Its Application”**, organized by *M. S. G. College, Malegaon Camp, Malegaon (Dist:- Nasik)*.
- January 23 - 24, 2019  An International level **International Conference on “Innovations in Teaching Learning and Evaluation in Higher Education”**, organized by *L. V. H. College, Panchavati, Nashik*.
- July 18, 2019  A University level **Workshop on “Maxima Software & Discussion on Syllabus”**, organized by *BOD, Savitribai Phule Pune University, Pune*.
- March 05, 2020  A University level **Workshop on “Restructuring of S. Y. B. Sc. /S. Y. B. Sc. (Computer Science) / M. Sc. -II Mathematics Syllabus**, organized by *BOD, Savitribai Phule Pune University, Pune*.
- May 10, 2020  **National webinar on “Innovation And Entrepreneurship Ecosystem In Educational Institutes”**, organized by *SIES College of Arts, Science and Commerce (Autonomous), Sion (West), Mumbai-400022*.
- May 22 - 23, 2020  **International e-Conference on “Recent Trends in Advancement of Mathematical and Physical Sciences”**, organized by *Deva Nagri College, Meerut*.
- May 29 - 30, 2020  **National Webinar on “E-Content Creation And E-Learning through MOOCs”**, organized by *Barr. Balasaheb Khardekar Knowledge Resource Center and Department of Library and Information Science of Shivaji University*.

Seminars/Workshops/Conferences (continued)


- June 08 - 13, 2020  **Online Webinar Series on Effective use of Digital tools in Academic Administration-“Work from Anywhere Anytime”**, organized by *UGC - Human Resource Development Center, Savitribai Phule Pune University, SPPU Edutech Foundation.*
- June 13, 2020  **National Online Workshop on Blended Learning**, organized by *SNDT Women’s University, Mumbai.*
- June 20 - 22, 2020  **Workshop on “Importance of Mathematics in Science and Engineering”**, organized by *PES’s College of Engineering, Phaltan in association with IAIAM, TIMC and Bhaskaracharya Pratishthana, Pune.*
- June 27 - August 02, 2020  **National Workshop on “Learniiing Management System: Moodle”**, organized by *PMMMMNMTT-MHRD, SNDT Women’s University, Mumbai.*
- September 29, 2020  **National webinar on “The Career Opportunities in Decision Sciences and Mathematical Statistics”**, organized by *Mathematics Division, University Institute of Sciences, Chandigarh University, Mohali (Punjab), India.*
- October 13, 2020  **National Webinar on Hyperbolic Functions**, organized by *MES’s Abasaheb Garware College, Karve road, Pune.*
- November 02 - 04, 2020  **International Conference on Mathematical Analysis and Applications**, organized by *Department of Mathematics, National Institute of Technology, Jamdeshedpur.*
- August 02 - 04, 2021  The International Research Summit AVLOKAN 2021 titled **“Redefining Social Responsibility and Ethical Leadership”**, organized by *Faculty Research Cell – Gyanidhi & SRDC- Vidhyanidhi, CMS, Jain (Deemed-to-be University).*
- September 09, 2021  **“Teacher’s Conference” on the Theme “Empowering Educators”**, organized by *Institute Of Company Secretaries Of India.*
- April 01 - 02, 2022  **International Conference on Recent Advances in Science (ICRAS-2022)**, organized by *Invertis University, Bareilly.*
- August 20, 2022  **International Webinar on Innovations in Material Processing**, organized by *BIET, CRESIHRD and ICERS.*

Awards and Prizes

Gold Medal Award


2003  **Pandit G. M. Joshi Memorial Gold Medal**, awarded for securing highest number of marks and standing first in M. A./ M. Sc. Mathematics Examination in Pune University.

Cash Prize

 **Natu Foundation Public Charitable Trust, Pune** has been awarded Cash Prize of Rs.1000 for first rank in M. Sc. Mathematics examination in University of Pune.

Research Project

Minor Research Project

2012-2015  Project title: **Decision Analysis of Investment Alternatives**
Sanctioned by UGC (WRO), Ganeshkhind, Pune
Sanctioned Amount: **Rs. 1,85,000/-**
Status: **Completed.**

References

Available on Request