

Curriculum Vitae

Personal Information:-

Name: Mr. Navnath Kashinath Chavan
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Mobile: +919860558114, +919403867356 (What's App)
Date of Birth: 25th April, 1985
Life Membership: Indian Physics Teacher Association (13850L8847)
Youtube Channel: www.youtube.com/@competitivephysics2504
Teaching Experience: 16 years.



Educational Qualifications:-

Exam	Passing Year	Board / University	Score	Remarks
Ph. D.	-	Shivaji University	-	Spiral thesis Submitted
NET	September (2024)	CSIR UGC	99.59	Qualified (AIR -3)
SET	April (2021)	Savitribai Phule, Pune University	-	Qualified
M. Sc. (Physics)	October (2009)	Shivaji University	60.00	(6.23) (A)
B. Sc. (Physics)	April (2006)	Shivaji University	77.17	(I)
B. Sc. (Chemistry)	April (2005)	Shivaji University	66.24	(I)
H. S. C.	February (2002)	Pune (Kolhapur)	55.17	(II)
S. S. C.	March (2000)	Pune (Kolhapur)	59.33	(II)
PGDHR	March (2019)	Shivaji University	60.00	(I)

Working Experience:-

Institute / Organization	Designation	Period (years)	Appointment
School of Nanoscience and Technology, Shivaji University, Kolhapur	Assistant Professor	05	Temporary and CHB
Department of Physics, Shivaji University, Kolhapur	Assistant Professor	5 months	Temporary
Dr. Patangrao Kadam Mahavidyalaya, Sangli	Assistant Professor	09	CHB
Shri. Vijaysinha Yadav College, Pethvadgaon	Assistant Professor	11	CHB
Bharati Vidyapeeth's College of Optometry	Assistant Professor	04	Visiting Faculty

Examination and Administrative experience:-

Role / Designation	Institution / University	Duration	Key Responsibilities
Senior Supervisor	Shivaji University, Kolhapur	2021-2024	Oversaw overall exam center operations; coordinated invigilators, logistics, and reporting
SRPD	SNST Shivaji University, Kolhapur	2021-2026	Managed confidential paper downloads, password protocols, and ensured secure access during university examinations
Paper Setter and Moderator	Shivaji University, Kolhapur	2021-2026	Prepared and moderated UG/PG question papers as per curriculum standards
External Examiner (Practical)	Yashwantrao Chavan Institute of Satara	2022	Conducted external practical/viva examinations and evaluated answer scripts
Pre-Ph.D. Course Work Coordinator	Department of Physics, Shivaji University	2022-23	Organized coursework modules, evaluation, and research methodology workshops

NPTEL (Online Swayam courses):-

Course	Month & Year	Score
Nuclear and Particle Physics	October (2021)	60%
Quantum Mechanics I	September (2021)	45%
Semiconductor Optoelectronics	December (2020)	60%
Solar Photovoltaics Fundamentals, Technology and Applications	September (2019)	73%

Professional Achievements and Computer Skills:

Course	Month & Year	Score
Certificate Course in Information Technology (CCIT)	January (2003)	71%
Maharashtra State Certificate in Information Technology (MSCIT)	October (2006)	76%
Certificate Course in Library Management	March (2017)	57.29%
TOT Program of Mobile Phone Hardware Repair Technician Conducted under NSDC at Pune	April (2018)	80.25%
Certificate Course in Entrepreneurship (CCE) Ref. No.: TEC9602830583	September (2022)	-
Climate Change Teachers Training Program Climate Project Foundation	May (2020)	-
MCED: Dairy Farming Course (Duration : 12 days)	June (2005)	-

Research Experience:-

Title of Ph. D. Dissertation:-

“Studies on Synthesis and Characterization of Nanocrystalline CuInSe₂ (CIS) Thin Films for Solar Cell Application”

M. Sc. Project :- “Study of Sunspot cycles during the period of 1755 to 1996 year”

Orcid ID : <https://orcid.org/0000-0003-3409-6664> Citations : 91 **h-index: 01** **i10-index: 01**

Research Publications:-

- Room temperature synthesis of nanocrystalline CuInSe₂ thin films by electrodeposition**
Chavan Navnath K, Pawar Sachin J, Nimat Rajesh K. AIP Conference Proceedings 2265,030054(2020), <https://doi.org/10.1063/5.0017248>.
- Monolithic and shrinkage-free hydrophobic silica aerogels via new rapid supercritical extraction process**
D B Mahadik, Y K Lee, **N K Chavan**, S A Mahadik, H H Park, The Journal of Supercritical Fluids 107(2016), 84-91 (Impact Factor – 4.4), <https://doi.org/10.1016/j.supflu.2015.08.020>.
- Right To Information Act in perspective as protecting Human Rights**
Shivanand M. Kulkarni, **Navnath K. Chavan**, Proceedings of National Conference on Human Rights Education and Indian Scenario 2016, ISBN: 978-81-927211-9-1

Participation of Conferences / Symposium / Seminars / Workshops:-

Mode	International	National	State / University / Local	Workshops / FDP
Offline	10	15	18	15
Online	08	34	03	17

Participation in Co-curricular and Extracurricular Activities: -

1. Participate for NSS camp in year 2003 – 04.
2. Participated in MCC in the year 1998-99.
3. Working as Amateur Astronomer.
4. Worked as organizing committee member in “DST INSPIRE PROGRM 2011” organized by Shri. Vijaysinha Yadav Arts & Science College, Peth Vadgaon, on December 2011.
5. Worked as organizing committee member in “ENTREPRENEURSHIP AWARENESS CAMP” organized by Shri. Vijaysinha Yadav Arts & Science College, Peth Vadgaon. (2010,2011, 2012,2015,2016).
6. Worked as organizing committee member in “INTERNSHIP PROGRAM 2012-13” organized by Bharati Vidyapeeth’s Dr. Patangrao Kadam Mahavidyalaya, Sangli, January 2013.
7. Worked as organizing committee member in “INTERNSHIP PROGRAM 2013-14” organized by Bharati Vidyapeeth’s Dr. Patangrao Kadam Mahavidyalaya, Sangli, August 2014.
8. Worked as organizing committee member in “Celebration of Ramanujan – Chandrashekhar Legacy in Science” organized by Shri. Vijaysinha Yadav Arts & Science College, Peth Vadgaon, on January 2014.
9. Worked as local organizing committee member in “National Conference on Changing Phases in Women Empowerment” held in Shri. Vijaysinha Yadav Arts & Science College, Peth Vadgaon, Kolhapur, on 13th & 14th October, 2014.
10. Worked as local organizing committee member in “AVISHKAR 2018-19” held in Shri. Vijaysinha Yadav Arts & Science College, Peth Vadgaon, Kolhapur, on 27th December, 2018.
11. Worked as a Instructor in the One Day Workshop On “How to Make, Connect & Power LED Strip Lightning” jointly organized by Entrepreneurship Development Cell & Department of Physics, Shri. Vijaysinha Yadav Arts & Science College, Peth Vadgaon, Kolhapur, November 2016.
12. Worked as organizing committee member in “Dyanbharati Sahitya Samenlan Varsh Dusare” organized by Bharati Vidyapeeth’s Dr. Patangrao Kadam Mahavidyalaya, Sangli, January 5, 2017.
13. Worked as organizing committee member in “Science Week” under the theme of Azadi ka Amrit Mahostav organized by SAIF DST center, Shivaji University,Kolhapur as a part of “Stuti Program” 22-28 February, 2022.
14. Worked as organizing committee member in five days “Hands on Training Workshop on Advanced Techniques in Nanoscience and Nanotechnology” organized by School of Nanoscience and Technology, Shivaji University, Kolhapur, on 10th to 15th March, 2022.
15. Worked as committee member in one day “Management Development Program on Nanoscience and Nanotechnology the Next Step to Industrial Innovations” organized by School of Nanoscience and Technology, Shivaji University, Kolhapur on 29th March 2022.
16. Worked as organizing committee member in One³-day Symposium on Emerging Role of Radiation in Nanotechnology: Fundamental to Translational Research” organized by School of Nanoscience

and Technology, Shivaji University, Kolhapur, in association with ISRAPS and Maharashtra Academy of Sciences Kolhapur Chapter on 15th October, 2022.

17. Worked as organizing committee member in “University level Avishkar Research Convention, 2022-23” organized by School of Nanoscience and Technology, Shivaji University, Kolhapur, on 7th & 8th December, 2022.

International Workshops / Seminars / Symposium / Lectures:-

1. Participated in Three Day “5th International Conference on Physics of Materials & Materials Based Device Fabrication (ICPM-MDF-2025)”, organized by Department of Physics, Shivaji University, Kolhapur, on 10th to 12th December, 2025.
2. Participated in Three Day “International Conference on Pioneering Science and Progress: Nanotechnology for Sustainable Developments (ICPSP-NSD 2025)”, organized by School of Nanoscience and Technology, Shivaji University, Kolhapur, on 11th to 13th September, 2025.
3. Participated in One Day International Conference on “Recent Trends in Fabrication of Nano-materials and Their Applications” ICRTFNA 2023 organized by Department of Physics, Rajarshi Chhatrapati Shahu College, Kolhapur, on March 15, 2023.
4. Participated and presented paper in 3rd International Conference entitled, “Multidisciplinary Approach in Basic and Applied Sciences” (MABAS-2023) organized by Padmabhushan Dr. Vasantaraodada Patil Mahavidyalaya, Tasgaon, February 23 & 24, 2023.
5. Participated in International Conference on “Fifth International Conference on Advances in Material Science (online)” organized by Department of Physics, Raje Ramrao College, Jath, on June 6-7, 2020.
6. Presented a paper and participated in “64th DAE SOLID STATE PHYSICS SYMPOSIUM” organized by BARC Mumbai, held at IIT Jodhpur, on December 18-22, 2019.
7. Participated and presented poster in 4th International conference on “Physics of Materials and Materials Based Device Fabrication (ICPM-MDF 2019)” organized by Department of Physics, Shivaji University, Kolhapur, on January 10-11, 2019.
8. Participated and presented poster in 3rd International conference on “Advances in Material Science (ICAMS-2018)” organized by Department of Physics, Raje Ramrao Mahavidyalaya, Jath, on December 27-29, 2018.
9. Participated in one day Multidisciplinary International conference on “World Sustainable Development: Vision 2030” organized by Bharati Vidyapeeth’s Dr. Patangrao Kadam Mahavidyalaya, Sangli, on 19th March 2019.
10. Participated and presented poster in 2nd International conference on “Physics of Materials and Materials Based Device Fabrication (ICPM-MDF 2014)” organized by Department of Physics, Shivaji University, Kolhapur, on January 13-15, 2014.

1. Participated in 2nd National conference on Science and Technology for Sustainable Development organized by Faculty of Science and IQAC, Jaysingpur college, Jaysingpur, on December 16, 2023.
2. Participated in “National Conference on Physics of Materials & Materials based Device Fabrication 2023” (NCPM-MDF-2023) conference, organized by Department of Physics, Shivaji University, Kolhapur, on November 25-26, 2023.
3. Participated in two days National Conference on “Recent Scenario in chemical sciences and material sciences (RSCSMS-2023)” organized by Shri. Vijaysinha Yadav Arts and Science College, Pethvadgaon, on 3rd & 4th March, 2023.
4. Participated in “Workshop & hands-on training on XRD” organized by SAIF-CFC under STRIDE programme, Shivaji University Kolhapur, on November 11-12, 2021.
5. Participated in National conference on “Emerging trends in Chemical and Material Sciences” organized by Department of Chemistry, Shivaji University, Kolhapur, on March 6-7, 2020.
6. Participated in one day national conference on “1st National conference on Issues and challenges in India: Perspectives and Policies and Action” organized by Bharati Vidyapeeth’s Dr. Patangrao Kadam Mahavidyalaya, Sangli, on February 15, 2020.
7. Participated in one day national conference on “2nd National conference on Recent trends in Pure and Applied Sciences” organized by Bharati Vidyapeeth’s Dr. Patangrao Kadam Mahavidyalaya, Sangli, on January 11, 2020.
8. Participated in one day National seminar on “Use of ICT in Effective Teaching and Learning Processes” organized by IQAC Bharati Vidyapeeth’s Dr. Patangrao Kadam Mahavidyalaya, Sangli on August 24, 2019.
9. Participated in one day National conference on “Recent Trends in Pure and Applied Sciences” organized by Bharati Vidyapeeth’s Dr. Patangrao Kadam Mahavidyalaya, Sangli, on 23rd March 2019.
10. Participated in National Seminar on “Chemistry and its Role in Human Development” organized by Bharati Vidyapeeth’s Dr. Patangrao Kadam Mahavidyalaya, Sangli, on 26th March 2012.
11. Participated in one day National Seminar on “Problems and Prospects of Agriculture Labour in India” organized by Bharati Vidyapeeth’s Dr. Patangrao Kadam Mahavidyalaya, Sangli, on 20th March 2017.
12. Attended National Seminar on “Impact of Globalization on Human Rights” organized by Arts, Commerce and Science college, Palus, held on 27th August 2016.
13. Participated and paper presented in two days National Conference on “Human Rights Education and Indian Scenario” organized by Shri. Vijaysinha Yadav Arts and Science College, Pethvadgaon, on 26th & 27th February, 2016.
14. Participated in Two days National level Workshop on “Latex” at Annasaheb Dange College of Engineering and Technology, on 05 & 06th July 2019.
15. Participated in Two days Workshop on “Network Implementation & Security” at Dr. Patangrao

Kadam Mahavidyalaya, Sangli, organized by Association for Computer Machinery – IIT Delhi and Network Bulls, on 23 & 24th January 2014.

State / Local Level Workshops / Seminars / Symposium / Lectures:-

1. Participated in the workshop & hands-on training on “BIO-ATOMIC FORCE MICROSCOPY (BIO-AFM) organized by SAIF (CFC)”, Shivaji University, Kolhapur held during 04-05 Jan, 2022
2. Participated in “WORKSHOP & HANDS-ON TRAINING ON XRD ORGANISED BY SAIF-CFC UNDER STRIDE PROGRAMME” , Shivaji University, Kolhapur dated 11-12, November 2021.
3. Participated in “Dr. Vikram Sarabhai’s Centenary Programme” organized by Department of Physics, SGU, Kolhapur, on January 22, 2020.
4. Participated in one day workshop on “Ozone Day” organized by Department of Physics, School of Science and Environmental Club, Sanjay Ghodawat University, Kolhapur, on September 16, 2019.
5. Participated in Teachers Training Workshop on “*Understanding Climate Change and Sustainable Development Goals for safer planet and a Sustainable future*” organized by Department of Zoology, Shri. Vijaysinha Yadav Arts and Science college, Pethvadgaon, on 12th January 2019.
6. Participated in One day Workshop on “*Organic Electronic Devices*” organized by Department of Technology, Shivaji University, Kolhapur on 24th September 2013.
7. Participated in State Level Workshop on “*New Horizon-Joy of Learning Physics*” organized by Department of Physics, Sanjay Ghodawat University, Kolhapur on 23rd January 2018.
8. Attended “One Day Seminar on Physics” organized by the Department of Physics, Willingdon College, Sangli and IAPT on Sunday 25th September 2005.
9. Participated in the event “Let’s Watch the Sky Together” organized by Astro Club on 22nd June 2011.
10. Attended “One Day Seminar on Physics” organized by the Department of Physics, Willingdon College, Sangli on 18th January 2010.
11. Participate in the “Mock Parliament” Competition at the National Science Day Celebrations-2008 from 25th February to 1st March, 2008 at Shivaji University Kolhapur.
12. Participate in the “Youth Parliament” Competition at the National Science Day Celebrations-2009 from 24th February to 28th February, 2009 at Shivaji University Kolhapur.
13. Attended in One day workshop on “Implementation of Sexual Harassment of Women at Workplace (Prevention, Prohibition & Redressal) Act 2013” organized by Department of Physics, Bharati Vidyapeeth’s Dr. Patangrao Kadam Mahavidyalaya, Sangli, on 27 February, 2017.
14. Participated in introductory workshop on “Basics of Intellectual Property and Filing Patents” organized by Bharati Vidyapeeth’s Dr. Patangrao Kadam Mahavidyalaya, Sangli, on December, 8,

2017.

15. Attended and actively participated in One day workshop on “Alternative Learning method in Science” organized by Department of Physics, Bharati Vidyapeeth’s Dr. Patangrao Kadam Mahavidyalaya, Sangli, 16 July 2013.
16. Attended one day workshop on “Value Education” organized by Smt. Akkatai Ramgonda Patil Kanya Mahavidyalaya, Ichalkaranji, on 25th January, 2017.
17. Participated in “20th Annual Conference of SUMS” organized by Shri. Vijaysinha Yadav Arts & Science College, Peth Vadgaon.
18. Participated Teachers training program in “Celebration of Ramanujan - Chandrashekhar Legacy in Science” organized by Shri. Vijaysinha Yadav Arts & Science College, Peth Vadgaon, 31th January, 2014.

Attended workshops on B.Sc. Syllabus:-

1. Participated in one day teachers training workshop on “Newly Changed Syllabus of B. Sc. Part – II (SEM-III) Major Paper V & VI, Minor V, Major Practical in Physics” organized by Department of Physics, Matoshri Bayabai Shripatrao Kadam Mahavidyalaya, Kadegaon, on September 16, 2025.
2. Participated in one day teacher workshop on “New Changed Syllabus of B. Sc. Part – II Physics (CBCS), Thermal Physics and Statistical Mechanics – II, Paper No. VII” organized by Department of Physics, D. P. Bhosale College, Koregaon, on October 11, 2019.
3. Participated in one day workshop on “Revised B. Sc. II CBCS Curriculum of Physics Paper VIII” organized by Department of Physics, Rajarshi Chhatrapati Shahu College, Kolhapur, on September 16, 2019.
4. Participated in one day workshop on “New Changed Syllabus (CBCS) of B. Sc. Part II Physics Practical” organized by Department of Physics, Yashwantrao Chavan college of Science, Karad, on August 21, 2019.
5. Participated in “One day workshop on B. Sc. III Revised syllabus” organized by Yashwantrao Chavan Warana Mahavidyalaya, Warananagar, on August 22, 2015.
6. Participated in “One day workshop on New Changed Syllabus (CBCS) of B. Sc. Part I Physics” organized by Yashwantrao Chavan College of Science, Karad on August 20, 2018.
7. Participated in one day workshop on “Revised Syllabus of Physics (B. Sc. III, Sem VI)” organized by Krantisinha Nana Patil College, Walawa, Sangli, on August 25, 2015.
8. Participated in workshop on” Revised Practical Syllabus of B. Sc. III” organized by Yashwantrao Chavan Institute of Science, Satara, on August 28, 2015.
9. Participated in one day workshop on “B. Sc. Part III Revised Syllabus” organized by Shikshanmaharshi Dr. Bapuji Salunkhe Mahavidyalaya, Miraj, on August 4, 2012.
10. Participated in workshop on “Revised Practical Syllabus of B. Sc. III Physics” organized by Balasaheb Desai college, Patan, on August 13, 2012.
11. Participated in one day workshop on “Revised syllabus of Physics (B. Sc. III, Sem VI)” organized by Padmabhushan Dr. Vasantaraodada Patil Mahavidyalaya, Tasgaon, August 10, 2012.

12. Participated in one day teacher training program on “Revised Syllabus of B. Sc. II in Physics, Semester IV” organized by Yashwantrao Chavan College, Halkarni, on August 21, 2014.
13. Participated in one day workshop on “B. Sc. Part II Revised Syllabus” organized by Shikshanmaharshi Dr. Bapuji Salunkhe Mahavidyalaya, Miraj, on August 6, 2011.
14. Participated in one day workshop on “Revised Syllabus of B. Sc. Part I Physics, Semester II” organized by Smt. Kasturbai Walchand College, Sangli, on September 13, 2013.