



Rayat Shikshan Sanstha's
Yashavantrao Chavan Institute of Science, Satara (Autonomous)
Lead College of Karmaveer Bhaurao Patil University, Satara

Faculty Profile

❖ **General information**

Name : Dr. Jaykumar Jagannath Chavan
Designation : Assistant Professor
Department : Botany
Educational Qualification : M.Sc., Ph.D.
Date of Appointment : 01/02/2013
Teaching Experience : UG: 10 years
PG: 10 years
Research Experience : 14 years
Research Area : Botany (Plant Biotechnology, Phytochemistry, Food Biotechnology)



❖ **Educational Qualification Details (undergraduate onwards)**

| Sr. No. | College/University | Degree | Subjects | Year | Class/ Percentage |
|---------|--|--------|---|------|--------------------------------|
| 1 | Atpadi College Atpadi, Shivaji University, Kolhapur, India | B.Sc. | <u>Botany</u> , Subsidiary: Zoology & Chemistry | 2005 | I st class/ 67.17 % |
| 2 | Department of Botany, Shivaji University, Kolhapur, India | M.Sc. | <u>Botany</u> , Cytogenetics & Plant Breeding | 2007 | I st class/ 67.67 % |
| 3 | Department of Botany, Shivaji University, Kolhapur, India | Ph.D. | <u>Botany</u> (Plant tissue culture, Molecular Biology) | 2012 | Awarded |

❖ **Academic and Administrative Responsibilities**

| Sr. No. | Position | Organization | Date/Duration |
|---------|--|--------------|---------------------------|
| 1 | Dean, Science and Technology | KBPU, Satara | 03/11/2022 – till date |
| 2 | Member, General Council | KBPU, Satara | 11/05/2023 – till date |
| 3 | Member, Academic Council | KBPU, Satara | 11/05/2023 – till date |
| 4 | Vice Principal | YCIS, Satara | May, 2022 – till date |
| 5 | Head, Department of Biotechnology | YCIS, Satara | January, 2014 – till date |
| 6 | Director, Internal Quality Assurance Cell (IQAC) | YCIS, Satara | January, 2017 – till date |
| 7 | Member, College Development Committee (CDC) | YCIS, Satara | June, 2017 – till date |

Internal Quality Assurance Cell (IQAC), YCIS, Satara

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| 8 | Chairman, Board of Studies (BoS) in Biochemistry, Biotechnology and Forensic Science | YCIS, Satara | June, 2018 – till date |
| 9 | Member, Academic Council | YCIS, Satara | June, 2018 – till date |
| 10 | Member, Board of Studies (BoS) in Botany | YCIS, Satara | June, 2018 – till date |
| 11 | Member, Coordination Committee in Botany | Shivaji University, Kolhapur | 2015-2016 |
| 12 | Member (VC Nominee), Board of Studies (BoS) in Botany | K. B. P. College, Pandharpur (Autonomous) | June, 2019 – May 2023 |
| 13 | Member, BoS Subcommittee in Botany | S. G. M. College, Karad | June, 2019 |
| 14 | Member, Board of Studies (BoS) in Botany | S. G. M. College, Karad | 2023-24 to 2025-26 |
| 15 | Member, Internal Quality Assurance Cell (IQAC) | Chhatrapati Shivaji College, Satara (Autonomous) | June, 2019- till date |
| 16 | Coordinator, MOCK Peer Team | K. B. P. College of Engineering, Satara | 29/07/2019 |
| 17 | Coordinator, MOCK Peer Team | Shripatrao Kadam Mahavidyalaya, Shirwal | 31/08/2021 |
| 18 | Member, LIC Committee | Shivaji University, Kolhapur | 15/12/2020 - onwards |
| 19 | Member, Board of Studies (BoS) in Botany | T. C. College, Baramati | 2022-23 to 2024-25 |
| 20 | Director | Laxmibai Bhaurao Patil Shikshanottejak Sahkari Patpedhi Ltd. Satara | June 2023 – till date |

❖ **Awards/Honors/Recognitions/Scholarship etc.:**

| Sr. No. | Name of the award/honor/recognition | Awarding Organization | Date and year |
|---------|--|---|-------------------------|
| 1 | Meritorious Student Scholarship | Shivaji University, Kolhapur | 28/03/2006 |
| 2 | Junior Research Fellow | DBT, Govt. of India | 20/08/2008 – 30/06/2012 |
| 3 | Young Scientist Award | DST, Govt. of India | June, 2013 |
| 4 | Prof. D. C. Cooper Prize Award for Best Paper Presentation | Society of Cytologists and Geneticists, India | 24/12/2014 |
| 5 | Honorary Professor | Rayat Institute of Research and | 04/03/2015 - |

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| | | Development, Satara, India | onwards |
| 6 | Research Advisor | NanYang Academy of Sciences, Singapore | October, 2018–till date |
| 7 | Best Teacher Award | YCIS, Satara | 18/02/2019 |
| 8 | Recognition as PG teacher | Shivaji University, Kolhapur | 26/12/2016 - onwards |
| | | Karmaveer Bhaurao Patil University, Satara | 21/03/2023 - onwards |
| 9 | Recognition as Research Guide for M.Phil., Ph.D. | Shivaji University, Kolhapur | 19/08/2019 - onwards |
| | | Karmaveer Bhaurao Patil University, Satara | 21/03/2023 - onwards |
| 10 | Young Associate | Maharashtra Academy of Sciences, Pune, India | 14/12/2019 - onwards |
| 11 | International Young Scientist Award 2020-21 | International Institute of Organized Research, registered with Ministry of MSME, Govt. of India | Dec. 2021 |
| 12 | Recognition as Global Scientist | A D Scientific Ranking by Michigan State University, USA | 2021 – till date |

❖ **Membership to Professional Organizations/Associations:**

| Sr. No. | Membership type (Annual/Life/any other) | Organization/Association | Date and year |
|---------|---|--|-------------------------|
| 1 | Life Member | Sahyadri GENES –NGO | 2011 - onwards |
| 2 | Life Member | All India Society of Cytologists and Geneticists, India | 2014 - onwards |
| 3 | Life Member | Prof. H. S. Srivastava Foundation for Science and Society, India | 2014 - onwards |
| 4 | Life member | Society for Biochemistry and Biotechnology, India | 2015 –16 onwards |
| 5 | Young Associateship | Maharashtra Academy of Sciences, India | Dec. 2019 onwards |
| 6 | Annual Member | The American Phytopathological Society | 04/06/2022 - 03/06/2023 |

❖ **Worked as Editor/Reviewer to Journals/Books/Proceedings etc.**

| Sr. No. | Name of the Journal/Book/ Proceedings | ISSN/ ISBN | Assignment (Editor/Reviewer) | Publisher | Publication Year |
|---------|--|------------|------------------------------|--------------|------------------|
| 1 | Proceedings of National Conference on 'Recent Trends in Physical Education & Sports' | - | Editorial Board Member | YCIS, Satara | 2016 |
| 2 | Journal of Cell Science and | Yet to | Editor | Allied | 2017 to |

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|----|--|----------------|------------------------|--|-------------------------|
| | Mutation | receive | | Academies Publishing, London, UK | till date |
| 3 | SOA: Applied Biotechnology and Bioengineering | Yet to receive | Editorial Board Member | Scient Open Access Publisher, USA | 2017 to till date |
| 4 | Bulletin of Environment, Pharmacology and Life Sciences Volume 1, Special Issue - 2023 | 2277-1808 | Chief Guest Editor | Academy for Environment and Life Sciences, India | 2023 |
| 5 | Journal of Plant Research and Innovations | Yet to receive | Editorial Board Member | Reseapro Journals, Japan | 2023 – onwards |
| 6 | Science Research Journal (Interdisciplinary) | Yet to receive | Executive Editor | YCIS, Satara, India | January, 2021 - onwards |
| 7 | Journal of Saudi Society of Agricultural Sciences | 1658-077X | Reviewer | Elsevier | 28/11/2015 |
| 8 | Journal of Chromatographic Science | 0021-9665 | Reviewer | Oxford University Press | 09/03/2015 |
| 9 | Natural Product Research | 1478-6427 | Reviewer | Taylor and Francis | 10/05/2015 |
| 10 | Plant Biosystems | 1724-5575 | Reviewer | Taylor and Francis | 27/06/2015 |
| 11 | Natural Product Research | 1478-6427 | Reviewer | Taylor and Francis | 25/07/2016 |
| 12 | Food and Function | 2042-6496 | Reviewer | Royal Society of Chemistry | 01/03/2016 |
| 13 | International Journal of Food Properties | 1532-2386 | Reviewer | Taylor and Francis | 31/03/2016 |
| 14 | Journal of Chromatographic Science | 0021-9665 | Reviewer | Oxford University Press | 31/03/2016 |
| 15 | Bioresource Technology | 1873-2976 | Reviewer | Elsevier | 2016 |
| 16 | South African Journal of Botany | 1727-9321 | Reviewer | Elsevier | 11/09/2017-2022 |
| 17 | Energy Sources, Part A: Recovery, Utilization, and Environmental Effects | 1556-7230 | Reviewer | Taylor and Francis | 06/03/2018 |
| 18 | Journal of Herbal Medicine | 2210-8041 | Reviewer | Elsevier | 2019 |
| 19 | Biocatalysis and Agricultural Biotechnology | 1878-8181 | Reviewer | Elsevier | 2020 |
| 20 | Journal of Applied Research on Medicinal and Aromatic Plants | 2214-7861 | Reviewer | Elsevier | 2021 |
| 21 | In Vitro Cellular and Developmental Biology – Plants | 1054-5476 | Reviewer | Springer | 2022 |

❖ **Research Projects (Ongoing/Completed)**

| Sr. No. | Title of Project | Duration | Amount Sanctioned (in Lakhs) | Agency | Status (Ongoing/Completed) |
|-----------------------------------|---|------------------------|------------------------------|----------------------|----------------------------|
| Major Research Project (3) | | | | | |
| 1 | Biotechnological approaches for propagation and improvement of an important medicinal plant 'Saptarangi' (<i>Salacia chinensis</i> L.) | July, 2013- June 2016 | 23.70 | DST, Govt. of India | Completed |
| 2 | Biotechnological intervention towards enhancement of commercial value of 'Shampoo Ginger' (<i>Zingiber zerumbet</i>) | July 2015 - June 2018 | 15.73 | UGC, Govt. of India | Completed |
| 3 | Molecular Phylogenetics of Indian <i>Argyreia</i> spp. | July, 2021- March 2023 | 6.00 | RUSA, Govt. of India | Ongoing |
| Minor Research Project | | | | | |
| 1 | - | - | - | - | - |

❖ **Research Guidance:**

- Number of students (M.Phil) 1) Completed: Nil 2) Registered: 01
- Number of students (Ph.D.) 1) Completed: Nil 2) Registered: 04

❖ **Details of Research Publications**

A) Patent (1)

| Sr. No. | Title | Patent No. | Indian/US/Any other | Granting date |
|---------|--|----------------------|---------------------|---------------|
| 1 | Storage device to preserve and transport plant species | Design No. 30150-001 | Indian | 13/05/2022 |

B) Books/Book Chapters (4)

| Sr. No. | Title | Publisher | Year of Publication | ISBN No | Type (Reference/Text) |
|---------|---|--|---------------------|-------------------|--------------------------|
| 1 | Biotechnological strategies for conservation of an endemic and endangered <i>Ceropegia</i> spp. | Lap Lambert Academic Publishing, Germany | 2013 | 978-3-659-41890-7 | Reference Book |
| 2 | A Handbook of Practical Botany | YCIS, Satara | 2018 | - | Text Book |
| 3 | <i>In vitro</i> callus induction and plant regeneration from stem explants of | Springer Protocols, Humana Press, | 2016 | 978-1-4939-3330-3 | Reference (Book Chapter) |

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|---|---|------------------------------|------|-------------------|--------------------------|
| | <i>Ceropegia noorjahaniae</i> ; a critically endangered medicinal herb. | New York | | | |
| 4 | Tree Diversity of Dandoba Hills, Sangli Dist. (M.S.) India | Prarup Publication, Kolhapur | 2022 | 978-81-956739-6-4 | Reference (Book Chapter) |

C) Datasets Submission (2)

| Sr. No. | Title | Accession No. | Data base | Year of publication |
|---------|---|---------------|-----------|---------------------|
| 1 | Isolation and characterization of silicon leaching bacteria from soil | KT334299 | NCBI | 2015 |
| 2 | Leaf spot causing fungi of <i>Ceropegia vincaefolia</i> | ON530942 | NCBI | 2022 |

D) Research papers:

| Sr. No | Title of paper | Journal/proceeding details (Name, Vol., page no, year of publication etc.) | ISSN No | Scopus/ Web of Science/ UGC Care | Impact factor (If any) |
|--------|--|--|-----------|----------------------------------|------------------------|
| 1 | <i>Zingiber zerumbet</i> : A green and ecofriendly natural surfactant for the synthesis of Bis(indolyl)methane, tris-indoline and spirooxindole derivatives | Sustainable Chemistry and Pharmacy 35: 101228, 2023 | 2352-5541 | Scopus | 6.0 |
| 2 | <i>Zingiber zerumbet</i> (L.) Roscoe ex Sm.: biotechnological advancements and perspectives | Applied Microbiology and Biotechnology, 107: 5613-5625, 2023 | 1432-0614 | Scopus | 5.0 |
| 3 | Preliminary phytochemical screening, quantification of bioactive compounds and antioxidant potential of <i>Achyranthes aspera</i> L. leaf powder | Journal of Plant Science Research, 39(1): 133-140, 2023 | 0970-2539 | UGC Care | - |
| 4 | Multidirectional insights into nutritional, phytochemical, anti-oxidant capability and multivariate analysis of underutilized edible berry plant (<i>Salacia macrosperma</i> Wight) – A novel source for food and pharmaceutical industry | Food Chemistry Advances, 2: 100284, 2023 | 2772-753X | Scopus | - |
| 5 | Morphological characterization, propagation and identification of | Genetic Resources and Crop Evolution, | 1573-5109 | Scopus | 2.0 |

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|----|--|---|-----------|----------|-----|
| | <i>Boucerosia frerei</i> (G.D.Rowley) Meve & Liede accessions for its introduction in hanging basket: an attractive succulent with star-shaped flowers from the Northern Western Ghats of India | 70: 1633-1651, 2023 | | | |
| 6 | Antibacterial potential of elicitor-treated callus cultures of saptarangi (<i>Salacia chinensis</i> L.). | Journal of Information and Computational Science, 12(8): 114-125, 2022 | 1548-7741 | UGC Care | - |
| 7 | Isolation and characterization of bacterial strains obtained from rotten fruits and their application in the production of bioethanol. | Science Research Journal 2(I): 46-51, 2022 | - | - | - |
| 8 | Efficient plant regeneration and molecular marker based genetic fidelity assessment of <i>Ceropegia lawii</i> Hook: an endemic and endangered herb. | Journal of Applied Biology and Biotechnology, 10(01): 95-102, 2022 | 2347-212X | Scopus | - |
| 10 | Elicitor-mediated enhancement of biomass, polyphenols, mangiferin production and antioxidant activities in callus cultures of <i>Salacia chinensis</i> L. | 3 Biotech, 11(6): 285, 2022 | 2190-5738 | Scopus | 2.8 |
| 11 | Plant regeneration through direct and indirect organogenesis, phyto-molecular profiles, antioxidant properties and swertiamarin production in elicited cell suspension cultures of <i>Swertia minor</i> (Griseb.) Knobl. | Plant Cell, Tissue and Organ Culture, 144: 383–396, 2021 | 1573-5044 | Scopus | 3.0 |
| 12 | Micropropagation, polyphenol content and biological properties of Sweet Flag (<i>Acorus calamus</i>): a potent medicinal and aromatic herb. | Vegetos, 33: 296–303, 2020 | 2229-4473 | Scopus | - |
| 13 | Green synthesis of silver nanoparticles using Congress weed – <i>Parthenium hysterophorus</i> . | Science Research Journal (Inter-disciplinary), 1(1): 84-89, 2020 | - | - | - |
| 14 | Study of physiochemical parameters of soil from Kass plateau. | Science Research Journal (Inter-disciplinary), 1(1): 81-83, 2020 | - | - | - |

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|----|--|---|-----------|----------|-----|
| 15 | Assessment of floral diversity around a historical lake Swatantra-pur, Sangli (Maharashtra, India). | Indian Journal of Plant Sciences, 9: 125–135, 2020 | 2319-3824 | UGC Care | - |
| 16 | Metabolite profiling, antioxidant potential and RP-UFLC determination of bioactive molecules from eight <i>Swertia</i> species. | Biocatalysis and Agricultural Biotechnology, 23: 101479, 2020 | 1878-8181 | Scopus | 4.0 |
| 17 | <i>In vitro</i> regeneration approaches for restoration of <i>Ceropegia mohanramii</i> – an endemic and critically endangered asclepiad. | Journal of Genetic Engineering and Biotechnology, 17: 2, 2019 | 2090-5920 | Scopus | - |
| 18 | Floristic study of Kalbhairavnath sacred grove, Bharsakale, Satara, Maharashtra. | Species, 20: 155–162, 2019 | 2319-5754 | UCG Care | - |
| 19 | Micropropagation, metabolite profiling, antioxidant activities and chromatographic determination of bioactive drugs across <i>in vitro</i> conditions and subsequent field cultivation stages of ‘Shampoo Ginger’ (<i>Zingiber zerumbet</i> L. Roscoe ex Sm). | Biocatalysis and Agricultural Biotechnology, 16: 79–89, 2018 | 1878-8181 | Scopus | 4.0 |
| 20 | Biosynthesis, characterization and antibacterial capability of silver and copper nanoparticles using aqueous leaf extract of <i>Salacia chinensis</i> L. | Journal of Nanomedicine and Nanotechnology, 9: 484, 2018 | 2157-7439 | Scopus | - |
| 21 | Biotechnological interventions for propagation, conservation and improvement of ‘Lantern Flowers’ (<i>Ceropegia</i> spp.). | South African Journal of Botany, 114: 192–216, 2018 | 1727-9321 | Scopus | 3.1 |
| 22 | Extraction efficiency, phytochemical profiles and antioxidative properties of different parts of Saptarangi (<i>Salacia chinensis</i> L.) – An important underutilized plant. | Biochemistry and Biophysics Reports, 12: 79–90, 2017 | 2405-5808 | Scopus | 2.7 |
| 23 | Molecular authentication of medicinal plant <i>Swertia chirayita</i> and its adulterant species. | Proceedings of National Academy of Sciences, India, Section B – Biol. Sci., 87(1): 101–107, 2017 | 2250-1746 | Scopus | - |
| 24 | Green synthesis of silver nanoparticles using bamboo extracts and its antimicrobial properties. | Trajectory, 25(2): 7–13, 2017 | 0975-1165 | - | - |
| 25 | Direct and indirect shoot | Journal of Cell | Yet to | - | - |

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|----|--|--|-------------|----------|-----|
| | organogenesis strategies for propagation and conservation of <i>Abutilon ranadei</i> Wooder & Stapf - A critically endangered plant. | Science and Mutations (<i>Formerly</i> , Advances in Cell Science & Tissue Culture), 1(1): 5–8, 2017 | receiv e | | |
| 26 | Micropropagation, molecular profiling and RP-HPLC determination of mangiferin across various regeneration stages of Saptarangi (<i>Salacia chinensis</i> L.). | Industrial Crops and Products, 76: 1123–1132, 2015 | 1872-633X | Scopus | 5.9 |
| 27 | Highly efficient <i>in vitro</i> regeneration, establishment of callus and cell suspension cultures and RAPD analysis of regenerants of <i>Swertia lawii</i> Burkill. | Biotechnology Reports, 6: 79–84, 2015 | 2215-017X | Scopus | - |
| 28 | Optimization of extraction techniques and RP-HPLC analysis of antidiabetic and anti-HIV drug mangiferin from roots of Saptarangi (<i>Salacia chinensis</i> L.). | Journal of Liquid Chromatography and Related Technologies, 38(9): 963–969, 2015 | 1520-572X | Scopus | 1.3 |
| 29 | Phytochemical composition, antioxidant activity and HPLC profiles of <i>Swertia</i> species from Western Ghats. | Natural Product Research, 29(8): 780–784, 2015 | 1478-6427 | Scopus | 2.2 |
| 30 | Highly efficient <i>in vitro</i> proliferation and genetic stability analysis of micropropagated <i>Ceropegia evansii</i> by RAPD and ISSR markers – a critically endangered plant of Western Ghats. | Plant Biosystems, 149(2): 442–450, 2015 | 1724-5575 | Scopus | 2.0 |
| 31 | Phytochemical and antimicrobial studies on <i>Asparagus racemosus</i> . | World Journal of Pharmaceutical Research, 4(9): 1805–1810, 2015 | 2277-7105 | UGC Care | - |
| 32 | An efficient micropropagation system for <i>Ceropegia noorjahaniae</i> : an endemic and critically endangered plant of Western Ghats, India. | Physiology and molecular biology of plants, 20(3): 405–410, 2014 | 0974-0430 | Scopus | 3.5 |
| 33 | Discrepancy in polyphenol content and mineral composition from various organs of <i>Solanum xanthocarpum</i> Schrad & Wendl. | National Academy Science Letters, 37(2): 187–190, 2014 | 2250-1754 | Scopus | 1.1 |
| 34 | Efficiency of direct and indirect | Plant Growth | 1573- | Scopus | 4.2 |

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|----|--|--|-----------|----------|-----|
| | shoot organogenesis, molecular profiling, secondary metabolite production and antioxidant activity of micropropagated <i>Ceropegia santapau</i> . | Regulation, 72(1): 1–15, 2014 | 5087 | | |
| 35 | Application of molecular markers to appraise the genetic fidelity of <i>Ceropegia spiralis</i> – an endangered medicinal plant of South India. | Current Science, 105(10): 1348–1350, 2013 | 0011-3891 | Scopus | 1.0 |
| 36 | Total phenolics, flavonoids and antioxidant potential of <i>Salacia chinensis</i> L. fruit pulp. | Journal of plant Biochemistry and Biotechnology, 22(4): 409-413, 2013 | | Scopus | 1.9 |
| 35 | Total phenolics, flavonoids and antioxidant properties of three <i>Ceropegia</i> species from Western Ghats of India. | South African Journal of Botany, 88: 273–277, 2013 | 1727-9321 | Scopus | 3.1 |
| 37 | High multiplication frequency and genetic stability analysis of <i>Ceropegia panchganiensis</i> , a threatened ornamental plant of Western Ghats: Conservation implications. | Scientia Horticulturae, 161: 134–142, 2013 | | Scopus | 4.3 |
| 38 | Comparative study of photosynthetic pigments and phenolic content in three <i>Barleria</i> species. | World Journal of Pharmaceutical Research, 2(3): 626–630, 2013 | 2277-7105 | UGC Care | - |
| 39 | Rapid <i>in vitro</i> propagation of <i>Clematis heynei</i> M. A. Rau; an important medicinal plant. | Emirates Journal of Food and Agriculture, 24(1): 77–82, 2012 | 2079-0538 | Scopus | 1.1 |
| 40 | Corolla elongation as an aid in self-pollination in <i>Rhamphicarpa longiflora</i> (Scrophulariaceae). | Current Science, 100(11): 1624–1626, 2011 | 0011-3891 | Scopus | 1.0 |
| 41 | Micropropagation and <i>in vitro</i> flowering of endemic and endangered plant <i>Ceropegia attenuata</i> Hook. | Journal of Plant Biochemistry & Biotechnology, 20(2): 276–282, 2011 | 0974-1275 | Scopus | 1.9 |
| 42 | <i>In vitro</i> propagation of <i>Ceropegia spiralis</i> Wight – an endemic and rare potential ornamental plant of peninsular India. | Proceedings of the National Academy of Sciences, India, Section B - Biological Sciences 81: 120–126, 2011 | 2250-1746 | Scopus | - |

E) Paper Presentation in Conference /Seminar/ Symposia: (2017 to 2023)

| Sr. No | Title of paper | Name of the Conference /Seminar/ Symposia Details (Title, Date, Page No etc.) | Level (Intl/Natl/ State/Uni. | Organizing institute |
|--------|--|---|------------------------------|--|
| 1 | <i>Cardamine occulta</i> Hornem.: an invasive weed may become medicinal herb. | Recent Advances in Biological Sciences and Biodiversity Conservation' pp-16 (28/12/2022). | National | Shri Shivaji Mahavidyalaya, Barshi |
| 2 | Phytochemical analysis of <i>Argyrea osyrensis</i> (Roth) Choisy and <i>A. elliptica</i> (Roth) Choisy. | Recent Advances in Biological Sciences and Biodiversity Conservation (28/12/2022) | National | Shri Shivaji Mahavidyalaya, Barshi |
| 3 | An efficient micro-propagation protocol for conservation of an endemic and endangered lantern flower (<i>Ceropegia vincifolia</i> Hook.) | Biodiversity and Biosciences (29/12/2022) | National | Balwant College, Vita, |
| 4 | Studies in Section Furcaria of <i>Hibiscus</i> L.(Malvaceae) from Peninsular India. | Biodiversity and Biosciences (29/12/2022) | National | Balwant College, Vita, |
| 5 | Comparative account of antibacterial activity of different plant parts of <i>Salacia macrosperma</i> Wight | Emerging Trends in Applied Microbiology and Food Sciences (02-03/11/2022). | International | Y. C. Institute of Science, Satara |
| 6 | Report on Cryptovivipary in Wild Caper Bush (<i>Capparis sepiaria</i> L.) Capparaceae. | The Contribution of Angiosperm Diversity to Human Wellbeing and the Risks Associated with its Decline, (11 th -13 th November, 2022). | National | Karnataka University's Karnataka Science College, Dharwad, Karnataka |
| 7 | Role of photosynthesis on lipid production in <i>Chlorella</i> sp. and <i>Nannochloropsis</i> sp. | Innovative Trends in Life Sciences, (11-12 th March, 2022). | International | Sadguru Gadage Maharaj College, Karad |
| 8 | Comparative account of micro-morphological features among different accessions of <i>Jasminum multiflorum</i> (Burm.f.) Andr. (Oleaceae) from Satara, Maharashtra (India). | Current Approaches in Life Sciences for Sustainable Development, (19 th -20 th March, 2021), pp: 51. | International | Y. C. Institute of Science, Satara |

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|----|---|--|---------------|--|
| 9 | Antibacterial properties of elicitor treated callus cultures of <i>Salacia chinensis</i> L | Current Approaches in Life Sciences for Sustainable Development, (19 th –20 th March, 2021), pp: 72. | International | Y. C. Institute of Science, Satara |
| 10 | Biotechnological advancement in Lantern Flowers (<i>Ceropegia</i> spp.) – a fascinating group of horticultural importance | Global Biotechnology Conference, (2 nd –3 rd Sept. 2020), pp: 20. | International | Reignite Innovative Conferences, India |
| | Isolation, characterization and identification of antimicrobial peptide from Bacteria. | Interdisciplinary Approaches in Life Sciences, (2 nd –3 rd February, 2020). | National | Y. C. Institute of Science, Satara |
| 11 | To isolate and characterize the oil degrading bacteria from contaminated soil. | Interdisciplinary Approaches in Life Sciences, (2 nd –3 rd February, 2020). | National | Y. C. Institute of Science, Satara |
| 12 | Micropropagation and <i>ex vitro</i> rooting of <i>Frerea indica</i> (Dalz.) – An endemic, critically endangered and monotypic plant. | Interdisciplinary Approaches in Life Sciences, (2 nd –3 rd February, 2020). | National | Y. C. Institute of Science, Satara |
| 13 | An efficient micropropagation protocol for <i>Vigna khandalensis</i> - an endemic and underutilized legume of the Northern Western Ghats. | Interdisciplinary Approaches in Life Sciences, (2 nd –3 rd February, 2020). | National | Y. C. Institute of Science, Satara |
| 14 | Risk estimation and conservation measures to Indian Lantern Flowers (<i>Ceropegia</i> spp.). | Chemistry, Environment and Energy (16 th –18 th February, 2019). | International | Y. C. Institute of Science, Satara |
| 15 | Seasonal variation in physicochemical parameters of water from Ujani Reservoir, Solapur District, Maharashtra, India. | Chemistry, Environment and Energy (16 th –18 th February, 2019). | International | Y. C. Institute of Science, Satara |
| 16 | Green synthesis of silver nanoparticles using the leaf extract of <i>Bambuseae</i> and study of its antimicrobial activity. | Chemistry, Environment and Energy (16 th –18 th February, 2019). | International | Y. C. Institute of Science, Satara |
| 17 | Isolation and | Recent Advances in | International | Y. C. Institute of |

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|----|---|---|----------|------------------------------------|
| | characterization of high alkaline strain of <i>Chlorella</i> form commercial <i>Spirulina</i> production pond. | Renewable Energy and Hygiene Devices, (5-6 th March, 2018). | | Science, Satara |
| 18 | Water quality profile of Ujani reservoir from Solapur district, (MS) India. | Multidisciplinary Approaches in Life Science: Research and Application for Sustainable Development (5-6 th January, 2018). | National | Y. C. Institute of Science, Satara |
| 19 | Isolation and screening of lignin degrading microbes and their potential for dye decolorization. | Multidisciplinary Approaches in Life Science: Research and Application for Sustainable Development (5-6 th January, 2018). | National | Y. C. Institute of Science, Satara |
| 20 | Isolation, characterization & purification of bacteriocine producing halophile from Arabian Sea and check their antimicrobial activity. | Multidisciplinary Approaches in Life Science: Research and Application for Sustainable Development (5-6 th January, 2018). | National | Y. C. Institute of Science, Satara |
| 21 | Water analysis of different pond ecosystems in Satara district. | Multidisciplinary Approaches in Life Science: Research and Application for Sustainable Development (5-6 th January, 2018). | National | Y. C. Institute of Science, Satara |
| 22 | Phytochemical investigation and synthesis of silver nanoparticles from <i>Abelmoschus moschatus</i> . | Multidisciplinary Approaches in Life Science: Research and Application for Sustainable Development (5-6 th January, 2018). | National | Y. C. Institute of Science, Satara |
| 23 | Isolation, characterization and identification of methyl orange dye degrading microorganisms from textile effluent. | Multidisciplinary Approaches in Life Science: Research and Application for Sustainable Development (5-6 th January, 2018). | National | Y. C. Institute of Science, Satara |
| 24 | Utilization of fruit wastes to produce Single Cell Protein (SCP). | Multidisciplinary Approaches in Life Science: Research and Application for Sustainable Development (5-6 th January, 2018). | National | Y. C. Institute of Science, Satara |
| 25 | Differential response of wheat (<i>Triticum aestivum</i> L.) cultivators to PEG 6000 induced drought | Multidisciplinary Approaches in Life Science: Research and Application for Sustainable Development (5-6 th January, | National | Y. C. Institute of Science, Satara |

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| | stress in relation to seed germination and anti-oxidant enzyme activity. | 2018). | | |
| 26 | Isolation, purification and characterization of L-asparaginase producing bacteria from pond water. | Multidisciplinary Approaches in Life Science: Research and Application for Sustainable Development (5-6 th January, 2018). | National | Y. C. Institute of Science, Satara |
| 27 | Synthesis of silver nanoparticles from <i>Ocimum sanctum</i> and <i>Murraya koenigii</i> and its antimicrobial activity. | Multidisciplinary Approaches in Life Science: Research and Application for Sustainable Development (5-6 th January, 2018). | National | Y. C. Institute of Science, Satara |
| 28 | Isolation and characterization of plant growth promoting endophytic bacteria from <i>Canna indica</i> . | Multidisciplinary Approaches in Life Science: Research and Application for Sustainable Development (5-6 th January, 2018). | National | Y. C. Institute of Science, Satara |
| 29 | Isolation and characterization of feather degrading bacteria. | Multidisciplinary Approaches in Life Science: Research and Application for Sustainable Development (5-6 th January, 2018). | National | Y. C. Institute of Science, Satara |
| 30 | An improved micropropagation, metabolite profiles and antimicrobial activity of active fractions of 'Sweet Flag' (<i>Acorus calamus</i>): a potent aromatic herb. | Multidisciplinary Approaches in Life Science: Research and Application for Sustainable Development (5-6 th January, 2018). | National | Y. C. Institute of Science, Satara |

F) Citation Index

| | Google Scholar | Scopus | Web of Science |
|------------------|-----------------------|---------------|-----------------------|
| Citations | 796 | 504 | |
| h-index | 16 | 14 | |
| i10-index | 21 | 18 | |

❖ Participation in Orientation/Refresher/FDP/Short Term/Training Programs:

| Sr. No. | Name of the programme | Organizing institute | Date |
|----------------|--|--|--------------------------|
| 1 | 90 th Orientation Programme | UGC- Academic Staff College, Goa University, Goa | 01/11/2014 to 28/11/2014 |
| 2 | Refresher Course in Life Sciences | UGC-HRDC, University of Mysore, Mysore | 03/11/2016 to 23/11/2016 |

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| 3 | Interdisciplinary Refresher Course in Biological Sciences | UGC-HRDC, Kannur University, Kannur, Kerala | 05/01/2021 to 18/01/2021 |
| 4 | Short Term Faculty Development Program on 'Effective Ways to Develop E-Content for Teaching Learning' | UGC-HRDC, Savitribai Phule Pune University, Pune and K. T. H. M College, Nashik | 21/05/2020 to 30/05/2020 |
| 5 | Ten Days Faculty Development Program on 'Innovative Practices in Pedagogy (Science)' | UGC-HRDC, Savitribai Phule Pune University, Pune and Azad College of Education, Satara | 15/06/2019 to 24/06/2019 |
| 6 | National Level One Week Faculty Orientation Workshop on 'Revised Guidelines of NAAC' | Yashwantrao Chavan Institute of Science, Satara | 27/04/2020 to 02/05/2020 |
| 7 | Two Weeks Faculty Development Programme on "Managing Online Classes and Co-Creating Moocs" | Teaching Learning Center, Ramanujan College, University of Delhi | 20/04/2020 to 06/05/2020 |
| 8 | One Day National Level Faculty Development Workshop on Cyber Security' | Shivaji University, Kolhapur | 10/04/2020 |
| 9 | Hands on Training Program in Taxonomy | Y. C. Institute of Science, Satara & Naoroji Godrej Centre for Plant Research, Shirwal | 29/12/2018 |
| 10 | Workshop and Hands-on-training on Plant DNA Fingerprinting and Diagnostics of Medicinal Potential in Plants | Bose Institute (Main Campus), Kolkata | 18/02/2014 to 04/03/2014 |
| 11 | Training programme on 'Analytical Instruments Techniques' | Department of University Science Instrumentation Centre, Shivaji University Kolhapur | 18-20/03/2009 |

❖ **Participation in Conference/Seminar/Symposia/Workshop/Any other programs: (2017 to 2023)**

| Sr. No. | Name of the event | Level (Intl/ Natl/ State/ Uni/Local etc.) | Organizing institute | Date |
|---------|---|---|---|-------------|
| 1 | National Conference on 'Multidisciplinary Approaches in Life Science: Research and Application for Sustainable Development' | National | Department of Botany & Biotechnology, Yashwantrao Chavan Institute of Science, Satara | 5-6/01/2018 |
| 2 | International Conference on 'Recent Advances in Renewable Energy and Hygiene Devices' | International | Yashwantrao Chavan Institute of Science, Satara | 5-6/03/2018 |
| | Two Days Lecture Series on 'Issues in Higher Education' | State | Karmaveer Vidyaprabodhini, Satara & D. G. College of Commerce, Satara | 7-8/05/2018 |

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| 3 | One Day Workshop on ‘Quality Monitoring of Chemicals, Glassware’s and Instruments’ | State | Rayat Shikshan Sanstha, Satara & Y. C. Institute of Science, Satara | 31/07/2018 |
| 4 | One Day Workshop on ‘Revised NAAC’ | National | KBPIMSR, Satara & Ismailsaheb Mulla Law College, Satara | 13/10/2018 |
| 5 | One Day National Workshop on ‘Submission of Online AQAR Under Revised NAAC Guidelines’ | National | Sardar Babasaheb Mane Mahavidyalaya, Rahimatpur | 11/02/2019 |
| 6 | International Conference on ‘Chemistry, Environment and Energy’ | International | Yashavantrao Chavan Institute of Science, Satara | 16–18/02/2019 |
| 7 | Two Day National Workshop on ‘Role of IQAC in Extension Activities, Best Practices and Student Progression’ | National | Savitribai Phule Mahila Mahavidyalaya, Satara | 24-25/02/2019 |
| 8 | Two Days Lecture Series on ‘Issues in Higher Education’ | State | Karmaveer Vidyaprabodhini, Satara & D. G. College of Commerce, Satara | 7-8/05/2019 |
| 9 | National Conference on ‘Interdisciplinary Approaches in Life Sciences’ | National | Department of Zoology and Biotechnology, Y. C. Institute of Science, Satara | 2–3/02/2020 |
| 10 | One Day Workshop on ‘Intellectual Property Rights (IPR) for Academia and Industry for Technology Collaboration and Transfer’ | Local | Yashavantrao Chavan Institute of Science, Satara | 14/03/2020 |
| 11 | One Day Webinar on ‘Molecular Taxonomy and DNA Barcoding: Concepts, Methods and Applications’ | National | R. D. & S. H. National College and S. W. A. Science College, Bandra (W), Mumbai | 20/05/2020 |
| 12 | One Day Workshop on ‘ICT Enablement in Higher Education for the Betterment of Academic Delivery and Statutory Adherence’ | National | Lal Bahadur Shastri College, Satara | 21/05/2020 |
| 13 | One Day Workshop on ‘NAAC- | State | YCIS, Satara; RUSA, | 01/06/2020 |

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| | Revised Accreditation Framework' | | Maharashtra; Regional Joint Director, Higher Education, Kolhapur & Shivaji University, Kolhapur | |
| 14 | One Day National Webinar on 'Risk of Social Isolation Human Behavior' | National | Chandrabai Shantapa Shendure College, Hupari & Y. C. Institute of Science, Satara | 09/06/2020 |
| 15 | National Webinar on 'Biodiversity and Biotechnological Interventions' | National | Kisan Veer Mahavidyalaya, Wai, Dist - Satara | 20/08/2020 |
| 16 | National Webinar on 'The amazing Power of Botanicals into the area of Cancer Therapy' | National | K. B. P. Mahavidyalaya, Pandharpur, Dist- Solapur | 04/11/2020 |
| 17 | One Day National Seminar on 'National Education Policy – 2020' | National | Yashavantrao Chavan Institute of Science, Satara | 23/01/2021 |
| 18 | International E-Conference on 'Current Approaches in Life Sciences for Sustainable Development' | International | Yashavantrao Chavan Institute of Science, Satara | 19-20/03/2021 |
| 19 | One Week Online Workshop on 'NAAC Accreditation Process' | National | Modern College of Arts, Science and Commerce (Autonomous), Pune | 15/04/2021 to 22/04/2021 |
| 20 | National Webinar on 'Publication Metrics' | National | Shri Kadasiddheshwar Arts College and H. S. Kotambri Science Institute, Hubballi, Karnataka | 03/05/2021 |
| 21 | One Day State Level Workshop on 'Understanding NAAC Manual' | State | Yashavantrao Chavan Institute of Science, Satara | 02/06/2021 |
| 22 | A Webinar on 'Transformative Reform Under New Education Policy-2020' | National | Shivaji University, Kolhapur | 10/08/2021 |
| 23 | Two Days Workshop on 'Teacher Training for Mentoring and Counseling of Students' | Local | Yashavantrao Chavan Institute of Science, Satara | 21-22/10/2021 |

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| 24 | International Conference on Nanobiotechnology | | Yashavantrao Chavan Institute of Science, Satara | 17 th – 18 th 2023 |
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❖ **Resource person in Conference/Seminar/Workshop/Any other programs: (2018-2023)**

| S. No. | Title of the event | Level (Intl/ Natl/ State/ Uni./local etc.) | Organizer | Date |
|--------|---|--|---|------------|
| | One Day Workshop on 'Plant Tissue Culture' | Local | Sadguru Gadage Maharaj College, Karad | 17/10/2018 |
| | Guest lecture on 'Kaas Plateau – World Heritage Site | Local | Yashavantrao Chavan Institute of Science, Satara | 26/08/2019 |
| | Guest lecture on 'Kaas Plateau: A world heritage site -diversity, threats and conservation strategies | Local | Shrimant Babasaheb Deshmukh Mahavidyalaya, Atpadi | 01/10/2019 |
| | National Level One Week Faculty Orientation Workshop on 'Revised Guidelines of NAAC' | National | Yashavantrao Chavan Institute of Science, Satara | 27/04/2020 |
| | National Seminar on 'Tissue Culture and Its Significance | National | Lal Bahadur Shastri College, Satara | 10/06/2020 |
| 2 | International E-Conference on 'Recent Trends in Life Sciences' | International | Shrimant Babasaheb Deshmukh Mahavidyalaya, Atpadi, Dist: Sangli | 25/07/2020 |
| | Five Days Induction Program for Students - Education Policy | Local | Yashavantrao Chavan Institute of Science, Satara | 10/08/2020 |
| | National Webinar on 'Biodiversity and Biotechnology' | National | Kisan Veer Mahavidyalaya, Wai | 20/08/2020 |
| | Six Days Orientation Program for Students of Professional Courses – Higher Education Policy- 2020 | National | Yashavantrao Chavan Institute of Science, Satara | 24/08/2020 |
| 1 | Global Biotechnology Conference | International | Reignite Innovative Conferences, India | 02/09/2020 |
| 5 | National Level Workshop on 'The Power of Feedback in Higher Education Institution' | National | Shri Kadasiddheshwar Arts College and H. S. Kotambri Science | 19/09/2020 |

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| | | | Institute, Hubballi, Karnataka | |
| | Guest lecture on ‘Research, Innovation, Linkages and Incubation’ | Local | Arts and Commerce College, Satara | 29/01/2021 |
| | One Day Workshop on ‘A Qualitative Research Approach’ | Local | Yashwantrao Chavan Institute of Science, Satara | 22/05/2021 |
| 4 | National Webinar on ‘Role of Biotechnology in Biodiversity Conservation’ | National | Yashwantrao Chavan Warna Mahavidyalaya, Warnanagar | 28/07/2021 |
| | One Day Workshop on ‘National Education Policy-2020 and its Relevance in NAAC Accreditation’ | National | Annasaheb Awate Arts, Commerce and Hutatma Babu Genu Science College, Manchar, Dist: Pune | 14/10/2021 |
| | Staff academy | Local | Ismailsaheb Mulla Law College, Satara | 13/12/2021 |
| 3 | National Level Guest Lecture Series under DBT Star College Scheme | National | Shri Shivaji Mahavidyalaya, Barshi, Dist: Solapur | 19/03/2022 |
| | Career opportunities in advanced plant sciences | Local | Lal Bahadur Shastri College, Satara | 04/04/2022 |
| | One Day State Level Awareness Workshop on ‘Strategies for Implementation of NEP-2020 In Maharashtra State’ | State | Yashwantrao Chavan Institute of Science, Satara | 21/12/2022 |

❖ Chaired Sessions in Conference/Seminar/Workshop etc.:

| S. No. | Title of the event | Level (Intl/Natl/ State/Uni./local etc.) | Organizer | Date |
|--------|---|--|--|---------------|
| 1 | International Conference on ‘Multidisciplinary Approach and Innovations in Chemical Sciences’ | International | Department of Chemistry, Y. C. Institute of Science, Satara | 25-26/03/2022 |
| 2 | International Conference on ‘Emerging Trends and Challenges in Electronics and Computing’ | International | Department of Electronics, Yashwantrao Chavan Institute of Science, Satara | 4-6/03/2021 |
| 3 | International Conference on | International | Department of | 5-6/03/ 2018 |

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| | 'Recent Advances in Renewable Energy and Hygiene Devices | | Electronics, Yashvantrao Chavan Institute of Science, Satara | |
| 4 | 6 th International Conference on 'Recent Trends in Life Sciences' | International | New Arts, Commerce and Science, College, Parner Dist. Ahmednagar | 29-30/12/2017 |
| 5 | International Conference on 'Plant Research and Resource Management' | International | Tuljaram Chaturchand College, Baramati, Dist-Pune | 11-13/02/2016 |
| 6 | International Conference on 'Contemporary Research in Chemical and Life Sciences, | International | Sadguru Gadage Maharaj College, Karad | 22-23/04/2015 |
| 7 | National Conference on 'Applications of Forensic Science for Societal Development' | National | Yashvantrao Chavan Institute of Science, Satara | 21-22/12/2019 |
| 8 | National level Conference on 'Status, Opportunities and Challenges in Life Sciences' | National | Radhabai Kale Mahila Mahavidyalaya, Ahmednagar held | 17-19/09/2013 |

Signature of Faculty