# **CURRICULUM VITAE**

# 1. PERSONAL PROFILE:

: Dr.Ahilya V. Waghmode Name

Father Name : Vitthal

Gender : Female

Date of Birth : 02/05/1983

**Marital Status** : Married

Religion : Hindu

: NT-C Category

Address for Communication : Dept. of Botany, Sadguru Gadage Maharaj College, Karad Mobile No. : 7588595492

: waghmode.algae@gmail.com E-mail ID

# 2. EDUCATIONAL QUALIFICATION:

Degree	Name of Institute / College	University	Year of Passing	Marks (%)
B.Sc.	University of Pune, Pune.	2003	Botany	69.41%
M.Sc.	Department of Botany, University of Pune, Pune.	1 2005	Botany (Phycology)	'B' grade
Ph. D.	Department of Botany, Shivaji University, Kolhapur.	2013	Botany	Awarded



#### 3. EXPERIENCE:

Designation	Name of Institution / Organization	Period of Service		Experience(Year
Designation		From	To	s &Months)
Visiting lecturer	Department of Botany, Shivaji University, Kolhapur-416004	2007	2008	One year
Teaching assistant	Department of Botany, Shivaji University, Kolhapur-416004	2009	2010	One year
Assistant Professor Temporary	Gopal Krishna Gokhale College, Kolhapur	2013	2014	One year
Assistant Professor Temporary	Rajarshi Chh. Shahu College, Kolhapur	2014	2015	One year
C.H.B. and Principal Investigator, Young Scientist DST-SERB Project.	Rajarshi Chh. Shahu College, Kolhapur	2015	2018	Three years
Assistant Professor (Temporary)	Dept. of Botany, Shivaji University, Kolhapur	2018	2019	One year
Assistant Professor (Temporary)	Dept. of Botany, Shivaji University, Kolhapur	2019	2020	One year
Assistant Professor and Co-ordinator of Food Science Dept.	Sadguru Gadage Maharaj College, Karad	5 <sup>th</sup> June 2020	Till date	Three year

Total Teaching Experience: 12 years & 03 Months

# 4. BOOK PUBLISHED: 03

# Research Monograph (01)

1. Waghmode A.V and Sabale A. B. (2015). Hand Book on Biosorption. Omniscriptum Gmbh & Co. Kg.LAP Lambert Academic Publishing, Germany.ISBN:9783659705335. https://www.lap-publishing.com/978-3-659-70533-5/9783659705335.

### **Book Published (02)**

- 1. A Text book of Cryptogamic Botany (Algae & Fungi) for B.Sc. Botany, Nirali Prakashan (Oct 2021) ISBN- 978-93-5451-239-1.
- 2. Manual of Practical Botany (Algae & Fungi) for B.Sc. Botany, Nirali Prakashan (Oct 2022) ISBN-978-93-95951-12-8.

#### 5. **PATENTS PUBLISHED:** 03

(INTERNATIONAL)

- 1. Waghmode A.V, Ghadage, S.J, Panaskar P.S, Patil, H.S, Patil, K.H and., Rajmane, M.M. An Apparatus for Removing Pb(II) Ions from an Aqueous Solution. Grant Certificate for German Application No.202022103534 on 19/09/2022.
- 2. Waghmode A.V. Ghadage, S.J., Panaskar P.S., Patil, H.S., and Patil, K.H., A System for Removal of Lead from Aqueous Solution Using Dried Biomass of Brown Algae. Grant Certificate for German Application No.202022104092 on 29/09/2022.
- 3. Waghmode A.V. Chavan, N.S, Gokhale M.V, Patil P.D, and Telave, Ajit B A System for Isolation of Starch from Mangroves. Grant Certificate for German Application No.202022105251 on 27/09/2022.

#### 6. AWARDS AND ACHIVEMENTS: 03

- 1.Young Scientist award, Project Sanctioned by Department of Science and Technology, Govt. of India, Under SERB Fast Track Proposal for Young Scientist Scheme 2015-2018, entitled "Phytochemical screening of *Sargassum* Spp from West Cost of Maharashtra" under Start-up Research Grant vide Registration No. SERB/LS-138/2014 Dtd. 28<sup>th</sup> March, 2014. Total coast: 30, 50,000/-
- 2. Best poster presentation award in AVISHKAR 2010-2011. "Removal of heavy metal ions from wastewater using green and brown algae" (Poster) at university level (2<sup>nd</sup> Rank in Poster competition) at Shivaji University Kolhapur.
- 3. Best poster presentation award in National conference on "Mangroves and Coastal Resources" (2<sup>nd</sup> Rank in Poster competition) Organized by Department of Botany, Shivaji University Kolhapur in Association with Mangrove society of India Goa and Mangrove foundation, Mumbai, 12<sup>th</sup> April, 2019.

#### 7. RESEARCH PAPER PRESENTED: 27

- 1.Biosorption of copper using brown alga *Padina tetrastromatica* (Hauck) Oral presentation, at XXXIII Conference of Indian Botanical Society and International Symposium on the New Horizons of Botany at Department of Botany, Shivaji University, Kolhapur (2010).
- 2. Biosorption of heavy metals from industrial wastewater by a brown alga *Sargassum ilicifolium* (Turner) C. Agardh Oral presentation, at National Conference on current innovations in Plant Sciences at K. J. Somaya College, Kopargaon (2012).
- 3. Application of seaweeds for removing heavy metal ions from wastewater. Poster presented at National conference on recent trends in plant sciences 21<sup>st</sup> APSI Scientist meet, Organized by Tuljaram Chaturchand College Baramati Pune (with Sabale A. B. 2012).

- 4. Ethno botanical survey of some medicinal plant with respect to medicinal drugs from Chandoli, Poster presented at National conference on recent trends in plant sciences 21<sup>st</sup> APSI scientist meet, Organized by Tuljaram Chaturchand College Baramati, Pune (with Kamble S. R. and Deokar R. R, 2012).
- 5. Medicinal potential of seaweeds Poster presented at national seminar on medicinal plants: status and future, Department of Botany, Shivaji University, Kolhapur (with Mole M. M, 2012).
- 6. Ethno botanical studies of some useful herbs, shrubs and trees of Shirala Tahsil of Sangali district, M.S. India. Poster presented in national seminar on medicinal plants: status and future, at Department of Botany, Shivaji University, Kolhapur (with Deokar R. R., Kamble. S. R. and Sabale A. B. (2012)
- 8. Removal of Cobalt (II) and Nickel (II) from aqueous medium using brown seaweeds. Poster presented in Sustainable water resource development and management at Department of Environmental Sciences, Shivaji University, Kolhapur (with Sartape S. S, Deokar R. R and Sabale A. B. (2012).
- 9. Ethnobotanical and ethno medicinal survey of Chikurde sacred grove, District Kolhapur (Maharashtra) Poster presented, UGC Sponsored National conference on Sacred groves as a repository for ethno medicinal plants organized by Department of Botany, Rajaram college, Kolhapur (with Deokar R. R, Kamble S. R and Sabale A. B. (2013).
- 10. Cadmium biosorption by using brown marine alga *Sargassum ilicifolium* Poster presented, UGC Sponsored "National conference on Life Sciences: An Outlook and Challenges, organized by Department of Botany & Zoology, Dahiwadi college, Dahiwadi, Tal-Man, Dist-Satara (with Deokar R. R. (2014).
- 11. Biosorption of Cadmium (II) from aqueous solution using marine algae. Oral presentation, XII conference of society of cytologists and geneticists and national symposium on challenges for biologists in 21<sup>st</sup> century, organized by Department of Botany, Shivaji University, Kolhapur (2014).
- 12. Phytochemical Screening and Isolation of Fucoxanthin Content of *Sargassum ilicifolium*. Oral presentation, Two-day international conference on challenges and opportunities before 21<sup>st</sup> century India, at Rajarshi Chh. Shahu College, Kadamwadi, Kolhapur.
- 13. Diversity and Distribution of Brown algae from the West Coast of Maharashtra. Poster presentation, National conference on Recent trends in Physical, Chemical and Biosciences [RTPCB-2016] Organized by Department of Chemistry, Arts, Science and Commerce College Baramati, (with Patil H. S and Tabe A. R. (2016).
- 14. Study of Brown algae (Phaeophyceae) from the West Coast of Maharashtra and Phytochemical characterization of brown seaweed Sargassum cinereum. Oral presentation, 3<sup>rd</sup> International Conference on Innovative Research in Science and Technology (ICIRST-2017) Organized by Gopal Krishna Gokhale College, Kolhapur, (MS), India.
- 15. RP-HPLC profile of major phenolics from brown marine macroalgae. Poster presentation, National seminar on "Organized by Abasaheb Marathe Arts and New Commerce, Science College, Vikhare-Gothane, Rajapur. Dist-Ratnagiri, Maharashtra, (with Powar P.S and Sutar P. T. (2018).

- 16. Quantification of fucoxanthin and astaxanthin in brown algae (*Sargassum* sp.) by high performance liquid chromatography" Poster presentation, International Conference on Materials and Environmental Sciences [ICMES-2018] organized by Shri Yashwantrao Patil Science College, Solankur and The New College, Kolhapur, on 7<sup>th</sup> & 8<sup>th</sup> December, (with Narayankar C.U, Nimbalkar M.S and Gaikwad D.K 2018).
- 17. "Removal of heavy metal from aqueous medium using seaweeds" Poster presentation in the India International Seaweed Expo and Summit 2019 held at World Trade Centre, Mumbai during 22nd-24th January 2019.
- 18. "Antibacterial activity of common seaweeds from the west coast of Maharashtra" Poster presentation in National conference on Mangroves and Coastal resources organized by Department of Botany, Shivaji University, Kolhapur in Association with Mangrove society of India, Goa and Mangrove foundation, Mumbai,12<sup>th</sup> April, 2019 with Sabale A.B. (2<sup>nd</sup> Rank Poster presentation).
- 19. "Restoration and management of Mangrove ecosystem", presented a Poster in the Online International conference on "Climate Change, Mangroves and Sustainable Management" on 24th April 2020. IQAC & PG-Department of Botany of Shri Pancham Khemraj Mahavidyalaya, Sawantwadi, (MS) University of Mumbai, Mangrove Society of India & Sahyadri Botanical Society, Kolhapur.
- 20. "GC-HRMS and NMR profile of brown algae along the west coast of Maharashtra" Oral presentation in Jointly Organizing with Sadguru Gadage Maharaj College, Karad and Shri Pancham Khemraj Mahavidyalaya, Sawantwadi, Two days Virtual International Conference on Research Interventions and Advancements in Plant Science(RIAPS) 15<sup>th</sup> and 16<sup>th</sup> June 2020.
- 21. "Gas Chromatography-High Resolution Mass Spectrometry Analysis of *Sargassum* species". Oral Presentation in two days International E-Conference on Cutting Edge Smart Materials & Nanotechnology (ICCESMN-2020) held on 20-21st August 2020 jointly organized by Department of Physics and IQAC of Sadguru Gadage Maharaj College, Karad, Maharashtra, India. (With Manasi Patil.)
- 22. Antioxidant and Antimicrobial activity from Common Seaweeds from west coast of Maharashtra Oral Presentation in two days International E-Conference, Phycology Webinar 2021 on 28<sup>th</sup>-29<sup>th</sup> January2021organized by Probir Chatterjee Research Foundation and Dept. of Botany, University of Calcutta.
- 23. "Anticancer activity of some brown algae along west coast of Maharashtra" Oral presentation in Shri Pancham Khemraj Mahavidyalaya, Sawantwadi and with association of plant science research, Dehradun, Two days International Conference on Research Interventions and Advancements in Plant Science(RITAPS) 26<sup>th</sup> and 27<sup>th</sup> March 2021.(With Chiraj Narayankar).
- 24. *Passiflora* a Promising medicinal plant (2021). Poster presentation in National Conference on Advances in Plant Science Research, 4<sup>TH</sup> Plant Science Researchers Meet(PSRM-2021) 20<sup>th</sup> and 21<sup>th</sup> November 2021. (With Manasi Patil, Poonam Panaskar, Chirag Naraynkar and D.K. Gaikwad).
- 25. Antioxidant Study in *Stocheospermum marginatum* (2022) Poster presentation in National conference on "Panorama of Life Sciences-2022", Organized by Department of Life Sciences, Maharaja Krishnakumarsinhji Bhavnagar University, Bhavnagar and AOZ

- ASSOCIATION OF ZOOLOGISTS on 20th January,2022. <a href="https://youtu.be/5uKGaArPyyQ">https://youtu.be/5uKGaArPyyQ</a> (Individual).
- 26. FT-IR Characterization of Methanolic Extract of Marine Algae from West Coast of Maharashtra in Two days International Conference on Innovative trends in life sciences (ITLS 2022) on 11<sup>th</sup> and 12<sup>th</sup> March 2022 Organized by Sadguru Gadage Maharaj College, Karad (Individual).
- 27. Alpha Amylase Inhibition Activity of Common Seaweeds from Westcoast of Maharashtra in two days International Conference on Microbes for sustainable Agriculture, Animal husbandry and environment (MSAAHE 2023) on 3<sup>rd</sup> and 4<sup>th</sup> February 2023 Organized by Karmaveer Bhaurao Patil Mahavidyalaya, Pandharpur, Dist-Solapur-413304(Individual).
- 28. Gas Chromatography mass spectrometry analysis of *Stoechospermum* Species in the two days Interdisciplinary National conference on Environmental Sustainability in life science (INCESLS) Scheduled from 24<sup>th</sup> & 25<sup>th</sup> March 2023 by Deshbhakt Anandrao Balwantrao Naik College, Chikhali, Maharashtra, India(Oral Presentation).

#### 8. RESEARCH PAPER/ REVIEW ARTICLE PUBLISHED: 24

#### **Communicated –02**

Citations -121, h-index- 4, i-10-index-1

- Research Gate Score: 4.78
- **1.** Sabale A. B. and Waghmode A. V. (2010). Biosorption of Copper (II) by Brown Seaweed *Sargassum ilicifolium* (Turner) C. Agardh, *The Bioscan*, 5(3): 407-410.ISSN 0973-7049. An International Quarterly Journal of Life Sciences.
- **2.** Waghmode A. V. and Sabale A. B. (2011). Biosorption of Heavy Metals from Industrial wastewater by a Brown Alga *Sargassum ilicifolium* (Turner) C. Agardh, *Advances in Plant Sciences*, 24(II): 523-525. IF- 2.5 by NAAS. ISSN: 0970-3586.
- **3.** Deshmukh B. S. and Waghmode A.V. (2011). Ex-Situ Conservation of some Rare Endemic and Medicinal plant Species from Akole Taluka (MS) India. *Bioscience Discovery*, 2(2):171-173. ISSN: 2229-3469. http://www.biosciencediscovery.com. ISSN: 2231-024X.
- **4.** Deshmukh B. S. and Waghmode A. V. (2011). Role of Wild edible fruits as a food resource: Traditional Knowledge. *International Journal of Pharmacy and Life sciences*. 2(7): 919-922. Citations- 47 ISSN: 0976-7126
- **5.** Waghmode A. V. and Sabale A. B. (2012). Application of *Padina tetrastromatica* for removal of heavy metal ions from wastewater. *Journal of Environmental Research and Development*. 2A (07): 958-963, IF- 0.157. An international research journal of natural SCS. Technology, Social SCS, Law and Management for environment, E-ISSN 2319-5983, ISSN 0973-6921. Citations- 06
- **6.** Waghmode A. V. and Sabale A. B. (2013). Biosorption of lead from aqueous solution by brown seaweeds. *Indian Journal of Applied* Research, IF-0.8215, 3(9), 58-62, ISSN-2249-555X.
- 7. Waghmode A. V. and Kumbhar R. R. (2015). Phytochemical Screening and Isolation of Fucoxanthin content of Sargassum ilicifolium. International Journal of Pure and Applied

- *Biosciences*, 3(6):218-222, ISSN: 2320-7051, IF-1.106. DOI: http://dx.doi.org/10.18782/2320-7051.2180.
- **8.** Waghmode A.V. and Kumbhar R. R. (2016). Study of Blue-green algae from Lonar Lake. *Indian Journal of Fundamental and Applied Life Sciences*, 6(2), 69-73. 2231–6345, IF-1.54. http://www.cibtech.org/jls.htm. ISSN: 2231–6345
- **9.** Waghmode A.V. and Deshmukh B. S. (2016). A New report of *Rosenvingea orientalis* (J.Ag.) Boergesen from Ratnagiri District of Maharashtra, India. *Journal of Algal Biomass Utilization*, 7(3): 70-72, ISSN: 2229 –6905.
- **10.** Waghmode A.V. (2017). Diversity and Distribution of Seaweeds from the West Coast of Maharashtra. *Journal of Algal Biomass Utilization*, 8(3):29-39. ISSN: 2229 –6905.
- **11.** Waghmode A.V. and Khilare C. J. (2018). RP-HPLC profile of major phenolics from brown marine macroalgae. Journal of Applied Pharmacy, 10(2):1-5. DOI: 10.4172/1920-4159.1000262, IF- 0.69\*; 0.87\* ISSN: 1920-4159.
- **12.** Waghmode A.V. and Deshmukh B. S. (2018). A New report of *Hypnea spinella* (C.Agardh), Kutzing from Sindhudurgh District of Maharashtra, India. *Indian Journal of Geo-Marine Sciences*, 47(11):2321-2323. IF-0.289, ISSN: 0379-5136 (UGC listed).
- **13.** Bansode, P; Rashinkar, G; Somasundaram, I; Birajdar, A; Mishra, S; Patil, D; Waghmode, A. 2019. Evaluation of Chemical, Antipsoriatic and Antiangiogenic Properties of Salt from Lonar Crater Lake Water. <u>Asian Journal of Organic & MedicinalChemistry</u>, 4(3),159-165, <a href="https://doi.org/10.14233/ajomc.2019.ajomc-p193">https://doi.org/10.14233/ajomc.2019.ajomc-p193</a> ISSN NO: 2456-893, CODEN: AJOMB2.
- **14.** Waghmode A.V., Narayankar C.U, Nimbalkar M.S and Gaikwad D.K 2019. Exploration of fucoxanthin and astaxanthin in brown algae (*Sargassum* sp.) by high performance liquid chromatography, *Indian Hydrobiology*, 18(1&2):40-49, (UGC care list) ISSN: 0971-6548.
- **15.** Manasi Patil, Nivas Desai, Ahilya Waghmode and D.K. Gaikwad 2020. Effect of Exogenous Application of Plant Growth Regulators on Physiology and Secondary Metabolite Accumulation of *Colubrina Asiatica L. Studia Rosenthaliana* (Journal for the Study of Research) Volume XII, Issue IX, September-2020 ISSN NO: 1781-7838. (UGC care list).
- 16. Patil Manasi, V. Waghmode Ahilya, Chirag Narayankar, D. K. Gaikwad 2021. Influence of plant growth regulators on fatty acid composition of *Simarouba glauca* DC. *Current Botany*, 12: 1-3. Doi:10.25081/cb.2021.v12.6521https://updatepublishing.com/journal/index.php/cb ISSN: 2220-4822.
- **17.** Ahilya V. Waghmode and Manasi S. Patil (2021) Gas chromatography-high resolution mass spectrometry analysis of *Sargassum* species. *Indian Hydrobiology* 20(1): 1–10. ISSN :0971-6548.
- **18.** Waghmode A.V, Narayankar C.U, Manasi Patil, Nimbalkar M.S and Harshada Takale (2021). Antioxidant, Antimicrobial and Cytotoxic activity of Some Common Seaweed along West Coast of Maharashtra. *Egyptian Journal of Aquatic Biology and Fisheries*, Zoology Dept, Faculty of Science, Ain Shams University, Cairo, Egypt. ISSN 1110-6131, Vol. 25(6):129-143. www.ejabf.journals.ekb.eg(Scopus).

- **19.** Manasi Patil, Poonam Panaskar, Chirag Naraynkar, Ahilya Waghmode and D.K. Gaikwad (2021) *Passiflora* a Promising medicinal plant. *Science, Technology and Development Journal*, Volume X Issue XI NOVEMBER 2021 ISSN: 0950-0707,65-76. (UGC Care list).
- **20.** Manasi Patil, Poonam Panaskar, Chirag Naraynkar, Ahilya Waghmode (2021) Preliminary Phytochemical Evaluation of *Passiflora* Fruits. December IJIRT International Journal of Innovative Research in Technology | Volume 8 Issue 7 |554-557 ISSN: 2349-6002.
- 21. Hingane N.N, Waghmode A.V, Gajbhye M.H and Agnihotri S.N. Antioxidant potentials and total phenolic content of brown and red seaweeds harvested from the Sindhudurg coastal area, Maharashtra. Advances in Bioresearch, Vol 14[1/2]2023. (UGC Care list) (Web of Science).
- **22.** Waghmode, A.V. and Shinde, H.P. Marine algal species as biosorbents for sequestering toxic heavy metals: a review. Biological Forum-An International Journal, 15(2):1090-1096(2023).
- **23.** Patil Manasi, Nivas Desai, Chirag Narayankar, Waghmode Ahilya and D. K. Gaikwad 2021. Effect of plant growth regulators on the carbohydrate accumulation in *Simarouba glauca* seedling. Journal of Stress Physiology & Biochemistry, vol.19, No.2, 2023, pp.34-39. ISSN 1997-0838.
- **24.** Nikam, P.D. Shinde, H.P. and Pawar, R.P. Waghmode, A.V. Occurrence and conservation status of *Ceropegia anjanerica*, Malpure et. al. (Apocynaceae; Asclepiadoideae; Ceropegieae) in Nasik district: A review. International Journal of Plant and Environment, vol.09 (1)2023.
- **25.** Waghmode, A.V. Shinde, H.P, Patil M.S and Chavan S.N and. Exploration of Phenolic and Flavonoid Compounds from Marine algae. Communicated.

#### 9. SEMINAR / CONFERENCE / WROKSHOP ATTENDED: 32

- 1. Participated in XVII Annual conference of Indian Association for angiosperm taxonomy and international seminar on "Changing scenario in angiosperm systematic" at Department of Botany, Shivaji University, Kolhapur (2007).
- 2. Participated in national conference on "Integrated pest management and bioremediation" organized by Department of Botany and Agriculture Department, Lal Bahadur Shastri Mahavidyalaya, Satara (2012).
- 3. Participated in national conference on "Advanced Techniques of Teaching and Learning in Higher Education" organized by Vishwasrao Naik Arts, Commerce and Baba Naik Science Mahavidyalaya, Shirala, Jan 6<sup>th</sup> 2012.
- 4. Participated in One day seminar on "Plant Diversity Conservation" at Department of Botany, Shivaji University, Kolhapur at 25<sup>th</sup> June (2013).
- 5. Participated in "National seminar on "Envi and Bio. Terminology" organized by commission for scientific and technical terminology at Vidya Pratisthans, ASC College, Baramati, Dist-Pune (2015).

- 6. Participated in "National seminar on "Biodiversity: An Outlook and Challenges" organized by Department of Botany and Zoology, D. P. Bhosale College, Koregaon, District- Satara (M.S) Held on 13<sup>th</sup> Feb, 2016.
- 7. Participated in One day Multilingual National Conference on "Freedom of Expression Portrayed in Literature" on 17<sup>th</sup> January 2016, organized by Department of Languages, Rajarshi Chh. Shahu College, Kolhapur.
- 8. Participated in XXVI Annual conference of Indian Association for angiosperm taxonomy and international seminar on conservation and sustainable utilization of Biodiversity. At Department of Botany, Shivaji University, Kolhapur held on 7-9<sup>th</sup> Nov, (2016).
- 9. Participated in National conference on "Advances in Agriculture& Technologies for future "organized by Department of Agriculture and Department of Botany, Sadguru Gadage Maharaj College, Karad, Maharashtra, India held on 12 Decem. 2022.
- 10. Worked as a member in National conference on "Advances in Agriculture& Technologies for future "organized by Department of Agriculture and Department of Botany, Sadguru Gadage Maharaj College, Karad, Maharashtra, India held on 12 Decem.2022.
- 11. Participated and organized in "Ranbhaja mahoshv v pakkruti saprdha-2022" Department of Botany, Sadguru Gadage Maharaj College, Karad, Maharashtra, India held on 12 Decem.2022.
- 12. Exploration of Phenolic and Flavonoid Compounds from Marine algae Symposium on "Current Perspectives in Algal and Cyanobacterial Biology (CPACB-2023)" February 20-21, 2023. Organized by Centre of Advanced Study in Botany, Institute of Science, Banaras Hindu University, Varanasi-221005, UP, India.

# Workshops (20)

- 1. Participated in National workshop on Research methodology and Quantitative techniques at December 2010, Department of Humanity, Shivaji University, Kolhapur.
- 2. Participated in two-day workshop on Research writing, Ethics, Plagiarism and Publishability at 26<sup>th</sup> and 27<sup>th</sup> July, 2012, organized by Internal Quality Assurance Cell (IQAC), Shivaji University, Kolhapur.
- 3. Participated in National workshop on Mangrove awareness programe on December 29<sup>th</sup> 2011, Department of Botany, Shivaji University, Kolhapur and Godutai Gambhekar Vidhyalay, Ratnagiri.
- 4. Participated in National workshop on Plants of medicinal potential from Western Ghats and pharmaceutics on March 22<sup>nd</sup> 2012, Department of Botany, Shivaji University, Kolhapur.
- 5. Participated in National workshop on The integrated fertilizer and nutrient management in botany on Feb 26<sup>th</sup> 2014, G.K.G college cluster, Department of Botany, The New College, Kolhapur.
- 6. Participated in National workshop on Rare, endangered and threatened (RET) plants of Western Ghats on Sept 4<sup>th</sup> 2015, under lead college scheme, G.K.G college cluster, Shivaji University, Kolhapur organized by Department of Botany, Shri Shahaji Chh. Mahavidyalaya, Kolhapur.

- 7. Participated in one day workshop on SET/NET guidance organized by Rajarshi Chh. Shahu College, Kolhapur in Life Sciences Subject on 6<sup>th</sup> Jan, 2017.
- 8. Participated in One day National workshop on Bonsai for Connecting with the Nature on 7<sup>th</sup> July 2017, jointly organized by Kolhapur Bonsai Club with Department of Botany, Shivaji University, Kolhapur.
- 9. Participated in National workshop on Science Academies Lecture Workshop on Plant Sciences: Challenges and Opportunities Organized by Department of Botany, The New College, Kolhapur on 19<sup>th</sup> and 20<sup>th</sup> December, 2017.
- 10. Participated in global initiative for academic network, a seven days GIAN course on "Deployment of Allelopathy in Sustainable Agriculture" Organized by Department of Botany, Shivaji University Kolhapur-416004 on 27<sup>th</sup> Sept. to 3<sup>rd</sup> October, 2019.
- 11. Participated in V. P. College, Baramati one day Webinar on restructuring of S.Y.B.Sc. Botany syllabus.
- 12. Participated in ONLINE KITCHEN GARDENING COURSE 23 July 8 Oct, 2020 three months course on Kitchen Gardening organized by Br. Balasaheb Khardekar College, Vengurla in collaboration with Gardens Club of Kolhapur.
- 13. Participated in One Day Online Teachers' Workshop on the revised (CBCS) syllabus of B.Sc. III Botany (Theory) 6<sup>th</sup> Feb, 2021 organized by dept. of Botany M.H. Shinde Mahavidyalaya, Tisangi.
- 14. Participated in three Day online workshop on "Skill Development Program in Seaweed Cultivation and Processing Technology (SEA-CPT), 24-26 February 2021 organized by CSIR-Central Salt and Marine Chemicals Research Institute, Bhavnagar, Gujarat.
- 15. Maharashtra State Development of Educators and Enhancement in Delivery (MS-DEED) Program for Maharashtra State Science and Mathematics Teachers from Higher Education Institutes to be held by PMMMNMTT Centre of Excellence in Science and Mathematics Education (CoESME), at IISER Pune from 21<sup>st</sup> to 23 rd December 2021.
- 16. Participated in one day workshop on "Intellectual Property Rights Awareness" as activity organized by internal Quality Assurance Cell in Collaboration with dept. of Zoology, S.G.M. College, Karad on March 25<sup>th</sup> 2022.
  - 17. Participated in one day workshop on "An Orientation of NAAC Criterion VII-Institutional values and Best practices" organized by Internal quality assurance cell under RUSA Sponsorship at S.G.M. College, Karad on July 22<sup>th</sup> 2022.
  - 18. Participated in one day workshop on "National Education Policy 2020" organized by Internal quality assurance cell under RUSA Sponsorship at S.G.M. College, Karad on July 23<sup>th</sup> 2022.
  - 19. Participated in one day workshop on "Research Data management tools and techniques" organized by research advisory committee and internal Quality Assurance Cell at S.G.M. College, Karad on March 28<sup>th</sup> July 2022.
  - 20. Participated in the teachers training program on "Climate education and green campuses for a safer planet" jointly organized by department of Botany and internal Quality Assurance Cell of Vivekanand College, Kolhapur and climate reality project India, on Sept. 16<sup>th</sup> 2022.

# 10. WORK AS RESOURCE PERSON: 16 Invited Talks (16)

- 1. Delivered lecture at "Pradhapak probodini" in Rajarshi Chh. Shahu College, Kadamwadi, Kolhapur on "Biosorption of Heavy metals by using Seaweeds (2014).
- 2. Guest lecture on "Algae and opportunity in research field" for T.Y.B.Sc. (Botany) students of Shardabai Pawar Mahila Mahavidyalaya (Arts, Commerce, Science and Home Science) Shardanagar, Malegaon (Bk.) Tal-Baramati, Dist: Pune-413115 Maharashtra, India on 26<sup>th</sup> Jan 2015.
- 3. Guest lecture on "Algal Biotechnology" for Undergraduate and Postgraduate of Botany, Zoology and Microbiology students of Vidya Pratishthan's Arts, Commerce, Science and Commerce college, Tal-Baramati, Dist: Pune-413115 Maharashtra, India on 17<sup>th</sup> Feb 2016.
- 4. Delivered talk on "Career Guidance" at Mahatma Phule Vidyalaye, Varkute Khurd, Tal-Indapur, Dist- Pune on 24<sup>th</sup> July 2018.
- 5. Delivered lecture on "Algae" for T.Y.B.Sc. (Botany) students of Adv. Mohanrao Nanashaeb Deshmukh Arts, Science and Commerce Mahavidyalaya Rajur. (Tal- Akole, Dist-Ahmednagar, Maharashtra, India on 14<sup>th</sup> Sept. 2018.
- 6. Guest lecture on "Anatomy of Angiosperms" for Undergraduate of Botany students of Rajarshi Chhatrapati Shahu College, Kadamwadi, Kolhapur, Maharashtra, India on 23<sup>th</sup> Feb 2019.
- 7. Guest lecture on "Algal Diversity of Coastal Maharashtra" for Undergraduate of Botany, students of Vidya Pratishthan's Arts, Commerce, Science and Commerce college, Tal-Baramati, Dist: Pune-413115 Maharashtra, India on 09<sup>th</sup> Sept. 2019.
- 8. Guest lecture on "Seaweed natural resources and its uses" for Gadre Marine Export, 3298-A, Mirkarwada, Ratnagiri, Maharashtra on 2<sup>nd</sup> April 2021.
- 9. Guest lecture on "Seaweed and its applications" for Undergraduate of Botany, students of S.M. Joshi college, Hadapsar, Dist: Pune-413115 Maharashtra, India on 06<sup>th</sup> June, 2021.
- 10. Guest lecture on "Seaweed farming" for Undergraduate of Botany, students of Shrimant Babasaheb Deshmukh Mahavidyalaya, Atpadi, Tal. Atpadi, Dist. Sangli Maharashtra, India on 12<sup>th</sup> June, 2021.
- 11. Guest lecture on "Green Practices for Sustainable Agriculture" for Undergraduate of Botany, students of Sadguru Gadage Maharaj College, Karad, Dist: Satara, Maharashtra, India on 09<sup>th</sup> July, 2021.

- 12. Guest lecture on "Seaweeds: Applications and scope Green for Sustainable Agriculture" for Under and Post graduate of Botany, students of Sathaye College, Mumbai, Maharashtra, India on 26<sup>th</sup> August, 2021.
- 13. Guest lecture on "Herbarium preparation & identification of Algae" for Under and Post graduate of Botany, students of Shardabai Pawar Mahila Arts, Commerce & Science College, Baramati, Pune Maharashtra, India on 31<sup>st</sup> December, 2021.
- 14. Guest lecture on "Modern techniques in Plant breeding" for Post graduate of Botany, students of Baburaoji Gholap College Arts, Science & Commerce College, Sangvi, Pune-411027, Maharashtra, India on 13<sup>st</sup> February, 2022.
- 15. Guest lecture on "Workshop on Avishkar Competition" for graduate students of Venutai Chavan Arts & Commerce, College, Vidyanagar, Karad, Dist-Satara, Pin 415124, Maharashtra, India on 04 <sup>th</sup> October, 2022.
- 16. Guest lecture on "Techniques of Algal Preservation and Exploration of Fresh water Algae" for graduate and post graduate students of Karmaveer Bhaurao Patil Mahavidyaaya, Pandharpur, Dist-Solapur, Pin 413304, Maharashtra, India on 26 th November, 2022.

#### 11. MEMBER OF ORGANIZING COMMITTEE: 04

- 1. Worked as member of organizing committee "Rayat Inspire Camp" at Dept. of Physics, Chemistry and Life Science, R. C. Shahu College Kolhapur for the School Student of M. G. Vidyalaya, Rukadi held during 1<sup>st</sup> to 5<sup>th</sup> December 2015.
- 2. Worked as member of organizing committee "Rayat Inspire Camp" at Dept. of Physics, Chemistry and Life Science, R. C. Shahu College Kolhapur for the School Student of M. G. Vidyalaya, Rukadi held during 1<sup>st</sup> to 5<sup>th</sup> December 2015.
- 3. Worked as member of organizing committee in RUSA Sponsored One Day International conference on "Innovative trends in Life Sciences (ITLS 2022)" organized by Sadguru Gadage Maharaj College, Karad on 10<sup>th</sup> &12 <sup>th</sup>March 2022.
- 4. Worked as member of organizing committee in RUSA Sponsored One Day National conference on "Practical Librarianship and quality Enhancement" organized by Sadguru Gadage Maharaj College, Karad in collaboration with Shivaji University College Librarians Association (SUCLA) ON 10<sup>th</sup> October 2022.

#### **OTHER:**

- **1.** Worked as Co-Ordinator AVISHKAR Satara District 2022.
- **2.** Working as Co-Ordinator of Food Science 2022 till date.

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