Profile of the Faculty



1. General Information:

| Name of the Faculty | : | Dr. (Mrs.) Seema S. Kokitkar |
|--|---|---|
| Name of the Department | : | Biotechnology |
| Educational Qualifications | : | M.Sc., Ph.D., Postdoc. (NET, GATE) |
| Present Position | : | Assistant professor & Head |
| Address | : | Department of Biotechnology, C.K.T. College, Plot No. 1, Sector-11, Khanda Colony, New Panvel District Raigad, Maharashtra, India |
| E-mail | : | seemak@ckthakurcollege.net |
| Specialization | : | Biochemistry and Biotechnology |
| Total teaching experience | : | 22 years |
| Courses taught | : | Biochemistry, Immunology ,Genetic engineering, PTC, ATC |
| Research experience | : | 21 years |
| Number of students registered for Ph.D. degree | : | 04 |
| Number of students awarded Ph.D. degree | : | 01 |
| Number of students awarded M.Phil degree | | 01 |

2. Publication of Research Papers:

| UGC listed journals | : | 05 |
|----------------------------|---|----|
| Peer reviewed journals | : | 02 |
| Non-peer reviewed journals | | 03 |
| Conference proceedings | : | 05 |

3. List of Publication of Research Papers:

- 1. Tanuja Upadhayay, **Seema Chavan** and D. P. Mishra. 'A study on polyamine accumulation under salt stress in salt resistant and salt sensitive varieties of rice'. *International Journal of Physiology &. Mol. Biol. Plants* (2001) 7:55-59.
- 2. **Seema Chavan**, B.D. Lakhchaura* and V. Umapathi. Early pregnancy diagnosis in cattle and buffaloes from milk. *The Indian Journal of Animal Reproduction*; 24(2): 106-108; December 2003.
- 3. **Seema Chavan** and Lakhchaura B.D. Immunodiagnosis of Pregnancy. Conference Paper in *Advances in Immunology and Immunopathology*, Proceeding of national symposium on immunomodulation in health and diseases. 2001, pp 93-97.
- 4. **Seema Kokitkar,** Shweta Bhagat, Omkar Raut and Tukaram Shelke. 'effect of various temperatures on antioxidants present in *Annonasquamosa L.*,' Journal Bionano Frontier, , 2014, Volume 07, Special Issue 12, pp No. 86-88
- Poonam Dayaram, Seema Kokitkar, Bhupesh Mali, Ravina Mhaskar, Shubhangi Jamdar and Rohit Jadhav. 'Enumeration and Characterization of Pathogenic Microbial Load from Automatic Ticket Vending Machine in Mumbai's Harbour Route', Journal Bionano Frontier, 2013, Volume 06, Special Issue 03 pp97-99.
- PoonamDayaram Seema Kokitkar, Kritika Choubey and Neha Natekar. 'Preservation studies of pathogenic microorganisms in saline suspension', Journal Bionano Frontier, 2014, Volume 07, Special Issue 12pp No. 136-137.
- Smita Sinalkar, Seema Kokitkar and Swati Singh. 'Potential benefits of *Punicagranatum*', Journal Bionano Frontier, 2014, Volume 07, Special issue 12, pp No. 70-74.
- Latika C., Seema K. and Akshya P. 'To study the effect of *Allium sativum* oil on acne causing bacteria', Journal Bionano Frontier, 2014, Volume 07, Special issue 2, ,pp No. 39-41

- S.S. Kokitkar, L.R. Chavan and S.A. Bhagat: Alleviation of Adverse Effects of Salt Stress in *TriticumAestivum*by Foliar Application of Compatible Solutes. International Journal Of Researches In Biosciences, Agriculture And Technology, Vol. V, Special Issue (3), pp., 272-276 (ISSN 2347 – 517X) UGC Approved Journal
- S.A. Bhagat, S.S. Kokitkar and L.R. Chavan: Isolation of chloropyrifos degrading bacteria from contaminated soil and evaluation of their bioremediation potential. International Journal Of Researches In Biosciences, Agriculture And Technology, Vol. V, Special Issue (3), pp., 308-312 (ISSN 2347 – 517X) UGC Approved Journal
- Shweta Bhagat and Seema Kokitkar *. Isolation and identification of bacteria with cellulose-degrading potential from soil and optimization of cellulase production. Journal of Applied Biology & Biotechnology Vol. 9(06), pp. 154-161, November, 2021. Available online at http://www.jabonline.in DOI: 10.7324/JABB.2021.96020. UGC CARE LIST-II (Indexing-Scopus, Web of Science)
- 12. **Smita Viplav Sawant and Seema Sambhaji Kokitkar**^{*} Phytochemical Profiling and GC-MS analysis of n-Hexane extract of Lavandula bipinnata (Roth) Kuntze leaves. Jour Pl Sci Res 38 (1) 357–363 2022. **UGC CARE-I**
- 13. R.D. Nanekar and S.S. Kokitkar* Isolation, genetic identification and optimization of hydrocarbon degrading bacteria from petroleum contaminated soil in Raigad region. ISSN 0971–765X 29 (4): 2023; pp. (1554-1561) http://doi.org/10.53550/EEC.2023.v29i04.014

Non peer reviewed

- 1. **S.S. Kokitkar**, R.S. Gharat and P. Kumbhar Survey on nutritional status of pregnant women in Panvel, **Anugoonj**,2013 , Issue 03, pp 60-62 (**ISSN No.2345-9731**)
- S.S. Kokitkar, Poonam D., S.S. Sinalkar Survey on uptake of liquid diet by people of different age groups in and around Panvel., Anugoonj ,2013, Issue 03, pp 55-59 (ISSN No.2345-9731

4. Books:

| Reviewed Book | : | Textbook of Basic and Clinical Immunology by Dr. Sudha Gangal |
|---------------|---|---|
| | | (University Press) |

5. Oral Presentations:

| Sl. | Name of all | Title of the Paper | Name of Institute | Date of |
|-----|---|--|---|------------------------------|
| No. | Authors | - | | Presentation |
| 1. | S. S. Kokitkar , L. R. Chavan and S. A. Bhagat | Alleviation of adverse effects of salt stress in <i>Triticum</i> <i>aestivum</i> by foliar application | Gopal Krishna Gokhale College, Kolhapur | 7/11/2017 |
| | <u> </u> | of compatible solutes | | |
| 2. | S. A. Bhagat S. S. Kokitkar L. R. Chavan | Isolation of Chlorpyrifos degrading bacteria from contaminated soil and evaluation of their bioremediation potential | Gopal Krishna Gokhale College, Kolhapur | 8/11/2017 |
| 3. | Dr. S. S. Kokitkar and Ms. S. A. Bhagat | Screening and isolation of potential cellulolytic bacteria from soil and optimization of culture conditions for maximum cellulase production. | Prin. L. N. Welingkar Institute of Management, Development & Research, Matunga, Mumbai | 20/12/2019 |
| 4. | Bhagat S.A. Kokitar S.S. | optimization of pectinase production by bacillus species using submerged fermentation | 3 rd International Conference on 'Empirical and Theoretical Research (ICETR- 2022)' organized by International Board for Education, Research and Development | 28/01/2022 29/01/2022 |
| 5. | Rupali D. Nanekar and Seema S. Kokitkar* | Isolation, characterization and optimization of hydrocarbons degrading bacteria from oil contaminated sites of raigad region | University of Mumbai | 4/08/2022 To 6/08/2022 |

| 6. | Smita Sawant, | "Phytochemical screening, | International | 10/01/2023 |
|-----|-------------------|--------------------------------|--------------------|------------|
| | Seema Kokitkar | antioxidant study and | e-Conference on | 11/01/2023 |
| | | Identification of active | "Recent | |
| | | compounds using GC-MS of | Innovations In | |
| | | Lavendula bipinnata leaves. | Science and | |
| | | | Technology" RIST | |
| 7. | Rupali D. | Isolation, characterization | Mohanlal Sukhadia | 15/03/2023 |
| | Nanekar and | and optimization of | University, | |
| | Seema S. | Diesel degrading bacteria | Udaipur, Rajasthan | |
| | Kokitkar* | from oil contaminated | | |
| | | Soils of raigad region | | |
| 8. | Bhawana. P. Nile1 | Screening, isolation and | Mohanlal Sukhadia | 15/03/2023 |
| | and | characterization of | University, | |
| | Seema. S. | Cholesterol degrading | Udaipur, Rajasthan | |
| | Kokitkar * | bacteria from the soil Sample | | |
| 9. | Smita S. and | Phytochemical evaluation, | Mohanlal | 15/03/2023 |
| | Seema K. | antioxidant potential | Sukhadia | |
| | | & GC-MS analysis of soymida | University, | |
| | | febrifuga (roxb.) A. Juss | Udaipur, | |
| | | | Rajasthan | |
| 10. | Bindu Rajaguru | In vitro propagation of | Mohanlal | 15/03/2023 |
| | and Seema S. | Quisqualis indica: a Medicinal | Sukhadia | |
| | Kokitkar | woody plant - as a | University, | |
| | | sustainable approach | Udaipur, | |
| | | | Rajasthan | |

6. Dr. Seema Kokitkar, Ms. Shweta A. Bhagat, Ms. Rupali D. Nanekar and Ms. Bhawana Nile: 20 Bacterial gene sequences has been deposited in GenBank (NCBI). Accession number was provided to individual isolates.

7. Research Projects Completed: AS PRINCIPLE INVESTIGATOR

| Sl. | Title of the project | Date of sanction | Duration | Grant | Funding agency |
|-----|---------------------------|------------------|----------|------------|-----------------|
| No. | | | | Sanctioned | |
| 1. | Production, Purification | 28/07/2017 | 02 Years | 4,50,000/- | University Gant |
| | and Immobilization of ß- | | | | Commission |
| | glucosidase from | | | | |
| | Cellulolytic Isolates of | | | | |
| | Raigad District and to | | | | |
| | Check its Potential for | | | | |
| | Hydrolysis of | | | | |
| | Lignocellulosic Biomass | | | | |
| | for Bioethanol Production | | | | |

| 2. | Isolation, purification and Characterization of Protease and Lipase from Isolates in Raigad District and their Comparative Study in Oil Degumming for Biodiesel Production | 21/09/ 2010 | 02 Years | 2,00000/- | University Gant Commission |
|----|--|-------------|--|------------|-------------------------------|
| 3. | Punica granatum peel and Citrullus lanatus rind mediated green synthesis of Cu Nanoparticles: An Eco-Friendly Approach | 17/10/2014 | 01 Years | 30,000/- | University of Mumbai |
| 4. | Effect of salinity On callus of <i>Jatropha curcus L.</i> and role of osmolytes | 26/11/2010 | 01 Years | 35,000/- | University of Mumbai |
| 5. | Effect of salt stress on carotenoid content in different food sources | 14/02/2007 | 01 Years | 30,000/- | University of Mumbai |
| 6. | Management of local fish waste by turning it into a valuable organic fertilizer: An eco- friendly Approach | 10/10/2020 | 01 Years | 1,00,000/- | RUSA |
| 7. | Construction of a Microbial Consortium for Effective Valorization of Lignocellulosic Biomass and production of bioethanol | 1/1/2024 | (Thakur Infraproje cts Pvt. Ltd. (TIPL) Panvel | | 4,80,000/- |

8. Research Projects Ongoing : AS CO-INVESTIGATOR

| Sl. | Title of the project | Date of sanction | Duration | Grant | Funding |
|-----|--------------------------------|------------------|----------|------------|---------|
| No. | | | | Sanctioned | agency |
| 1. | Development of lab and | 18/01/2023 | 01 Years | 1,00,000/- | RUSA |
| | pilot scale bioreactor for the | | | | |
| | treatment of a real textile | | | | |
| | effluent and subsequent | | | | |
| | toxicity studies in concern | | | | |
| | with public health in | | | | |
| | Maharashtra. | | | | |

| 2. | Screening, isolation and | 18/01/2023 | 01 Years | 1,00,000/- | RUSA |
|----|------------------------------|------------|----------|------------|------|
| | characterization of | | | | |
| | Cholesterol oxidase from | | | | |
| | novel micro-organisms. | | | | |
| З. | To Study the therapeutic | 18/01/2023 | 01 Years | 1,05,000/- | RUSA |
| | effect and Phytochemical | | | | |
| | properties of <i>Nelumbo</i> | | | | |
| | nucifera (Indian Lotus) seed | | | | |
| | and its application. | | | | |

9. Copyrights

| Sr. No. | Name | Title of Copyright | Year | Copyright Registration Number | Copyright Granted |
|---------|--|---|----------------|-------------------------------------|----------------------|
| 01 | Dr. Seema Kokitkar and Ms. Rupali D. Nanekar | Comparative analysis between Ascophyllum nodusum extract & fruit peels waste extract on germination & growth of mung bean | 2021-2022 | L-114366/2022 | Granted |
| 02 | Dr. Seema Kokitkar and Ms. Shweta A. Bhagat | Effect of Fe3O4(Iron oxide) nanoparticles on the growth of Salt stressed Lablab purpureus | 2022-2023 | L-117620/2022 | Granted |
| 03 | Dr. S.S. Kokitkar & Ms. B.R. Suryawanshi | Assessment of different seed priming treatment and their growth attributes in pulses i.e. Vigna radiata and Vigna aconitifolia | 08/08/202 | L-131653/2023 | Granted |
| 04 | Ms R.D. Nanekar Dr. S.S. Kokitkar | Use of groundnut shell waste as plant growth enhance | 15/05/202 3 | L-130569/2023 | Granted |

| Sr. No. | Name of the Course | Place | Duration | Sponsoring Agency |
|------------|---|--|---------------------------------|---|
| 1. | Short Term Course | University of Mumbai | 07/03/2011 to 11/03/ 2011 | UGC |
| 2. | Orientation Course | UGC HRDC, LNCPE Gwalior | 26/11/2019 to 16/12/2019 | RUSA |
| 3. | Refresher Course | University of Mumbai | 20/02/2017 to 11/03/2017 | RUSA |
| 4. | 10 Days Work shop on the development of E- Content development | Universal Teachers Academy Puducherry | 21/04/2020 to 30/04/2020 | Universal Teachers Academy Puducherry |
| 5. | Refresher Course | HRDC Nainital | 03/03/2021 to 16/03/ 2021 | UGC |
| 6. | Faculty Development Programs Advanced Concepts For Developing Moocs | Ramanujan College, University of Delhi | 02/07/2020 to 17/07/ 2020 | Ministry of Education Gov. of India |
| 7. | One week Online International Workshop on Advance Statistical Data Analysis using SPSS | Science Tech Institute (Run by MKS Educational Society), Lucknow, UP India. | 21/01/2022 to 27/01/2022 | MKS Educational Society |
| 8. | One Week FDP | e-Content & MOOCS Creation: Hands on Training | 18/09/2022 to 23/09/2022 | RUSA |
| 9. | One Week Faculty Development Program Research Methodology | Guru Nanak College of Arts, Science and Commerce G.T.B Nagar, Mumbai – 400037 | 06/02/2023 to 11/02/2023 | Guru Nanak College of Arts, Science and Commerce |
| 10. | One Week Faculty Development Program | Ramanujan college | 15/12/2023 to 21/12/2023 | |

10. Academic Staff College Orientation/Refresher courses attended:

11. Participation in conferences, symposia, seminars and workshops: (2015-16 to 2022-2023)

| Level | Presented paper | Only attended | Chaired session | Resource person | Online webinars and workshops during Covid-19 |
|---------------|--------------------|------------------|--------------------|--------------------|---|
| International | 07 | 02 | 02 | | 01 |
| National | | 13 | | | 06 |

| State | 04 | | |
|------------|--------|--------|----|
| University | 12 | 01 | 04 |

12. Conferences, symposia, seminars and workshops organized as convener/coconvener:

| Level | Convener | Co-convener |
|---------------|----------|-------------|
| International | Nil | Nil |
| National | 03 | 01 |
| State | | |
| University | 02 | |

13. Experience on the various committees at the college-

- Member Secretary Research Development Cell (2022-2023 till date)
- Member Research Ethics Committee (2022-2023 till date)
- Chairperson of Avishkar Research committee (2013-2014 to till date) College won 05 times overall championship and three time runners-up position in Avishkar Research Convention, University of Mumbai under my chairpersonship.
- Member of the Examination Committee (2018-19 –till date)
- Member of Library Advisory Committee (2017-till date)
- Chairperson of Science Association (2012-2013)
- Member of time table committee (2009-2013)
- Member of teacher- parent committee (2005-2013)
- Member of discipline committee (2008-2013)
- Member of Research association, (2009-2012)
- Member of specialty programme committee, (2006-2013)
- Member of career oriented courses committee,(2006-2013)
- Member of Alumni association,(2006-2013)
- Member of Cultural association, (2007-2010)
- Member of Avishkar Research Committee,(2008-2010)
- Member of Library Advisory Committee(2013-2014)

14. Experience on the NAAC/ IQAC of the college

- Member of IQAC (2019-2020 till date)
- Member of the committee for criteria –III
- Editor of the booklet on Avishkar for third cycle of NAAC and Silver Jubilee Year.

• Represented the Department at First, Second and Third Cycle of NAAC as head of the Department.

| 15. Experience | on | the | Various | Committees | at | the | University | of | Mumbai | / |
|----------------|------|-------|-----------|----------------|----|-----|------------|----|--------|---|
| Government | - Aw | vards | /recognit | tions received | l: | | | | | |

| Level | Title | Year | Awarding agency |
|------------|--|---------------------|-------------------|
| University | • Vice Chancellor Nominee in | 2022-2023 till date | University |
| | board of studies in | | of |
| | Bioanalytical Science, G.N. | | Mumbai |
| | Khalsa Collge, Mumbai | | II |
| | • Member of Ad hock board of | Sept-2019-till Date | University of |
| | studies in Biotechnology, University of Mumbai | | Mumbai |
| | Member of Ad hock board of | Sept-2019-till Date | University |
| | studies in Bioanalytical | Sept-2019-till Date | of |
| | Science, University of Mumbai | | Mumbai |
| | Member of board of studies in | 2019 –till date | MGM University of |
| | MGM school of Biomedical | | health Science |
| | Science | | |
| | Member of Local Enquiry | | University |
| | Committee University of | | of |
| | Mumbai for Ph.D., UG, and PG | | Mumbai |
| | affiliation visited: Vaze | | |
| | College, Gogte Joglekar | | |
| | College Ratnagiri, CHM | | |
| | College, Viva College, Thakur | | |
| | College, and Pillai College. Member of M. Sc. | 2018-2019 | University |
| | Biotechnology syllabus | 2010-2019 | of |
| | revision committee, | | Mumbai |
| | University of Mumbai | | 1. Tumbur |
| | • Visited as a member of | | University |
| | Local Enquiry committee, | | of |
| | University of Mumbai | | Mumbai |
| | Recognized research guide | 2015-2016 | University |
| | for Ph.D. Science in the | | of |
| | subject of Biotechnology, | | Mumbai |
| | University of Mumbai | 2010.2212 | · · · · |
| | • Recognized guide for M.Sc. by | 2012-2013 | University |
| | Research in Biotechnology, | | of Mumboi |
| | University of Mumbai | 2012 2012 | Mumbai |
| | Recognized PG Teacher in Biotechnology University of | 2012-2013 | University of |
| | Biotechnology, University of Mumbai | | Mumbai |
| | Mullival | | inunibai |

| Recogni | zed research guide | 2006-2007 | Alagappa |
|---------|---------------------|-----------|-------------|
| for M | Phil biotechnology, | | University, |
| distant | education | | Tamilnadu. |

• Achievements in Avishkar Research Convention-Projects guided for Avishkar Research Convention, which won medals at University Level

| Sr. | Name of the Student | Category | Year | Level | Achievement |
|-----|-------------------------|----------|---------|------------|-------------------|
| No. | | | | | |
| 1. | Ms. Priyanka S. Verma | C-4/UG | 2014-15 | University | Gold Medal |
| 2. | Ms. Dhanshree Dudvadkar | C-4/pG | 2014-15 | University | Silver Medal |
| 3. | Ms. Shweta A. Bhagat | C-4/PPG | 2018-19 | University | Silver Medal |
| 4. | Ms. Rupali D. Nanekar | C-3/PPG | 2021-22 | University | Consolation Prize |
| 5. | Mrs. Rajaguru Bindu | C-3/TH | 2021-22 | University | Gold Medal |
| 6. | Ms. Rupali D. Nanekar | C-3/PPG | 2022-23 | University | Consolation Prize |
| 7. | Ms. Bhawna Nile | C-3/PPG | 2023-24 | University | Bronze Medal |

• Best Teacher Award by Ramsheth Thakur Samajik Vikas Mandal

 Smita Sawant and Seema Kokitkar, First Prize in Oral Presentation in International Conference on Recent Innovations in Science & Technology organized by Ismail Yusuf College of Arts, Commerce & Science Jogeshwari Mumbai on 10/01/2023 and 11/01/2023
