

CURRICULUM VITAE

Dr (Mrs) Anita Surendra Patil
Professor

Lab No. 106, Plant Secondary Metabolite Lab,
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Residential Address : House no 33, "Fulore Banglow" Yogiraj nagar, Shiv Colony, Near water bridge, Tapovan, Amravati (M.S) 444602

Date of Birth: 06-06 1974

Area of specialization: 1. Secondary Metabolites 2. Microbial
Biotechnology

Education

Post Doc. UGC fellowship (2011)

Ph.D. Biotechnology: SGB Amravati University, (M.S) India (2003)

NET, Biotechnology (1999)

M.Sc. Biotechnology: SGB Amravati University, (M.S) India (69.90%) 1996

B.Sc. Microbiology: SGB Amravati University, (M.S) India (75.03%) 1994

Research Publications

Research papers -61

Research Projects: 10

Popular articles -15

Books -03

Patents -06 (03 granted)

Research Guidance

Ph.D. Awarded -10, Registered -02 M.Phil-2

Post Doc- 1 applied

M.Sc. Dissertations supervised-86

A. Research Publications

1. Ashwin G. Lunge and **Anita S. Patil** (2021). Evaluation of biocontrol potential of *Trichoderma harzianum* and its mutants and their effect on growth and yield of chickpea (*Cicer arietinum* L.) in India. International Journal of Science Technology and Management. Vol 10 (1). ISSN 2394-1537.
2. Paikrao Hariprasad, Dipale Ashlesha, **Patil Anita**, Tajane Diksha. Nano-Forensics a Comprehensive Review. Forensic Sci Add Res. 5(3). FSAR. 000618. 2021. DOI: 10.31031/FSAR.2021.05.000618
3. Dhakate Leena, Paikrao Hariprasad, **Patil Anita** (2021) Effect of PPD on Human Health, Int. J. of. Life Sciences, Special Issue, A15: 37-40. ISSN:2320-7817(p) 2320-964X(0)
4. **Patil AS**, Kale AS, Patil SR (2019). Studies on stages of somatic embryogenesis in *Nothapodytes nimmoniana* and its quantitative evaluation of camptothecin content. Horticult Int J. 3(1):24–29. DOI: 10.15406/hij.2019.03.00107
5. **Anita S. Patil**, Bipin D. Lade (2018). Wound Stress Induced Secondary Metabolites in *Passiflora foetida*: Exploration of Antimicrobial Compounds. Saudi J. Med. Pharm. Sci., Vol-4, Iss-5 (May, 2018): 613-627. ISSN 2413-4929 (Print) Scholars Middle East Publishers ISSN 2413-4910 (Online)
6. **Anita Surendra Patil**, Pooja Suryavanshi and Devanand Fulzele (2018). *In vitro* regeneration of gamma irradiated callus of *Artemisia annua* and evaluation of increase artemisinin content by HPLC analysis. *J Anal Pharm Res.* 2018;7(5):569–573.
7. **Anita Surendra Patil**, Pooja Suryavanshi and Devanand Fulzele (2018). Evaluation of Effect of Gamma Radiation on Total Phenolic Content, Flavonoid and Antioxidant Activity of *In Vitro* Callus Culture of *Artemisia annua*. *Nat Prod Chem Res.* 6: 345. doi:10.4172/2329-6836.1000345
8. Shital Kailsh Sharma, **Anita Patil**, Adarsh Kumar Agnihotri, Shakti Mehrotra (2018). In vitro conservation of *Alectra chitrakutensis*: a critically endangered root parasitic plant of high medicinal importance. *Acta Physiologiae Plantarum* 40:29. <https://doi.org/10.1007/s11738-018-2606-y>. **IF-2.514**.
9. Deshmukh A.S., Deshmukh S.S., Pathak V.S., **Patil A.S.** (2018). A review of mushroom bioactive metabolites responsible for antioxidant and anticancer effects. *Asian Journal of Microbiology, Biotechnology and Environmental Sciences.* Vol 20, Issue 1, 2018; Page No.(225-230).
10. Shinde G, **Patil AS** and Sheikh R (2017). Reduction of Hydrogen Peroxide-Induced Erythrocyte Damage by Leaf Extracts of *Buchanania Lanza* Spreng as a Potential Natural Antioxidant. *Austin J Biotechnol Bioeng.* 2017; 4(2): 1079.
11. **Anita Surendra Patil**, Hariprasad Madhukarrao Paikrao, Ankit Subhash Kale, Surendra Raghoba Manik (2017). A TLC-Direct Bioautography Method for Detection of Antiuro lithiatic Metabolites. *J Chromatogr Sci.* 1-7. doi: 10.1093/chromsci/bmx002 (**Oxford**) **IF-1.214**
12. Bipin D. Lade and **Anita S. Patil** (2017). Silver nano fabrication using leaf disc of *Passiflora foetida* Linn. *Appl Nanosci.* 181-192. DOI 10.1007/s13204-017-0558-y (**Springer**) **IF- 2.519**.

13. Ankit Subhash Kale, **Anita Surendra Patil**, Hariprasad Madhukarrao Paikrao (2017). A modified TLC bioautographic technique for the detection of antilithiatic potential of therapeutic plants from Indigenous Ayurvedic System. *Pharm Methods*. 8(1): 209-212.
14. Deshmukh A.S., Deshmukh S.S., Pathak V.S., Patil A.S.(2018). A review of mushroom bioactive metabolites responsible for antioxidant and anticancerous effects. *Asian Journal of Microbiology, Biotechnology and Environmental Sciences*. Vol 20, Issue 1, 2018; Page No.(225-230).
15. Kalbande, B. B., **Patil, A. S.** (2016). Cloning and characterization of NPR1 gene from *Arabidopsis thaliana* ecotype Col-0. *Int. J. Curr. Res. Biosci. Plant Biol.* 3(2), 15-26.doi: <http://dx.doi.org/10.20546/ijcrbp.2016.302.003>.
16. B.B. Kalbande, **A.S. Patil** (2016). Plant tissue culture independent *Agrobacterium tumefaciens* mediated In-planta transformation strategy for upland cotton (*Gossypium hirsutum*). *Journal of Genetic Engineering and Biotechnology* (2016), Volume 14, Issue 1, June 2016, Pages 9-18 <http://dx.doi.org/10.1016/j.jgeb.2016.05.003> (**Elsevier**).
- 17.**Anita Surendra Patil**, Ankit Subhash Kale, Surendra Rajaram Patil, Hariprasad Madhukarrao Paikrao (2016). Validation of accumulation of camptothecin content, an anti-cancer alkaloid in *Nothapodytes nimmoniana* graham. in phenotypic variants: method for identifying high-yielding sources of alkaloid. *International Journal of Pharmacy and Pharmaceutical Sciences*. Vol 8, Issue 9, pp 19-23.
18. Bipinchandra B. Kalbande, Anita S. Patil, Pranjib K. Chakrabarty (2016). An efficient, simple and high throughput protocol for cotton genomic DNA isolation. *Journal of Plant Biochemistry and Biotechnology*. October 2016, Volume 25, Issue 4, pp 437–44. Springer IF-1.038.
19. Shital Sharma, **Anita Patil**, R. L. Sikarwar (2016). Comparative phytochemical evaluation of ethnobotanically important medicinal parasitic herb: *Alectra chitrakutensis*. *International Journal of Pharmacy and Pharmaceutical Sciences*. ISSN- 0975-1491 Vol 8, Issue 4.
20. **Anita S Patil**, Surendra R Patil, Ankit S Kale (2015). Influence of growth Regulators on germination and growth of endangered medicinal plant *Nothapodytes nimmoniana* j.graham under shade net conditions, *Global J Res. Med. Plants & Indigen. Med.*, Volume 4(1): 01–09.
21. **Anita Surendra Patil**, Hariprasad Madhukarrao Paikrao, Ankit Subhash Kale, Surendra Raghoba Manik (2015). Effect Of Aqueous Extracts From Therapeutic Plants From Indigenous Ayurvedic System On *In Vitro* Calcium Oxalate Crystallization In Human Urine. *Current Traditional Medicine*, 2015, 1, 193-202. **Bentham science**
22. Bipinchandra B Kalbande and **Anita S Patil** (2015). Callus induction studies on *Gossypium hirsutum* L. Cv LRK-516 using hypocotyls explants. *Cotton Research Journal*. Vol 6, No.2, Pp 119-124.
23. Girish C. Kamble, Harshalata J. Petkar, **Anita S Patil** (2015). Biotechnological Study of Mutagenic Effect on Flowering and Fruiting Pattern in Wild Chickpea. *International Journal of Science and Research (IJSR)*. Volume 4 (3).
24. **Anita Patil**, Surendra Patil, Shubhada Mahure and Ankit Kale (2014). UV, FTIR, HPLC Confirmation of Camptothecin an Anticancer Metabolite from Bark Extract of *Nothapodytes nimmoniana* (J. Graham). *American Journal of Ethnomedicine*. Vol. 1, No. 3, 174-185.

25. **Patil AS** and GC Kamble (2014). Comparative protein profiling study in wild chickpea and its Induced mutants. *The Experiment*. Vol. 18(4), 1297-1303.
26. Kamble G.C. and **Patil A.S** (2014). Comparative mutagenicity of EMS and gamma Radiation in wild chickpea. *International Journal of Science, Environment*. Vol. 3, No 1, 166 – 180.
27. Bipin Lade, **Anita Patil** and Hariprasad Paikrao (2014). Efficient genomic DNA extraction protocol from medicinal rich *Passiflora foetida* containing high level of polysaccharide and polyphenol. *SpringerPlus* 2014, 3:457.
28. Bipin D Lade, **Anita S Patil**, Hariprasad M Paikrao, Ankit S Kale, Kushal K Hire (2014). A Comprehensive Working, Principles and Applications of Thin Layer Chromatography. *Research Journal of Pharmaceutical, Biological and Chemical Sciences*. 5(4) 486-503.
29. **Anita Surendra Patil**, Bipin Deochand Lade and Hariprasad Madhukarrao Paikrao (2014). A Scientific Update on *Passiflora foetida*. *European Journal of Medicinal Plants*. ISSN: 2231-0894 ,Vol.: 5, Issue. 2. Science Domain
30. Bipin D. Lade, **Anita S. Patil**, and Hariprasad M. Paikrao (2014). Systematic Optimization of Thin-Layer Chromatography for Wound-Induced Differential Secondary Metabolites in *Passiflora foetida*. *Journal of Planar Chromatography*. 27 (2014) 5, 385–391. Akadémiai Kiadó Zrt, Budapest).
31. Bipin Deochand Lade, **Anita Surendra Patil**, Surendra Rajaram Patil, Hariprasad Madhukarrao Paikrao (2014). Preliminary Observation of *Acraea Viola*: A Natural Enemy of *Passiflora Foetida*. *Discovery Nature*, 9(19), 1-10.
32. Patil AS, Kale AS and Paikrao HM (2014). Screening the *In vitro* Calcium Oxalate Crystal Inhibition Potential of *Abutilon indicum* L.: A Common Weed Plant from the Indian Medicine System. *Austin J Biotechnol Bioeng*.1(6): 4.
33. **Patil A.S** and Paikrao H.M (2013). *Passiflora foetida* L. : a complete morphological And phytopharmacological review. *Int J Pharm Bio Sci*. vol. 4(1): (p) 285 – 296.
34. Manjusha Chakranarayan and **Anita Patil** (2013). Comparison of microscopic, macromorphological producing capabilities of *Aspergillus* species associated with rhizosphere of groundnut (*A.hypogaea* L.). *Journal of Chemical, Biological and Physical Sciences*. Vol. 3, No. 2, 1327-1337.
35. **Anita Patil**, Aarti Laddha, Ashwin Lunge, Hariprasad Paikrao and Shubhada Mahure (2012). *In vitro* antagonistic properties of selected *Trichoderma* species against tomato root rot causing *Pythium*. *International Journal of Science, Environment and Technology*. Vol. 1, No 4, 2012, 302 – 315.
36. Ashwin Lunge and **Anita Patil** (2012). Characterization of efficient chitinolytic enzyme producing *Trichoderma* species: a tool for better antagonistic approach. *International Journal of Science, Environment and Technology*, Vol. 1, No 5, 2012, 377 – 385.

37. **Patil A.S** and Paikrao H.M (2012). Bioassay Guided Phytometabolites Extraction for Screening of Potent Antimicrobials in *Passiflora foetida* L. *Journal of Applied Pharmaceutical Science*. Vol. 2 (9), pp. 137-142.
38. **Anita S Patil** and Ashwin Lunge (2012). Strain improvement of *Trichoderma harzianum* by UV mutagenesis for Enhancing it's biocontrol potential against aflotoxigenic aspergillus species. *The Experiment*. November, Vol. 4(2), 228-242.
39. **Patil Anita S**, Paikrao Hariprasad M (2012). A novel regeneration system for a wild passion fruit species (*Passiflora foetida* L.) Based on direct somatic embryogenesis from leaf explant. *Global J Res. Med. Plants & Indigen. Med.* Volume 1, Issue 10, 485–495.
40. H. M Paikrao, **A.S Patil**, V.S Gaikwad, R.D Dhore, P.S Ambaikar S. Bande (2010). Comparative phylogenetic analysis of *Passiflora* based on protein marker chloroplast expressed glutamine synthetase (ncpG5) and ribosomal protein S4 (rp S4). Vol 1(1), pp 1-6. *Journal of Advanced Bioinformatic Applications and Research*. Vol 1(1).
41. **Anita Patil** (2010). Exploring *Passiflora incarnata* L. : A medicinal plant secondary metabolites as antimicrobial agent. *Journal of Medicinal Plants Research*. Vol 4(4). pp 1496-1501.
42. **Anita Patil**, Aruna Deshmukh, Shivaji Deshmukh, Jitesh Khadse, Swapna Khade and Surendra Patil (2009). Microbial pretreatment of lignocellulosic biowaste for biogas, value added mushrooms and compost: A recalcitrant recycling tool. *International Journal of Ecol. Env and cons.* 15 (1) pp 99-103.
43. **Anita Patil**, Aruna Deshmukh and Vaishali Dhanokar (2009). Development of Rapid Method for the measurement of total microbial activity during fluorecein diacetate (FDA) in compost prepared from agrowaste combination. *Amravati University Res. Journal*. vol. IV (1). 24-28.
44. **A.S Patil**, M.R Charkranarayan and P.K Khandelwal (2009). Antimicrobial efficiency of volatile and non volatile secondary metabolites from *Trichoderma* species against pathogens. *J. Pl. Dis. Sci.* vol 4(2): 170-172.
45. Deshmukh, A. S and **A.S.Patil**(2008). Biological Efficiency Of Different *Pleurotus* Species On Lignocellulosic Agrowastes. *Journal of Plant Disease and Sciences*. Vol 3(1); 68-70.
46. A.S Desmukh, **A.S Patil** and J.K Khadse (2008). Bioefficiency of different *Pleurotus* species on lignocellulosic agrawastes. *J. Pl. Dis. Sci.* vol 3(1): 68-70.
47. **Anita Patil**, Jitesh Khadse and Surendra Patil (2007). Effect of chemical mutagen ethyl methane sulphonate (EMS) on the wild Pisum seeds physiology, morphology and yield. *Indian J. Applied and Pure Bio.* Vol., 169-174.
48. **Anita Patil** and Namrata Chabrani.(2005). Screening the antimicrobial activity of *Moringa olifera* (L) against plant pathogen.(2005). *Journal of Plant diseases and Sciences*. Vol 1 (1). 50-53.

49. **Anita Patil** (2004). Enhancement of chymotrypsin activity in biphasic liquid system (Chloroform: water). *Amravati University Research Journal* 1(1). 87-90.

50. **Ramteke, A.P** (2003). Establishment of *Phanerochate chrysosporium* on unsterile straw in solid state substrate fermentation system for lignin degradation. *Journal of Microbial world*. Vol. 6 (1).72-75.

51. Ingale, A.G**Ramteke, A.P** and Chikhale N.J (2003). Studies on Nitrogen fixing bacteria from maize rhizosphere soil of Amravati. Amravati University, Research Bulletin. 1(2). 39-4.

52. Patil S.R, M M Dhamke and Patil A.S (2003). Studies on seasonal changes in developing fruits of Nagpur madarian (*Citrus reticulata* Blanco) under Katol conditions. *Indian Journal of citriculture*. 2(1) 34-37.

Book Chapters

1. Ankit S Kale, **Anita S Patil**,Hariprasad M. Paikrao, Surendra R Patil (2019). Characterization and purification of antiurolithiatic metabolites from medicinal plants. In:Ethnobotany-Applications of Medicinal plants. Eds. Jose L. Martinez, Amner Munoz-Acevedo and Mahendra Rai. CRC press, pp217-232.ISBN 978-1-1383-2066-6.

2. **Patil A.S.**, Patil S.R., Sayyed R.Z. (2019) Interaction of Rhizobacteria with Soil Microorganisms: An Agro-Beneficiary Aspect. In: Sayyed R. (eds) Plant Growth Promoting Rhizobacteria for Sustainable Stress Management. Microorganisms for Sustainability, vol 13. Springer, Singapore.

3. **Patil A**, Kale A, Ajane G, Sheikh R, Patil S. (2017) Plant Growth-Promoting *Rhizobium*: Mechanisms and Biotechnological Prospective. In: Hansen A., Choudhary D., Agrawal P., Varma A. (eds) Rhizobium Biology and Biotechnology. Soil Biology, vol 50. Springer, Cham.ISSN 2196-4831; ISBN 978-3-319-64982-5 (e-print)

4. **Anita Patil**, Surendra Patil and Hariprasad Paikrao (2016). *Trichoderma* secondary metabolites: their biochemistry and possible role in disease management. Book Chapter In book: **Microbial-mediated induced systematic resistance in Plants**. Chapter 6, pp 69-102. Edited by Dr Devendra Choudhary and Dr. A. K Verma. Springer. ISBN 978-981-10-0387-5 ISBN 978-981-10-0388-2 (eBook) DOI 10.1007/978-981-10-0388-2

5. **Anita Patil** and Bipin Lade (2016). Pharmacological aspects of *Tribulus terrestris* Linn. (Goksura): progress and products. **Therapeutic medicinal plant: From lab to the market**; Chapter 18. Edited by Marta C.T. Duarte, Mahendra Rai. CRC press Taylor and Francis.

6. AS Patil and MR Chakranarayan (2016). Production and characterization of Trichoderma metabolites: a new approach for selective bioremediation. In book-Recent Trends in PGPR Research for Sustainable Crop Productivity, Chapter 4, pp 29-50. PGPR society.**SCIENTIFIC PUBLISHERS (INDIA)** ISBN: 978-81-7233-990-6.

7. AS Patil; Chikhale N. J and Patil S.R.(2004). Lignin Biodegradation : A clean technology for paper industry.(2004). *In: Biotechnology in Environment management*. 75-100. Ed. G.R

Pathade and P. K Goel. ABD publisher Jodhpur.

8. AS Patil, Chikhale N. J and Patil S.R.(2004). Lignin degradation by white rot fungi *Phanerochate chrysosporium*: A Review. In: Biotechnological Applications in Environment and Agriculture. 189-205. Ed. G.R Pathade and P. K Goel. ABD publisher Jodhpur.

9. AS Patil; Dhundi R. M and Chikhale N. J. (2004). Production, extraction, purification and identification of Aflatoxin produced by *Aspergillus niger* from rhizosphere of *Cajanus cajan* (L). 111-114. In Book: Recent Trends in Biotechnology (2004). Scientific Publisher Jodhpur.

10. Patil S.R. and AS Patil. Fruit drop in different species of citrus. In Book: Recent Trends in Biotechnology (2004). Scientific Publisher Jodhpur. 149-155.

11. Ingale, A. G; Chikhale N.J and Ramteke (2004). Multiple sequence alignment and structure prediction of CD 40, CD 40L and tumour necrosis factors (TNF). In Book: Recent Trends in Biotechnology (2004). Scientific Publisher Jodhpur. 204-208.

B. Memberships of Scientific Societies

1. Life member, Biotechnological Associations of India
2. Life-member, Indian Science Congress Association, (ISC) Calcutta.
3. Life member, All India Microbiological Association (AMI).
4. Life member of Asian PGPR society
5. Life member of Society for Bioinformatics and Biological Sciences

C. Research projects as PI(Completed and ongoing)

SNo	Title of project	Sanction No.	Total cost (In Lac)	Funding Agency
1	An inexpensive method for the determination of oxalate in urine and assessment of hyperoxaluria by nano- based paper strip technique.	RGSTC/File-2011/DPP-166/CR-42	Rs 34.76	Rajiv Gandhi Science and Technology Commission, Mumbai (Ongoing) 2017-20
2	Gamma irradiated enhancement of Artemisinin production from <i>A. annua</i> L. And process optimization in Bioreactor.	No.35/14/30/2016 BRNS/35106	Rs 24.83	DAE, BRNS, BARC Trombay (Ongoing) 2016-2019
3	<i>In vitro</i> production and process optimization of Camptothecin (An Anticancer drug) from <i>N. nimmoniana</i> Graham: A rare Endangered medicinal plant from Western Ghats of Maharashtra.	F. No.42-212/2013 (SR)	Rs. 12.19	UGC, New Delhi (Completed)
4	Process Development And Characterization Of Antiuro lithic Activity Of Bioactive Metabolites Of Selected Medicinal Plants From Melghat Forest Region (Amravati)	RGSTC/File-2012/DPP-94/CR-12	Rs. 28.00	Rajiv Gandhi Science and Technology Commission, Mumbai (Completed)
5	Development Of Mutants Of <i>Trichoderma</i> Spp. Using UV Radiation And Protoplast Fusion: Determination Of Their Antifungal, Biochemical And Physiological Features.	No F 30-1/2009 (SA-III) (2009-2011)	Rs. 16.60	UGC (2009-11) Post Doc Research award (Completed)

6	" <i>In vitro</i> production and optimization of antimicrobial secondary metabolite i.e passicol from <i>Passiflora</i> species".	No SR/ CT/ LS-127/ 2008 (2009-12)	Rs. 19.53	SERC Fast Track DST, New Delhi (Completed)
7	Cultivation and biochemical analysis of wild edible mushrooms from Melghat area (Dist Amravati). Co- PI	F.No. 47-1388/10 -WRO (2008-10)	Rs. 1.55	UGC, New Delhi (Completed)
8	Study on seed protein content and protein pattern in gamma ray induced <i>Pisum</i> mutants.	F. No. 31-249/2005 (SR) (2005-07)	Rs. 1.0	UGC, New Delhi (Completed)
9	Isolation and characterization of fungi from acid environment.	(2002-04)	15,000=0	TREDA, SGB (Completed)

D. List of patent Published and under examination:

S.no	Name of Inventors	Title of invention	Application Number	Publication date	Date of filing application	Patent Grant order/date	Patent Application status
1	Sant Gadge Baba Amravati University, Amravati Dr Anita Patil Mr. Hariprasad Paikrao	Method for selective extraction and purification of stress induced antimicrobial metabolite from <i>Passiflora foetida</i> L.	3299/MUM/2012	15/11/2012	28/12/2012	29/04/2020	In order for grant under section 43, Awaiting NBA approval
2	Sant Gadge Baba Amravati University, Amravati Dr Anita Patil Mr. Hariprasad Paikrao	Process for elicitation of a stress induced antimicrobial metabolite in <i>Passiflora foetida</i> L.	3300/MUM/2012	15/11/2012	21/12/2012	04/04/2019	In order for grant under section 43, Awaiting NBA approval
3	Dr Anita Surendra Patil, Hariprasad Paikrao, Surendra Raghoba Manik, Surendra Rajaram Patil	Method for identification of metabolites possessing calcium oxalate stone inhibitory properties in plant extract using TLC bioassay.	494/MUM/2013	10/07/2015	17/02/2017	23/01/2021	Reply Filed. Application in amended examination
4	Anita Surendra Patil, Hariprasad Paikrao, Ankit Subhash Kale, Surendra Rajaram Patil	Method for in vitro qualitative and quantitative detection of calcium oxalate inhibitory activity	1501/MUM2014	29/4/2014	20/11/2015	10/06/2021	Granted- Patent no. 369010
5	Anita Surendra Patil, Hariprasad Paikrao, Ankit Subhash Kale, Surendra Rajaram Patil, Bipin Lade	Herbal Combination for treatment of Calculus Disease	201621008675	15/09/2017	13/07/2020	25/05/2021	Reply Filed. Application in amended examination

E.Awards and Fellowships

1. Fast Track Young Scientist award, SERB, DST, New Delhi (2009)
2. UGC Research Award, UGC, New Delhi (2009)
3. Third Aakhil Bhartiya Pratibha Samman Puraskar (2006) Indor, M.P

4. Bharat Vikas award, Institute of self reliance, Bhubaneswar, Odisha awarded on 19th November 2017 on the occasion of "CITIZEN's Day".
5. Dr. A. P. J Abdul Kalam Award-2018, Academic Research Foundation, 29-30 Dec, 2018.
6. Women Scientist Award -2018 of the Society for Bioinformatics and Biological Sciences (SBBS), 5-7 April, Satna M.P

F. Research guidance

Sr. No.	Name of student	Title	Status (Awarded/submitted/ongoing)
1.	Dr Minal Keche	Studies on effect of gamma radiation on <i>Pisum sativum</i> L. AU/554-Ph.D/BIOTECH/005/2004	Awarded (31.12.2009)
2.	Dr. Aruna Deshmukh	Bioconversion of lignocellulosic crop residues by mushroom cultivation. AU/554-Ph.D/BIOTECH/04/2006	Awarded (08.04.2011)
3.	Dr. Girish Kamble	Comparative mutagenicity of gamma rays and ethyl methane sulphonate to improve the genome in some species of Cicer species. AU/554-Ph.D/BIOTECH/001/2005	Awarded (17.01.2014)
4.	Dr. Ashwin Lunge	Strain improvement of Chitinolytic enzyme producing selected <i>Trichoderma</i> species for enhancing its biocontrol potential.	Awarded (24.01.2014)
5.	Dr. Manjusha Chakranarayan	Production and characterization of Aflatoxin inhibiting secondary metabolites produced by selected <i>Trichoderma</i> species. SGBAU/Ph.D/BTC/01/2009	Awarded (13.02.2017)
6.	Dr. Hariprasad Paikrao	Antimicrobial secondary metabolites produced by <i>Passiflora</i> species: preparation, physicochemical characterization and its in silico pharmacokinetics. SGBAU/Ph.D/BTC-4625/2011	Awarded (17.09.2016)
7.	Dr. B. B Kalbande	Information to RCGM to carryout research involving preparation of rDNA construct involving NPR1 gene and its transformation in <i>Gossypium hirsutum</i> cv LRK-516 to improve its agronomic traits.SGBAU/Ph.D/BTC-4965/2011	Awarded (26.10.2017)
8.	Dr. Shital Sharma	Pharmacognostical standardization, In vitro propagation and comparative evaluation of antimicrobial secondary metabolite of <i>Alectra Chitrakutensis</i> (Rau) R. Prasad and R.D. Dixit. SGBAU/Ph.D/BTC-4966/2011	Awarded (27.08.2018)
9.	Mr. Bipin .Lade	Biochemical and molecular approaches for characterization of wound stress induced antimicrobial metabolites in <i>Passiflora foetida</i> Linn. SGBAU/Ph.D/BTC/46454/2014	Awarded (31.05.2019)
10.	Dr. Ankit Kale	Validation of Antiuro lithiatic activity of selected ethanomedicinal plants from Melghat forest region Amravati District. SGBAU/Ph.D/BTC-6451/2014	Awarded (18.08.2018)
11.	Mr. Gaurav Ajane	Purification, characterization and elicitation of cytotoxic secondary metabolites from <i>Passiflora</i> species. SGBAU/Ph.D/BTC-7169/2015	Ongoing (2015)
12.	Ms. Harsha Loyte	Alkaloid production by transformed and non-transformed hairy root organ culture of <i>Catharanthus lanceus</i> (bojer ex a.dc.) SGBAU/Ph.D./BIOTECH/2020 w.e.f.	SGBAU/Ph.D./BIOTECH/2020 w.e.f.

G. International Visits

1. Invited by Prof. Dr Le Huy Ham, Director General, Tu Liem North, Hanoi, Vietnam on May 8-9, 2015- Academic visit, discussion and Lecture at Institute of Agricultural genetics, Vietnam Academy of Agricultural Science.

2. Invited by Dr Nguyen van Tuyen, Director and Assoc. Prof Dr. Trinh Thi Thuy, Head of natural Product research laboratory, 18 Hoang Quoc viet, Hanoi, Vietnam May 10, 2015 for Academic visit and collaborative project to Institute of Chemistry, Vietnam Academy of Science and Technology, Institute of chemistry.

3. Presented research paper entitled “Therapeutic applications of herbal Plants of India” under Medicine and Agriculture subsection to discuss the application of drugs from plants. How to make the drug purification, characterization and applicable to local and humankind. As per technical programme scheduled It was held on 7th Oct, 2018 in session 4 at 5.pm to 6:00 pm under the section Medicine and Agriculture subsection. The Moderators for the present session was Prof. Hideaki Ishida, Daito Bunka University, Saitama Japan.

4. Invited by Kenichiro Ishida, Director of Mountain Science Center, Faculty of Life and Environmental Sciences, University of Tsukuba, Ikarashi Japan. Lectures and attended the Sugadaira seminar held on 9 Oct, 2018 as guest speaker also had the discussion with scientists about the future collaboration.

H. Books written/Published

1. Recent Trends in Biotechnology (Editor) Scientific Publication, 2014 Jodhpur.
2. Phytosecondary metabolites: isolation, characterization and their biological properties. STUDERA PRESS (2020). ISBN 978-93-85883-19-4. Anita Patil
3. Fundamentals of Food Nutrition. Narendra Publishing House, Delhi (2021). ISBN 978-93-89996-49-4. Authors Prasant Debaje, Rahul Ranveer, Surendra Patil, Anita Patil

I. Professional recognitions

1. Member NIRF committee- DY Patil University, 2019-20
2. Member- Kalpana Chawla Young Lady Research Award committee- 2020
3. Coordinator – GIAN program UGC - 2019
4. Member Board of National and International Linkages -2018
5. Member - preparing the vision document of University-2019
6. Course Coordinator, Refresher course in Life Sciences, 20-8-2018 to 12-9-2018. Organized by UGC- Human Resource development center, SGBAU
6. Inaugural lecture at Microbiological Society Adarsh Mahavidyalaya Dhamangaon Rly on occasion of Association of Microbiology -2018
7. Member –In starting up a bamboo-based product and artefacts, 2018

8. Member IQAC subcommittee –Planning of patents submitted by teachers
9. Coordinator, National Science Day-2018
10. Member Student council election committee- 2018
11. Member, University Physical verification committee-2017
12. Member, Institutional Development Plan , Criteria III : Research Innovations and Extension, 2017.
13. Jury Member for District level student Research convection, Avishkar 2017
14. CPCSEA nominee, 2016 (Committee for the Purpose of Control and Supervision on Experiments on Animals, Ministry of Environment, Forest and Climate Changes, Govt. of India).
-Nominated as Biological Scientist on IAEC. Govt. Medical College Akola, ii. Sudhakar Rao Naik Pharmacy college, Pusad
15. Managing Editor, Biotechnology Section of *Journal of Biological Sciences and Disease*, Dr. Panjabrao Krishi Vidyapeeth, Akola, (Central India). From 2005.
16. Member, Advisory committee, Buddhist study center SGBAU (2015, 2016,2017, 2018)
17. Editorial member, *Austin J Biotechnol Bioeng.*(2015 contd.) International
18. Editorial member, Dr PDKVAkola- National
19. Member Board of Studies, Biotechnology Board (2015). SRTM University, Nanded.
20. Secretary, Institutional Animal Ethical committee, Sant Gadge Baba, Amravati University, Amravati.2002 to contd.
21. Member, Institutional Biosafety committee, Sant Gadge Baba, Amravati University, Amravati.2015
22. Member, Women grievance committee, SGB, Amravati University, Amravati (2003).
23. In charge, Day care center (2005-08). UGC sanctioned scheme.
24. Secretary, Women Association, Sant Gadge Baba, Amravati University, Amravati. (2002-05)
25. Team manager, Inter University Science festival, AVISKAR- , 2004; 2005, 2008
26. Recognized Ph.D supervisor, Biotechnology subject, Sant Gadge Baba, Amravati University, Amravati.
27. Recognized M.Phil supervisor, Agalgappa University, Karnataka.
28. Member, Biotech Village Program from Lab to field. 2010-2017
29. Organizing secretary in National conference, 2013

J. Refresher/ orientation workshop attended

1. Refresher course in life sciences. 5- 27 June 2000. Organized by SGB Amravati University, Amravati (M.S).
2. Orientation course 2- 25 June 2001. Organized by Amravati University, Amravati (M.S).

3. Workshop on “Capacity Building of women managers in Higher Education” Sponsor by UGC, Organized by SGB Amravati University, Amravati, 4-8 Feb, 2008.
4. National Seminar on “Frontiers in Biotechnology and Bioinformatics” NS-FIBB-2007, Feb 2-3, 2007, Organized by Dr. D Y Patil University, Mumbai.
5. Workshop on “Capacity Building of women managers in Higher Education” Sponsor by UGC, Organized by 2014. SGB Amravati University, Amravati.
6. Short term training on Processing of Indian/foreign Patent Application, at National Int. of Instinctual Property management, Nagpur, 3-4 Jan 2011.
7. State level workshop on Free open source software (FOSS) at Shri Shivaji Science College, Amravati 21-23rd July, 2011
8. National Workshop on “Applications of Chromatographic Techniques in Phytochemical Analysis” Organized by Govt College of Pharmacy, Amravati , 3-4 Oct, 2011.
9. International Pre conference workshop on “Publishing your Research Works in Impact Journal”, Organized by School of Natural Product Research, Jadavpur University, Kolkata, 17 Feb, 2012.
10. One week short term course on Achieving excellence in higher education. 11-12-2017 to 16-12-2017, SGBAU
11. One week training program on “Soft skill LMS and E-content Development” 2-1-2017 to 2-1-2017, SGBAU
12. Workshop on विद्यापीठातील महिला आरोग्य आणि कायदेकमीस शक्तीकरण, 8/3/18
13. International E-conference on Innovative Research trends in life Sciences (3-4 Dec, 2020). Shri Shivaji Science Arts and Commerce College Akola. In collaboration of Indian Science congress lead lecture – Patent filling
14. International e-conference on Forensic Biology 2021 (IeCFB). Jan 28-29, 2021. Govt Institute of Science, Nagpur
15. Guest Lecture in One week faculty Induction programme by IQAC cell. Topic- Patent Filing 15-19 July 2020. BY Jagadamba Mahavidyalaya Achalpur

