#### A BRIEF PROFILE

## Dr. Elangbam Athoiba Singh

# **Dean, Faculty of Science**

### **Vice-Principal (Administration)**

Bharati Vidyapeeth (Deemed to be University)
Rajiv Gandhi Institute of I.T. & Biotechnology (RGIT-BT), Katraj, Pune
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E-mail-elangbam.singh@bharatividyapeeth.edu; athoibasingh@gmail.com

Date of birth: 01-03-1970, Nationality: Indian Sex: Male,

Permanent address: Shree Yash Garden, Bld.A1, Flatno.201, Sr.No.35/5, Mohannagar, Dhankawdi, Pune -411 043.

### • Education Profile:

Bachelor in Science (B.Sc.) in Botany from B.V. Y.M. College, Pune (University of Pune) in 1993 followed by Master in Science (M.Sc.) in Environment Science from BVDU-Institute of Environment Education and Research, Pune (University of Pune) in 1996.

- Awarded for Doctorate of Philosophy, (Ph.D.) Studies in Bharati Vidyapeeth Deemed University, Y.M. College, Pune under the guidance of Dr. S. Y. Kamble and Dr. T. N. More and Ph.D. degree was awarded by Bharati Vidyapeeth (Deemed to be University), Pune in 2007.
- Title of the thesis: 'Studies on Biodiversity of Sacred groves of Pune District, its conservation and Ethnobotany of Thakar Tribe of Pune and Raigad District of Maharashtra State, India'. Recipient,
   1st prize on presentation of a study of allergenic fungal aero-biopollutant in the library environment, 5th National Conference of Indian Academy of Allergy, More T. N. Murthy A. and Singh E. A.
- Recipient, 1<sup>st</sup> prize on presentation of studies on biodiversity of newly reported scared groves,
  National Conference on Recent advances in plant microbial and environmental biotechnology"
  Department of Botany, Chandmal Tarachand Bora College, Shirur, Pune, Singh E. A., Kamble S.Y., More T.N., Patil S. R., and Pawar S. G.
- <u>Best Teacher Awards</u> from Bharati Vidyapeeth Deemed University, Pune -30 on 26<sup>th</sup> April 2017 22<sup>nd</sup> Foundation Day of Bharati Vidyapeeth (Deemed to be University), Pune
- <u>Three Patent Granted:</u> Patent no.351908 Date of Grant: 23/11/2020 2. Patent no.362305 Date of Grant: 22/03/2021, and Patent no.394759 Date of Grant: 13/04/2022
- <u>Keynote Address</u> on UGC Sponsored National Conference on "New Horizons in Biological Science Research" on 4th Jan.2023 at Coimbatore -43, Tamil Nadu INDIA.

- One International Patent Granted. Patent no 57 of 1978 number 2022/12415, WO2021/2147882
   A1 Date of Grant 29th March 2023
- Total Teaching Experience: 27 years
- Number of years in Rajiv Gandhi Institute of I.T.& Biotechnology, Pune: 21 years
- Working as Vice-Principal: 14years (Since-2010)
- Working as HOD in Dept. of Plant Biotechnology: 14 years (Since-2010)
- Number of Govt. Research Projects Completed: 02
- Number of Ph.D. Students: 01 completed, 05 currently registered
- Number of Publications: 35
- Number of patents: 11
- Number of books: 04

Teaching Environmental Biotechnology to UG & PG Program

Teaching Environmental Studies to UG Level

- Refresher Course on "Modern Biotechnology Tools and Techniques in Biodiversity
  Conservation" by Dept. of Botany, Bharathiar University, Coimbatore Tamil Nadu, India from 12<sup>th</sup>
  April 2022 to 25<sup>th</sup> April 2022 Sponsored by Indian Academy of Sciences, Bangalore, Indian
  Academy of Sciences, New Delhi and The National Academy of Sciences, Allahabad.
- **Keynote address** UGC Sponsored Two Day National Conference on New Horizons in Biological Science Research at Avinashilingam Institute for Home Science and Higher Education for Women (Deemed to be University) Coimbatore, Tamil Nadu, India on 4<sup>th</sup> Jan.-5<sup>th</sup> Jan.23.

# • Educational qualifications:

Sr. No.	Institution	Degree	Marks (%)	Year	Field of Study
1	Bharati Vidyapeeth (Deemed to be	Ph. D.	By thesis	2007	Environment
	University) of Pune, Pune				Science
2	University of Pune, Pune	M.Sc.	64.5	1996	Environment
					Science
3	University of Pune, Pune	B. Sc.	64.4	1993	Botany

# **Administrative responsibilities:**

- CAP Director (2009-10)
- Senior Supervisor (External) (2006-22)
- Member, Flying Squad BVU, Pune (2014-15)
- Member of Fee Structure of RGIT & BT, Pune
- Member of Management of RGIT & BT, Pune
- Member of Purchase committee of RGIT & BT, Pune
- Member of Library committee of RGIT & BT, Pune
- Secretary of NSS committee of RGIT & BT, Pune
- Secretary of Sports committee of RGIT & BT, Pune
- In-charge- Placement cell, Admission cell, Educational trips, Administrative Work (2008-09), Sports (2003-09).
- Member of Hostel Committee of BVU, Dhankawdi Campus
- Member of Bharati Parivar, Pune
- Centre Co-ordinator State Level G.K. Test of RGIIT & BT, Pune
- Coordinator International Students of RGIT&BT, Pune
- Vice-Principal (Administration)
- Dean, Faculty of Science
- Member of Academic Council of Bharati Vidyapeeth (Deemed to be University), Pune (2016-17)
- Member of Association for the Promotion of DNA Fingerprinting and Other DNA Technologies (ADNAT), Hyderabad
- Member of Society for Ethno-pharmacology (SFE-INDIA) Jadavpur, Kolkata
- Member of Microbiologists Society, India

#### **Research Publications:**

Publications: Total=39 4 (Books) and 35 (Research papers)

- Suraj Jadhav, Suresh Jagtap, Anand Zanwar and E. A. Singh (2024) A Comparative analysis of four 'Sariva plants: HPTLC profiling and Antioxidant activity A Journal Ecology, Environment and Conservation, 30 (August Suppl. Issue) ISSN 0971–765X, pp. (S55-S63).
- Sagar Shinde, Jagtap Suresh, Deokule Subhash, Mungikar Rahul and **Athoiba Singh** (2024) Angiosperms, Fabaceae, *Mucuna championii* Benth. New record to India A Journal Ecology, Environment, and Conservation, 30 (1):2024; ISSN 0971–765X, pp. (412-413).
- Sagar Shinde, **Athoiba Singh**, Shekhar Shinde and Jagtap Suresh (2024) Emerging Perspectives on Plant–Based L-Dopa Sources for the Treatment of Parkinson's disease A Journal Ecology, Environment, and Conservation, 30 (2):2024; ISSN 0971–765X, pp. (551-559).
- **Singh E. A.**, Nidhi Dubey, and Sahil Punia (2024) Eco-Friendly Noise-Absorbing Panels from Waste Materials: A Sustainable Solution to Control Noise Pollution, International Journal for Multidisciplinary Research, Vol.6(1) E-ISSN: 2582-2160,1-9.
- Lad D, U, E. A. Singh, M.B. Gaikwad, D.M, Sawant and A.S Salunkhe (2023) Effect of Insecticides against Whitefly *Bemisia tabaci* on Okra, Bioifolet Vol.20(3B): 623-625.
- Abhijeet, E. A. Singh and M. R. Shindikar (2023) A Comprehensive Review Climate Change and its Effects International Journal of Environment and Climate Change, Vol.13(11): 924-931.
- Jayant Pawar, R. S. Phatak, Nilam M., Qureshi, Athoiba E. Singh, Manish D. Shinde, Dinesh P Amalnerkar and Jaehyeok Doh (2023) Contemporary Trends In Active And Intelligent Polymer Nanocomposite based Food Packaging Systems For Food Safety and Sustainability In Modern Aeon. Current Materials Science Vol.17.2024: 2666–1462,
- Jayant Pawar1, G. R. Pathade1 and **E. A. Singh** (2023) Investigation of the antibacterial efficacy of Zinc Oxide Nanoparticles (ZnO NPs) based Irrigant against Enterococcus faecalis Concerning Root Canal Disinfection A Journal Ecology, Environment and Conservation, 29 (May Suppl. Issue) ISSN 0971–765X, pp. (S70-S74).
- Shindikar M. R. and E. A. Singh (2023) Ecological and Palaeoecological Understanding of Mangrove Wetlands of Maharashtra (West Coast, India) towards Better Planning and Management Book Chapter Biodiversity and Conservative Research Integrated Publications, New Delhi ISBN: 978-93-95118-28-6,123-146.
- Suraj Jadhav, **Athoiba Singh** and Suresh Jagtap (2022) Sariva: Indian Medicinal Plants with Broad Spectrum and Role of Chromatography in their Authentication A Journal of Physical Sciences, Engineering and TechnologyVol.14(3): 58-69.

- Kartikey Jagtap., Anuradha Mulik, **E. A. Singh** and Suresh Jagtap (2022) Comparative Study to Evaluate and Ethyl Acetate Extracts of Different Vidanga Species for Antioxidant Efficacy and Phyto-Constituents Screening Biomedical and Pharmacology Journal, Vol.15(1)165-177.
- Jagtap Suresh, Nagarkar Bhagyashri, Shinde Kavita, Nangare Ninad, **Singh Aithoiba**. 2021. Evaluation of the acute and subacute toxicity of new polyherbal formulations df1911, df2112 and df2813. International Journal of Research and Analytical Reviews. 8(4): 921-932.
- **Singh E. A.,** Prashant Singh Parihar, Panthora B. Marak, Anjali Jha and Amit Sharma (2020) An Ecofriendly Approach of Rice Husk in Phosphate Removal and it's Synthesis in Silica Extract from Waste Residues International Research Journal of Engineering and Technology, Vol.07,10:338-348.
- Tayebeh Soltanighias, **E. A. Singh**, Surekha K Satpute Arun G Banpurkar, Ali Koolivand, Praveen Rahi (2019) Assessment of biosurfactant –producing bacteria from oil contaminated soils and their hydrocarbon degradation potential Environmental Sustainability Doi.org/10.1007/s42398-019-00074-0
- Jayant Pawar, Rabinder Henry, Prakash Viswanathan, Amit Patwardhan & E. A. Singh (2018) Testing of antibacterial efficacy of CuO nanoparticles by methylene blue reduction test against *Bacillus cereus* responsible for food spoilage and poisoning, Indian Chemical Engineer DOI:10.1080/00194506,20181548948.
- Narkhede AN, PS Nirmal, BE Nagarkar, **EA Singh**, A. M. Harsulkar and S. D. Jagtap (2018) Validation of the immunomodultory potential of amarkand speciesIndian Journal of Pharmaceutical Sciences 79(6): 965-973.
- Tayebeh Soltanighias, Athoiba Elangbam Singh, Praveen Rahi (2017) Mining Bacterial Diversity for Biosurfactants Springer International Publishing AG. Part of Springer Nature. Pp 443-461.
- Jayant Pawar, Prakash V, Prasen Vinchurkar, Manish Shinde, Rabinder Henry, Yashodhan Mandke, Amit Patwardhan, E.A. Singh (2017) Application of semi-solvo thermally synthesized zinc oxide (ZnO) nanoparticles in food technology and their characterization International Journal of Nanotechnology and Applications ISSN 0973-631X 11(1): 75-80.
- Jayant Pawar, Manish Shinde, Ravindra Chaudhari, and E.A. Singh. (2017) "Semi-Solvo Thermal Synthesis and Characterization of Zinc Oxide Nanostructures Against Food Borne Pathogens" International Journal of Pharma and Bio Sciences 8(2):(B) 311-315.
- Pawar, S. G., S. S. Pawar, V. M. Kamble, Kamble, S, Y, and E. A, Singh. (2016) "Quantitative Evaluation of Plant Diversity from Newly reported Sacred Groves (Devrais) in Pune District (Maharashtra)." Asian Journal of Multidisciplinary Studies, Vol.10: 58-66.

- Aarti Narkhede, Minal Mahajan, **Elangbam Singh**, Abhay Harsulkar, Suresh Jagtap. (2016) Antioxidant Activity of Fourteen *Eulophia* Species Traditionally Known as Amarkand International Journal of Pharmacy and Pharmaceutical Sciences ISSN-0975-1491 Vol 9, Issue 9: **313-316.**
- Pawar, S. G., Kamble, S. Y., P., S., Sawant, S, R, Patil and E. A. Singh (2016) "Preliminary Phytochemical Investigations of three species of Traditional Medicinal Plants of Tribal Regions of Maharashtra (India)" International Journal of Pharmaceutical & Phytopharmacological Research 8(5);742-745.
- Pawar, S. G., E. A, Singh, P, S, Sawant, S, R, Patil and Kamble, S, Y. (2016) "New Finding of Traditional Medicinal uses of Plants from Bhimashankar and Mulshi Areas of Pune District, Maharashtra." Asian Journal of Multidisciplinary Studies, Vol.4: 92-98.
- Kamble, S. Y., P. S. Sawant, Patil, S. R, S. Pawar, S. G. and **Singh, E. A.** (2014) Traditional herbal remedies practiced by the herbal healers in the tribal regions of Maharashtra-India. Int. J. of Life Scinces, Vol.2 (4):334-340.
- Kamble, S. Y., P. S. Sawant, **Singh, E. A,** S. R. Patil, and S. G. Pawar, (2014) Noteworthy Ethnomedicinal Plants used by the Tribes of Maharashtra. J.Econ.Taxon.Bot.38 (2):254-259.
- Suresh Khadke, Shweta Rani, Vithal Awad, Neelambika Meti, **Elangbam Singh,** Aniket Kuvalekar and Abhay Harsulkar (2013) An improved protocol for *in vitro* regeneration of *Rubia cordifolia* L.Via organogenesis International Journal of Plant, Animal and Environmental Sciences Vol.-3 Issue-4:ISSN 2231-4490.
- Aarti Narkhede, Jaskaran Gill, Kajal Thakur, Divya Singh, **Elangbam Singh**, Omkar Kulkarni, Abhay Harsulkar and Suresh Jagtap (2013) Total Polyphenolic content and free radical quenching potential of *Dioscorea alata* L. Tubers International Journal of Pharmacy and Pharmaceutical Sciences Vol 5, Issue 3: 866-869.
- Jayant Pawar, N. K. Bipinraj, **E. A. Singh** and Nikhil Nikam (2012) Determination and Partial Characterization of Antimicrobial Material of *Pseudomonas aeruginosa* Isolated from Milk A Journal of Food Science & Technology. Vol 1 issue 2, 16-23.
- **Singh E. A.** Kamble S. Y., Bipinraj N. K. Jagtap S. D. (2012) Medicinal Plants used by the Thakar Tribes of Raigad District, Maharashtra For the Treatment of Snake-Bite and Scorpion-Bite, International Journal of Phytotherapy Research, Vol 2 issue 2: 26-35
- Kamble, S. Y., Patil, S. R., Swant, S. P., Sangeeta, P. Pawar, S. G., and **Singh, E. A.**, (2010) Studies on plants used as traditional medicines by Bhilla tribe of Maharashtra State. Indian Journal of Traditional Knowledge. 9(3): 591-598.

- Kamble, S. Y., Patil, S. R., Sawant, P. S., Sangeeta, P. Sawant and **Singh, E. A**. (2009) Traditional medicines used by tribes of Pune and Thane districts for the treatment of upper respiratory tract disorders. J.Econ.Taxon.Bot.33 (3) 682-687.
- Kamble, S. Y., More, T. N., Patil, S. R., **Singh, E. A.** and S. G. Pawar (2009) Ethnobotany of Thakar tribe of Maharashtra. J. Econ. Taxon. Bot. 33(Suppl.): 95-122.
- Jayant Pawar, Manish Shinde, Ravindra Chaudhari, and E. A. Singh (2017) "Active and Intelligent (Polymer) Nanocomposite Systems in Food Safety and Sustainability in the Modern Era" International Journal of Springer Science Reviews.
- Singh E. A., Kamble S. Y., T. N. More, S. R. Patil & S. G. Pawar (2004) Studies on Biodiversity of Newly reported scared groves (Devrais) from Pune District. Proc.National Conference, on Recent Advances in Plant Microbial and Environmental Biotechnology Shirur, Pune Maharashtra. (J S Bhadale Yashoda Mudranalaya, Kothrud, Pune) pp 180-192.
- **Singh E. A.** & T. N. More (2004), The study of sacred groves (Devrais) from Mulshi Taluka and their socio-religious value. Proceedings of the National Seminar on "Ethnobotany and Sacred groves role in Conservation Strategy of India, Pune, Maharashtra. "Focus on Sacred groves and Ethnobotany" (Prism Publications Chembur, Mumbai, India). pp 144-149.
- Bharucha E. K., Shamita Kumar., Ghorpade D.B., Pokharkar P. S. and E. A. Singh, (1998) Handbook of Environment Education for Teachers, Institute of Environment Education Research Publ., Bharati Vidyapeeth University, Pune.
- Aarti Narkhede, Suresh Jagtap, Bhagyashri Nagarkar, Pallavi Nirmal, Omkar Kulkarni, Abhay Harsulkar, **Singh Elangbam** (2017) Documentation of Anti-inflammatory remedies traditionally used by *Korku* and *Pawra* tribes from *Satpura* hills of Maharashtra, India for publication in Indian Journal of Traditional Knowledge. New Delhi (India).
- Aarti Narkhede, Pallavi Nirmal, Bhagyashri Nagarkar, **Singh Elangbam**, Abhay Harsulkar, Suresh Jagtap. (2017) Documentation of Anti-inflammatory remedies traditionally used by *Korku* and *Pawra* tribes from *Satpura* hills of Maharashtra, India for publication in Indian Journal of Pharmaceutical Sciences.
- Jagtap S. D., Nagarkar B. E., Shinde K. B. Nangare N. B., Singh E. A. (2017) Evalution of The Acute and Sub-Acute Toxicity of New Polyherbal Formulations DF1911, DF2112 And DF2813, for publication in Indian Journal of Pharmaceutical Sciences. 8(4): 921-932.

### • Patents filed, registered:

1) Name of Inventor: Prof. Athoiba Singh Elangbam,

Title of the invention: Method of Synthesis of Zinc Oxide Nano-particles using Oscillatoria Alage

Patent Application No.: 2146MUM2013 (INDIA)

Date of filing of application: 25/06/2013,

Publication Date 12/07/2013,

Journal No.28/2013

2) Name of Inventor: Prof. Athoiba Singh Elangbam,

Title of the invention: A method of preparation of ZNO Nanoparticless by coprecipitation method using Black Tiger Prawns (Penaeus monodon) Extract

Patent Application No.: 2422/MUM/2013 (INDIA)

Date of filing of application: 19/07/2013,

Publication Date 02/08/2013,

Journal No.31/2013

3) Name of Inventor: Prof. Athoiba Singh Elangbam,

Title of the invention: AMethod for Bio-synthsis of Mono-Dispersed Spherical Silver

Nanoparticles (AGNPS)By using Aqueous Bio-reactants from Withania sominifera

Patent Application No.: 764/MUM/2014 (INDIA)

Date of filing of application: 06/03/2014,

Publication Date 28/03/2014,

Journal No.13/2014

4) Name of Inventor: Prof. Athoiba Singh Elangbam,

Title of the invention: Nano Metal Oxide Based Fungicide against Food Spoilage

**Yeasts** 

Patent Application No.: 2/1601/2016-MUM (INDIA)

Date of filing of application: 07/04/2016,

Journal No.20162102102

5) Name of Inventor: Prof. Athoiba Singh Elangbam,

Title of the invention: Development of Moisture Sensitive Intelligent Cellulose

Nanocomposite (ICNC) based Capacitive

Patent Application No.: E-2/1964/2017MUM (INDIA)

Date of filing of application: 07/06/2017,

Journal No.201721031797

6) Name of Inventor: Prof. Athoiba Singh Elangbam,

**Title of the invention:** Development of Antimicrobial Active Polymer Nanocomposites

based Food Packaging System

Patent Application No.: E-2/1963/2017MUM (INDIA)

Date of filing of application: 09/05/2017,

Journal No.201721031796

7) Name of Inventor: Prof. Athoiba Singh Elangbam,

**Title of the invention:** New formulation for the management of glycosidase and oxidative stress.

Patent Application No.: 201721039231 (INDIA)

Date of filing of application: 03/11/2017.

8) Name of Inventor: E. A. Singh,

Title of the invention: A Packaging Composite and the Process for Preparing such

Composite

Patent Application No.: 203021016991A (INDIA)

Date of filing of application: 20/04/2020,

Publication Date 22/05/2020,

No. of page 29, No. of Claims 10/2020

9) Name of Inventor: E.A. Singh,

**Title of the invention**: A Method for Depositing Layer of Zinc Oxide Nano-particles over a substrate of Hygroscopic material as a Dielectric Substrate and a Sensor containing the substrate for Detecting Moisture

Patent Application No.: 202021024684 A (INDIA)

Date of filing of application: 12/06/2020,

Publication Date 10/07/2020,

Journal No.35, No. of Claims 15/2020

10) Name of Inventor: E.A. Singh,

Title of the invention: Simple UV-Vis Spectrophotometer Technique For Identification and

Differentiation of Different Botanicals Traded as Drug Vidanga

Patent Application No.: 202321049089A (INDIA)

Date of filing of application: 20/07/2023,

Publication Date 15/09/2023,

Journal No. 37/2023 No. of Claims 05

11) Name of Inventor: E.A. Singh,

Title of the invention: "FTIR Spectroscopic based Chemometrics Technique for

Identication and Diffrentiation of closely related species of Sariva Plant"

Patent Application No.: 202421009090 A (INDIA)

Date of filing of application: 10/02/2024,

Publication Date 15/03/2024,

Journal No. 11/2024 No. of Claims 09

12) Name of Inventor: E.A. Singh

Title of the invention: "New formulation for the management of glycosidase and oxidative stress"

Patent Application No.: L-152009/2024 (INDIA)

Date of filing of application: 29/07/2024.

Total patents = 12