Dr. SHANKAR DATTATRAY NAWALE



Professor & Principal
N B Navale Sinhgad College of Engineering, Solapur

& Former **Dean**, **Faculty of Science & Technology**,
PAH, Solapur University Solapur, MS, India, 413255

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PROFILE:

- **Post-Doctoral** and **Doctoral Research** at **France** and **Italy** respectively, under Erasmus Mundus scholarship, **funded by European Commission**
- Working as approved **Principal** at NBN Sinhgad College of Engineering, Solapur (Institute Re-accredited by **NAAC with Grade 'A', CGPA 3.15/4,** in March 2024)
- Former **Dean, Faculty of Science and Technology,** PAH Solapur University, Solapur
- Having **Experience of Academic Administration** in the capacities as Principal, HoD, PG Coordinator, Exam cell Incharge, etc.
- As a **HoD of E&TC Engg**., at SIT Lonavala, **department got accreditation by NBA**
- **Ability to work with limited resources** to get optimum solution
- A Dedicated **research scholar** in the area of UHF RFID Passive Tag and its applications
- A **highly motivated individual** and always endeavoring to learn and upgrade the skills
- Having **Personal tie-ups with the European Universities**
- Visited Foreign Countries like **Italy, France, Spain, Switzerland, Malaysia**, etc, for the research and symposium work
- Delivered **more than 200 invited talks** at Conferences, Workshops and Lecture series
- Presented as **Educational counselor and motivational speaker**
- Played key role for developing **Project Based Learning environment** at the college and also delivered expert talks and presentations on these activities
- Has been a **teacher** in area of Microwave Engineering, Antennas, and Wave Propagation
- A **consistent performer with high academic score**, throughout the educational career
- Have **attended more than 30** training workshops and acquired technical skills related to areas of specialization
- Having **Personal Liaisons** with industries like Jio, SAMEER, DRDL, ISRO, Infosys, etc.
- **Sincere, Dedicated and Hardworking** Individual
- Had been a **Reviewer for 8 Ph.D. and 50 Master's Thesis**
- **Successfully Guided Three PhD** candidates and **Five** are pursuing
- **Certified Master Trainer (**ToT**) by MSFDA** for Academic Leadership Development

AREAS OF EXPERTISE:

- ✓ RFID Passive Tags and its applications
- ✓ Microwave Engineering
- ✓ Micro-strip & Smart Antennas
- ✓ Electromagnetic & Wave Propagation
- ✓ Wireless communication
- ✓ Wireless Sensor Network

EDUCATIONAL QUALIFICATION:

- **Post-Doc Research**, LCIS Lab, ESISAR, Grenoble-INP, Valence, France (Jan-Nov 2014)
- **Ph. D.** (E. & T. C. Engg.), VJTI, Mumbai University, MS, India, (June 2013)
- **M. Tech**. (E. & T. C. Engg.),VJTI, Mumbai University, MS, India, (June 2008) (CPI - 8.2)
- **B. E.** (E. & T. C. Engg.), Dr. BAMU, Aurangabad, MS, India, (June 2000) (70.93%)
- **Diploma** (E. & T. C. Engg.), Govt. Poly. Pune, MS, India, (June 1997) (72.92%)
- **H.S.C.** (M.S.Board, Pune Division), MS, India, (March 1995) (72.83%)
- **S.S.C.** (M.S.Board, Pune Division), MS, India, (March 1993) (83.28%)

List of Publications

Journals-30, Conferences-20, Books-04, Book Chapter- 04, Editor-01, Patent-04, Copyright-02

(https://scholar.google.co.in/citations?user=8s6G9wYAAAAJ&hl=en)
(https://www.scopus.com/authid/detail.uri?authorId=55247696300)

Journals:

[1] S. Manzari, C. Occhiuzzi, **S. Nawale**, A. Catini, C. Di Natale, and G. Marrocco, "Humidity Sensing by Polymer-Loaded UHF RFID Antennas", *IEEE Sensors Journal*, Vol. 12, No. 9, Sept. 2012, pp:2851-2859 [Q1]

[2] G. Andia Vera, **S. D. Nawale**, Y. Duroc and S. Tedjini, "Read Range Enhancement by Harmonic Energy Harvesting in Passive UHF RFID," in *IEEE Microwave and Wireless Components Letters*, vol. 25, no. 9, pp. 627-629, Sept. 2015, doi: 10.1109/LMWC.2015.2451391 [Q1]

[3] **S. Nawale**, G Andia-Vera, Y.Duroc, S. Tedjini, "Exploitation of the nonlinearities in electromagnetic energy harvesting and passive UHF RFID", *Wireless Power Transfer, Cambridge University Press*, Volume 3, Issue 1, March 2016, pp 43-52 [Q2]

[4] **Shankar Nawale**, G Andia-Vera, Y. Duroc, S. Tedjini, "Non-linear Exploitation in Passive UHF RFID and Energy Harvesting: Power Dependency and Harmonic Generation", *IEEE Transactions on Microwave Theory and Techniques*, Vol. 63, Issue 8, Aug 2015, ISSN: 0018-9480, pp 2672-2679 [Q1]

[5] **S. D. Nawale**, N.P. Sarwade, D.K. Singh, "Design of UHF Micro-strip Antenna for Passive RFID Tag", *Journal of Advances in Engineering and Sciences*, January-June 2012, ISSN 0973-9041, pp:77-84

[6] A. Bandal, **S. Nawale**, "RFID Security Using Lightweight Mutual Authentication And Ownership Transfer Protocol", *International Journal of Ad hoc, Sensor & Ubiquitous Computing* Vol.3, No.3, June 2012, pp: 1-11 [Q4]

[7] S. Shaikh, **S. Nawale**, "Secure Access of RFID System", *International Journal of Scientific & Engineering Research*, Volume 3, Issue 8, August-2012, PP.870-873 [Q4]

[8] **Shankar D. Nawale**, Gianfranco A. Vera, "Non-linear harmonic utilization of passive UHF RFID tag for Energy Harvesting", *IEEE Microwave and Wireless Components Letters*, Issue 12, Dec.2014, pp: 884-886 [Q1]

[9] **Shankar D. Nawale**, S. S. Shirgan, Jayendra Kumar, "Design of Compact High Frequency Micro-Strip Antenna", *International Journal of Enhanced Research in Science Technology & Engineering*, Vol.-4, Issue-5, May 2015, pp: 118-122 [Q4]

[10] **S. D. Nawale**, "UHF RFID Passive Tag for Humidity Sensing and Electromagnetic Energy Harvesting", *Souvenir of Innovative Technologies for Rural Development and Their Commercialization*, February 2017, pp. 44

[11] S. B. Biradar, **S. D. Nawale**, S. H. Pawar, "Bio-Engineered Silver Nano-particles for controlling oily spots disease of Pomegranate", *Innovative Technologies for Rural Developments (A Compendium of CRTD Events)*, Published by SPSPM, Sinhgad Institutes, Solapur, 2018, ISBN 978--93-5268-900-2

[12] N. N. Neelamegam, P. S. Madole, A. Y. Negewan, **S. D. Nawale**, "Design of C-Band Microstrip Patch Antenna for RADAR applications", *Journal of Frontiers in Interdisciplinary Research and Technology Development* (JFIRTD), Sinhgad- Fractol Publication, 2018

[13] Sudha Surwase, Ravi Yadahalli, **Shankar Nawale**, "PIFA RFID Tag Antenna Design and Simulation using CST Microwave Studio", *International Journal of Science and Research*, (ISSN: 2319-7064), Volume 7 Issue 10, October 2018, pp. 1018-1021 [Q2]

[14] **Shankar D. Nawale**, Shashikant H. Lamkane, "Active Learning-Teaching Methodologies and Modern Assesment Techniques", *Indian Journal of Research*, (ISSN 2231-6655), Special Volume 5, April 2019, pp 87-93 [Q3]

[15] S. J. Nandedkar, **S. D. Nawale** "Design and Performance Analysis of Linear Array" *International Research Journal of Engineering and Technology* (IRJET) (e-ISSN: 2395-0056, p-ISSN: 2395-0072), Volume: 07, Issue: 04, Apr 2020, pp. 33-37 [Q4]

[16] Sudha Surwase, Ravi Yadahalli, **Shankar Nawale**, "Design of Nested H slot Passive UHF

RFID Tag", *International Journal of Engineering and Advanced Technology*, ISSN: 2249-8958, Volume-10, Issue-1, October 2020, pp. 346-349 [Q4]

[17] Shilpa Nandedkar, **Shankar Nawale**, "Frequency and space-diverse MIMO antenna with enhanced gain", *Journal of Integrated Science & Technology*, 2023, pp 1-6, J. Integr. Sci. Technol., 2023, 11(2), 482. URN:NBN:sciencein.jist.2023.v11.482, ISSN: 2321-4635 [Q3]

[18] Shilpa Nandedkar, **Shankar Nawale**, "Compact MIMO Microstrip Antenna for Wireless PAN" *International Journal of Electrical and Electronic Engineering & Telecommunications* Vol. 12, No. 1, January 2023, doi: 10.18178/ijeetc.12.1. pp. 53-59, ISSN: 2319 – 2518 [Q3]

[19] Amit Deshmukh, **Shankar Nawale**, "Survey Paper on Different Techniques for reducing Mutual Coupling between MIMO Antennas", *Sirjana Journal*, VOLUME 54 ISSUE 2, 2024, pp. 29-37, ISSN: 2455-1058 [Q4]

[20] Nilesh Lakade, **Shankar Nawale,** "High-Efficiency Dual-Band RF Energy Harvesting with Integrated Impedance-Matching and Rectifier Circuits", 02 July 2024, *Preprint (Version 1) available at Research Square* [https://doi.org/10.21203/rs.3.rs-4577084/v1] [Q4]

[21] Konapure, R., and S. Nawale "Enhancing pharmaceutical supply chain efficiency through smart contracts: ensuring transparency, traceability, and security." *SSRG International Journal of Electrical and Electronics Engineering*, pp- 8-13, 11 (2024)[Q4]

[22] Anil M Kasture, Kailash J Karande, **Shankar D Nawale,** "Performance Analysis of Various Nonlinear Elements in Frequency Multiplying Circuits for Wireless Applications", *International Journal of Electrical and Electronics Research* (IJEER), Volume 12, Issue 4, Pages 1332-1336, 15/12/2024,e-ISSN:2347-470X[Q3]

[23] Anil M Kasture, Kailash J Karande, **Shankar D Nawale**, Altaf O Mulani, "Wireless interrogator for passive electromagnetic sensors for IoT applications", *International Journal of Basic and Applied Sciences*, 14 (1) (2025), pp. 92 – 98, https://doi.org/10.14419/gv4spa37[Q4]

[24] Amit A. Deshmukh, **Shankar D. Nawale**, Vijay Ramesh Kapure, Shubhangi A. Deshmukh, Mahadu Trimukhe, and Rajiv Kumar Gupta, "Highly Isolated Compact Dual-Band MIMO Antenna Using Stubs, Slots and Neutralization Line for 5G Wi-MAX and WLAN Applications," *Progress In Electromagnetics Research C*, Vol. 158, 27-35, 2025, doi:10.2528/PIERC25051801[Q2]

[25] Rahul Konapure, **Shankar Nawale**, "Traceability and Verification to Prevent Counterfeit Drugs: A Secure, Efficient Pharma Supply Chain with IoT-Enabled Blockchain and Smart Contracts" *International Journal of Electronics and Communication Engineering*, (eISSN: 2348-8549), Vol. 12, Issue 1, 33-43, 2025, doi: 10.14445/23488549/ijece-v12i1p103 [Q4]

[26] Nilesh Lakade, **Shankar Nawale**, Anjali Rochkari, Mahadu Trimukhe and Rajiv Gupta, "High-Gain Dual band MIMO Antenna using Metamaterial Surface, for Blue-Tooth, Wi-fi and 5G Applications", *Progress In Electromagnetics Research C, Vol.166, 41-51, 2026* [Q2]

[27] Amit Deshmukh, **Shankar Nawale**, Shubhangi Deshmukh, Kailas Karande, Mahadu Trimukhe, Rajiv Gupta, "Compact Four-Port MIMO Antenna with High-Isolation Using Defected Ground Structure for Sub-6 GHz 5G and Wi-MAX Applications", *International Journal of Microwave And Optical Technology*, Vol.21, No.5, September 2026, pp 578 – 588 [Q3]

[28] Hiremath, G. A., **Nawale, S. D**. "Deep Reinforcement Learning for MC-MIMO-NOMA: A Corrected Benchmark Reveals No Gains over Classical Beamforming and Power Control" *International Journal of Artificial Intelligence and Machine Learning*, 6(11s), 244–255, 2026 [Q3]

[29] Yogesh Ghodake, **Shankar D. Nawale**, "A Compact PIN Diode-Based Independently Fed Frequency and Pattern Reconfigurable Hybrid Antenna Array for Wireless Applications," *Progress In Electromagnetics Research C*, Vol. 173, 279-292, 2026 [Q2]

[30] Gurudevi A. Hiremath, Shankar D. Nawale, "Joint Clustering, Association, and Power Allocation in Cell-Free Massive MIMO-NOMA," International Journal of Electronics and Communication Engineering, vol. 13, no. 10, pp. 54-67, 2026 [Q3]

Conferences:

[1] **S. D. Nawale**, N. P. Sarwade, "RFID Vapor Sensor: Beyond Identification", *IEEE 2012 Sixth International Conference on Sensing Technology*, CDAC, Kolkata, India, Dec 18-21, 2012 pp: 248-253

[2] **S. D. Nawale**, N.P.Sarwade, "Variation in wireless-sensing of UHF-RFID Antennas with insertion of Dielectric material", *Progress in Electromagnetic Research Symphosium,* Kaulalumpur, Malasia, March 27-30, 2012, pp: 206-209
[3] **S. D. Nawale**, N.P.Sarwade "RFID: Beyond Identification", *2012 Proceedings of the 35th International Convention MIPRO*, Croatia, May 21-25, 2012 pp 60-62
[4] S.Manzari, C. Occhiuzzi, **S. Nawale**, A. Catini, C. Di Natale , and G. Marrocco, "UHF RFID Humidity Sensor Tag Based on Hygroscopic Polymeric Load", *6th IEEE European Conference on Antennas and Propagation (EUCAP)*, Czech Republic, 26-30 March 2012, pp:3030-3033
[5] S.Manzari, C. Occhiuzzi, **S. Nawale**, A. Catini, C. D iNatale , and G. Marrocco, "Polymer-Doped UHF RFID Tag for Wireless-Sensing of Humidity", *IEEE International Conference on RFID (RFID 2012)*, April 3-5, 2012, Orlando, Florida, USA, pp: 124-129
[6] **S. D. Nawale**, M.B. Sayyad, N.P. Sarwade, S. L. Nalbarwar, "Telecom Convergence using IP Multimedia Subsystem (IMS)" *Silver Jubilee Conference on Communication Technologies and VLSI Design* (CommV 2009), VIT University, Tamilnadu, India 8-10/10/2009 pp: 415-416
[7] **Nawale S. D**., Bhosale S. J., "Design of Microwave Wideband Inter-digital Filter" *International Conference on Emerging Technologies and Applications in Engineering, Technologies and Sciences*, Saurashtra University, Rajkot, India, 13-14 January,2008.
[8] G. A. Vera, **S. D. Nawale**, Y. Duroc and S. Tedjini, "Optimum integration of passive UHF RFID tag-rectenna in a single feed dual band antenna," *2014 XXXIth URSI General Assembly and Scientific Symposium (URSI GASS)*, 2014, pp. 1-4, doi: 10.1109/URSIGASS.2014.6929450.
[9] G. Andia Vera, **S. D. Nawale**, S. Tedjini and Y. Duroc, "Passive UHF RFID backscattering for indoor lighting control," *2014 Annual IEEE India Conference (INDICON)*, 2014, pp. 1-4, doi: 10.1109/INDICON.2014.7030472.
[10] P. Mhatre, R. Duche, **S. Nawale** and P. Patil, "RF power harvesting system for RFID applications in multiband systems," *2015 6th International Conference on Computing, Communication and Networking Technologies (ICCCNT)*, 2015, pp. 1-5, doi: 10.1109/ICCCNT.2015.7395226.
[11] Vishal salve, Shankar D. Nawale, "Effect of Noise on Various Digital Modulation Formats in an Mach-Zehnder Modulator", IETE National Conference on "VLSI, Communication and Signal Processing" NCVCS 2021- 27th to 28th November 2021
[12] Sudha Surwase, Ravi Yadahalli, **Shankar Nawale**, "Design of Passive UHF RFID Tag", *5th IEEE International Conference for Converegence in Technology*, (I2CT), Pune, March 27-29, 2019
[13] S. J. Nandedkar, **S. D. Nawale** and A. Kulkarni, "Comparison of Feeding Techniques for EMCP Array Antenna," *2021 IEEE International Conference on Emerging Smart Computing and Informatics (ESCI)*, 2021, pp. 423-426, doi: 10.1109/ESCI50559.2021.9396967.
[14] **S. D. Nawale** and R. R. Konapure, "Blockchain & IoT based Drugs Traceability for Pharma Industry," *2021 IEEE International Conference on Engineering, Technology and Innovation (ICE/ITMC)*, 2021, pp. 1-4, doi: 10.1109/ICE/ITMC52061.2021.9570251
[15] R. R. Konapure and **S. D. Nawale**, "Smart Contract System Architecture for Pharma Supply chain," *2022 International Conference on IoT and Blockchain Technology (ICIBT)*, 2022, pp. 1-5, doi: 10.1109/ICIBT52874.2022.9807744.
[16] N. A. Lakade, **S. D. Nawale**, Design of Sunflower Shaped Dual Band Antenna for RF Energy Harvesting Application, *66th Annual IETE Convention (AIC) -2023 organized by IETE Pune*, 16-17 September 2023, Paper ID 98
[17] N. A. Lakade and **S. D. Nawale**, "Design of Heptagonal-Shaped 2.45 GHz Omni-directional Antenna for RF Energy Harvesting Application," *2024 15th International Conference on Computing Communication and Networking Technologies (ICCCNT)*, Kamand, India, 2024, pp. 1-4, doi: 10.1109/ICCCNT61001.2024.10724644
[18] A. M. Kasture, K. J. Karande and **S. D. Nawale**, "Optimization of Harmonic Generation in Frequency Multiplying Circuit for Wireless Application," *2024 3rd Edition of IEEE Delhi Section Flagship Conference (DELCON)*, New Delhi, India, 2024, pp. 1-5, doi: 10.1109/DELCON64804.2024.10866239.
[19] G. Hiremath and **S. D. Nawale**, "Harnessing 5G for Sustainable Energy Efficiency in Modern Telecommunications," *2024 First International Conference on Data, Computation and Communication*, Sehore, India, 2024, pp. 35-39, doi: 10.1109/ICDCC62744.2024.10960855.
[20] Biradar, P.K., **Nawale, S.D**. (2026) "Comprehensive Survey on Context-Based Learning in Video Super-Resolution" Proceedings of the 4th International Conference on Cognitive and

Intelligent Computing-Volume2,ICCIC 2024,Cognitive Science and Technology, Springer, pp.449-457, https://doi.org/10.1007/978-981-95-0144-1_46, ISBN978-981-95-0143-4

Books:

[1] S. H. Pawar, **S. D. Nawale**, R. K. Singh, *Innovative Technologies for Rural Developments (A Compendium of CRTD Events)*, Published by SPSPM, Sinhgad Institutes, Solapur, 2018

[2] A. Bandal, **S. Nawale**, *RFID Security Using Lightweight Mutual Authentication And Ownership Transfer Protocol,* Lap Lambert Academic Publishing, International Edition, ISBN: 978-3659218330, August 2012

[3] **S. Nawale**, S. Shaikh, *Secure Access of RFID System*, Lap Lambert Academic Publishing, International Edition, ISBN: 978-3659229398, August 2012

[4] Shivaji H Pawar, Prakash A Mahanwar, **Shankar D Nawale**, *Advances in Mulberry, Silk Science and Technology Development* by **Cambridge Scholor Publishing, UK**.

Book Chapter:

[1] Shilpa Nandedkar, **Shankar Nawale**, and Anirudha Kulkarni, *Parametric Study of electromagnetic Coupled MSA Array for PAN Devices with RF Survey*, 'Advances in Intelligent Systems and Computing Volume 1354, Applied Information Processing Systems Proceedings of ICCET 2021' (6th International Conference on Computing in Engineering and Technology), Aug-21, ISBN 978-981-16-2007-2, ISSN 2194-5357, Springer

[2] I M Chandarki, B. B. Singh, **S. D. Nawale**, *Role of Knowledge Engineering in an Organization*, NEP 2020 and its Impact on Quality in Higher Education – A progressive Step Towards Excellence published by Sindhi College in association with NAAC Bangaluru, pp: 10-16, ISBN: 978-93-5779-945-4

[3] Vaishali R Shinde, **Shankar D. Nawale**, Shivaji H. Pawar, *Estimation of Antioxident Capacity of Medicinal Plants by Cyclic Voltametry*, 'Nanotechnology Applications in Medicinal Plants and Their Bio-nano-composites: A New Perspective in Ayurvedas' a book published by Cambridge Scholars press, UK in May 2024, pp: 58-103, ISBN(13): 978-1-0364-0228-0

[4] Amit A. Kambale, **Shankar D. Nawale**, Shivaji H. Pawar, *Interplay Between Mulbery, Silk Fibroin and Dye-Sensidized Solar Cells*, Cambridge Scholor Publishing, UK

Editor:

[1] S. H. Pawar, **S. D. Nawale**, I M Chandarki, *Journal of Frontiers in Interdisciplinary Research and Technology Development* (JFIRTD), Sinhgad- Fractol Publication, 2018

Patents:

[1] Amit A. Deshmukh, **Shankar D. Nawale**, Kailash J. Karande, Mahadu A. Trimukhe, Rajiv K. Gupta, Patent on 'UWB Antenna' by The patent office, Govt. of India, Sr. No. 182167, Date of issue- 07/10/2024

[2] Anil M. Kasture, Kailash J. Karande, **Shankar D. Nawale** Patent on 'IoT Range Extention Reflectenna with Frequency Multiplication' by The patent office, Govt. of India, Sr. No. 184912, Date of issue- 18/11/2024

[3] Anil M. Kasture, Kailash J. Karande, **Shankar D. Nawale** Patent on 'Signal Frequency Enhancing Device' by The patent office, Govt. of India, Sr. No. 186733, Date of issue- 09/12/2024

[4] Yogesh S. Ghodake, **Shankar D. Nawale**, Kailash J. Karande, Sanjay P. Patil, Amit A. Deshmukh, Shailendrakumar M. Mukane, Somnath M. Lambe, Anil M. Kasture Patent on 'Hybrid Antenna System For Wireless Networks' by The patent office, Govt. of India, Design No. 466443-001, Date of issue- 11/12/2025

Copyrights:

[1] M. H. Naikawadi, K. P. Patil, S. S. Shirgan, **S. D. Nawale**, Copyright on 'Hybrid Deep Nural Network Based Spectrum Inference in Cognitive Radio Network', Published by Copyright Office, Govt. of India, Registration No. L-145063/2024

[2] S. S. Hippargi, **S. D. Nawale**, S. S. Shirgan, V. N. Jokare, A. A. Kshirsagar, 'Teacher Guardian Manual, Published by Copyright Office, Govt. of India, Registration No. L-137990/ 2023

RESEARCH PROJECTS Undertaken:

A) *Post-Doctoral research*: at **LCIS Lab, ESISAR, Grenoble-INP, Valence, France** (1st Jan-14 to 31st Oct-14)

Research Topic: Electromagnetic Energy Harvesting in Passive UHF RFID tag

Credentials: Received Fellowship from European Commission, under Erasmus Mundus Action 2 "India4EU II" project for Invited research.

Amount Received: Euro 1800 pm plus Travel Grant (INR 20 Lakh approx.)

B) *Ph. D. work*: at **VJTI Mumbai** (Jan-09 to Dec-13) and at **URTV, Rome, Italy** (Sept-09 to Feb-10)

Research Topic: Environmental Wireless Sensing based on UHF RFID Passive Tag integrated with Conductive Polymer.

Credentials: Received Scholarship from European Commission, for doing part of research at University of Rome, Tor-Vergata, Italy (From 01/09/2010 to 28/02/2011)

Amount Received: Euro 1500 pm plus Travel Grant (INR 12 Lakh approx.)

C) *M. Tech. Project*: At **VJTI Mumbai** (July06-June 08)

Title: 'Design of Microwave Inter-digital Waveguide Filter at S-Band Frequency"

D) Sponsored *Research Project 1*:

Title: Design and Implementation of Dual Band Miniaturized Microstrip Filter for GSM and CDMA applications.

Credentials: Received funding by BCUD, University of Pune (A.Y. 2011-13)

Amount Received: Rs. 190000/-

E) Sponsored *Research Project 2*:

Title: Development of Mulberry Based Value Added Products For Upliftment of Sericulture Farmers

Credentials: Funded by Rajiv Gandhi Science and Technology Commission, Govt. of Maharashtra (through PAH Solapur University, Solapur) (A.Y. 2025-2027)

Amount Received: Rs. 500000/-

CONSULTANCY WORK:

Assignment: To design Course structure and syllabus for B.Tech. Electronics and Telecommunication Engineering.

Sponsoring Authority: Indira Gandhi National Open University (**IGNOU**), Delhi, India in 2009

Grant Received: Rs. 330000/-

RESEARCH ACHIEVEMENTS:

- Selected for **Scholarship Based Post-Doctoral Research**, under EC Project at 'Grenoble Institute of Technology', Valence, France for Ten Months
- Selected for **Scholarship Based Ph. D. Program**, under EC Fellowship at University of Rome, 'TorVargata', Italy for Six Months
- One of the paper was **awarded with the price of 400 Euro**, in Germany

PROFESSIONAL EXPERIENCE: (Total- **26.6** Yrs)

1. **N B Navale Sinhgad College of Engineering, Solapur** (13th November, 2014 till date)
   Professor and Principal
   Approval as a Principal: SUS/TA/117(4)/2016-17/3557 Date: 1st June, 2017
   Responsible for the overall development of **Academic, Research, Co-Curricular and Extra-Curricular Activities** of students and staff.

Achievements of the Institute:

- Institute is accredited by **NAAC with Grade 'A' (CGPA 3.15/4)**
- Institute has received **'A++' Grade (93.33 %)** in AAA by PAH SU Solapur
- Institute is Recognized by '**Atal Ranking of Institution for Innovation Achievement'** by Govt. of India's Ministry of Education (in band 51-75) in 2020
- **Institute Innovation Council (IIC)** of the College has received 4.5/5.0 Star Rating by AICTE New Delhi and MoE's Innovation Cell in 2019-20.
- Received **Best College Award** by PAH Solapur University Solapur in 2023
- Received **Best Principal Award** by PAH Solapur University Solapur in 2023
- Received **Best Educational Trust Award** by PAH Solapur University in 2024
- Established **Research Center** for Cloud Physics Research by **IITM Pune, Ministry of Earth Science, Govt. of India**
- Established the '**Center for Research and Technology Development'** (CRTD), for the inculcating the research culture at the institute

a) Major Events Organized by the Institute are:

- ✓ Hosted '**12th and 15th Youth Festival'** of Solapur University, Solapur
- ✓ A Multi-Mega Event on "**Innovative Technologies for Rural Development and Their Commercialization**", (ITRDC-2017) in Collaboration with CRTD and Bhabha Automic Research Center (**BARC**) from 17th to 20th Feb, 2017

b) **Toatal 48 MoU's** Signed with the reputed Industries/Organizations such as:

- **Indian Institute of Tropical Metrology** (IITM), an **Govt. of India** initiative under the ministry of Earth Science, for establishing the research Lab in the research of Cloud Physics and received total investment of approx. INR 10 crore
- **Reliance Jio**, for establishment of Fiber optic network to provide free Wi-Fi
- **Tata-Technologies** to provide free training CAD/CAM Software with certificates
- **SPAN Associates** for placement of the students as future entrepreneurs
- **K-Watt Solutions**, IIT Mumbai, to train the students on Solar Technologies
- **Maharashtra Pollution Control Board**, to measure the pollution in Solapur City
- **Ultratech Cement,** to provide training and placement to Civil Engg. Students

2. **Sinhgad Institute of Technology, Lonavala, Pune** (26th June, 2007 to 12th Nov,14)
Approval as Associate Professor: Univ. of Pune CCO/1629 Date: 28th May, 2014
Head (E&TC Engg.)- From 30th June 2011 to 31st December 2013.
Associate Professor – 1st April 2010 to 12th Nov. 2014
Asstt. Professor - from June 1st, 2009 to March 31st, 2010.
Sr. Lecturer – from April 1st, 2008 to May 31st, 2009.
Lecturer - from June 26th, 2007 to March 31st, 2008.
   - Held the position of **Head**, Department of E & TC Engg.
   - Represented Department of E & TC Engg. To **National Board of Accreditation** and Received Accreditation for Two Years.
   - Convener for One day workshop on "Opportunities in Electronics Sector of Design and Manufacturing", in Collaboration with **DiET, Govt. of India.**
   - Acted as **PG Coordinator** (M. E. Computer Engg.)
3. **Bharati Vidyapeeth's College of Engineering, Navi Mumbai** 24/09/01 to 25/06/07
Lecturer (*Approval No. CONCOL/SA/5885 of 2004, Mumbai-32, Dated: 23/11/2004*)
   - Successfully carried over the duties as **Exam Cell In charge** for two years.
   - Successfully carried over the duties as **Student council In charge**.
   - Coordinated the **alumni association** of the college.
4. **ACCEL FRONTLINE Global IT Services**, **Pune** 15th July 2000 to 20th Sept. 2001
   - Worked as Assistant in Testing and Development
5. **Government Polytechnic, Pune** Visiting Lecturer: 21st Jan, 2001 to 19th May, 2001
   - Subjects Taught: Theory (Basic Electronics, LIC), Practical (ECA)

APPOINTMENTS/RESPONSIBILITIES HANDLED AT PROFESSIONAL LEVEL :

1. Membership of **Authorities and Bodies of University / Institutions**:
   - I/c **Dean, Faculty of Science and Technology** at PAH Solapur University, Solapur (Sept. 2020 to May 2023)
   - Member, **Senate** at PAH Solapur University, Solapur for two terms
   - Member, **Academic Council**, PAH Solapur University, Solapur
   - Member, **Management Council**, PAH Solapur University, Solapur
   - Chairman, **RRC and DRC** in Science and Technology
   - **Member BoD and BoEE** at PAH Solapur University, Solapur
   - Member **Shulk Nishiti Samiti** PAH Solapur University, Solapur
   - Non –official member of **UPSC**, Govt. of India, New Delhi
   - **Chairman, Board of Studies**, Electronics and Telecommunication Engineering, PAH Solapur University, Solapur (**SUS**)
   - **Member, Board of Studies,** Electronics, E&TC and Biomedical Engineering at Dr. Babasaheb Ambedkar Technological University (**DBATU**), Lonere
   - **Chairman, Local Inquiry Committee,** Solapur University, Solapur
   - **Chairman, MahaDBT scholarship verification,** Social Welfare Dept., Solapur
   - Chaired the committee for checking the proposals submitted for starting of New Division/Course/Institution, for PAH **Solapur University, Solapur**
   - Member of "**New Education Policy**" constituted by Hon. Vice Chancellor of **Solapur University, Solapur**
   - Single man Expert Committee for Verifying the Revaluation Result at **Solapur University**, appointed by Hon. Vice Chancellor
   - **Single man Expert Committee** for finding the discrepancies in the Question paper for **Solapur University**
   - Expert Member for the Staff Appraisal presentations and Recommendations at **Vishwanekaten's IMEET, Khopoli, Raigad**
   - **Chairman, Academic & Research Score** (ARS) Committee at PAH Solapur University, Solapur
   - **Chairman,** University Examination Lapses Committee at PAHSUS
   - **Governing Body Member of Autonomous Institute** at Walchand Institute of Technology Solapur and Sangameshwar College Solapur
   - **Academic Council Member** of SVERI's Colle of Engineering Pandharpur and KBP College Pandharpur
   - **Board of Studies Member** at Cummins Women's College of Engineering, Pune
   - **Board of Studies Member** at SPPU Pune in the subject of Microelectronics
   - **Chairman Examination Lapses** Committee at PAH Solapur University, Solapur
2. Research:
   a. **Recognized as Ph. D. Research Guide** in the Subject of Electronics Engineering and E &TC Engineering, by **PAH Solapur University**, Solapur
   b. **Recognized as Ph. D. Research Guide** in the Subject of Electronics Engineering, Under the faculty of Engineering & Technology, **Dr. Babasaheb Ambedkar Marathwada University**, Aurangabad, to guide **Two** Ph.D. Students
   c. **Approved as Co-Supervisor** of the Ph.D. Candidate by **Visvesvaraya Technological University**, Belgavi, Karnataka from June 2015
   d. **Successfully Guided Two PhD** candidates and **Six** are pursuing
3. Administrative:
   a. Chaired the position of **Convener of the 12th and 15th Youth Festival**, of Solapur University, Solapur

b. Chaired the position of **Secretary for the Multi-Mega Event ITRDC-2017** organized in collaboration with **BARC, Mumbai**
c. Appointed as a **Principal** at NBN Sinhgad College of Engineering, Soalpur **at very young age**.
d. **Nominated Member** of Committee by UGC and PAHSUS for Granting Autonomy at Walchand Institute of Technology, Solapur

4. Community Services:
   a. **Donated Ten Books** in the Library of STBCoE, Tuljapur for the students benefit
   b. Donates blood at-least twice a year (Donated **more than 56 times till now**)
   c. **Guides & Motivates students** for their career through different social platforms
5. Awards and Recognition:
   - **Best Principal Award** by PAH Solapur University, Solapur on its 19th Foundation Day, held on 1st August 2023.
   - **Best College Award** by PAH Solapur University, Solapur on its 19th Foundation Day, held on 1st August 2023.
   - Receipient of '**Young Academic Leadership Award**' by Institute of Engineers Solapur chapter, in November 2022
   - Received **Adarsh Seva Sanman Puraskar** by daily Tufan Kranti on 20/03/2022
   - Received **Best Researcher Award** in 7th International Scientist Award on Engineering, Science and Medicine in 2020
   - Awarded as '**Excellance in Education**' at Solapur Shikshak Parishad in December 2018
   - Awarded with "**Dr. APJ Abdul Kalam Teacher Inspire Award**", by Dreams Foundation, Solapur on 5th Sept, 2015
   - Awarded with **Best Participant Award** at IIT, Kharaghpur in 2009
   - **One of the four Researchers** from all over India, who have been invited under European Commission Fellowship for Post-Doctoral Research
   - Paper was **awarded as a best paper** with the price of **400 Euro**, in Germany
   - Received **total research grant of Rs. 42 Lakh** from different Funding Agencies
   - Received "**Active Engineering College Principal Award**" by Maharashtra State School implementation Committee in January 2025
   - Appreciation by '**NextWave**' for Significant Contribution to AI Education in 2024

WORKSHOPS/CONFERENCES/PROGRAMS ORGANIZED:

- **Secretary**, Innovative Technologies for Rural Development and their Commercialization (ITRDC-2017) (A Multi-Mega Event) with Emphasis on Renewable Energy and DAE Technologies) organized in Collaboration with BARC Mumbai, 18th-20th February, 2017
- **Organizing Chair** for 12th Youth Festival (9th-12th Oct, 2015) and 15th Youth Festival (20th – 23rd October 2018) of Solapur University, Solapur
- **Convener**, International Conference on Silk Fabroin & Sericulture Resources (IC-SFSR-24) in collaboration with SoES, PAH Solapur University, Solapur (16-19 Feb., 2024)
- **Convener**, National Conference on 'Innovative Technologies for Rural Development and their commercialization' (A Multi-mega Event), 3-5 March, 2025
- **Convener** for One day workshop on "Opportunities in Electronics Sector of Design and Manufacturing (ESDM)", in Collaboration with *DiET,* ***Ministry of Information Technology, Govt. of India.***
- **Convener** of National Level Technical Festival, *'XENOS 2010'*
- **Organized** workshops on Matlab, Funded by *BCUD, University of Pune*
- **Conducted** workshop on 'Writing Technical Documents using LYX' at SIT, Lonavala

- **Conducted** Faculty Development program on Advances in the modern instruments, in Collaboration with *Scientech, Pune*
- **Coordinated** International Conference on Wireless Standardization organized by ***GISFI***
- **Coordinated** the projects on Satellite Image Processing with *Indian Space Research Organization (**ISRO**), Banglore.*

INVITED TALK DELIVERED AT:

- Delivered an Expert Lecture at **VJTI, Mumbai** in AICTE Sponsored One week QIP
- Key Note Speaker, at **Dept. of Technology, Shivaji University**, in the workshop on Microstrip Antennas and their Applications
- Invited as a Chief Guest at **STB College of Engineering**, **Tuljapur**
- Invited Speaker for STTP at **Thakur College of Engineering and Technology**, **Mumbai**
- Resource Person for Three Days Workshop **K J College of Engineering**, **Pune**
- Chief Guest at **WIT, Solapur** for the Valedectory function of Two days' Workshop on IoT
- Chief Guest at **Swami Vivekanand Institute of Technology**, **Solapur**
- Invited Speech at **Vidyalankar Institute of Technology, Mumbai**.
- Motivational Speaker and Educational Councilor at **HRM, Institute, Delhi**
- Workshop at **Asia Pacific Institute of Information Technology, Panipat, Hariyana**.
- Session Chair of National Conference at **Sinhgad College of Engineering, Pune**
- Short Term Training Programon "Microwave Engineering" at **Marathwada Institute of Technology, Aurangabad**.
- Chief Guest at Faculty Development Program at **Javahar Institute of Tech., Nashik**
- Short Term Training Program at **Pillai's HOC College of Engineering, Rasayani**
- National Conference at **Vidyalankar Institute of Technology, Mumbai**
- Faculty Development Program at **Sinhgad Engg. College, Pandharpur**
- National Conference at **Masters in Computer Applications, Pandharpur**
- Educational Councilor at **SNDT, College of BioTechnology, Malegaon**
- Workshop on Lyx, at **Sinhgad Institute of Technology, Lonavala**
- Invited speech at **Bharati Vidyapeet's College of Engineering at, Navi Mumbai**
- Conference at **Vidya Pratishtan College of Enginnering, Baramati, Pune**
- National Conference at **A.G. Awate College of Engineering, Hadpasar, Pune**
- Invited speech at **Terna College of Enginering, Nerul, Navi Mumbai**
- Invited speech at **Anjuman Islam Polytechnic, Navi Mumbai**
- Invited Speech at **Dream Foundation Career Guidance Program at Solapur**
- Chief Guest at Program held by **Yashwant Shaikshnik Samiti, Solapur**
- KeyNote Speaker at Career Mahayatra organized by **Rotary Club of Beed**
- Speaker at the Program on Career Guidance organized by **Solapur Municipal Corporation, Solapur**
- Invited as a guest at "Coffee with Sakal" organized by **Sakal Media Group, Solapur**
- Chief Guest at **SES Polytechnic, Solapur** on the occasion of Engineers Day
- Chief Guest for the inaugural Function of TechnoSiddh-17, at **SSWP, solapur**
- Guest of Honor and Key Note Speaker at National Conf. at Modern Education Societie's **Wadia College of Engineering, Pune**
- Chief guest for the inauguration of Project Competition at **SVIT, Solapur**
- Guest at the Principal's Meet organized by **Sakal Media Group**
- Invited as the Speaker at **Bharati Vidyapeeth's AKIMSS, Solapur**
- Chief Guest at Installation Ceremony of **CSI Solapur Chapter** at AKIMSS,Solapur
- Inaugural Speaker at **AKIMSS's NSS Activity Camp, Solapur**
- Technical Speaker at the Career Guidance Program, organized by **G. P. Solapur**

- Keynote Speaker for TEQIP Funded Two days Workshop at **Department of Technology, Kolhapur**
- Keynote Speaker at Two Days National Conference on "Innovations & Developments in Computational and Applied sciences" held at **MIT, Alandi**
- ….. And many more

Membership of Professional Bodies/ Associations:

1. **Member** of Institute of Electrical and Electronics Engineering (**IEEE**), (No. - 91145534)
2. **Life Member** of The Institution of Electronics and Telecommunication Engineers (**IETE**), (No. M-215200)
3. **Life Member** of The Indian Society for Technical Education (**ISTE**), (No. LM 41166)
4. **Member** of Maharashtra State **Green Army** (No. SO/2017/Ind/317028)
5. **Life Member** of Maharashtra Sahitya Parishad, Solapur (30/12/2015)

Personal Details:

Father's name	: Late Dattatray Ramchandra Nawale
Date of birth	: 25th September, 1977
Category	: Open (Hindu-Maratha)
Gender	: Male
Marital Status	: Married
Languages Known	: English, Marathi, Hindi, Italian and French
Correspondence Address	: Principal, NBN Sinhgad College of Engineering, Solapur-Pune Highway, Kegaon-Solapur, 413255, (MS), India

References:

1. Dr. Nisha P. Sarawade (Ph. D. Guide)
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2. Dr. Kailash J. Karande
Principal and Campus Director,
Sinhgad Institutes, SKN Sinhgad College of Engineering, Korti, Pandharpur, MS
Cell: +91 9324504016, 7350508899
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The above furnished information is correct to the Best of my Knowledge and with respect to Code of Conduct.



Prof. Dr. Shankar Dattatray Nawale