Dr. Punjan Dohare

Curriculum vitae

Personal Details

Present Status : Assistant Professor Grade-II

Address : EE321, Electrical Engineering Department, MANIT Bhopal

Email : punjan.nitk@gmail.com

Contact No : +918054017836

Academic Qualification

DOCTOR OF PHILOSOPHY ***(Engineering Sciences)*** with 9.29 CGPA **2020**
Academy Of Scientific & Innovative Research

MASTER OF TECHNOLOGY ***(Control System)*** with 8.449 CGPA **2011**
National Institute of Technology, Kurukshetra

BACHELOR OF ENGINEERING ***(Electrical Engineering)*** with 77.00% ***(Dist.)*** **2008**
Madhav Institute of Technology & Science, Gwalior

Research Interest

- Control applications to electrical system, Image Processing, Medical Imaging, Bio-instrumentation, Biomechanics, Electronic Nose, 3D Printing

Ph.D. Thesis Title

- Understanding Olfaction: A CFD based approach for the development of bio-inspired sensor chamber for electronic nose

Ph.D. Thesis Adviser's Name

- **Dr. Amol P Bhondekar**, Senior Principal Scientist, CSIR-Central Scientific Instruments Organisation, Chandigarh India

Teaching and Research Experience

S. No.	Position held	Institute	From	To
1	Assistant Professor	Madhav Institute of Technology & Science, Gwalior	18th Jan. 2018	30th Sep. 2021
2	Senior Project Fellow	CSIR-Central Scientific Instruments Organisation	13th Aug. 2012	31st Mar. 2017

Courses Taught

- I have taught various courses falling under the domain of Electrical Engineering at Undergraduate as well as Postgraduate level. Some of them are listed as bellow:
  - Control System (B.Tech & M.E.)
  - Basic Electrical Engineering (B.Tech)
  - Network Theory (B.Tech)

Sponsored Projects

- Project Title: The three-dimensional approach in joint replacement technique to aid the orthopaedic surgeons
  Role: Principal Investigator
  Funding Agency: AICTE
  Amount: 14.87 Lakhs
  Duration: 21 Months
  Status: Completed

Publications

- **Punjan Dohare**, Amol P. Bhondekar, Anupma Sharma, and C. Ghanshyam, "Influence of airflow dynamics on vortices in the human nasal cavity", Engineering Computations, Vol. 36 No. 9, pp. 3164-3179, 2019. https://doi.org/10.1108/EC-08-2018-0335 (Impact Factor-1.67)
- **Punjan Dohare**, Sudeshna Bagchi and Amol P. Bhondekar, "Performance optimization of sensing chamber using fluid dynamic simulation for electronic nose applications", Turkish Journal of Electrical Engineering & Computer Sciences, 2020, 28(5), 3068-3078. https://doi.org/10.3906/elk-1903-103 (Impact Factor- 1.1)
- **Punjan Dohare**, and Sumit Jha. "A Proposal for Reliable Routing in Communication Network." Advanced Materials Research, vol. 403–408, Trans Tech Publications, Ltd., Nov. 2011, pp. 1057–1061. https://doi.org/10.4028/www.scientific.net/amr.403-408.105

International Conferences

- **Punjan Dohare** and A.K. Wadhwani, "Three-Dimensional Printing of Joint Replacement for Clinical Applications", 2nd International Conference on Multidisciplinary Innovation in Academic Research (ICMIAR-2021), Chennai, March 18, 2021.
- **Punjan Dohare** and Amol P. Bhondekar, "Computational fluid dynamic approach to design the bio-inspired sensor chamber for volatile detection of electronic nose applications", Indo-German Conference on Computational Mathematics (IGCM), IISc, Bangalore, December 02-04, 2019.
- **Punjan Dohare** and Amol P. Bhondekar, "Laminar airflow computational modelling in the human nasal cavity", International Conference on Sustainable and Innovative Solutions for Current Challenges in Engineering & Technology (ICSISCET 2019), November 02-03, 2019.
- **Punjan Dohare** and Sumit Jha, "A proposal for reliable routing in communication network", In Proceedings of the 2011 International Conference on Control, Robotics and Cybernetics (ICCRC 2011), New Delhi, India, March 19-20, 2011.
- **Punjan Dohare** and Sumit Jha, "Energy Management and Electrifying Domestic Areas" in 5th International Multi Conference on Intelligent Systems, Sustainable, New and Renewable Energy technology and Nanotechnology, (IISN-2011), Klawad, India, 2011.

National Conferences

- **Punjan Dohare**, Ritesh Kumar, S. R. Chowdhury, S. T. Sarkar, Anupma Sharma, C. Ghanshyam, and Amol Bhondekar (2016, April). Importance of Aerodynamics in a Human Nasal Cavity. In Proceedings of the Modern Information and Communication Technologies for Digital India (MICTDI-2016).
- **Punjan Dohare**, Sonam Bandil, and Somendra Mathur (2008, March). Sensor and Measurement system for distributed temperature profiling in a test process reactor. In Proceedings of the 13th National Seminar on Physics and Technology of Sensors (NSPTS-13).
- Prerna Soni, **Punjan Dohare**, and Sonam Bandil (2006, November). Induction motor Tests Using MATLAB/Simulink. In Proceedings of the National Conference on Advances in Electrical Engineering (AEE-06).

Book Chapter

- **Punjan Dohare** and Amol P. Bhondekar (2020) Laminar Airflow Computational Modelling in the Human Nasal Cavity. In: Pandit M., Srivastava L., Venkata Rao R., Bansal J. (eds) Intelligent Computing Applications for Sustainable Real-World Systems. ICSISCET 2019. Proceedings in Adaptation, Learning and Optimization, vol 13. Springer, Cham. https://doi.org/10.1007/978-3-030-44758-8_41

Awards and Recognitions

- Best paper award in 47th Mid Term Symposium on Modern Information and Communication Technologies for Digital India conducted (April 09-10, 2016).
- Received a fellowship from the M.P. Council of Science and Technology in 36th M.P. Young Scientist Congress.

Membership of learned societies

S. No.	Name of Body	Date of Award	Status of Membership
1.	IEEE	09-03-2021	Annual
2.	IETE	24-03-2021	Life

Technical Skills

Software

- MATLAB, SIMULINK, OCTAVE, Fluent, CFD-CFX Post, MIMICS, ICEM CFD

Hardware

- 3D Printing Machine

REFERENCES

Dr. Amol P Bhondekar
Senior Principal Scientist,
CSIR-Central Scientific Instruments Organisation,
Sector - 30 C Chandigarh 160030. Mobile: +918146585825
E-mail id: amol.bhondekar@gmail.com

Dr. Akhilesh Swarup
Professor (Retired),
Electrical Engineering Department,
NIT Kurukshetra, Haryana – 136119. Mobile: +919416266610
E-mail id: akhilesh.swarup@gmail.com

Dr C Ghanshyam
Ex-Chief Scientist,
CSIR- Central Scientific Instruments Organisation,
Sector - 30 C Chandigarh 160030. Mobile: +919815363532
E-mail id: cghan@rediffmail.com