

## Profile Summary: Prof. (Dr.) Shakti Kumar

Director, Panipat Institute of Engineering and Technology, Samalkha, Haryana, India.



### Educational Qualifications:

**Ph.D. (Electronics & Computer Engg.) (1996)** from National Institute of Technology, (formerly REC) Kurukshetra, Haryana, India

**M.S. (Electronics & Control) (1990)**, Birla Institute of Technology and Science (BITS) Pilani, India

### Membership of Professional Bodies:

**Fellow IE (India), Fellow IETE, Member IEEE, Life Member ISTE, Member AIMA**

**Experience:** more than 30 years of experience in Teaching, Research and Administration (More than 15 years as Director/Principal)

**Served as Vice Chancellor, Baddi University of Emerging Sciences & Technology, Baddi, Distt. Solan, Himachal Pradesh.**

Served at

1. National Institute of Technology (Formerly REC), Kurukshetra,
2. **Birla Institute of Science and Technology (BITS) Dubai Campus, UAE,**
3. Chandigarh University, Gharuan, Panjab,
4. **Atlim University, Ankara, Turkey.**
5. Haryana Engineering College, Yamunanagar Haryana.

Have been Co-ordinator, Centre for Excellence in Reliability Engineering at National Institute of Technology, Kurukshetra Funded by MHRD Govt. of India and Director, Computational Intelligence Laboratory at Institute of Science and Technology, Kalawad, Haryana.

Have been a Member of various Boards of Studies at NIT Kurukshetra; GGS Indra Prastha University Delhi; Guru Jambheshwar University of Science & Technology, Hisar; DCR University of Science and Technology, Murthal, Haryana; Atilim University, Ankara, Turkey; BITS, Dubai Campus, UAE; Chandigarh University, Panjab; and Punjab Technical University, Kapurthla, Punjab.

### Research Contributions:

Current research interest: **Soft Computing, Machine Learning, Quantum Computing**

1. **a) Research Articles:** 215 **b) International Book Chapters:** 9
2. **c) Patents:** 12 **d) Ph. D. Supervision:** Completed 14.
3. Successfully Designed and Developed prototype of experimental LiFi based Heterogeneous Receiver (TV/Computer/Mobile) Broadcast Station at PIET, Panipat.
4. Designed and developed Fuzzy Logic/ANN based Machine Learning model development Toolbox.
5. Design & Development of Electronic Insulin Delivery System for Type 1 diabetes patients in progress. Concept testing in progress.

6. Successfully executed 4 industrial Design and Development projects.
7. Successfully completed one **MHRD** and one **DRDO** funded Research Project.
8. Co-designer DRDO Funded Experimental WMN (Project Data-Link) for Indian Navy
9. Designed and Developed Fuzzy Design Engineer **FDEng** a Software Design Tool that automates the design of Fuzzy Logic Based Systems from the given data.
10. Project Director, LiFi based Lightways Broadcast Project at Baddi University of emerging Sciences and Technology, Baddi.
11. **Organised 7 International and 6 National Conferences** on Intelligent Systems and Networks, Nanotechnology and Renewable Energy Sources.
12. **Organized 6 National Level Workshops** in the field of Applied Soft Computing, Biologically Inspired Computing and Fuzzy Logic Based Systems, Machine Learning.
13. **Expert Lectures:** Around 100 expert lectures in India as well as abroad.

### **Awards & Honours:**

1. “**Eminent Engineering Personality**” Felicitations by Institution of Engineers (India) at the 35<sup>th</sup> National Convention of IE (India) held at TERII, Kurukshetra, Haryana 19<sup>th</sup> Oct 2019.
2. “**Sir Thomas Ward Memorial Prize**” by The Institution of Engineers (India), Calcutta, for the year 2010.
3. “**Rashtriya Nirman Award-2001**” by International Business Council, New Delhi, India.
4. **Best Paper Award** for a jointly authored paper by International Academy of Science, Engineering and Technology (IASET) in Dec 2014.
5. Was adjudged the **Outstanding Instructor Dec 1988 and Best Instructor** June, 1989 at Naval Electrical Engineering Institute, INS Valsura the Asia's largest Naval Electrical/ Electronics Engg. Training Institute.

### **Social Contributions and Sports:**

1. Donated blood about 30 times so far.
2. Member, District Juvenile Justice Board, Yamunanagar, Haryana, From 12<sup>th</sup> Aug, 2009 to May 2011
3. President, Go Green International Organization GGIO (India, Chapter).
4. Won bronze medal in Hammer Throw in Indian Navy Athletics Championship, Cochin 1988-89
5. Won Gold Medal in Hammer Throw, Baddi University Athletic Championship 2016.