

# DR. MANISH DEV SHARMA

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## PROFESSIONAL QUALIFICATION:

**Ph. D** in Faculty of Engineering & Technology, from Panjab University, Chandigarh.

**M.Tech.** in the First Division, from **Punjab Engineering College, Chandigarh**, under Panjab University.

**MBA** [Human Resource Management] from IGNOU, New Delhi.

**B.Tech. [Electronics and Communication]** in First division, under PTU Jalandhar, Punjab.

**Post Graduate Diploma in Management, Human Resource Management & Diploma in Management.**

## PRESENT WORKING:

Job Designation: **Assistant Professor ( Physics & Electronics )**.

University: Department of Physics, **Panjab University, Chandigarh-160014.**

## SHORT TERM TRAINING PROGRAMS / WORKSHOPS ATTENDED ON:

- MATLAB and its Applications.
- Optical Fiber Communication.
- Script Writing & Lecture Based Video Film Production.
- Trends in Telecommunications.
- New Trends in Mobile Communications.
- Faculty Awareness Camp on Entrepreneurship.
- Embedded Systems and Design.
- Lean Manufacturing: Today & Tomorrow.
- Intellectual Property Rights Sensitization Program by FICCI-IPR division New Delhi.
- NBA Accreditation and QA in Private Colleges.
- Technology Development and Management.
- Implementation of TQM, 6 Sigma, 7 S and ISO System.
- Entrepreneurship Development.

## RESEARCH PAPERS PUBLISHED AT INTERNATIONAL / NATIONAL LEVELS:

- **1 article in E-Business magazine** [International Level Magazine] **of September 2007 Issue.**
- **1 paper** on *Storage Media* in national referred journal **Technology Trends** of April 2009 Issue
- **1 another article for** International Level Magazine in the pipe-line for the next coming issue.
- 5 Research papers on Mechatronics.
- 9 Research papers on Cellular Systems.
- 2 Research paper on Artificial Intelligence.
- 5 Review paper on Microprocessor.
- 3 Review paper on Quality in Engineering Education.

**GUEST FACULTY:**

- Physics Department, Panjab University, Chandigarh, for Session 2009-2010 for PG Course.

**LIFE MEMBERSHIP :**

Life Memberships of

**Indian Society for Technical Education (ISTE),  
Indian Physics Association (IPA),  
Indian Association of Physics Teachers (IAPT),  
Institution of Electronics and Telecommunication Engineers (IETE),  
Chandigarh Region Innovation and Knowledge Cluster (CRIKC).**

**INDUSTRIAL TRAINING :**

- Six months of training at H.M.T. (Hindustan Machine Tools), Pinjore, Distt. Panchkula, HR (India), on CNC (Computerized Numeric Control) Machine, including hardware & software installation.
- One month of training at **B.H.E.P.** Dist. Doda, J&K(India) at **Jai Parkash Industries Pvt. Limited** on sensors installation for operation of various electrical machines of the industry.

**SOFTWARE PROFICIENCY & PROJECT UNDERTAKEN :**

- STEP-7 Software Program to test Running of AC/DC Drives,
- VISUAL BASIC 6.0 Project of library of files.
- Video Lecture was recorded (8 min) at NITTTR Chandigarh, on Mobile Introduction and Use.
- VHDL as VLSI Language: Programming and Design
- Centralization of Sensors with Microprocessor-based controller for entire Batching Plant.

**THE CUTTING EDGE :**

Define my self as a gregarious & goal-oriented person. I would always like to see my today better than yesterday both personally & professionally. A self-starter with excellent analytical & communication skills & never say die attitude & a team player with an aptitude to rise to the occasion. Would like to be in an organization, which fosters team spirit & gives me an opportunity to grow by providing the variety and challenge.

The above details complete my resume. While I submit for your perusal.  
Always awaiting favorable response.

Yours sincerely,

***Manish Dev Sharma.***

## List of Summer Schools /Workshops / Sttps Attended:

- **Optical Fiber Communication** workshop at NITTTR, Sector 26, Chandigarh, in May 2004.
- **Script Writing & Lecture Based Video Film Production** workshop at NITTTR, Chd., in June 2006.
- **Trends in Telecommunications** workshop at NITTTR, Sector 26, Chandigarh, in June 2007.
- **Embedded Systems and Design** workshop at RIEIT, Railmajra, by EEAST, Chandigarh, in Aug. 2007
- **New Trends in Mobile Communication** Short Term Training Program by Rayat Institute of Engineering & IT, Railmajra, PB, in June 2008.
- **Faculty Awareness Camp on Entrepreneurship** Short Term Training Program by Rayat Institute of Engineering & IT, Railmajra, PB, in June 2008.
- **Lean Manufacturing: Today and Tomorrow** STTP by BBSBEC, Fatehgarh Sahib, PB in Dec. 2008
- **NBA Accreditation and QA in Private Colleges** summer school at NITTTR, Chandigarh, in July 2009.
- **Technology Development and Management** summer school at NITTTR, Chandigarh, in August 2009.
- **Implementation of TQM, 6 Sigma, ISO System** summer school at NITTTR, Chandigarh, in Aug. 2009.
- **Orientation Programme-116<sup>th</sup>** by UGC Academic Staff College, AMU Aligarh, Aligarh UP in July 2011
- Short Term Course on **ANN with MATLAB Programming** at NITTTR, Chandigarh, in September 2011.
- **Refresher Course** in Research Methodologies, by UGC Academic Staff College, PU Chandigarh in November 2012
- **Workshop on Recent Developments in Functional Materials** by PEC University of Technology, Chandigarh in April 2013.
- **Refresher Course** in Experimental Physics, by IAS **Indian Academy of Sciences**, Bangalore in June 2013
- **Faculty Updation Training on Electronic Packaging, PCB and Industrial Design** organized by CDAC, Hyderabad, Andhra Pradesh from January 01-10, 2014
- **Refresher Course** in Material Preparation and Measurement of Properties, by IAS **Indian Academy of Sciences**, Bangalore in September 2014
- **60<sup>th</sup> DAE Solid State Physics Symposium** organized by Amity University, Noida, UP from December 21-25, 2015.
- Short Term Course on **Instrumental Techniques for Chemical and Material Analysis (ITCMA-2016)** by PEC University of Technology, Chandigarh in June 06-11, 2016.
- Newton Bhabha Fund, DBT and IISER Pune sponsored National Workshop in RBPT, conducted at IISER, Mohali, Punjab in January 23-25, 2017 on STEM Teachers Training Workshop on Research Based Pedagogical Tools.

- Newton Bhabha Fund, DBT and IISER Pune sponsored National Workshop in RBPT, conducted at IISER, Pune, Maharashtra in March 01-04, 2017 on Level 2 STEM Teachers Training Workshop on Research Based Pedagogical Tools.
- Workshop on **Identification of Subject wise resources for Teachers in Higher Education** organized by National Resource Centre for Education, NIEPA, New Delhi from June 06-08, 2018.
- **GIAN** Course on **Nanostructured Metal Oxides for Sensing and Environmental** Applications sponsored by Ministry of Human Resource Development and organized by Panjab University, Chandigarh from August 06-10, 2018.
- Short Term Course on **MATLAB for Engineering Application** at **Panjab University Chandigarh**, conducted by NITTTTR, Chandigarh, in March 2019.
- UGC Sponsored one week Short Term Course on Research Methodology, conducted by Human Resource Development Centre, Panjab University, Chandigarh, from October 11-17, 2019.
- UGC Sponsored Two weeks **Refresher Course** on India: Traditions, Arts, Culture and Society, by Human Resource Development Centre, Panjab University, Chandigarh, from in November 2019.

## List of National Seminars Attended:

- **Intellectual Property Rights Sensitization Program** by FICCI-IPR division in February 2009.
- National seminar on **Research in Higher Technical Education** at NITTTR, Chandigarh, in February 2010.
- Springer Road show on **e-Resources from the Researcher and End-user Perspective and its Benefits** by the Springer Publications, Chandigarh, in September 2013.
- Tutorials on Introduction to **Mobile Systems** and **Wireless Sensor Networks** at IIT, Ropar, in June 2014.
- National Seminar on Material Characterization by Thermal Analysis, conducted by NETZSCH India Private Limited, in October 2014.

## **List of National Seminars / Symposium / Conferences Conducted:**

- Function as Resource Person at National Seminar on Recent Trends in Physics, conducted at Dev Samaj Post Graduate College for Women, Ferozpur, PB on 22<sup>nd</sup> September, 2016 for delivering the expert talk.
- Function as Resource Person at Two Days National Symposium on Emerging Microwave Remote Sensing Technology for Rural Applications (MISENTRA-2017), conducted at Galgotias College of Engineering and Technology, Greater Noida, UP on 30<sup>th</sup> March, 2017 for delivering the two expert talks.
- Function as Invited Speaker at Two Days National Seminar on Recent Developments in Nano Science & Technology, held at Government Autonomous College, Rourkela, Odisha on 9-10<sup>th</sup> September, 2018 for delivering the expert talk.
- Function as Technical Program Committee Member at 6<sup>th</sup> International Conference on Signal Processing and Integrated Networks, conducted at Amity University, Noida Campus, UP in March, 2019.

## List of Workshops Conducted:

- **AICTE Funded ISTE Sponsored** Short Term Training Program on New Trends in Mobile Communication Short Term Training Program conducted in the Rayat Institute of Engineering & IT, Railmajra, Nawanshar, PB.
- **AICTE Funded ISTE Sponsored** Short Term Training Program on Faculty Awareness Camp on Entrepreneurship conducted in the Rayat Institute of Engineering & IT, Railmajra, Nawanshar, PB.
- Function as Resource Person at 56<sup>th</sup> Science Academies' Refresher Course in Experimental Physics, conducted at Panjab University Chandigarh in February 2014 of 15 days duration for delivering expert talks as well as conducting the experiments.
- Function as Resource Person at 68<sup>th</sup> Science Academies' Refresher Course in Experimental Physics, conducted at Central University of Rajasthan in March 2015 of 15 days duration for delivering expert talks as well as conducting the experiments.
- Function as Resource Person at 70<sup>th</sup> Science Academies' Refresher Course in Experimental Physics, conducted at National Institute of Technology, Aizawl, Mizoram in May 2015 of 15 days duration for delivering expert talks as well as conducting the experiments.
- Function as Resource Person at 72<sup>nd</sup> Science Academies' Refresher Course in Experimental Physics, conducted at Panjab University Chandigarh in June 2015 of 15 days duration for delivering expert talks as well as conducting the experiments.
- Function as Resource Person at 73<sup>rd</sup> Science Academies' Refresher Course in Experimental Physics, conducted at Kurukshetra University, Kurukshetra, Haryana in September 2015 of 15 days duration for delivering expert talks as well as conducting the experiments.
- Function as a Laboratory Mentor / Trainer in 3<sup>rd</sup> DST INSPIRE Internship Camp at conducted at Panjab University, Chandigarh U.T. in January 2016 of 5 days duration for conducting the experiments sessions.
- Function as Resource Person at 74<sup>th</sup> Science Academies' Refresher Course in Experimental Physics, conducted at Tripura University, Agartala, Tripura in March 2016 of 15 days duration for delivering expert talks as well as conducting the experiments.
- Function as Resource Person at 75<sup>th</sup> Science Academies' Refresher Course in Experimental Physics, conducted at University of Kashmir, Srinagar, J & K in April 2016 of 15 days duration for delivering expert talks as well as conducting the experiments.
- Function as Resource Person at 79<sup>th</sup> Science Academies' Refresher Course in Experimental Physics, conducted at University Panjab University Chandigarh in September 2016 of 15 days duration for delivering expert talks as well as conducting the experiments.

- Function as Resource Person at 80<sup>th</sup> Science Academies' Refresher Course in Experimental Physics, conducted at Holkar Science College, Indore, Madhya Pradesh in October 2016 of 15 days duration for delivering expert talks as well as conducting the experiments.
- Function as a Laboratory Mentor / Trainer in 4<sup>th</sup> DST INSPIRE Internship Camp at conducted at Panjab University, Chandigarh U.T. in November 2016 of 5 days duration for conducting the experiments sessions.
- Function as Resource Person at 83<sup>rd</sup> Science Academies' Refresher Course in Experimental Physics, conducted at Modi University, Lakshmangarh, Rajasthan in January 2017 of 15 days duration for delivering expert talks as well as conducting the experiments.
- Function as Resource Person at 87<sup>th</sup> Science Academies' Refresher Course in Experimental Physics, conducted at Bahra University, Wagnagaht, Himachal Pradesh in May 2017 of 15 days duration for delivering expert talks as well as conducting the experiments.
- Function as a Trainer Expert at Newton Bhabha Fund and IISER Pune sponsored Regional Workshop in RBPT, conducted at Global College of Engineering and Technology, Roopnagar, Punjab in June 2017 of 3 days duration for delivering expert talks as well as handling the activity and discussion sessions.
- Function as Resource Person at 89<sup>th</sup> Science Academies' Refresher Course in Experimental Physics, conducted at GB Pant University of Agriculture and Technology, Pantnagar, Uttarakhand in June 2017 of 15 days duration for delivering expert talks as well as conducting the experiments.
- Function as a Lead Trainer Expert at Newton Bhabha Fund and IISER Pune sponsored Regional Workshop in RBPT, conducted at Department of Biotechnology, University of Kashmir, Srinagar, J & K in July 2017 of 3 days duration for delivering expert talks as well as handling the activity and discussion sessions.
- Function as Resource Person at 90<sup>th</sup> Science Academies' Refresher Course in Experimental Physics, conducted at IIT, Patna, Bihar in October 2017 of 15 days duration for delivering expert talks as well as conducting the experiments.
- Function as a Laboratory Mentor / Trainer in 6<sup>th</sup> DST INSPIRE Internship Camp at conducted at Panjab University, Chandigarh U.T. in November 2017 of 5 days duration for conducting the experiments sessions.
- Function as Resource Person at 94<sup>th</sup> Science Academies' Refresher Course in Experimental Physics, conducted at Panjab University, Chandigarh U.T. in December 2017 of 15 days duration for delivering expert talks as well as conducting the experiments.
- Function as Resource Person at 97<sup>th</sup> Science Academies' Refresher Course in Experimental Physics, conducted at Rajiv Gandhi Central University, Doimukh, Arunachal Pradesh (NE) in April 2018 of 15 days duration for delivering expert talks as well as conducting the experiments.



- Function as Resource Person at 99<sup>th</sup> Science Academies' Refresher Course in Experimental Physics, conducted at BITs University, Ranchi, Jharkhand in June 2018 of 15 days duration for delivering expert talks as well as conducting the experiments.
- Function as Resource Person at 100<sup>th</sup> Science Academies' Refresher Course in Experimental Physics, conducted at Panjab University, Chandigarh U.T. in July 2018 of 15 days duration for delivering expert talks as well as conducting the experiments.
- Function as Resource Person at 101<sup>th</sup> Science Academies' Refresher Course in Experimental Physics, conducted at Osmania University, Hyderabad, Telangana in October 2018 of 15 days duration for delivering expert talks as well as conducting the experiments.
- Function as Resource Person at 104<sup>th</sup> Science Academies' Refresher Course in Experimental Physics, conducted at Modi University, Lakshmangarh, Rajasthan in January 2019 of 15 days duration for delivering expert talks as well as conducting the experiments.
- Conducted a DBT Sponsored two days Experimental Physics workshop, at BBK DAV Girls College, Amritsar, Punjab on March 15-16, 2019 for undergraduate students.
- Function as Resource Person at 106<sup>th</sup> Science Academies' Refresher Course in Experimental Physics, conducted at Maharaja's College (Autonomous), Vizianagaram, Andhra Pradesh in April 2019 of 15 days duration for delivering expert talks as well as conducting the experiments.
- Function as Resource Person at 107<sup>th</sup> Science Academies' Refresher Course in Experimental Physics, conducted at Government Autonomous College, Panposh, Rourkela, Odisha in June 2019 of 15 days duration for delivering expert talks as well as conducting the experiments.
- Conducted a two days experimental workshop "**Hands on Training in Electronics**", at DAV College, sector10, Chandigarh on September 13-14, 2019 for postgraduate students.

## Invited Lectures / Expert Lectures / Special Lectures delivered

- Delivered a special invited lecture on “**Microprocessor: Introduction and Various Versions**” on June 20, 2011 at Quest Group of Institutions, Punjab.
- Delivered a special invited lecture on “**Introduction to the Cellular and Mobile Communication**” on November 20, 2012 at Rayat-Bahra College of Engineering and Biotechnology for Women, Punjab.
- Delivered a special guest lecture on “**Digital Circuits and Microprocessor: Introduction and Uses**” on June 13, 2013 at Rayat-Bahra College of Engineering and Biotechnology for Women, Punjab.
- Delivered a special invited lecture on “**ANN in classification and categorization of malignancy**” on July 26, 2013 at Doaba Women Institute of Engineering and Technology, Punjab.
- Delivered an expert lecture on “**Neural Network and its Applications (Cancer Detection by ANN)**” on September 26, 2013 at Doaba Women Institute of Engineering and Technology, PB.
- Delivered six lectures on “**Thermal Relaxation of Serial Light Bulb**”, “**B-H Curve for Hand iron core**”, “**Thermal Diffusivity**”, “**AC Experiments**”, and “**PCB Introduction and its uses**” during the 56<sup>th</sup> Science Academies’ Refresher Course in Experimental Physics from February 11-13, 2014 at Panjab University, Chandigarh.
- Delivered six lectures on “**Determination of ‘k/e’ using a Transistor**”, “**Signal generator and Power Amplifier**”, “**AC Experiments**”, “**Passive Filters**”, “**AC Bridges**” and “**PCB Design and Applications**” during the Science Academies’ Refresher Course in Experimental Physics from March 10-25, 2015 at Central University of Rajasthan, Kishan Garh, Ajmer, Rajasthan.
- Delivered six lectures on “**Determination of ‘k/e’ using a Transistor**”, “**High Resistance by Leakage Method**”, “**AC Bridges**”, “**Passive Filters**”, “**AC Experiments**”, and “**PCB Introduction and Design**” during the Science Academies’ 72<sup>nd</sup> Refresher Course in Experimental Physics from June 16, 2015 to July 1, 2015 at Panjab University, Chandigarh.
- Delivered a special invited lecture on “**PCB: Introduction and Design**” on May 18, 2015 during the Science Academies’ Refresher Course in Experimental Physics at NIT (National Institute of Technology), Aizal, Mizoram.

- Delivered six lectures on **“High Resistance by Leakage Method”**, **“Determination of ‘k/e’ using a Transistor”**, **“AC Experiments”**, **“Passive Filters”**, **“AC Bridges”** and **“PCB Introduction and Design”** during the Science Academies’ Refresher Course in Experimental Physics from May 7-22, 2015 at NIT (National Institute of Technology), Aizal, Mizoram.
- Delivered a lecture on **“Electronic Communication and Devices”** on September 2, 2015 at Post Graduate Government College for Girls, Sector 42, Chandigarh.
- Delivered a special invited lecture on **“PCB: Introduction and Design”** on September 22, 2015 during the Science Academies’ Refresher Course in Experimental Physics at Kurukshetra University, Haryana.
- Delivered six lectures on **“AC Experiments”**, **“Passive Filters”**, **“AC Bridges”**, **“Capacitor meter – Dielectric Constant of Benzene and Dipole Moment of Acetone”** and **“High Resistance by Leakage Method”** during the Science Academies’ 73<sup>th</sup> Refresher Course in Experimental Physics from September 13-28, 2015 at Kurukshetra University, Haryana.
- Delivered a lecture on **“Operational Amplifier: Introduction and Uses”** on October 10, 2015 at DAV College, Chandigarh.
- Delivered a lecture on **“Operational Amplifier as Comparators”** on November 18, 2015 at DAV College, Chandigarh.
- Delivered a lecture on **“Window Comparators and Comparators with Hysteresis”** on November 19, 2015 at DAV College, Chandigarh.
- Delivered a lecture on **“Network Analysis and Synthesis”** on November 21, 2015 at DAV College, Chandigarh.
- Delivered a lecture on **“Network Theorems”** on November 23, 2015 at DAV College, Chandigarh.
- Delivered six special invited lectures on **“Fundamentals of Digital Electronics”**, **“Introduction to Boolean Algebra and Karnaugh’s Map”**, **“Basics of Analog to Digital Converters and Types”**, **“Digital to Analog Converters and Types”**, **“Arithmetic Logic Circuit: Comparator, Parity Generators”**, **“Multiplexers and Demultiplexers”** from February 16, 2016 to February 24, 2016 at DAV College, Chandigarh.

- Delivered six special invited lectures on **“Encoders and Decoders”**, **“Understanding Shift Registers and their Storage Mechanism”**, **“Introduction to Basic Counters”**, **“Asynchronous Counters and Synchronous Counters”**, **“Decade Counter, Ring Counter and other Types”**, **“Designing of Counter Circuits”** from February 25, 2016 to March 02, 2016 at DAV College, Chandigarh.
- Delivered seven lectures on **“DC Differential Amplifier and Constant Current Source”**, **“Passive Filters”**, **“AC Bridges”**, **“AC Experiments”**, **“High Resistance by Leakage Method”**, **“Determination of ‘k/e’ using a Transistor”** and **“PCB Introduction and Design”** during the Science Academies’ 74<sup>th</sup> Refresher Course in Experimental Physics from March 6-15, 2016 at Tripura University, Agartala, Tripura.
- Delivered four special invited lectures on **“Fundamentals of Microprocessors”**, **“Intel 8085 Microprocessor Architecture”**, **“Intel 8085-Instruction Set, Interrupts, Addressing Modes”** and **“Introduction to Intel 8051 and Its Architecture”** from April 01-04, 2016 at DAV College, Chandigarh.
- Delivered six lectures on **“Passive Filters”**, **“AC Bridges”**, **“AC Experiments”**, **“High Resistance by Leakage Method”**, **“PCB Introduction and Design”** and **“Determination of ‘k/e’ using a Transistor ”** during the Science Academies’ 75<sup>th</sup> Refresher Course in Experimental Physics from Aril 12-18, 2016 at Post Graduate Department of Physics, University of Kashmir, Srinagar.
- Delivered two lectures on **“Photovoltaic Cell”** and **“Wave Propagation in GSM”** during the Science Academies’ 75<sup>th</sup> Refresher Course in Experimental Physics on Aril 21& 25, 2016 at Post Graduate Department of Physics, University of Kashmir, Srinagar.
- Delivered seven lectures on **“Passive Filters”**, **“AC Bridges”**, **“AC Experiments”**, **“Thermal Diffusivity”**, **“High Resistance by Leakage Method”**, **“Determination of ‘k/e’ using a Transistor ”** and **“PCB Introduction and Design”** in Experimental Physics Refresher Course held from September 25, 2016 to October 10, 2016 organized by Department of Physics, Panjab University, Chandigarh.
- Delivered eight lectures on **“Signal Generator and Power Amplifier”**, **“Constant Current Source and DC Differential Amplifier”**, **“Passive Filters”**, **“AC Bridges”**, **“AC Experiments”**, **“High Resistance by Leakage Method”**, **“Determination of ‘k/e’ using a Transistor”** and **“PCB Introduction and Design”** during the Science Academies’ 80<sup>th</sup> Refresher Course in Experimental Physics from October 13-28, 2016 at Shaskiya Aadarsh swashaasi Holkar Vigyan Mahavidhyalay, Indore, Madhya Pradesh.

- Delivered seven special invited lectures on “**Power Devices**”, “**Amplitude Modulation**”, “**Mobile Communication**”, “**Satellite Communication**”, “**Semiconductor and Varactor**”, “**Zener Diode and its applications**” and “**Tunnel Diode**” from November 11-18, 2016 at DAV College, Chandigarh.
- Delivered seven special invited lectures on “**Gunn Diode, Diffusion and Direct Current**”, “**OP-AMP, Filters**”, “**Impatt Diode and LCD**”, “**Thevenin Theorem**”, “**Norton Theorem**”, “**FET, BJT**” and “**MOSFET**” from November 19,24-29, 2016 at DAV College, Chandigarh.
- Delivered six lectures on “**AC Experiments: Measurement of L, C, Resonant Circuits**”, “**Passive Filters**”, “**AC Bridges**”, “**High Resistance by Leakage Method**”, “**Determination of ‘k/e’ using a Transistor**” and “**PCB Introduction and Design**” during the Science Academies’ 83<sup>th</sup> Refresher Course in Experimental Physics from December 29, 2016 to January 13, 2017 at Mody University of Science and Technology, Lakshargarh, Rajasthan.
- Delivered a guest lecture on “**Operational Amplifier and its Applications**” on February 27, 2017 at DAV College, Chandigarh.
- Delivered a guest lecture on “**Operational Amplifiers**” on March 25, 2017 at JC DAV College, Dasuya, Punjab.
- Delivered a speech on topics “**Optical Communication for Remote Sensing**” and “**Optical Properties**” during Two days DST sponsored National Symposium on “Emerging Microwave Remote Sensing Technology for Rural Applications” on March 30, 2017 held at Galgotias College of Engineering and Technology, Greater Noida.
- Delivered seven lectures on the topics “**Thermal Coefficient of resistance of Copper**”, “**Constant Current Source and Micro-voltmeter**”, “**AC Experiments: Measurement of L, C and series and parallel Resonant Circuits**”, “**Passive Filters**”, “**AC Bridges**”, “**Neutral Temperature of an Fe-Cu Thermocouple**” and “**Calibration of Silicon Diode and Copper Constantan Thermocouple against Pt Resistance thermometer**” during the Science Academies’ 85<sup>th</sup> Refresher Course in Experimental Physics from may 09-24, 2017 at Bahra University, Solan, Himachal Pradesh.

- Delivered seven lectures on the topics **“Calibration of Silicon Diode and Copper Constantan Thermocouple against Pt Resistance thermometer ”**, **“Constant Current Source and Micro-voltmeter”**, **“Thermal Coefficient of resistance of Copper”**, **“AC Experiments: Measurement of L, C and series and parallel Resonant Circuits”**, **“Passive Filters”**, **“AC Bridges”** and **“Neutral Temperature of an Fe-Cu Thermocouple”** during the Science Academies’ Refresher Course in Experimental Physics from June 20, 2017 to July 05, 2017 at G. B. Pant University of Agriculture and Technology, Pantnagar, Uttarakhand.
- Delivered eight lectures on the topics **“Thermal Coefficient of resistance of Copper”**, **“Constant Current Source and Micro-voltmeter”**, **“AC Experiments: Measurement of L, C, Resonant Circuits”**, **“Passive Filters”**, **“AC Bridges”**, **“Energy Band gap of Silicon”**, **“Measuring High Resistance by Leakage Method”** & **“Measuring ‘k/e’ using a Transistor”** during the Science Academies’ 93<sup>th</sup> Refresher Course in Experimental Physics from November 07-22, 2017 at IIT (Indian Institute of Technology), Patna, Bihar.
- Delivered eight lectures on the topics **“Passive Filters Circuits”**, **“AC Bridges Experiments”**, **“Finding Dielectric Constant of Benzene and Dipole moment of Acetone”**, **“AC Experiments- LCR Circuits”**, **“Capacitance meter Circuits”**, **“Determination of ‘k/e’ using a Transistor”**, **“Measuring High Resistance by Leakage Method”** and **“PCB Introduction and Design”** during Refresher Course in Experimental Physics from December 18, 2017 to January 02, 2018 at Panjab University, Chandigarh.
- Delivered eight lectures on the topics **“Thermal Coefficient of resistance of Copper”**, **“Constant Current Source and Micro-voltmeter”**, **“AC Experiments: Measurement of L, C, Resonant Circuits”**, **“Passive Filters”**, **“AC Bridges”**, **“Energy Band gap of Silicon”**, **“Measuring High Resistance by Leakage Method”** & **“Measuring ‘k/e’ using a Transistor”** during the Science Academies’ 97<sup>th</sup> Refresher Course in Experimental Physics from March 26, 2018 to April 10, 2018 at Rajiv Gandhi University, Doimukh, Arunachal Pradesh.
- Delivered eight lectures on **“Calibration of Silicon Diodes for temperature measurements”**, **“Signal Generator and Power Amplifier”**, **“AC Experiments: Measurement of L, C, Resonant Circuits”**, **“Passive Filters”**, **“AC Bridges”**, **“Energy Band gap of Silicon”**, **“High Resistance by Leakage Method”** and **“Determination of ‘k/e’ using a Transistor ”** during the Science Academies’ 99<sup>th</sup> Refresher Course in Experimental Physics from June 14-29, 2018 at Birla Institute of Technology, Ranchi, Jharkhand.

- Delivered six lectures on “**AC Experiments: Measurement of L, C, Resonant Circuits**”, “**Passive Filters**”, “**AC Bridges**”, “**High Resistance by Leakage Method**”, “**Determination of ‘k/e’ using a Transistor**” and “**PCB Introduction and Design**” during the Science Academies’ 104<sup>th</sup> Refresher Course in Experimental Physics from December 23, 2018 to January 07, 2019 at Mody University of Science and Technology, Lakshmangarh, Rajasthan.
- Delivered a lecture on “**Integrated Circuits**” and “**Applications of Electronics**” held on February 26, 2019 at BBK DAV College for Women, Amritsar, Punjab.
- Delivered six lectures on “**Study of Constant Current Source and DC Differential Amplifier**”, “**Study of Stefan’s constant**”, “**Thermal and Electrical conductivity of Good Conductor and Thermal Conductivity of Bad Conductor**”, “**Study of Dielectric constant of Solids and Liquids**”, “**Verification of Curie Weiss Law for a ceramic capacitor**” and “**PCB and Introduction (as a special invited lecture)**” during the Science Academies’ 106<sup>th</sup> Refresher Course in Experimental Physics from April 15, 2019 to May 1, 2019 at Department of Physics, M.R College (A), Vizianagaram, Andhra Pradesh.
- Delivered a lecture as Guest speaker on “**Printed Circuit Board Introduction and Design**” held on April 24, 2019 at Department of Physics, M.R College (A), Vizianagaram, Andhra Pradesh.
- Delivered six lectures on “**Study of Constant Current Source and DC Differential Amplifier**”, “**Study of Stefan’s constant**”, “**Thermal and Electrical conductivity of Good Conductor and Thermal Conductivity of Bad Conductor**”, “**Study of Dielectric constant of Solids and Liquids**”, “**Verification of Curie Weiss Law for a ceramic capacitor**” and “**PCB and Introduction (as a special invited lecture)**” during the Science Academies’ 107<sup>th</sup> Refresher Course in Experimental Physics from June 04-19, 2019 at (GACR) Government Autonomous College, Rourkela.
- Delivered a special lecture on the topic “**Experimental Scope of Electronics in Physics**” on August 31, 2019 at D. A. V. College, Chandigarh.
- Delivered a special invited lecture on the topic “**Digital Electronics and Embedded System**” on November 9, 2019 at S. D. College, Chandigarh.

## List of Session Chaired in Conferences

- Chaired a Session in National Seminar on Recent Development in Nano Science and Technology from September 09-10, 2018 at Government Autonomous College, Rourkela, Odisha.
- Chaired a Session in 5<sup>th</sup> National Conference on Current Advances in Physical Science on February 26, 2019 at Khalsa College, Amritsar, Punjab.

## Chapter in the Books

- A full unit of the book, chapter no.43: titled “ Wireless Technologies: Security Management ” by Manish Dev Sharma and Amardeep Singh of the hard cover bound book named “**Research in Management and Technology**” edited by Aneet and Ramanjeet Singh, Deep and Deep Pub, in year 2008, xviii, 684 p, tables, figs, ISBN : 8184500820.
- **Product Link** : [http://www.vedamsbooks.in/product\\_details.php?pid=32215](http://www.vedamsbooks.in/product_details.php?pid=32215)



## List of Publications by Manish Dev Sharma

1. *Application of Wireless LAN in 4G Cellular System*, in LTTC-2006 at Rayat Institute of engineering and IT, Railmajra, Distt. Nawanshahar, PB on August 26-27, 2006.
2. *Capacity and traffic flow consideration for optical access in Personal Networks*, in LTTC-2006 at Rayat Institute of engineering and IT, Railmajra, Distt. Nawanshahar, PB on August 26-27, 2006.
3. *Foundations of Swarn Intelligence*, in NCRAME-2006 at Rayat Institute of engineering and IT, Railmajra, Distt. Nawanshahar, PB on September 8-9, 2006.
4. *Measuring capacity of 3G Cellular System using Smart Antennas*, in RAECT-06 at Guru Nanak Dev Engineering College, Ludhiana, PB on November 09-10, 2006.
5. *Collaborative Production Strategies for technological Innovation and Leadership in Network Industries: The Case of Bluetooth*, in RAECT-06 at Guru Nanak Dev Engineering College, Ludhiana, PB on November 09-10, 2006.
6. *4G Cellular System with Wireless LAN*, in International Conference ICAECT-2006 at K. C. College of Engineering and IT, Nawanshahar, PB on December 15-16, 2006.
7. *MIMO Application in 4G Cellular System*, in International Conference ICAECT-2006 at K. C. College of Engineering and IT, Nawanshahar, PB on December 15-16, 2006.
8. *Performance comparison of the CISC and RISC Instruction Set Architectures*, in International Conference ICAECT-2006 at K. C. College of Engineering and IT, Nawanshahar, PB on December 15-16, 2006.
9. *CMOS Sensor Application in Guidance System*, in TME-2007 at Chitkara Institute of Engineering and Technology, Rajpura, PB on January 19, 2007.
10. *Proximity Sensor Application in Guidance System*, in TME-2007 at Chitkara Institute of Engineering and Technology, Rajpura, PB on January 19, 2007.
11. *Optimizing Algorithm for Data Locality in Processors*, in ETCIT 07 at Rayat Institute of engineering and IT, Railmajra, Distt. Nawanshahar, PB on February 24-25, 2007.
12. *Data Communication System with Telemetry*, in ETCIT 07 at Rayat Institute of engineering and IT, Railmajra, Distt. Nawanshahar, PB on February 24-25, 2007.
13. *A Case Study on Automation in Material Management*, in Global conference CPIE-2007 at National Institute of Technology, Jalanadhar, PB on March 22-24, 2007.
14. *Wireless Technologies: Security Management*, in International Conference on Management and Technology at Gyan Jyoti Institute of Management and Technology, Mohali, PB on March 23-24, 2007.  
  
*Wireless Technologies: Security Management* also published in book, titled Research in Management and Technology, by Dr. Aneet Ramanjeet Singh with ISBN 978-81-8450-082-0, on pages 487-497.
15. *Microprocessor in Automated Vehicles*, in RATE' 07 at Rayat Institute of engineering and IT, Railmajra, Distt. Nawanshahar, PB on April 28-29, 2007.
16. *Age of Microprocessors*, in RATE' 07 at Rayat Institute of engineering and IT, Railmajra, Distt. Nawanshahar, PB on April 28-29, 2007.
17. *Automatic Docking and Charging System for Guidance Systems*, in RATE' 07 at Rayat Institute of engineering and IT, Railmajra, Distt. Nawanshahar, PB on April 28-29, 2007.
18. *Multimedia Services Management using Grid based architecture*, in NCTC 2007 at Swami Vivekanand Institute of Engineering and Technology, Banur, Distt. Patiala, PB on May 18-19, 2007.
19. Article on *Data Communication with Telemetry* in E-Business magazine of September 2007 Issue.
20. *Quality in Engineering Education* in 37<sup>th</sup> ISTE Annual Convention & National Seminar, at Manipal Institute of Technology, Manipal, Karnataka on December 17-19, 2007.

21. *Accountability of Engineering Study in Higher Education* in 38<sup>th</sup> ISTE Annual Convention & National Seminar, at KIIT, Bhubaneswar, Orissa on December 19-21, 2008.
22. *Prospective of Autonomy and Accountability of Technical and Higher Education* in 38<sup>th</sup> ISTE Annual Convention & National Seminar, at KIIT, Bhubaneswar, Orissa on December 19-21, 2008.
23. *Evolution and Standardization of the Smart Antenna System for Software Defined Radios* in All India Seminar on Emerging Trends in Wireless Communication-Vision 2020, at DIET, Kharar, PB on March 13-14, 2009.
24. *Ethernet as a Carrier Grade Technology* in All India Seminar on Emerging Trends in Wireless Communication-Vision 2020, at DIET, Kharar, PB on March 13-14, 2009.
25. *Face Recognition using Artificial Neural Networks* in All India Seminar on Emerging Trends in Wireless Communication-Vision 2020, at DIET, Kharar, PB on March 13-14, 2009.
26. Article on *Future of Storage Media* in national referred industrial journal titled Technology Trends of April 2009 issue.
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33. *A paper on Study of Charge Transfer Phenomenon in DNA*, in CHASCON 2013, in 7<sup>th</sup> Chandigarh Science Congress, at Panjab University Chandigarh, on March 01-03, 2013, Page 171.
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35. *A paper on Diagnosis And Categorization Of Malignancy Using Modified Neural Network*, in CHASCON 2014, in 8<sup>th</sup> Chandigarh Science Congress, at Panjab University Chandigarh, on February 26-28, 2014, at number 218
36. *A paper on Automated Cancer Screening by Digital Image Analysis Using Artificial Neural Network*, in CHASCON 2015, in 9<sup>th</sup> Chandigarh Science Congress, at Panjab University Chandigarh, on February 25-27, 2015, Page 242.
37. A paper on *Phase Identification and Structural Analysis of  $(In_{20}Se_{80})_{100-x}Sb_x$  with  $x=0,2,5$*  published in proceedings of International Conference on Innovation in Engineering Science and Management, New Delhi on January 23, 2016, with ISBN: 978-81-931974-1-7 at no.277, at pages 130 to 135. (with Best Paper Award).

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43. A *Review on Significant Chalcogens Material for Electronics: InSe System* at National Conference on Futuristic Aspects in Chemical Science & Tech, April 28- 29, 2018
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