


CURRICULUM VITAE

1. Personal Information			
(i)	Name	MANENDRA PAL SINGH CHAWLA	
(ii)	Qualification	M.E. (Power Electronics)	
(iii)	Designation	Associate Professor	
(iv)	Email-id	mpsshawla@gmail.com	
(v)	Employee No.	0900170	
(vi)	Department	Electrical Engineering	
(vii)	Experience	32 years	

2. Educational Qualification					
S. No	Name of Degree	Year of Passing	Name of University/Institute	Division	Specialization
01	ME	1992	DAVV / SGSITS	Hons (82.4%)	ELECTRICAL (Power Electronics)
02	BE	1988	Govt. Engg College, Ujjain	Hons (80.7%)	ELECTRICAL

3. Research Interests
SIGNAL PROCESSING, ADVANCED CONTROL SYSTEMS, ARTIFICIAL INTELLIGENCE, MACHINE LEARNING, SOFT COMPUTING, INTELLIGENT SYSTEMS.

4. Research Paper Publications
<u>National Conferences</u> 1. ICA Based Statistical Estimations for Removal of Noise and Artifacts in Electrocardiograms , M P S Chawla, Paper no. 32, National Conference, CISCON-2008, MIT, Manipal, India, 7-8, November 2008, pp. 101-107. 2. A New Approach to ECG Modeling Using Principal Component Analysis M P S Chawla, H K Verma, Vinod Kumar, Conf. Proceedings NCCCB 2006, National Conference held at Engineering College, Kota, 8-10, March 2006, Paper no. BM4. 3. Independent Component Analysis: A Novel Technique for Removal of Artifacts and Base-line Wander in ECG , M P S Chawla, H K Verma, Vinod Kumar, Paper no. 09, National Conference, CISCON2006, MIT, Manipal, India, 3-4, November 2006, pp. 14-18.
<u>List of Publications in International / National Journals</u> 1. P J Shah, R.K Saxena and M P S Chawla, Digital control technologies for improving the power quality of power supplies, Int. Journal of Neural Computing and Applications (NCA), Springer, Published Online on 12 th July, 2012, DOI 10.1007/s00521-012-1058-3. 2. P J Shah, R.K Saxena and M P S Chawla, Design and modeling of a digital controller for SMPS,

International Journal of Power Electronics and Energy, CASER2012, Vol.1, No.1, July 2012, pp 10-19.

3. P J Shah, R.K Saxena and **M P S Chawla**, Artificial Intelligence Approaches to Advance Signal Processing and Simulation Methods for Efficient Power Supplies, **Int. Journal of Electrical and Electronic Engineering, Vol. 2, No. 4, August 2012, pp. 217-225, Scientific & Academic Publishing (SAP), USA, DOI:10.5923/j.eee.20120204.07.**
4. P J Shah, R.K Saxena and **M P S Chawla**, Digital Filter Design with Harmonics Estimation for Power Supplies, **Journal of Institution of Engineers (IE), India, DOI 10.1007/s40031-12-0014-z, Via Springer Press, Published in July 2012, Series B (14).**

List of Publications in International Conferences

1. P J Shah, R.K Saxena and **M P S Chawla**, FPGA based digitalized Power Supplies, 2012 IEEE Fifth India International Conference on Power Electronics (**IICPE2012**), **Paper 209**, Organized at Delhi Technological University, Delhi, India, during 6-8, Dec-2012.
2. P J Shah, R.K Saxena and **M P S Chawla**, Power Quality Improvement in Switch Mode Power Supply using FPGA based Digital Control Approaches, **AET2013, ACEEE Fourth International Joint Conference on Advances in Electrical and Technology, NCR, New Delhi, India, 13-14, Dec-2013.**
3. P J Shah, Rakesh Saxena, **MPS Chawla**, Power Quality Requirement for Uninterruptible Power Supplies, **IEEE Conf, CICSyN 2009, pp. 51, Indore, India, 23-25, July 2009.**
4. P J Shah, Rakesh Saxena, **MPS Chawla**, Various Techniques for Improving the Power Quality in Power Supplies, **IEEE Int. Conf. CICSyN 2009, pp. 53, Indore, India, 23-25, July 2009.**
5. P J Shah, Rakesh Saxena, **MPS Chawla**, Review of Signal Processing Methods For Power Quality Improvement, **IEEE Int. Conf. on Electrical Power and Energy Systems-ICEPES-2010, Aug. 26-28, 2010, No-393, MANIT, Bhopal, India.**

List of Publications in National Conferences

1. **MPS Chawla**. A Comparative Study of Neural, SVM, WT and Statistical Techniques for ECG Analysis, **CISCON 2009, National Conference, Nov, 6-7, 2009, MIT, Manipal, India, pp. 39-43.**
2. L D Malviya and **M P S Chawla**, A Common Understanding of MATLAB and Utility of its Tool Boxes, **Bhartiya Vigyan Samelan (BVS-2009), DAVV, Indore, 1-3 Dec, 2009, Paper No. ICT-35.**
3. Rakesh Saxena, **MPS Chawla**, Aditya Tiwary, Farukh Hashmi and Giriraj Gupta, Programmable Logic Controllers - A Survey and Study, **Bhartiya Vigyan Samelan (BVS-2009), DAVV, Indore, 1-3 Dec, 2009, Paper No. ICT-42.**

List of Publications in International Journals

1. **M P S Chawla**, Detection of Indeterminacies in corrected ECG Signals Using Parameterized Multidimensional Independent Component Analysis, **Int. Journal of Computational and Mathematical Methods in Medicine (CMMM), Taylor & Francis, Volume 10, Issue 2, June 2009, pp. 85-115.**
2. **M P S Chawla**, A Comparative Analysis of Principal Component and Independent Component Techniques for Electrocardiograms, **Int. Journal of Neural Computing and Applications (NCA), Springer, Vol.18, No.6, Sept 2009, pp. 539-556.**
3. **M P S Chawla**, Multidimensional Independent Component Analysis for Statistical Estimations of Indeterminacies in Electrocardiograms, **Int. Journal of Mechanics in Medicine and Biology (JMMB), WSPC, Vol.9, Issue.3, Sept 2009, pp. 345-375.**
4. **M P S Chawla**, **PCA and ICA Processing Methods for Removal of Artifacts and Noise in Electrocardiograms: A Survey and Comparison, Applied Soft Computing, Elsevier, Available Online, 7th, August, 2010.**
5. **MPS Chawla**, A Combined PCA-ICA Statistical Approach and Quadratic Spline Wavelets for Detection of R-Peaks and Heart Rate Estimations in Electrocardiograms, **Int. Journal of Mechanics in Medicine and Biology (JMMB), WSPC, Nov-2010, Online, DOI No: 10.1142/S0219519411003855.**

List of Publications in International Journals

1. **M P S Chawla**, Detection of Indeterminacies in corrected ECG Signals Using Parameterized Multidimensional Independent Component Analysis, **Int. Journal of Computational and Mathematical Methods in**

Medicine (CMMM), Taylor & Francis, Volume 10, Issue 2, June 2009, pp. 85-115.

2. M P S Chawla, A Comparative Analysis of Principal Component and Independent Component Techniques for Electrocardiograms, **Int. Journal of Neural Computing and Applications (NCA), Springer, Vol.18, No.6, Sept 2009, pp. 539-556.**
3. M P S Chawla, Multidimensional Independent Component Analysis for Statistical Estimations of Indeterminacies in Electrocardiograms, **Int. Journal of Mechanics in Medicine and Biology (JMMB), WSPC, Vol.9, Issue.3, Sept 2009, pp. 345-375.**
4. Ritu Verma, **M.P.S. Chawla**, A Rathore “Optimal Sizing of a Standalone PV System for Remote Area of India” **International Journal of Recent Technology and Engineering (IJRTE)** ISSN: 2277-3878, Volume-8, Issue-1, May 2019.

List of Publications in National Conferences

1. Rakesh Saxena, MPS Chawla, Aditya Tiwary, Farukh Hashmi and Giriraj Gupta, Programmable Logic Controllers - A Survey and Study, **Bhartiya Vigyan Samelan (BVS-2009), DAVV, Indore, 1-3 Dec, 2009, Paper No. ICT-42.**
2. MPS Chawla. A Comparative Study of Neural, SVM, WT and Statistical Techniques for ECG Analysis, **CISCON 2009, National Conference, Nov, 6-7, 2009, MIT, Manipal, India, pp. 39-43.**
3. L D Malviya and M P S Chawla, A Common Understanding of MATLAB and Utility of its Tool Boxes, **Bhartiya Vigyan Samelan (BVS-2009), DAVV, Indore, 1-3 Dec, 2009, Paper No. ICT-35.**

Other Details of Publications

1	Souvanik Bandyopadhyay and M.P.S. Chawla	Solar Panel Ambient Characteristics Wireless Monitoring from any Remote Location	International Journal of Electrical, Instrumentation and Electronics Engineering	2017	ISSN (Online): 2278-8875/ISSN (Print): 2320-3765
3	Gaurav Kothari, M.P.S. Chawla	Railway signalling and interlocking with enhance safety system using PLC and SCADA	Journal of Electrical and Power System Engineering (India)	2019	
4	Bhumika Sahu, M.P.S. Chawla, Sandeep Bhongade	Optimization of PID Controller for Hybrid Power System using Particle Swarm Optimization Technique	Journal of Power Electronics and Devices (India)	2018	
5	Kalash Srivastava, M.P.S. Chawla	Fingerprint based Electronic voting machine with inbuilt identification and verification system	Journal of Advances in Electrical Devices (India)	2018	
6	Satyam Patel, M.P.S. Chawla, Sandeep Bhongade	Power Quality Analysis by calculating Total Harmonic Distortion at different sag values using dynamic voltage restorer	Journal of Power Electronics and devices (India)	2018	
11	Farheen Siddiqui and M. P. S. Chawla	Feature Extraction and Classification of EEG Signals Using Neural Network Based Techniques	Journal of Instrumentation and Innovation Sciences	2017	e-ISSN: 2456-9860
12	Akshay Sharma and M. P. S. Chawla	Fingerprint matching Using Minutiae Extraction Techniques	Journal of Advances in Electrical Devices	2017	

13	Preeti Yadav and M.P.S. Chawla	Forecasting of Solar Radiation of an Area by using Artificial Neural Network Technique through MATLAB	Journal of Instrumentation and Innovation Sciences	2017	e-ISSN: 2456-9860
14	Preeti Agrawal and M.P.S. Chawla	Vehicle Number Plate Detection Using Sobel Edge Detection Techniques By MATLAB	Journal of Instrumentation and Innovation Sciences	2017	
15	Pragyeesh Mishra and M.P.S. Chawla	A Fast Biometric Fingerprint Payment System	Journal of Digital Integrated Circuits in Electrical Devices	2017	
16	Jitendra Kem and M.P.S. Chawla	Bilateral Filtering of Various Images for De-Noise Analysis	Journal of Controller and Converters	2017	
17	Ashish Kumrawat and M.P.S. Chawla	Real Time Face Detection And Recognition Using Hybrid Method	Journal of Control and Instrumentation Engineering	2017	

5. List of Conferences/Workshops/Seminars Organized

- Prof. M.P.S. Chawla has been selected as an **Executive Editor in International Journal of “Robotics and Artificial Intelligence, Canada”**, for the next five years **2012-2017**.
 - **Editorial Board member in IEEE–IES, BACM, Society USA** from September 2009 Onwards.
 - **Editorial Board Member in World Journal of Cardiology, China** for the Period /Year 2009-2015.
 - **Editorial Board member in International Journal on Artificial Intelligence Research (ISSN 1927-6974, EISSN 1927-6982)**, Toronto, ON., M3J 3H7, Canada, Since March-2012 for next 5 years.
- Prof. M.P.S. Chawla has been selected as an Editorial Board Member of “Artificial Intelligence Research, International Panel of Canada”, to evaluate and help in running the proceedings of the journal in the area of Biomedical Engg, on 18th March 2012, for the next five years 2012-2017.
- Prof. MPS Chawla was invited as a **Keynote Speaker** in Two Day Workshop on “**MATLAB**”, Organised by **MANIT, Bhopal**, Department of Mathematics and Computer Applications, during 27-28, Feb, 2013 and delivered a Talk on **Matlab ToolBoxes** on 28th Feb, 2013.
 - Prof. MPS Chawla delivered an Expert Lecture on “**Digital Image Processing Using Matlab**”, at Department of Electrical Engineering, Sagar Institute of Research and Technology (SIRT), **Bhopal** on 27th Feb 2013.
 - Prof. MPS Chawla delivered a Talk on “**Bioinformatics**”, at Department of Computer Engineering and Information Technology, Truba Institute of Engineering and Information Technology, **Bhopal** on 26th Feb 2013.
 - Prof. MPS Chawla delivered an Expert Lecture on “**Soft Computing**”, at Department of Computer Engineering, Technocrats (TIT) Group of Institutions, **Bhopal** on 27th Feb 2013.
 - **Delivered a lecture on Bio-electric Signals and Processing** at Bharati Vidyapeeth College of Engineering, **New Delhi, India** on 10th March 2006.
 - **Delivered lecture on “A comparison of Higher order Statistical methods and classical techniques for ECG processing”**, at **Madhav Institute of Technology and Science (MITS), Gwalior (MP), India** in AICTE Sponsored Staff development program on **Application of Artificial Intelligence in Biomedical Engineering**, during 17-28 Feb, 2007.
 - **Delivered lecture on “Standardization, Specifications and Statistical needs in Electrocardiograms Madhav Institute of Technology and Science (MITS), Gwalior (MP), India** in AICTE Sponsored Staff development program on **Application of Artificial Intelligence in Biomedical Engineering**, during 17-28 Feb, 2007.

- **Delivered a lecture** on “**Higher Order Statistical Techniques for ECG Processing**”, in MHRD-TEQIP Sponsored Course on, **Recent Advances in Instrumentation & Control Engineering**, at National Institute of Technology (NIT), Jalandhar, Punjab, **India**, during March 5-9, 2007.
- Prof. MPS Chawla was INVITED AS **KEYNOTE SPEAKER** in National Conference on Future trends on Wireless communications “**FTWA’11**” held during 8-9th Nov 2011, at MIT, Mandasaur, MP and delivered a Talk on **Recent Emerging Tools in Engineering & Technology**.
- Prof. M P S Chawla was INVITED AS **KEYNOTE SPEAKER** IN TECHNO-MANAGEMENT FEST “**ECLECTIC’12**” on 18th March 2012, at MIT, Mandasaur, MP and delivered a Talk on **Face Detection and Fingerprint Analysis in a Biometric System**.
- Prof. MPS Chawla delivered an Expert Lecture on “**Artificial intelligence, Computational Intelligence and Soft computing**” on 28th April 2012 at Sagar Institute of Science and Technology (SISTec) Bhopal.
- Prof. MPS Chawla delivered an Expert Lecture on “**Cryptography and Secure Hash Algorithms**”, in All India Seminar on "Computer Applications in Engineering: Emerging Trends & Technologies" jointly with IE India (IEI) on 23rd Nov 2013, held during 22-23, Nov13 at Indore institute of Science and Technology, Indore.
Prof. MPS Chawla was appointed as Session Chairman, in International conference **ICCC 2012 on Computers & Communication**, on 27th & 28th January, 2012 at Sagar Institute of Science and Technology (SISTec) Bhopal.
- Prof. MPS Chawla appointed as Session Chairman, in National conference on Information Theory and Communication Networks (**NCITCN-14**), at MIT, Pune, during **3-4 Jan, 2014**.
- Prof. MPS Chawla was appointed as Session Chairman in **IEEE International Conference on Wireless and Optical Communication Networks (WOCN13)**, held at Technocrats Institute of Technology (TIT) Bhopal during **26-28, July, 2013**.
- Prof. MPS Chawla was appointed Session Chairman in **National Workshop on Applications of Ion Beam in Device Fabrication and Nanotechnology**, during 5-6th, March-2012 at School of instrumentation, DAVV, Indore.
- **Appointed as Reviewer and Session Chairman in Bhartiya Vigyan Samelan (BVS-2009), DAVV, Indore, during 1-3 Dec, 2009.**
- **Appointed as Reviewer and Session Chairman in NCEECS-2010, National Conference on Emerging Electronic and Computing Systems, DAVV, Indore, during 2-3 April, 2010.**
- Attended **Workshop on Analog Electronics** at Dept. of Elect. Engg, **IIT Bombay** during March 17-18, **1994** and **delivered a talk** on Frequency Response of Amplifiers.
- Attended as **Expert in Workshop on Energy Efficient Motors** at SGSITS, **Indore** during March 30-31, **1995**.
- **Delivered a lecture on Microprocessor Based Drives** in ISTE sponsored Winter School on **Modern Trends in Computer Based Automation** at SGSITS, Indore during Jan 3-14, **1994**.
- Chaired as **Session Coordinator** in 16th **MP Young Scientist Congress** held during **6-7, Sept-2001**, Organized by **DAVV Indore** and **MAPCOST Bhopal**.
- Appointed as **Reviewer** to Review Papers in **IEEE International Conference, Tencon 2003** held at **IISC Bangalore** during 14-17, Oct 2003.
- Chaired as **Session Chairman** in **International Conference, INCARF 2003** at **IIT DELHI** during 11-13 August 2003.
- Cochaired in National Conference **NCCCB-2006** held at **Engineering College, Kota**, during **March 8-10, 2006** in the session, **Neural networks and Communication Systems**.
- **Cochaired** in All India Seminar on **Modern Trends in Industrial Drives** organized by Institution of Engineers, **Indore Chapter** and **SGSITS, Indore** during Feb 19-20, **1999**.
- Prof. MPS Chawla was appointed as Session Chairman in **IEEE International Conference on Wireless and Optical Communication Networks (WOCN12)**, organised jointly by **IIT, Indore** and **Arbindo Institute of Technology, Indore**, held at **Indore** during **20-22, Sept, 2012**.