

BIO - DATA



1.	Name	Dr. SUKHWANT SINGH BANWAIT
2.	Postal Address	House No. 4165, Sector 68, SAS Nagar, Mohali - 160 062
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	(b) E-mail Address	ssbmec@gmail.com
	(c) Mobile Number	+919501588455
4.	Date of Birth	18 th October 1960
5.	Father's Name	S. Harbans Singh Banwait
6.	Permanent residence	House No 4165, Sector 68, SAS Nagar, Mohali - 160062
7.	Present Post held with Designation & name of the Organisation where employed	Professor, Department of Mechanical Engineering & Professor I/c M.E. & Ph.D. Programmes, National Institute of Technical Teachers Training & Research, Chandigarh - 160019

8. ACADEMIC QUALIFICATIONS

Degree	Year	College/University	Divn.	% of Marks / CGPA	Remarks
Ph.D. (Mechanical Engineering)	1999	Thapar Institute of Engineering and Technology, Patiala, Punjab, INDIA	--	--	
M. Tech.(Design of Mechanical Equipment)	1985	Indian Institute of Technology, Delhi, INDIA	First	CGPA=7.88	
B.E. (Mechanical Engineering)	1983	Government Engineering College, Jabalpur, Madhya Pradesh	First	85 %	Gold Medalist
Higher Secondary	1978	Board of Secondary Education, Madhya Pradesh, Bhopal, INDIA	First	80 %	

9. TEACHING & PROFESSIONAL EXPERIENCE

Position Held	Name of Organisation	Period		Nature of Work
		From	To	
Professor (Mechanical Engineering)	NITTTR, Chandigarh	22/03/04	Till date	Teaching ME students, guiding Ph.D. research scholars, etc.
Asstt. Professor (Mechanical Engineering)	NITTTR, Chandigarh	19/06/91	21/03/04	Teaching ME students, conducting short term courses for technical teachers, etc.
Lecturer (Mech. Engg.)	Punjab Engineering College, Chandigarh	21/04/89	19/06/91	Teaching BE students.
Assistant Works Manager	Indian Ordnance Factories Service	02/05/87	18/04/89	Management of small arms production.
S.S.I. Officer	Punjab National Bank, Jalandhar	01/07/85	29/04/87	Assessment, guidance and monitoring of performance of SSI units.

10. RESEARCH EXPERIENCE

(a) Student Research – Doctoral Degrees

S. No.	Name of Student	Year of Completion	Title of Thesis
1	P T Kale	2011	Performance Evaluation of ERP System in Small and Medium Scale Indian Manufacturing Industries
2	Harinder Singh Sidhu	2013	Investigations of Parameters for Surface Modifications of Dies using EDM Process
3	Sunil S. Baraskar	2013	Development of a Hybrid Model for Optimal selection of Electrical Discharge Machining Process parameters for Mould and Die Steel Materials
4	Ashish S. Bahendwar	2014	Multicriteria and Real-Time Scheduling Methodology for Controlling FMS in Manufacturing Industries
5	Manish M. Pawade	2014	Development and Evaluation of Flexible Machine Controller for Electrical Discharge Machining Process
6	Kanifnath R. Kadam	2013	Study of Thermo-hydrodynamic Performance of Multiple-Axial-Groove Journal Bearing
7	Jayant B. Khurpade	2013	Modelling and Control of Five Degree of Freedom Robot Manipulator under Parametric Variations
8	K . L. Meena	2013	An Experimental study of Non-Traditional Machining of Al/SiC-MMC's

(b) Student Research – Masters Degrees

S. No.	Name of Student	Year of Completion	Title of Thesis
1	Ranjit Singh	1995	Productivity Improvement in a Manufacturing Industry
2	Tarsem Chand	1995	Computer-Aided Design of Spur Gear
3	R R Jha	1995	Computer Aided Analysis of Hydrodynamic Journal Bearing
4	Sudhir Hansrane	1996	Study, Analysis and Design of a Computerised Inventory System
5	Tej Pal Singh	1996	Status of Quality System in Industries
6	M S Sajjad	1997	Productivity Improvement and Plant Capacity Assessment - A Case Study at Eicher Demm, Parwanoo
7	R A Kulkarni	1997	Capacity Planning, Capacity Control and Strategies Followed for Continuous Improvement : A Case Study
8	P T Kale	1998	Assembly Line Balancing : A Case Study
9	Hari Babu	1998	Computerised Planning and Scheduling System
10	S N Awasthi	1999	Application of Ranked Positional Weight Method of Line Balancing in an Industry
11	G K Gattani	1999	Development of a Rule Base Expert System for Fault Diagnosis in Automobiles
12	P S Viridi	2000	Diesel Engine Design and Optimisation Software
13	M V Mankar	2001	An Experimental Analysis Of Cutting Parameters On Microcrack Behaviour And Effect Of Surface Roughness In EDM Process
14	Mukesh Kataria	2002	Analysis of Stock Replenishment System and Development of EOQ Model under Decreasing Cost Functions Via Geometric Programming - A Case Study
15	S P Kulkarni	2003	Development of Boiler Tube Coiling Machine
16	Siddappa C Biradar	2007	Studies on the Dry Sliding Wear Behavior of Hypereutectic Aluminum-Silicon Alloys
17	V Elisha Devasahayaam	2007	Defect Analysis and Simulation Studies for Improving the Quality of Grey Iron Casting
18	S I Ahmad Qadri	2007	A Critical Study and Analysis of Process Parameters of Selective Laser Sintering Rapid Prototyping
19	Amulya Burman	2008	Study and Development of Computerised Operation and Maintenance System for Public Transport Services
20	Bharat Sanga	2008	Study of Critical Welding Parameters in MIG Welding Operation at M/s. Hema Engineering Industries Limited
21	Chinmoy Saha	2008	Failure Analysis of Worn Wheel in Coke Processing Plant at IISCO Steel Plant, Burnpur
22	Manoj Kumar Gupta	2008	Study and Analysis of Inventory Management System at M/s. Chinar Syntex Limited
23	Manoj Kumar Mishra	2008	Parametric Study of Spot Welding Operation : A Case Study
24	Sunil Kumar Saha	2008	Experimental Investigation on Heat Treatment of Die Steels
25	R M Patted	2008	Experimental Studies on the Effect of Addition of Mg and Sc on Mechanical and Tribological Properties of Aluminium
26	M B Dodamani	2008	Experimental Investigations of Microstructure, Mechanical & Wear Properties of LM-25 Alloy
27	S J Gorane	2008	Performance Measures and Practices of Supply Chain in Manufacturing Industries

28	Sanjeev Gupta	2009	A Comparative Analysis of JIT & Non-JIT Industries
29	Deepak Lamba	2009	Study and Analysis of Capacity Utilization, Process Planning and Production Control in Machining Processes
30	Nand Gopal	2009	Defect Analysis and Fixture Modification at M/s. Bubber Industries, Panchkula
31	S G Venkatesha	2009	Selection of Process Parameters for Optimum Weld Pool Geometry in TIG Welding of Tubular Structures
32	Lakshminarayana	2009	Study and Failure Analysis of ALH Collector Gear at HAL, Bangalore
33	Gopinatha K	2009	Critical Success Factors in Implementation of ERP : A Case Study
34	B S Vasuki	2009	Implementation of Lean Manufacturing System : A Case Study
35	Sandeep Handa	2009	Design of a Computerised System for Calibration of Gauges and Auditing of Tackles
36	S K Patra	2009	Computerised Preventive Maintenance Scheduling at M/s. New Holland Tractors (India) Private Limited
37	Sukhjith Singh Kang	2009	A Computerized Knowledge Based System for Spur Gear Design
38	Jasbir Singh	2009	Assembly Line Balancing : A Case Study
39	Doddaiah S V	2009	Study and Analysis of Enterprise Resource Planning System in Select Manufacturing Industries
40	Subhash Chand Gupta	2010	Study of Quality Improvement Analysis at NEI Limited, Gunki
41	Jitender Anand	2010	Implementation of Total Productive Maintenance
42	Munish Mehta	2010	Reliability Analysis of Various Complex System in a Sugar Mill
43	B D Gidwani	2010	Study and Analysis of Maintenance Strategy for M/s. Bansiwal Iron and Steel Rolling Mill
44	Jai Prakash	2010	Productivity Improvement in Tractor Assembly Line by Reducing 3M's
45	Peeyush Vats	2010	Study and Analysis of Journal Bearing Failure at M/s. Kaithal Cooperative Sugar Mills Limited
46	Abinay Agrawal	2010	Study and Analysis of Inventory Management System of M/s. Morgardshammar India Limited
47	Ram Karan Yadav	2010	Defect Analysis of Insulator Metal Castings at M/s. Jaidev Cast Alloys, Sri Ganga Nagar
48	Krishan Kumar	2010	Design and Fabrication of Universal Fixture at M/s. Bubber Industries, Panchkula
49	Chander Shekhar	2011	Design & Development of an Assembly Line at M/s Agriking Tractors and Equipments Limited, Solan
50	Satbir Singh	2011	Productivity Improvement & Analysis at Ms. APS Industries
51	Satish Kumar	2012	Process Parameter Optimisation of Welded Joints in Production of Pipes
52	Irshad Ali	2012	Experimental Study of Wearing Pattern of Rotavator Blades Treated with different Wear Resistance Process
53	Kunal Verma	2013	Experimental Investigations of Magnetic Abrasive Particles on Machining of Stainless Steel

11. PUBLICATIONS

(a) Papers Published in Journals

S. No.	Year of Publication	Title of Paper	Name of the Journal, Volume, page numbers	Name of the Publisher
1	1998	Study of Thermal Boundary Conditions for a Plain Journal Bearing	Tribology International, Vol. 31/6, pp. 289-296.	Elsevier, UK
2	2000	Effect of Misalignment on THD Analysis of Elliptical Journal Bearings	Journal of the Institution of Engineers (India), Vol. 81, pp 93-101.	Institution of Engineers (India)
3	2006	A Comparative Performance Study of Non-circular Two-Lobe and Three-Lobe Journal Bearings	Journal of the Institution of Engineers (India), Vol. 86, pp 202-210.	Institution of Engineers (India)
4	2008	Enterprise Resource Planning – Implementation, Assessment and Development	Journal of Engineering and Technology Education, Vol. 2, No. 2, pp. 16-22.	NITTTR, Chandigarh

5	2010	Systematic Failure Mode Effect Analysis : Applications and Weak Spots	The Indian Journal of Technical Education, Vol. 33, No. 3, pp. 58-69.	Indian Society for Technical Education, New Delhi.
6	2010	ERP benefits and Critical Success Factors : A Case Study	Journal of Emerging Tech. in Mech. Science & Engg., Vol. 1, No. 2, pp. 41-51.	Noorul Islam University, Thuckalay.
7	2010	Performance evaluation of ERP implementation in Indian SMEs	Journal of Manufacturing Technology Management, Vol. 21, No. 6, pp. 758-780.	Emerald Group Publishing Limited, UK.
8	2011	Multi-objective Optimisation of Electrical Discharge Machining Process using Derringer's Desirability Function Approach	International Journal of Materials Engineering Innovation, Vol. 2, No. 3/4, pp. 203-221.	Inderscience Enterprises Limited, UK.
9	2011	Evaluation of ERP implementation in an Indian Company : A Case Study	Global Journal of E-Business & Knowledge Management,	IIT, Delhi
10	2011	Mathematical Modelling of Electrical Discharge Machining Process through Response Surface Methodology	International Journal of Scientific and Engineering Research, Vol. 2, Issue 11, Nov. 2011, pp. 1-10.	Research Publication IJSER, USA

(b) Papers Accepted for Publication in Journals

S. No.	Year of Publication	Title of Paper	Name of the Journal, Volume/ page numbers,	Name of the Publisher
1	2013	Multi-Objective Optimization of Electrical Discharge Machining Process Using Hybrid Method	Journal of Materials and Manufacturing Processes, June 2013.	Taylor and Francis, UK

(c) Papers Published in Proceedings of International Conferences

S. No	Year of Publication	Title of Paper	Name and Place of Conference
1	Nov. 1995	A Case Study of Continuous Improvement : An Essential Element of Total Quality Management	International Conference on Precision Engineering, Singapore
2	Feb. 1997	Status of Quality System in ISO Certified Companies	7 th World Congress on Total Quality Management, New Delhi
3	Aug. 1997	Status of ISO 9000 Certified Industries in Northern India	International Conference on Quality Engineering & Management, Coimbatore
4	June 1998	Effect of Operating Parameters on Static and Dynamic Characteristics of Journal Bearing under THD Conditions	8 th International Conference in Tribology, Denmark.
5	Oct. 1998	THD Analysis of Misaligned Plain Journal Bearing	First Asia International Conference on Tribology, China
6	Dec. 1998	THD Analysis of Misaligned Two-Axial-Groove Journal Bearing	First International Conference on Fluid Mechanics and Fluid Power, New Delhi.
7	April 1999	A Study of THD Analysis of Two-Axial-Groove Journal Bearing	9 th International Conference on Computational Methods and Experimental Measurements, Italy.
8	June 2000	A Study of Thermohydrodynamic Analysis of Misaligned Three-Lobe Journal Bearing	9 th Nordic Symposium on Tribology, Finland.
9	Nov. 2000	A Comparative Study of Some Vital Parameters of Misaligned Journal Bearings under THD Condition	International Tribology Conference, Japan.
10	June 2001	Thermohydrodynamic Analysis of Two-Axial-Groove Journal Bearing	10 th International Conference on Computational Methods & Experimental Measurements, Spain.
11	April 2002	Practical Constraints to Key Performance Factors for Hydrodynamic Lubrication of Diesel Engine Journal Bearings	3 rd International Conference on Industrial Tribology, India.
12	June 2002	A Stability Analysis of Misaligned Hydrodynamic Journal Bearings	10 th Nordic Symposium on Tribology, Sweden.
13	Oct. 2007	Performance Evaluation of Enterprise Resource Planning Systems : A Brief Review	Internal conference on Advances in Manufacturing Engineering, Manipal.
14	Oct. 2007	Effect of Titanium and Phosphorous on the Wear Behaviour of Hypereutectic Aluminium – Silicon Alloys	International Symposium on Advanced Materials, Bagalkot.
15	Dec. 2007	Review of Key Performance Indicators of evaluation of Enterprise Resource Planning Systems in Small and Medium Enterprises	Annual International Conference of the Society of Operation Management, Pune.
16	Dec. 2008	Enterprise Resource Planning in Indian SMEs: Issues and Challenges	6 th International Conference on E-governance, IIT Delhi.
17	Dec. 2009	Benefits of the Enterprise Resource Planning in Indian SMEs	International Conference of Society of Operation Management, IIT Chennai.
18	July 2010	Evaluation of ERP implementation in an Indian Company : A Case Study	Annual Conference of Global Institute of Flexible Systems Management, Japan.

19	Oct. 2010	Impact of ERP on performance of SMEs: A Study of Indian Company	International Conference on Advanced Management Perspectives in Asia, China.
20	Nov. 2010	An Investigation of Enterprise Resource Planning Implementation : Empirical Evidence from Indian Companies	ASME 2010 International Mechanical Engineering Congress and Exposition, Canada.
21	Dec. 2010	Modeling and Simulation of a 2-link 3-DOF Robotic Manipulator using Vector Loop method	2 nd International Conference on Production and Industrial Engineering, Jalandhar.
22	June 2011	An Impact of ERP on performance of Small and Medium Enterprises : A Study of Indian Company	ASME 2011 International Manufacturing Science & Engineering Conference, USA.
23	June 2011	Mathematical Modeling of Electrical Discharge Machining Process through Response Surface Methodology	ASME 2011 International Manufacturing Science & Engineering Conference, USA.
24	Nov. 2011	A Review of Fuzzy Logic Based Control of Robotic Manipulators	ASME 2011 International Mechanical Engineering Congress & Exposition, USA.
25	June 2012	Application of Multiple Regression and Adaptive Neuro-Fuzzy Inference System for Prediction of Surface Roughness in EDM	ASME 2012 International Manufacturing Science & Engineering Conference, USA.

(d) Papers in Published in National Conferences

Sr. No	Year of Publication	Title of Paper	Name and Place of Conference
1	Nov. 1995	Computerisation in Industry : A Case Study	10 th National Convention of Computer Engineers, Lucknow
2	Nov. 1995	Misalignment in Hydrodynamic Journal Bearings : The Problems	11 th National Convention of Mechanical Engineers, Bhopal
3	Nov. 1995	Analysis of Pressure Distribution in Hydrodynamic Journal Bearing using different types of Finite Elements	11 th National Convention of Mechanical Engineers, Bhopal
4	March 1996	Computer Based Quality Information System : A Necessity for Quality Management	National Seminar on Total Quality Management, PEC, Chandigarh
5	March 1996	Education : The Neglected Aspect in Quality Management	National Seminar on Total Quality Management, PEC, Chandigarh
6	July 1998	Assembly Line Balancing : A Case Study	All India Seminar on Design of Production Systems – New Concepts, Bhubaneshwar
7	Oct. 1999	Changing Scenario of Human Workers in Automated Factories	National Conference on Industrial Human Resource Development, NITTTR, Chandigarh
8	Sep. 2000	A Database Design and Optimisation Approach for Diesel Engines	National Convention of Mechanical Engineers, IIT Roorkee.
9	Dec. 2000	A Critical Analysis of Non-circular Two-Lobe and Three-Lobe Journal Bearings	27 th National Conference on Fluid Mechanics & Fluid Power, Palghat.
10	Feb. 2001	An experimental Analysis of Cutting Parameters on Microcrack behaviour of die Steel with Copper electrode and Graphite electrode in EDM Process	National Seminar on Modern Methods for Economic and Quality Production, Nanded.
11	Dec. 2001	Hydrodynamic Lubrication of Diesel Engine Journal Bearings – Practical Limits to Key Performance Factors	28 th National Conference on Fluid Mechanics & Fluid Power, Chandigarh.
12	Dec. 2001	Computer-Aided Instructions : The Present Status and Future Strategies	16 th National Convention of Computer Engineers, Patna
13	Sep. 2002	Data-Base Design Approach for Journal Bearings of Diesel Engines	17 th National Convention of Production Engineers, Chennai,
14	Nov. 2005	A Review of Automated Manufacturing System	National Conference on Advances in Manufacturing Technology, NITTTR, Chandigarh
15	March 2008	A Study on Surface Quality during Machining of OHNS Dies Steel by EDM	2 nd National Conference on Advances in Manufacturing Technology, NITTTR, Chandigarh
16	March 2008	Enterprise Resource Planning - A Comparative Analysis of its Implementation Status	2 nd National Conference on Advances in Manufacturing Technology, NITTTR, Chandigarh
17	March 2008	Review of Performance Measures & Practices of Supply Chain in Manufacturing Process industries	2 nd National Conference on Advances in Manufacturing Technology, NITTTR, Chandigarh
18	March 2008	Experimental Studies on the Microstructure, Mechanical and Tribological properties of LM-25 alloy	2 nd National Conference on Advances in Manufacturing Technology, NITTTR, Chandigarh
19	March 2008	Experimental Studies on Effect of addition of Mg and Sc on Mechanical and Tribological properties of Aluminium	2 nd National Conference on Advances in Manufacturing Technology, NITTTR, Chandigarh
20	March 2012	Design and Development of Assembly Line using Ranked Positional Weight Technique	National Conference on Advances in Manufacturing Technology, NITTTR, Chandigarh

21	March 2012	Improvement and Analysis of Productivity	National Conference on Advances in Manufacturing Technology, NITTTR, Chandigarh
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(e) Books
Published

S. No.	Name of Book	Year of Publication	Name of Publisher
1	Text book on "Design and Manufacturing"	2003	Birla Publications, Delhi
2	Refrigerant and Psychrometric Charts & Tables	2001	Birla Publications, Delhi
3	Continuing Education Module on "Engineering Design"	1999	ISTE, New Delhi

12. INDUSTRIAL EXPERIENCE

S. No.	Period	Organisation	Description of Work and Responsibilities
1	1 st July 1985 to 29 th April 1987	Punjab National Bank, Jalandhar	SSI Officer : Assessing technical & economical viability of SSI units and monitoring them.
2	2 nd May 1987 to 18 th April 1989	Indian Ordnance Factories Services	Assistant Works Manager : Monitoring production of small arms.

13. ADMINISTRATIVE EXPERIENCE

S. No.	Period	Organisation	Designation	Nature of Responsibility
1	April 1996 to March 1999	NITTTR, Chandigarh	Member, Departmental Promotion Committee	As member ensuring promotion of employees as per GOI norms
2	April 1999 to March 2002	NITTTR, Chandigarh	Hostel Warden	Looking after institute hostel and canteen
3	April 2002 to March 2010	NITTTR, Chandigarh	Professor Incharge, Institute Vehicles	Looking after vehicle allocation & maintenance of institute vehicles
4	13 th August 2007 to 30 th June 2009	NITTTR, Chandigarh	Professor & Head, Department of Mechanical Engineering	Looking after the routine duties of the department
5	8 th May 2009 to 20 th October 2010	NITTTR, Chandigarh	Professor & Head, Information Management & Coordination Unit	Looking after the routine duties of the department
6	9 th July 2010 to 20 th October 2010	NITTTR, Chandigarh	Professor & Head, Department of Mechanical Engineering	Looking after the routine duties of the department
7	18 th October 2010 to till date	NITTTR, Chandigarh	Professor Incharge, M.E. & Ph.D. Programmes	Coordinating liaison work with Panjab University, Chandigarh and ensuring the implementation of rules and regulations of University

14. DETAILS OF FOREIGN VISITS

S. No.	Purpose	Place, Country	Duration
1	Attended International Conference on Integrating Sustainable Development issues into TVET : Poverty Alleviation & Skills for Employability, Citizenship and Conservation	Bangkok, Thailand	10 th August 2005 to 13 th August 2005
2	Attended ASME 2012 International Manufacturing Science and Engineering Conference	University of Notre Dame, IN, USA	4 th June 2012 to 8 th June 2012

15. MEMBERSHIP OF PROFESSIONAL BODIES / SOCIETIES

- **Fellow** of the Institution of Engineers (India).
- **Member** of Institute of Standards Engineers (India).
- **Life Member** of the National Society of Fluid Mechanics and Fluid Power(India).
- **Life Member** of the Indian Society for Technical Education.
- **Member** of American Society of Mechanical Engineers (USA).

16. AWARDS, HONOURS AND RECOGNITIONS

A. Academic Distinctions / Honours

- **Expert Member**, National Board of Accreditation, All India Council For Technical Education, New Delhi.
- **Research paper reviewer**, Global Journal of Flexible Systems Management, India.
- **Reviewer** of research papers presented at International Conference on Quality Engineering and Management, 1997, Coimbatore.
- **Chaired** one session on CAM at XVI National Convention of Mechanical Engineers and National Seminar, 2000, IIT Roorkee.
- **Member** of Evaluation committee for Dr. M.G. Deshpande memorial prize for best research paper presented at 27th National Conference on Fluid Mechanics & Fluid Power, 2000, Palghat.
- **Referee** of research papers presented at International Conference on Knowledge Based Computer Systems, 2002, NCST, Mumbai.
- **Member Advisory Committee**, All India Seminar on “Emerging Trends in Mechanical Engineering”, March 2005 at National Institute of Technology, Kurukshetra.
- **Paper reviewer** of Journal of Engineering and Technology Education, NITTTR, Chandigarh (from 2006 onwards).
- **Paper reviewer** of International Journal of Business and Systems Research, Inderscience Publishers, UK(2009).
- **Paper reviewer** of International Journal of Manufacturing Technology Management, Inderscience Publishers, UK(2010).
- **Member Advisory Committee**, National Conference on “Recent Advances in Electrical Engineering and Energy Systems” at Institute of Technology and Management, Bhilwara, Rajasthan, September 2010.
- **Paper reviewer** of International Journal of Enterprise Information Systems, Taylor and Francis Publishers, UK(2011).

B. Medals / Awards

- **Recipient** of Shri Murlu Manohar Agrawal Memorial **Gold Medal** from Rani Durgavati Vishwavidyalaya, Jabalpur, January 1984.
- **Recipient** of Late Chandra Shekhar Belapurkar Memorial **Gold Medal** from Rani Durgavati Vishwavidyalaya, Jabalpur, January 1984.
- **Nominated** for “**Bharat Jyoti Award**” by India International Friendship Society, New Delhi (2001).
- **Nominated** for “**Best Citizens of India Award**” by International Publishing House, New Delhi (2001).
- **Recipient** of “**Certificate of Merit**” by the Institution of Engineers (India) for the research paper published in Journal of the Institution of Engineers (India), December 2001.
- **Recipient** of **ISTE Baroda Chapter Award 2011** by the Indian Society for Technical Education for the research paper published in the Indian Journal of Technical Education, September 2010.

C. Expertise

- State level **expert** committee member for establishment of new diploma level technical institutions in Panjab and Haryana State(since 2002).
- **Expert member**, Board of Studies in M.E. (Manufacturing Technology), Panjab University, Chandigarh (since 1992).
- **Expert member**, National Board of Accreditation, All India Council For Technical Education, New Delhi (since 2006).
- **Member**, Research Board in Engineering & Technology, Panjab University, Chandigarh (since 2006).
- **Member**, Research Degree Committee in Mechanical Engineering, Panjab University, Chandigarh (since 2006).
- **Member**, Academic Council, National Institute of Technical Teachers Training & Research, Sector 26, Chandigarh (since 2007).
- **Expert Member**, Academic Council, Indo Swiss Training Centre, CSIO, Sector 30, Chandigarh (since 2009).
- **Organizer** of National Conferences / Seminars at NITTTR, Chandigarh.
- Selection Committee **expert member** for Ph.D. candidates under AICTE-QIP(Polytechnic) scheme.
- Selection committee **expert member** for lecturers in Mechanical Engineering at Baba Banda Singh Bahadur Engineering College, Fatehgarh Sahib.
- Selection committee **expert member** for lecturer in Mechanical Engineering at Chandigarh College of Engineering and Technology, Chandigarh.
- **Expert member of UPSC**, New Delhi for the development of item bank in Mechanical Engineering Aptitude.
- **Expert member of NPIU/ COFMOW** – in preparation of specifications and purchase of mechanical engineering equipment for polytechnic under World Bank project.
- **Expert member** selection committee for engaging Research Fellows / Project Assistants / Drivers at CSIO, Chandigarh.
- **Expert member** selection committee for recruitment of instructors / drivers in Department of Industrial Training and Vocational Education, Haryana.

- **Expert member** selection committee for recruitment of Lecturers in Department of Technical Education, Haryana.
- **Organising member** of committee for conduct of technical teacher recruitment test for Government of Haryana(2011).
- Selection committee **expert member** for Assistant Professor in Mechanical Engineering / Production Engineering at PEC University of Technology, Chandigarh(2011).

Date : 31st January 2013

Place : Chandigarh

Signature