



**1. Name in full:** RAVIPUDI VENKATA RAO

**2. Father's Name:** R. Lakshmi Narayana

**3. Address for communication:**

Dr. R. VENKATA RAO  
Professor, Department of Mechanical Engineering  
Sardar Vallabhbhai National Institute of Technology (SVNIT), Surat  
(An Institute of National importance of Government of India)  
Ichchhanath, Surat, Gujarat State – 395 007, India

**4. Contact Nos.:** 02612201982(O), 02612201661(R), 9925207027(M)

**5. Nationality:** Indian      **Email ID:** ravipudirao@gmail.com

**6. Date of Birth:** 04-07-1967

**7. Educational qualifications:**

Qualification	University/Board	% of marks overall	Year	Subjects of study/Specialization
S.S.C	Board of Secondary Education, A.P., India	First Class (76.8%)	1982	Maths, Sciences, etc.
Intermediate	Board of Intermediate Education, A.P., India	First Class (78.5%)	1984	Maths, Sciences, etc.
B. Tech. (Mech. Engg.)	Nagarjuna University, A.P.	First Class with Distinction (79.3%)	1988	Mechanical Engg.
M. Tech. (Mech. Engg.)	BanarasHinduUniversity (IIT-BHU now) Varanasi, U.P., India	CGPA= 9.23/10	1991	Production Engineering Specialization
Ph.D. (Mech. Engg.)	B.I.T.S. Pilani, Rajasthan, India	Degree was Awarded	2002	Mechanical Engineering (under the sole guidance of Dr. O. P. Gandhi of IIT Delhi)
Habilitation (D.Sc. in Technical Sciences)	Politechnika Krakowska, Krakow, Poland (Cracow University of Technology, Cracow, Poland) – Poland Government's Central Commission for Higher Academic Degrees	Degree was Awarded	2016	Mechanical Engineering

**8. Areas of Research:** Mech. Engg. (Application of advanced optimization techniques to the research problems of design, thermal, manufacturing and industrial engineering)

***(Only sincere and hard-working PhD aspirants may contact me for either full-time or part-time PhD supervision)***

**9. List of all previous employment:**

S. No.	Institute	Position held	Experience		
			Academic /Teaching	Administrative	Remarks
1	SardarVallabh bhai National Institute of Technology (SVNIT), Surat  <b>(An institute of MHRD, Govt. of India)</b>	Professor	6 <sup>th</sup> November 2006 till date	Head of the Department: 03 years  Dean (Academic): 01 year  Coordinator, QIP: 2 years 3 months	Deputed by MHRD New Delhi as a <i>Visiting Professor to AIT Bangkok, Thailand four times</i> (each time for one term of 16 weeks) during 2008, 2010, 2015 and 2018)
2	Shri Mata Vaishno Devi University, Katra, J&K <b>(J&amp;K State University)</b>	Professor	June 2005 – November 2006	Dean (College of Engineering) of University from July 2005 to November 2006.	Simultaneously worked as Head of the Dept. of Mech. Engg.
3	Kumaraguru College of Technology (KCT), Coimbatore Tamilnadu <b>(Autonomous Institute under Anna University, Chennai)</b>	Professor	2003-2005	Head of the Department of Mechanical Engg. (PG Section)	---
4	Beant College of Engg. & Technology Gurdaspur, Punjab <b>(Punjab Govt.'s College)</b>	Assistant Professor <i>(Equivalent to current Associate Professor post)</i>	1996-2003	Head of the Department of Mechanical & Production Engineering: 2 years	---
5	Sant Longowal Institute of Engg. & Technology, Longowal, Punjab <b>(an Institute of MHRD, Government of India)</b>	Lecturer <i>(Equivalent to current Assistant Professor post)</i>	1991–1996	Hostel Warden: 02 years  Coordinated the industrial training programs of the undergraduate students: 03 years	---

## 10. Other details:

No. of Awards / Recognitions	No. of Ph.D. guided (Completed and In progress)	No. of Publications (National and International),	No. of Books published & under publication,	No. of Projects (completed & In progress)	Details of Memberships in societies
20	10 completed + 03 theses submitted+ 03 are in progress.	<b>Total no. of papers: 331</b> International journals: 125 National journals: 30 International conference proceedings: 132 National conference proceedings: 44	<b>No. of books (Springer Science and Business Media): 05</b> <b>Under processing: 01 (Springer Nature, Switzerland)</b> Books published in India: 03 Book chapters: 06	<b>Completed : 04</b> <b>In progress: 01 (Indo-Slovenian Joint Research Project)</b>	07

## 12. Research Profile (as on 17-09-2017):

**Google Scholar: h-index=40; No. of citations:6884**



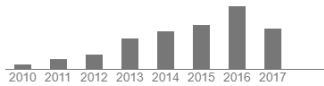
**Dr. R. Venkata Rao** Edit Follow

S. V. NATIONAL INSTITUTE OF TECHNOLOGY  
 Advanced Engineering Optimization, Decision Making Methods, Design of Mechanical and Thermal Systems, Manufacturing Processes and  
 Verified email at med.svnit.ac.in  
 My profile is public

[Change photo](#)

**Google Scholar**

Citation indices	All	Since 2012
Citations	6884	6144
h-index	40	38
i10-index	85	80

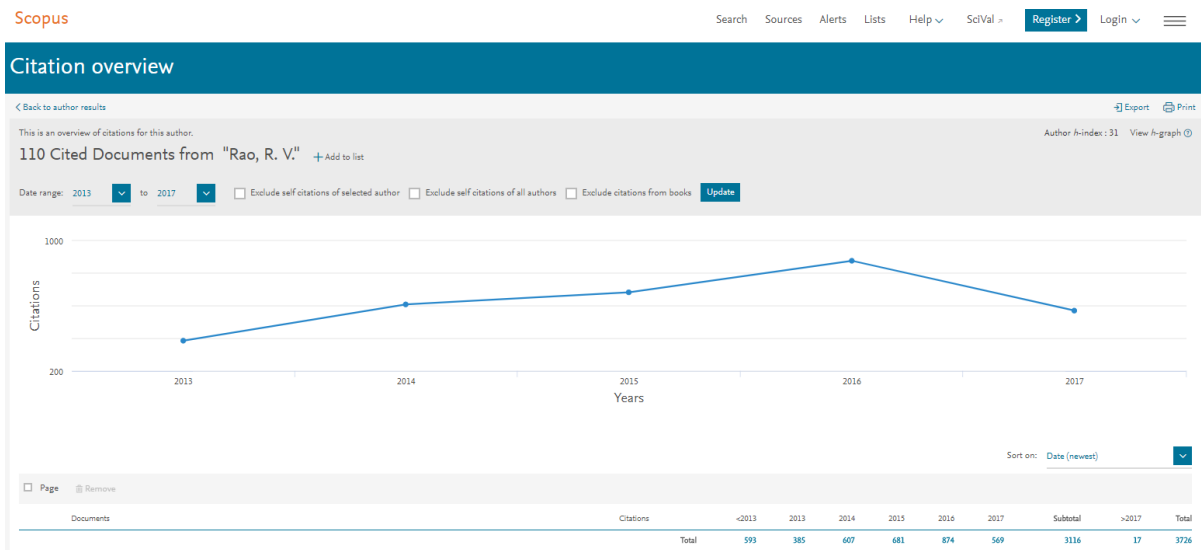


Title   1-20 Cited by Year

[Teaching-learning-based optimization: a novel method for constrained mechanical design optimization problems](#) 907 2011

RV Rao, VJ Savsani, DP Vakharia  
Computer-Aided Design 43 (3), 303-315

## Scopus: h-index=31; No. of citations:3726



## Latest Papers Published During 2016-2017

### Papers published in international journals (related to manufacturing)

Sr. no.	Title	Journal	5-years Impact factor (Clarivate Analytics)	Status
1.	Multi-objective optimization of machining and micro-machining processes using non-dominated sorting teaching-learning-based optimization algorithm	Journal of Intelligent Manufacturing, 2016 DOI:10.1007/s10845-016-1210-5 <b>ISSN: 0956-5515</b> <i>Springer</i>	3.035	Available online
2.	A new algorithm for parameter optimization of nano-finishing processes	Scientia Iranica Transaction on Industrial Engineering, 24(4) 2016, 868-875. <b>ISSN: 1026-3098</b>	1.025	Available online
3.	A new multi-objective Jaya algorithm for optimization of modern machining processes	Advances in Production Engineering & Management 11(4) 2016, 271-286. <b>ISSN: 1854-6250</b>	1.424	Published
4.	A multi-objective algorithm for	Engineering Applications of Artificial Intelligence, 61 2017, 103-125.	3.177	Published

	optimization of modern machining processes	<b>ISSN: 0952-1976</b> <i>Elsevier</i>		
5.	Optimization of welding processes using quasi oppositional based Jaya algorithm	Journal of Experimental and Theoretical Artificial Intelligence, 2017 DOI:10.1080/0952813X.2017.1309692 <b>ISSN: 1362-3079</b> <i>Taylor &amp; Francis</i>	1.384	Published
6.	Optimization of submerged arc welding process using quasi oppositional based Jaya algorithm	Journal of Mechanical Science and Technology, 31(5) 2017, 2013-2025. <b>ISSN:976-3824</b> <i>Springer</i>	1.128	Published
7.	Optimization of fused deposition modeling process using teaching-learning-based optimization algorithm	Engineering Science and Technology: An International Journal, 19(1) 2015, 587-603. <b>ISSN: 2215-0986</b> <i>Elsevier</i>	-	Published

**Papers published in international journals (related to design of thermal systems)**

<b>Sr. no.</b>	<b>Title</b>	<b>Journal</b>	<b>5-years Impact factor (Clarivate Analytics)</b>	<b>Status</b>
1.	A self-adaptive multi-population based Jaya algorithm for engineering optimization	Swarm and Evolutionary Computation, 2017, <a href="https://doi.org/10.1016/j.swevo.2017.04.008">https://doi.org/10.1016/j.swevo.2017.04.008</a> <b>ISSN: 2210-6502</b> <i>Elsevier</i>	7.731	Available online
2.	Design optimization and analysis of selected thermal devices using self-adaptive Jaya algorithm	Energy Conversion and Management, 140 2017, 24-35. <b>ISSN: 0196-8904</b> <i>Elsevier</i>	5.472	Published
3.	Constrained economic optimization of shell-and-tube heat exchangers using elitist-Jaya algorithm	Energy, 128 2017, 785-800. <b>ISSN: 0360-5442</b> <i>Elsevier</i>	5.182	Published
4.	Dimensional optimization of a micro-channel heat sink using Jaya algorithm	Applied Thermal Engineering, 103 2016, 572-582. <b>ISSN: 1359-4311</b> <i>Elsevier</i>	3.634	Published

5.	Economic optimization of shell-and-tube heat exchanger using Jaya algorithm with maintenance consideration	Applied Thermal Engineering, 116 2017, 473-487. <b>ISSN: 1359-4311</b> <i>Elsevier</i>	3.634	Published
6.	Optimal design and analysis of mechanical draft cooling tower using improved Jaya algorithm	International Journal of Refrigeration, <a href="https://doi.org/10.1016/j.ijrefrig.2017.06.024">https://doi.org/10.1016/j.ijrefrig.2017.06.024</a> <b>ISSN: 0140-7007</b> <i>Elsevier</i>	2.877	Available online
7.	Multi-objective optimization of the Stirling heat engine through self-adaptive Jaya algorithm	Journal of Renewable and Sustainable Energy, 9(3) 2017, 033703. <a href="http://doi.org/10.1063/1.4987149">http://doi.org/10.1063/1.4987149</a> <b>ISSN: 1941-7012</b> <i>American Institute of Physics</i>	1.276	Available online
8.	Multi-objective optimization of thermo-acoustic devices using teaching-learning-based optimization algorithm	Science and Technology for the Built Environment, 2017 DOI: <a href="http://dx.doi.org/10.1080/23744731.2017.1296319">http://dx.doi.org/10.1080/23744731.2017.1296319</a> <i>Taylor &amp; Francis</i>	1.145	Available online
9.	Optimal design of Stirling heat engine using an advanced optimization algorithm	Sadhana, 41(11) 2016, 1321-1331. ISSN: 0256-2499 <i>Springer</i>	0.465	Published
10.	Multi-objective design optimization of heat exchangers using elitist-Jaya algorithm	Energy Systems 2016, DOI: 10.1007/s12667-016-0221-9 <b>ISSN: 1868-3967</b> <i>Springer</i>	-	Available online
11.	Single- and multi-objective design optimization of plate-fin heat exchangers using Jaya algorithm	Heat Transfer Engineering 2017, <a href="http://dx.doi.org/10.1080/01457632.2017.1363629">http://dx.doi.org/10.1080/01457632.2017.1363629</a> <i>Taylor &amp; Francis</i>	1.431	Available online

## Additional Information:

### (i). No. of Awards / Recognitions:

1. **Institution of Engineers (India), Kolkata's M.P.Baya "National Award"** for Advancement of Technology in Mechanical Engineering for the year 2014.
2. **Elsevier's Computer-Aided Design Journal's "Most Cited Award for 2013 and 2014"**.
3. **"Fellowship" Award of the Indian Institution of Industrial Engineering (IIIE), Navi Mumbai (October 31, 2012).**
4. **"Lifetime Achievement Award"** declared by the Organizers of the International Conference on Agile Manufacturing during 16-19 December 2012 **conducted by the Dept. of Mech. Engg. of IIT (BHU) Varanasi.**
5. Received **"Best Research Paper Award" of Indian Society for Non-Destructive Testing (ISNT) Journal, India for 2010.**
6. Received the **"Meritorious Award"** from The International Institute for Advanced Studies in Systems Research (IIAS) Canada in 2008 for innovative research work.
7. Received **'Best Research Paper Award' of Indian Institution for Industrial Engineering (IIIE) Journal, India for 2006.**
8. Received **ISTE-New Delhi National Award for the year 2001 for "Best Research Work Done".**
9. Received **Gold Medal for B. Tech. Studies in 1988.**
10. Topped throughout the academic career during studies and received merit scholarships by the State Govt. of A. P., India.
11. Deputed four times as a **Visiting Professor by Ministry of Human Resource development (MHRD), New Delhi (India) to teach at Asian Institute of Technology (AIT) Bangkok, Thailand each time for 16 weeks (January 2018 to May 2018, January 2015 to May 2015, August 2010 to December 2010 and January 2008 to May 2008).**
12. Invited to **Politechnika Krakowska, Institute of Thermal Power Engineering, Poland** to deliver a series of seminars on advanced engineering techniques for computational heat and mass transfer, 10-22 January 2016 and 31<sup>st</sup> October to 13<sup>th</sup> November 2016.
13. Invited to **BITS pilani, Dubai Campus (UAE)** to deliver a series of lectures during June – December 2017.
14. Selected as a **Visiting Professor by Indian Society for Technical Education (ISTE) New Delhi** for the academic year 2007-2008 to visit any technical institution in India to deliver lectures.
15. Included in the **Panel of Expert Members, National Board of Accreditation (NBA) of Government of India, New Delhi.**
16. Included in the **Panel of Expert Members, Union Public Service Commission (UPSC) of Government of India, New Delhi.**
17. Included as an **expert in the Selection Boards** of many private and deemed universities of India.
18. Received international travel grants from government agencies like All India Council for Technical Education (AICTE), Department of Science and Technology (DST) and Indian National Science Academy (INSA) of India.
19. **Selected and deputed by Government of India to Nanyang Technological University, Singapore during 7-13 October 2008 , SIVAT, Seoul of South**

**Korea during 7-15 September 2009 and Institute of Technical Education, Ministry of Foreign Affairs, Singapore during 7-11 March 2011** as representative from India to participate in the technical education training programs organized by CPSC Manila.

20. Serving the **Editorial Boards** of many international journals.

**(ii). No. of Ph.D. guided (Completed and In-progress):**

10 completed+ 3 submitted + 3 are in progress.

<b>S.No.</b> <b>S. N.</b>	<b>Name of the Student</b>	<b>Title of the Thesis</b>	<b>Date of Registration</b>	<b>Date of completion</b>
1	Padmakar J.Pawar <b>(as sole supervisor)</b>	Parameter optimization of machining processes using non-traditional optimization techniques	July 2007	January 2011
2	Bhavesh K. Patel <b>(as sole supervisor)</b>	Development of Fuzzy Multiple Attribute Decision Support Systems and their Applications to the Problems of Manufacturing Environment	January 2008	July 2011
3	Vimal J.Savsani <b>(as joint supervisor)</b>	Design optimization of mechanical elements using advanced optimization techniques	July 2007	July 2011
4	Dinesh Singh <b>(as sole supervisor)</b>	Multiple Attribute Decision Making in the Manufacturing Environment	January 2008	January 2012
5	Vivek K. Patel <b>(as sole supervisor)</b>	Design optimization of thermal systems using advanced optimization techniques	July 2009	January 2013
6	Vivek D.Kalyankar <b>(as sole supervisor)</b>	Parameters optimization of selected manufacturing processes using advanced optimization techniques	January 2010	July 2013
7	G.Waghmare <b>(as sole supervisor)</b>	Design optimization using TLBO algorithm	January 2012	March 2016
8	Veera Darji <b>(as sole supervisor)</b>	Applications of Decision Making Methods to the Selected Problems of the Industrial Environment	July 2007	August 2016
9	P. B. Lanjewar <b>(as main supervisor)</b>	Decision Making in Thermal Engineering Environment Using An Integrated Graph Theory and Analytic Hierarchy Process Method	July 2010	June 2017





(iv). No. of Books published:

**Books Published by Springer Verlag, London, UK:**

S.No.	Book Details
1	Teaching-learning-based optimization and its engineering applications, <b>2016</b> , ISBN: 978-3-319-22731-3 (Refer to: <a href="http://link.springer.com/book/10.1007/978-3-319-22732-0">http://link.springer.com/book/10.1007/978-3-319-22732-0</a> )
2	Decision Making in the Manufacturing Environment Using Graph theory and Fuzzy Multiple Attribute Decision Making Methods, June <b>2007</b> , ISBN: 978-1-84628-818-0 {Refer to: <a href="http://link.springer.com/book/10.1007/978-1-84628-819-7">http://link.springer.com/book/10.1007/978-1-84628-819-7</a> }).
3	Decision Making in the Manufacturing Environment Using Graph theory and Fuzzy Multiple Attribute Decision Making Methods (Volume-2), 2013, ISBN: 978-1-4471-4374-1 (Refer to: <a href="http://www.springer.com/in/book/9781447143741">http://www.springer.com/in/book/9781447143741</a> ).
4	Advanced Modeling and Optimization of Manufacturing Processes: International Research and Development, <b>2011</b> , ISBN: 978-0-85729-014-4 {Refer to: <a href="http://link.springer.com/book/10.1007/978-0-85729-015-1">http://link.springer.com/book/10.1007/978-0-85729-015-1</a> }).
5	Mechanical Design Optimization Using Advanced Optimization Technique, February <b>2012</b> , ISBN: 978-1-4471-2747-5 {Refer to: <a href="http://link.springer.com/book/10.1007/978-1-4471-2748-2">http://link.springer.com/book/10.1007/978-1-4471-2748-2</a> }).
6	Jaya: An advanced optimization algorithm and its engineering applications, <b>2018, (in-process) (Springer Nature, Switzerland)</b>

**Book Chapters published:**

1. Multi-objective optimization of multi-pass milling process parameters using artificial bee colony optimization algorithm. Artificial Intelligence in Manufacturing, **Nova Science Publishers, USA**
2. Process parameter optimization of advanced finishing processes using PSO and SA algorithms. Artificial Intelligence in Manufacturing, **Nova Science Publishers, USA**
3. Modeling and optimization of parameters of GMAW process. Optimization Methods in Manufacturing, **IGI Global Publishers, USA.**
4. Vendor selection in supply chain using particle swarm optimization algorithm, **Excel Books, India**
5. Optimization of abrasive flow machining process. Introduction to Micromachining (Ed. V.K.Jain), **Narosa Publishing House, India.**
6. Optimization of advanced finishing processes using teaching-learning-based optimization algorithm. Nanofinishing Science and Technology (Ed. V.K.Jain), **CRC Press, USA.**

**Books Published by Indian Publishers:**

1. Fundamentals of Machining and Machine Tools. S.K.Kataria and Sons Publishers, New Delhi, 1997.
2. Metal Cutting and Machine Tools. S.K.Kataria and Sons Publishers, New Delhi, 1998.
3. Design and Manufacturing. S.K.Kataria and Sons Publishers, New Delhi, 1998.

**(v). No. of Projects (completed & In-progress):**

- Development of decision support systems for manufacturing environment: Council of Scientific and Industrial Research (CSIR), New Delhi: 2007-2010 **(Completed)**.
- Experimental investigation into submerged arc welding of Cr-Mo-V steel: Gujarat Council on Science and Technology (GUJCOST), Gandhinagar: 2011-2013 **(Completed)**.
- DST-FIST Project as Head of the Department: 2007-2010 (Completed with the help of Project Implementation Committee).
- Life cycle design of products: Institute Research Grant: 2007-2008 **(Completed)**.

**International research projects**

- Environmental conscious design and manufacturing of products: Department of Science and Technology (DST) – International Division, New Delhi: 2011-2013 **(Completed jointly with Technical University of Vienna, Austria)**
- Optimization of sustainable modern machining processes: Department of Science and Technology (DST) – International Division, New Delhi: 2015-2018 **(Ongoing jointly with University of Maribor, Maribor, Slovenia)**.

**International Workshops**

- **Indo-Russian Joint Research Workshop**: on “Computational Intelligence and Modern Heuristics on Automation and Robotics”  
Funding Agency: DST, India & RFBR, Russia  
Co-Coordinator: Prof. Vadim Zhmud, Novosibirsk State Technical University, Russia  
The Workshop was held successfully during 20-22 September 2010
- **Second Russian-Indian Joint Research Workshop**: on “Computational Intelligence and Modern Heuristics on Automation and Robotics”  
Funding Agency: DST, India & RFBR, Russia  
Co-Coordinator: Prof. Vadim Zhmud, Novosibirsk State Technical University, Russia  
The joint Workshop was held successfully during 10-13 September 2011.

**(vi). Details of Memberships in societies.**

- Fellow, Institution of Engineers (India), Kolkata
- Fellow, Indian Institution of Production Engineers (IIPE)
- Member, Operational Research Society of India (ORSI)
- Life Member, Indian Society of Technical Education (ISTE)
- Life Member, Indian Institution of Industrial Engineering (IIIE), Navi Mumbai
- Executive Council Member of IIIE during 2008-2009
- Life Member, Indian Society of Mechanical Engineers (ISME), New Delhi

## **Relevant information:**

### **1. Administrative Services: (e.g. Dean /HOD / Prof.Incharge / Chairman, Board of Studies, etc.):**

#### **Support to institute's management:**

##### **At SVNIT, Surat (Gujarat, India):**

- 1. Member, Senate of the institute since 2006**
- 2. Worked as Head of the Department of Mechanical Engineering for a term of 3 years from 8<sup>th</sup> January 2007 to 8<sup>th</sup> January 2010.**
  - a. As Head of the Department, I was involved in day-to-day administration of the department dealing with 45 faculty members and about 50 non-teaching staff members
  - b. Helped the institute management in recruiting highly qualified and competitive faculty members for the department at various levels (in 2007 and in 2009)
  - c. Actively involved in getting NBA accreditation for the 2 UG programs and 2 PG programs of the department in 2008
  - d. Introduced 2 new PG programs in M.Tech. (CAD/CAM) and M.Tech. (Thermal System Design)
  - e. Acted as Chairman of the Departmental Boards of Undergraduate and Post-Graduate Studies and Research
  - f. Conducted curriculum design and development workshops for the 2 UG and 5 PG programs of the department
  - g. Actively involved in conducting the M.Tech. and Ph.D. admissions of the department (as Chairman during my Headship and as a Member now)
  - h. Student intake is increased during my Headship and I had taken steps to accommodate them comfortably in the available class rooms
  - i. I had motivated the faculty members to develop the laboratories and to submit research projects
  - j. As the Head of the Department, I had acted as the overall coordinator of the DST-FIST project
  - k. Actively involved in implementing the TEQIP-I activities at the departmental level
- 3. Worked as Dean (Academics) at the institute level for 1 year (June 2013-June 2014).**
  - l. During this period I had acted as the Centre Incharge of the Reporting Centre for all the admissions in to the M.Tech. programs of the institute conducted by CCMT-2013 during June-July 2013
  - m. Effectively coordinated the Ph.D. admissions in all the departments in July 2013

- n. I had thoroughly revised the Academic Rules and Regulations of the B.Tech.,M.Tech. and Ph.D. programs of the institute and got those approved by the Senate in its meeting held on 15<sup>th</sup> July 2013. These regulations are effective from 2013-14.
- o. After taking over the charge, I had looked into the matter of NBA accreditation of 14 PG programs and 1 UG program. I had contacted the NBA authorities and started the online filling of the Self Assessment Reports (SARs). I was instrumental in the e-NBA activities.
- p. As the Member-Secretary of the Institute Academic Advisory Committee (IAAC), I had convened meetings after taking over the charge and dealt with various academic matters related to the UG, PG and Ph.D. programs of the institute
- q. Helped the Chairman, Senate in all the related matters
- r. Coordinated the conduct of examinations and the declaration of results in time
- s. Performed all the duties of Dean (Academics) as envisaged in the NIT Statues

**3. Worked as Coordinator of the Quality Improvement Programme (QIP) Centre of the institute for more than 2 years (October 2012-mid January 2015).**

As the QIP Coordinator, I was in effective touch with the office of the Principal Coordinator at IISc Bangalore and IIT Kanpur and organized the Ph.D. admissions through QIP in different departments of the institute.

**4. Other duties**

- t. Worked as incharge Registrar and incharge Director few times in the out-of-station dates of the regular Registrar and the Director
- u. Actively involved as a member of the Institute level Boards of Undergraduate and Post-Graduate Studies and Research
- v. Acted as the Overall Coordinator of the AICTE Sponsored One Week Short Term Training Programs conducted by different departments of the institute during the year 2008-2009
- w. Involved in various committees formed at institute level
- x. As a member of Senate, I am actively involved in all the activities of the Senate

**At SMVDUniversity, Katra (A state University of J&K):**

Worked as Dean (College of Engineering) of the University from July 2005 to November 2006 (before joining SV NIT, Surat) and looked after all the activities related to academics, research and administration. Simultaneously worked as Head of the Department of Mechanical Engineering.

**At Kumaraguru College of Technology (An Autonomous Institute under Anna University, Chennai)**

Worked as Head of the Department of PG section to conduct M.Tech. (CAD/CAM) and M.Tech. (Industrial Engg.) programs and looked after all the activities related to academics, research and administration related to PG section.

## **At Beant College of Engineering and Technology, Gurdaspur, Punjab (Punjab Government's College)**

Worked as Coordinator (i.e. Head) of the Department of Mechanical & Production Engineering for a term of 2 years and looked after all the activities related to academics and administration of the department.

In addition to the above, I am on the Boards of Studies of different universities like University of Pune, GITAM university, etc.

### **2. Liaison with the industries and Research Organizations:**

- A Deputy General Manager of L&T industries, Hazira, Surat and a Senior General Manager (Maintenance) of Reliance Industries Limited, Hazira, Surat had completed their M.Tech. (Research) dissertations under my guidance.
- A Senior General Manager of Reliance Industries Limited, Hazira, Surat has submitted his Ph.D. thesis in 2017 under my sole guidance.
- I had visited the plants of (i). Essar Steel Limited and (ii). Reliance Industries Limited of Surat and delivered lectures on research methodology to their R&D engineers.
- Senior managers and senior executives of Reliance Industries Limited, Essar Steel Limited, L&T, DRDO, IPR, etc. had attended the one week short term training programs conducted by me as participants. Subsequently they are applying the gained knowledge to solve their industrial problems.
- Space Applications Centre (SAC) of ISRO Ahmedabad had invited me to train 30 of their scientists for 3 days on the “Advanced Engineering Optimization Through Intelligent Techniques” during 1-3 May 2014. In addition, a 2-hours lecture on “Publication of Research Papers in Reputed International Journals” was delivered to about 250 ISRO scientists and engineers. I was invited once again in October 2016 to deliver a 2-hours lecture on TLBO and Jaya optimization algorithms.

**3. Countries visited:** Czech Republic, Hong Kong (3), Singapore (2), Ukraine, Russia (2), Austria, Germany (3), Turkey, Thailand (3), South Korea, Slovenia, Poland (4) and UAE.

### **4. No. of expert lectures delivered:**

More than 300 (including those at Orel State Technical University, **Russia**; Technical University of Liberec, **Czech Republic**; Kiev Polytechnic Institute, **Ukraine**; Nanyong Technological University, **Singapore**; HKUST **Hong Kong**; AIT **Bangkok**, Thailand; IIT **Kanpur**, IIT-BHU **Varanasi**, Indian Space Research Organization (**ISRO**), Ahmedabad, IIITM **Gwalior**, RGPV **Bhopal**, Anna University **Chennai**, MITS Gwalior, NITs, Deemed/Private Universities/engineering colleges, Reliance Industries, Essar Industries and the short term training programs conducted at SVNIT Surat). These lectures are based on advanced engineering optimization techniques and their applications and Research Methodology.

## 5. No. of Conferences/Workshops Organized:

### National Conferences:

- National Conference on “Emerging Trends in Mechanical Engineering” during 4-5 June 2007
- National Conference on “Recent Trends in Design and Manufacturing Technologies” (17-18 March 2005)
- National Conference on “Environmentally Conscious Design and Manufacturing” (23-24 July 2004)

### International Conferences:

- International Conference on Advances in Mechanical Engineering (ICAME 2008) held at SVNIT Surat during 15-17 December 2008
- Second International Conference on Advances in Mechanical Engineering (ICAME 2009) held at SVNIT Surat during 3-5 August 2009
- Third International Conference on Advances in Mechanical Engineering (ICAME 2010) held at SVNIT Surat during 4-6 January 2010
- Fourth International Conference on Advances in Mechanical Engineering (ICAME) held at SVNIT Surat during 23-25 September 2010
- Fifth International Conference on Advances in Mechanical Engineering (ICAME) held at SVNIT Surat during 06-08 June 2011
- International Conference on Advanced Engineering Optimization Through Intelligent Techniques held at SVNIT Surat during 01-03 July 2013
- **Indo-Russian Joint Research Workshop**: on “Computational Intelligence and Modern Heuristics on Automation and Robotics”  
Funding Agency: DST, India & RFBR, Russia  
Co-Coordinator: Prof. VadimZhmud, Novosibirsk State Technical University, Russia  
The Workshop was held successfully during 20-22 September 2010
- **Second Russian-Indian Joint Research Workshop**: on “Computational Intelligence and Modern Heuristics on Automation and Robotics”  
Funding Agency: DST, India & RFBR, Russia  
Co-Coordinator: Prof. VadimZhmud, Novosibirsk State Technical University, Russia  
The joint Workshop was held successfully during 10-13 September 2011.

## 6. No. of Summer/Winter schools/Training Programmes Organized:

S. No.	Title of the short term course	Month in which the course was conducted
1	AICTE sponsored one-week short term training program on “Advanced engineering optimization through intelligent techniques” <b>(Coordinator and Main Teacher)</b>	16-20 June 2008 (more than 70 participants from engineering colleges and institutes)
2	2 <sup>nd</sup> AICTE sponsored one-week short term training program on “Advanced engineering optimization through intelligent techniques” <b>(Coordinator and Main Teacher)</b>	30 <sup>th</sup> June – 4 <sup>th</sup> July 2008 (more than 60 participants from engineering colleges and institutes)

3	3 <sup>rd</sup> AICTE sponsored one-week short term training program on “Advanced engineering optimization through intelligent techniques” <b>(Coordinator and Main Teacher)</b>	22-26 December 2008 (more than 70 participants from engineering colleges and institutes)
4	4 <sup>th</sup> AICTE sponsored one-week short term training program on “Advanced engineering optimization through intelligent techniques” <b>(Coordinator and Main Teacher)</b>	13-17 July 2009 (more than 60 participants from engineering colleges and institutes)
5	5 <sup>th</sup> AICTE sponsored one-week short term training program on “Advanced engineering optimization through intelligent techniques” <b>(Coordinator and Main Teacher)</b>	14-18 December 2009 (more than 60 participants from engineering colleges and institutes)
6	6 <sup>th</sup> One-week short term training program on “Advanced engineering optimization through intelligent techniques” <i>(self-supported program)</i> <b>(Coordinator and Main Teacher)</b>	2-6 January 2012 (about 40 participants from engineering colleges and institutes)
7	7 <sup>th</sup> one-week short term training program on “Advanced engineering optimization through intelligent techniques” <i>(self-supported program)</i> <b>(Coordinator and Main Teacher)</b>	14-18 May 2012 (about 40 participants from engineering colleges and institutes)
8	8 <sup>th</sup> one-week short term training program on “Advanced engineering optimization through intelligent techniques” <i>(self-supported program)</i> <b>(Coordinator and Main Teacher)</b>	7-11 January 2013 (more than 50 participants from engineering colleges and institutes)
9	9 <sup>th</sup> one-week short term training program on “Advanced engineering optimization through intelligent techniques” <i>(self-supported program)</i> <b>(Coordinator and Main Teacher)</b>	23-27 September 2013 (more than 60 participants from engineering colleges and institutes)
10	10 <sup>th</sup> one-week short term training program on “Advanced engineering optimization through intelligent techniques” <i>(self-supported program)</i> <b>(Coordinator and Main Teacher)</b>	27-31 January 2014 (more than 70 participants from engineering colleges and institutes)
11	11 <sup>th</sup> one-week short term training program on “Advanced engineering optimization through intelligent techniques” <i>(self-supported program)</i> <b>(Coordinator and Main Teacher)</b>	24-28 March 2014 (more than 70 participants from engineering colleges and institutes)
12	12 <sup>th</sup> one-week short term training program on “Advanced engineering optimization through intelligent techniques” <i>(self-supported program)</i> <b>(Coordinator and Main Teacher)</b>	22-26 September 2014 (more than 85 participants from engineering colleges and institutes)
13	13 <sup>th</sup> one-week short term training program on “Advanced engineering optimization through intelligent techniques”	1-5 December 2014



	<i>(self-supported program)</i> <b>(Coordinator and Main Teacher)</b>	(more than 75 participants from engineering colleges and institutes)
14	14 <sup>th</sup> one-week short term training program on “Advanced engineering optimization through intelligent techniques” <i>(self-supported program)</i> <b>(Coordinator and Main Teacher)</b>	22-26 June 2015 (more than 70 participants from engineering colleges and institutes)
15	15 <sup>th</sup> one-week short term training program on “Advanced engineering optimization through intelligent techniques” <i>(self-supported program)</i> <b>(Coordinator and Main Teacher)</b>	21-25 March 2016 (more than 70 participants from engineering colleges and institutes)
16	Two-days short term course of “Multicriteria decision making and its applications” <i>(self-supported program)</i> <b>(Coordinator and Main Teacher)</b>	4-5 October 2008 (about 35 participants from engineering colleges and institutes)
17	One-day workshop/seminar on “Industrial Robotics” <i>(conducted in association with Cybermotion Technologies, Hyderabad)</i> <b>(Coordinator)</b>	9 <sup>th</sup> December 2009 (About 40 participants)
18	AICTE sponsored one-week short term training program on “Energy conservation and management” (as a co-coordinator)	21-25 December 2009 (more than 40 participants from engineering colleges and institutes)
19	AICTE sponsored one-week short term training program on “Pedagogy and research methodology” (as a co-coordinator)	19-23 January 2009 (more than 50 participants from engineering colleges and institutes)
20	DST Sponsored 3-days <b>Indo-Russian Joint Workshop</b> on “Computational Intelligence and Modern Heuristics in Automation and Robotics” <b>(As Indian Coordinator)</b>	20-22 September 2010 (10 Russian scientists and 30 Indian participants); Workshop was held in India
21	DST Sponsored Second 3-days <b>Russian-Indian Joint Workshop</b> on “Computational Intelligence and Modern Heuristics in Automation and Robotics” <b>(As Indian Coordinator)</b>	10-12 September 2011 (9 Indian participants and 10 Russian Scientists); Workshop was held in Russia
22	DST Sponsored Second 3-days <b>Russian-Indian Joint Workshop</b> on “Computational Intelligence and Modern Heuristics in Automation and Robotics” <b>(As Indian Coordinator)</b>	10-12 September 2011 (9 Indian participants and 10 Russian Scientists); Workshop was held in Russia
23	Three-days short term training program on “Advanced engineering optimization through intelligent techniques” <b>(Coordinator and Main Teacher)</b>	Space Applications Centre (SAC) of ISRO Ahmedabad 1-3 May 2014

		(30 scientists from ISRO, Ahmedabad)
24	16 <sup>th</sup> one-week short term training program on “Advanced engineering optimization through intelligent techniques” <b>(Coordinator and Main Teacher)</b>	22-26 August 2016 (more than 40 participants from engineering colleges and institutes)
25	17 <sup>th</sup> one-week short term training program on “Advanced engineering optimization through intelligent techniques” <b>(Coordinator and Main Teacher)</b>	6-10 February 2017 (more than 40 participants from engineering colleges and institutes)
26	18 <sup>th</sup> one-week short term training program on “Advanced engineering optimization through intelligent techniques” <b>(Coordinator and Main Teacher)</b>	27-31 March 2017 (more than 30 participants from engineering colleges and institutes)

## 7. Training Programs Attended Outside India (selected and deputed by MHRD, New Delhi):

Attended training programs organized by CPSC, Manila (Phillippines) in the following countries:

- National Institute of Education of Nanyang Technological University, Singapore (on Enhancing Pedagogy Skills for Teacher Trainers during 7-13 October 2008)
- SIVAT, Seoul, South Korea (on PPCP in technical and vocational education and training during 7-15 September 2009)
- Institute of Technical Education, Ministry of Foreign Affairs, Singapore (on TVET programme for Principals and Instructors during 7-11 March 2011)

## 8. Editorship of International Journals (Editor-in-Chief/Guest Editor/Editorial Board Member):

### International Journals

1. Journal of Intelligent Manufacturing, Springer Science+Business Media, London (**Associate Editor**), ISSN: 0956-5515 (**covered by Thomson Reuters and Scopus**).
2. The International Journal of Advanced Manufacturing Technology, Springer Science+Business Media, London (**Member, Editorial Board**), ISSN: 0268-3768 (**covered by Thomson Reuters and Scopus**).
3. Engineering Optimization, Taylor & Francis, UK (**Member, Mechanical Engineering Editorial Board Member**), ISSN: 0305-215X (**covered by Thomson Reuters and Scopus**)
4. Scientia Iranica: International Journal of Science and Technology, Sharif University of Technology, Iran (**Member, Mechanical Engineering Editorial Board Member**), ISSN: 1026-3098 (**covered by Thomson Reuters and Scopus**).
5. International Journal of Industrial Engineering Computations, Growing Science Publishers, Canada (**Member, Editorial Board**), ISSN : 1923-2934 (**covered by Scopus**).
6. Decision Science Letters, Growing Science Publishers, Canada (**Member, Editorial Board**), ISSN : 1929-5812 (**covered by Scopus**).
7. Journal of Advanced Manufacturing Systems, World Scientific Publishers, USA (**Member, Editorial Board**), ISSN : 0219-6867 (**covered by Scopus**).

8. International Journal of Materials and Engineering Innovation, Inderscience Publishers, UK (**Guest Editor: 2 issues**), Special Issue on Modeling and Optimization of Materials and Manufacturing Processes, Volume 2, Issues 3/4, 2011, **ISSN: 1757-2754 (covered by Scopus)**.
  9. International Journal of Materials, Manufacturing and Mechanical Engineering, IGI Publishers, USA (**Associate Editor**), **ISSN: 2156-1680 (covered by Scopus)**.
  10. International Journal of Research in Industrial Engineering, Iran (**Member, Editorial Board**), **ISSN: 1925-7505**.
  11. **International Journal of Advances in Thermal Sciences and Engineering**, International Science Press, New Delhi (**Editor-in-Chief**), **ISSN :0976-6820**.
  12. International Journal of Applied Evolutionary Computation, IGI Global Publishers, USA (**Associate Editor**), **ISSN: 1942-3594**.
  13. International Journal of Mechatronics and Intelligent Manufacturing, Nova Science Publishers, USA (**Guest Editor: 2 issues**), Volume 1, Issues 3/4, 2009, **ISSN: 1949-4904**.
  14. International Journal of Design Engineering, Inderscience Publishers, UK (**Guest Editor: 1 issue**), Special Issue on Mechanical Design and Optimization, Volume 2, Issue 2, 2009, **ISSN: 1751-5874**.
  15. International Journal of Manufacturing Technology and Industrial Engineering, International Science Press, New Delhi (**Editor-in-Chief**), **ISSN :0976-6251**.
  16. International Journal of Advanced Manufacturing Systems, International Science Press, New Delhi (**Editor-in-Chief**), **ISSN :2229-5860**.
  17. International Journal of Sustainable Manufacturing and Renewable Energy, Nova Science Publishers, USA, (**Member, Editorial Board**), **ISSN : 2153-6821**.
  18. Advances in Robotics Research, An International Journal, Techno-Press Publishers, Daejeon, South Korea (**Member, Editorial Board**), **ISSN : 2287-4976**.
  19. ISRN Aerospace Engineering, Hindwai Publishers, USA (**Member, Editorial Board**), **ISSN : 2356-7872**.
  20. International Journal of Engineering Project, Production Management, NUS Singapore, (**Member, Editorial Board**), **ISSN : 2221-6529**.
  21. International Journal of Mechatronics and Intelligent Manufacturing, Nova Science Publishers, USA, (**Member, Editorial Board**), **ISSN : 1949-4904**.
  22. International Journal of Modern Manufacturing Technology, International Science Publishers, New Delhi, (**Member, Editorial Board**), **ISSN : 0974-8415**.
- Indian Journals**
23. ISST Journal of Mechanical Engineering, Ghaziabad, Uttar Pradesh, (**Member, Editorial Board**), **ISSN : 0976-7371**.
  24. REASON-Technical Journal of Kalyani Govt. Engg. College, West Bengal (**Member, Editorial Board**), **ISSN : 2277-1654**.

## 9. Reviewer of International Journals

1. Applied Thermal Engineering, Elsevier
2. Heat and Mass Transfer, Springer
3. International Journal of Heat and Mass Transfer, Elsevier
4. Energy, Elsevier

5. Applied Energy, Elsevier
6. International Journal of Refrigeration, Elsevier
7. International Journal of Numerical Methods for Heat and Fluid Flow, Emerald Insight
8. International Journal of Electrical Power and Energy Systems, Elsevier
9. Chemical Engineering Research and Design, Elsevier
10. International Journal of Thermal Sciences, Elsevier
11. International Journal of Systems Science, Taylor & Francis
12. Asia-Pacific Journal of Chemical Engineering, Wiley
13. Neural Computing and Applications, Springer
14. Engineering Optimization, Taylor & Francis
15. Information Sciences, Elsevier
16. Engineering Applications of Artificial Intelligence, Elsevier
17. Applied Mathematics and Computation, Elsevier
18. Structural and Multidisciplinary Optimization, Springer
19. Applied Soft Computing, Elsevier, USA
20. Journal of King Saud University - Computer and Information Sciences, Elsevier
21. International Journal of Applied Evolutionary Computation, IGI Global
22. Optimal Control, Applications and Methods, Wiley
23. International Journal of Decision sciences, Elsevier
24. International Journal of Approximate Reasoning, Elsevier
25. National Academy of Sciences, India Section A: Physical Sciences, Springer
26. International Journal of Mechanics of Time-Dependant Materials, Springer
27. Applied Mathematical Modelling, Elsevier
28. Decision Support Systems and Technology, Elsevier
29. Research in Engineering Design, Springer
30. The Arabian Journal for Science and Engineering, Springer
31. IET Generation, Transmission & Distribution, Taylor & Francis
32. Finite Elements in Analysis and Design, Elsevier
33. Science China Information Sciences, Elsevier
34. Scientia Iranica, Elsevier
35. Journal of Zhejiang University-SCIENCE A, China, Elsevier
36. Machining Science & Technology, Taylor & Francis
37. IIE Transactions-Design & Manufacturing, Taylor & Francis
38. International Journal of Production Research, Taylor & Francis
39. International Journal of Engg. Tribology, IMechE
40. International Journal of Advanced Manufacturing Technology, Springer
41. Journal of Optical Communications, Taylor & Francis
42. International Journal of Robotics & Computer Integrated Manufacturing, Elsevier
43. International Journal of Machining and Machinability of Materials, Inderscience.
44. International Journal of Materials & Product Technology, Inderscience
45. International Journal of Mechatronics and Manufacturing Systems, Inderscience
46. Surface Review and Letters, World Scientific
47. Journal of Indian Institute of Science (IISc), Bangalore
48. Journal of Materials Processing Technology, Elsevier
49. Journal of Engineering Manufacture, IMechE, SAGE Publishers
50. Journal of Mechanical Engineering Sciences, IMechE, SAGE Publishers
51. Journal of Engineering Tribology, IMechE, SAGE Publishers

52. Journal of Materials Engineering and Performance, Taylor & Francis
  53. International Journal of Vehicle Design, Inderscience
  54. International Journal of Computers & Industrial Engineering, Elsevier
  55. International Journal of Mathematical and Computer Modeling, Elsevier
  56. International Journal of Management Research News
  57. ASME Journal of Mechanical Design, ASME, USA
  58. International Journal of Production Research, Taylor & Francis
  59. European Journal of Industrial Engineering, Inderscience
  60. International Journal of Manufacturing Research, Inderscience
  61. International Journal of Operational Research, Inderscience
  62. Journal of Intelligent Manufacturing, Springer
  63. International Journal of Decision Support Systems and Technology, IGI Global, USA
  64. International Journal of Information Technologies and Systems Approach, IGI Global, USA
  65. International Journal of Industrial Engineering Computations, Growing Science, Canada
  66. SME-Journal of Manufacturing Systems, Elsevier
  67. International Journal of Enterprise Network Management, Inderscience, UK
  68. Grey Systems: Theory and Application, Emerald Insight
  69. Heat and Mass Transfer, Springer, UK
  70. Optimal Control, Applications and Methods, Wiley, USA.
- Etc.