

## BIO-DATA

Name : **Dr. ANAND KUMAR**  
 Fathers' Name : Dr. Banarasi Lal  
 Designation : PROFESSOR  
 Department : Mechanical Engineering  
 Institute : HBTI, Kanpur  
 Teaching Experience : 25 years  
 Date of Birth : July 12, 1965  
 E-mail : [kranandhbti@gmail.com](mailto:kranandhbti@gmail.com)



## ACADEMIC QUALIFICATION

S.No	Examination Passed	Board/ University	Year	Percentage / OGPA	Division	Remarks
1	High School	U P Board	1981	83.8	First (Hons)	12 <sup>th</sup> Rank in U P
2	Intermediate	U P Board	1983	71.8	First	–
3	B.Tech. (Mech. Engg.)	Pant Univ., Pantnagar	1988	4.071	First	76.07 %
4	M.Tech. (Design & Prod. Engg.)	Pant Univ., Pantnagar	1991	4.718	First	85.77 %
5	Ph D (Mech. Engg.)	IIT, Kanpur	2011	8.500	–	85.00 %

## PROFESSIONAL EXPERIENCE

S.No.	Designation	Organization	From	To	Scale
1	Assistant Professor	Pant Univ., Pantnagar	May31,1991	Oct. 04,1999	Rs. 2200-4000
2	Assistant Professor	HBTI, Kanpur	Oct.5, 1999	Dec. 31,2005	Rs.12000- 18300
3	Associate Professor	HBTI, Kanpur	Jan.1, 2006	Feb. 28, 2011	Rs. 37400-67000 AGP Rs. 9000=00
4	Professor	HBTI, Kanpur	Mar. 01, 2011	Till date	Rs. 37400-67000 AGP Rs. 10000=00

## ADMINISTRATIVE EXPERIENCE

- Chief Vigilance Officer of the Institute, Jan. 2012- Feb. 2013
- Member, Institute OBC Scholarship Committee, 2010-till date
- PG Coordinator, Mechanical Engineering Department, 2008-10 & 2011-12
- Member, House Allotment Committee, 2007-08
- Chief Proctor of the Institute, 2005-07
- Chairman, Institute Proctorial Board, 2005-07
- Member, Procurement Cell, TEQIP, World Bank, 2005-06
- Officer-in-Charge, Mechanical Maintenance, 2002-03 & 2009-10
- Convener, Sport's Council, 2001-02

## WORKSHOPS / COURSES / SEMINARS ORGANIZED

- Conference Coordinator, National Conference on *Innovations in Materials, Design & Manufacturing*, Department of Mechanical Engineering, **March 27-28, 2015**, HBTI, Kanpur.
- Programme Coordinator, Faculty Development Programme on *Engineering Education: Opportunities, Challenges & Future Directions*, Department of Mechanical Engineering, **March 7-12, 2014**, HBTI, Kanpur.
- Dy. Coordinator, Faculty Development Programme on *Simulation, Modeling & Analysis of Engineering Systems* in collaboration with Department of Computer Science & Engineering, **October 25-30, 2013**, HBTI, Kanpur.
- Coordinator, All India Seminar on *Advances in Materials & Material Selection in Design*, in collaboration with the Institution of Engineers' (India), Kanpur Local Chapter held at HBTI Kanpur during **August 24-25, 2012**.
- Coordinator, *Advances in Engineering Materials*, One Week Faculty Development Programme, Department of Mechanical Engineering, **March 16-21, 2009**, HBTI, Kanpur.
- Coordinator, *Composite Materials: Potential & Challenges*, A two day Refresher Course, Department of Mechanical Engineering, **December 28-29, 2007**, HBTI, Kanpur.
- Coordinator, *Advances in Materials & Material Selection in Design*, A two day Refresher Course, Department of Mechanical Engineering, **March 10-11, 2007**, HBTI, Kanpur.
- Member, Local Organizing Committee, *National Workshop on Smart Materials & Composite Structures* at IIT, Kanpur, **February 12-14, 2002**.

## OTHER SIGNIFICANT CONTRIBUTIONS / AWARDS RECEIVED

- Foreign Countries Visited
  - I. To attend IV IPS Collaboration Symposium at Waseda University, Kitakyushi, Japan, **Nov. 17-19, 2010**
  - II. To attend SPIE Conference on Smart Materials + Nano - & Micro- Systems at RMIT University, Melbourne, Australia, **Dec. 8-12, 2008**

- Won second prize for poster presentation prize for research paper '*Structural health monitoring of composite laminate using smart magnetostrictive sensory layer*' at National Workshop on Advanced Functional Materials and Structures, MNIT, Allahabad, **July 12-14, 2012.**
- Won best poster presentation prize for research paper '*Delamination detection in composite beam using magnetostrictive materials as sensor*' at International Conference on Recent Advances in Composite Materials, IT-BHU, **December, 2004.**

### INVITED LECTURES

- *Evaluation systems in technical education: Appraisal of learning or a tool of mechanical differentiation*, FDP on Essentials of Teaching - Learning Processes, KNIT Sultanpur, **April, 2015.**
- *Absenteeism & mass bunking of classes: Causes, consequences and remedies*, FDP on Essentials of Teaching - Learning Processes, KNIT Sultanpur, **April, 2015.**
- *Smart materials & structures: concepts and applications*, Dr. Bhimrao Ambedkar College of Engineering & Technology, Etawah, **March, 2014.**
- *Engineering education in India*, FDP on Engineering Education: Opportunities, Challenges & Future Directions, HBTI, Kanpur, **March, 2014.**
- *Global scenario in engineering education*, FDP on Engineering Education: Opportunities, Challenges & Future Directions, HBTI, Kanpur, **March, 2014.**
- *Smart materials and their uses in structural health monitoring*, G B Pant Univ., Pantnagar, **February, 2014.**
- *Smart materials & structures*, National Conference on Emerging Frontiers in Mechanical Engineering, HBTI, Kanpur, **February, 2014.**
- *Mathematical representation of physical systems in engineering*, FDP on Simulation, Modeling & Analysis of Engineering Systems, HBTI, Kanpur, **October, 2013.**
- *Evaluation system: Absolute percentage v/s grading system*, FDP on Curriculum Development & Evaluation System, HBTI, Kanpur, **July, 2013.**
- *Strategies to prevent absenteeism and mass bunking*, FDP on Essentials of Teaching – Learning Process, HBTI, Kanpur, **March, 2013.**
- *Dynamical representation of physical systems and their analysis*, Department of Mathematics, HBTI, Kanpur, **September, 2012.**
- *Keynote address on Health and Usage Monitoring of Composite Structures*, BSA College of Engineering and Technology, Mathura, **March, 2011.**
- *Structural Health Monitoring of Composite Structures using Smart Sensing and Actuation*, IV IPS Collaboration Symposium, Waseda University, Japan, **November, 17-20, 2010.**
- *Health Monitoring of Composite Structures using Magnetostrictive Sensors* at SMDISA-2007, IIT, Kanpur, **March, 2007.**

- *Health Monitoring of Composites using Smart Materials with Special Emphasis on Magnetostrictive Materials*, B R Ambedkar Institute of Engineering, Etawah, **March, 2006**.
- *Material Selection in Design*, B R Ambedkar Institute of Engineering, Etawah, **March, 2006**.

#### REVIEWER OF JOURNALS / BOOKS

- Reviewed two chapters of a book on Mechanics of Solids for Cineage Publications, 2012.
- Reviewer to the NPTEL course – Principles of Vibration Control prepared by faculty members of IIT, Kanpur, 2012.
- Reviewer to the NPTEL course – Smart Materials, Structures and Systems prepared by faculty members of IIT, Kanpur, 2011.
- Reviewed two research papers for Intl. Jl. of Material Science & Engineering A, 2007.
- Reviewed a book on Machine Element Design for Pearson Publication, 2006.

#### BOOKS PUBLISHED

- Editor, Proceedings of National Conference on *Innovations in Materials, Design & Manufacturing*, Department of Mechanical Engineering, HBTI, Kanpur, **March 27-28, 2015**, (400 pages).
- Author of E-book on *Structural Health Monitoring* jointly with Dr. Bishakh Bhattacharya, Professor in Department of Mechanical Engineering, IIT, Kanpur under National Programme for Technology Enhancement Learning (NPTEL), IIT Kanpur, **2012**.
- Editor, *Advances in Materials & Material Selection in Design*, Proceedings of All India Seminar on Advances in Materials & Material Selection in Design organized by IEI, Kanpur and Department of Mechanical Engineering, HBTI, Kanpur, August 24-25, **2012** (244 pages).
- Editor, *Advances in Engineering Materials*, Proceedings of a one week Faculty Development Programme (FDP) organized by Department of Mechanical Engineering, HBTI, Kanpur, March 16-21, **2009** (107 pages).
- Editor, *Composite Materials: Potential & Challenges*, Proceedings of a two day Refresher Course organized by Department of Mechanical Engineering, HBTI, Kanpur, December 28-29, **2007** (136 pages).
- Editor, *Advances in Materials & Material Selection in Design*, Proceedings of a two day Refresher Course organized by Department of Mechanical Engineering, HBTI, Kanpur, March 10-11, **2007** (153 pages).

#### RESEARCH WORK

- M Tech Thesis, *Wear Characteristics of Tin Bronzes with Varying Tin Percentages* submitted to Department of Mechanical Engineering, G B Pant University, Pantnagar, **1991**.
- Ph D Thesis, *Structural Health Monitoring of Composites using Smart Actuation and Sensing* submitted to Department of Mechanical Engineering, IIT, Kanpur, **2011**.

## RESEARCH PROJECTS

### SPONSORED PROJECTS

1. *Real Time Integrity Monitoring of Composite Structures using Magnetostrictive Materials* under Research Promotion Scheme of All India Council of Technical Education, New Delhi, Two years, (2003-04) Grant amount Rs.10.00 Lakhs.
2. *Design and Material Modifications in Existing Yokes and Harnesses for Improved Performance* under Technical Education Quality Improvement Programme (TEQIP), World Bank, One year, (2007-08) Grant amount Rs. 0.72 Lakhs.
3. *Study of Dynamic Response of Selected Seasonal Fruits during the Process of Ripening for Better Transportation, Storage and Improved Shelf Life* under TEQIP-II, World Bank, One year, (2014-15) Grant amount Rs. 1.20 Lakhs.
4. *Development of a Setup for Producing Compacts for Bio-implants* under TEQIP-II, World Bank, One year, (2015-16) Grant amount Rs. 1.00 Lakhs.

### CONSULTANCY PROJECTS

1. Process certification of Lamplig, 2006 for IEDS, Kanpur worth Rs.25,000=00
2. Inspection of Aluminum channel used as construction material, 2010 for KDA, Kanpur worth Rs.12,133=00
3. Inspection of Aluminum channel used as construction material, 2010 for KDA, Kanpur worth Rs.12,133=00
4. Inspection of Aluminum channel used as construction material, 2010 for KDA, Kanpur worth Rs.12, 133=00.

## RESEARCH GUIDANCE

M. Tech. Students: **28** [Completed: 26; Pursuing: 02]

Ph D students: **04** [Under progress: 04]

### SHORT TERM COURSES ATTENDED

- Visiting Research Programme, TEQIP Incubation Centre, IIT Kanpur, May 10 to July 24, 2015 (10 weeks).
- Visiting Research Programme, TEQIP Incubation Centre, IIT Kanpur, December 7-27, 2014 (3 weeks).
- Mechanics in Physics, Department of Physics, IIT, Kanpur, February 22-23, 2014 (1 week).
- Management Development Programme on Enhancement of Leadership in Administrators at IIM, Lucknow (NOIDA Campus), January13-17, 2014.
- Processing, Characterization and Production of Advanced Engineering Materials, IIT, Kanpur, February 24-28, 2010 (1 week).
- Recent Trends in Advanced Composites at IIT, Kanpur, 2005, (1 week).
- FEM and its Advanced Applications at IIT, Kanpur, 2002 (1 week).
- Instrumentation & Data Analysis at IIT, Delhi, 1998 (2 weeks).
- Engineering Materials: Characteristics & Processing at MREC, Jaipur, 1996 (2 weeks).
- Recent Trends in Engineering Materials at MNREC, Allahabad, 1995 (2 weeks).

## CONFERENCES / SEMINARS / SYMPOSIA / WORKSHOPS ATTENDED

- National Workshop on ‘Padarth Vigyan:Nai Chunautiyan avam Nai Dishayein’ at DMSRDE, Kanpur, February 04, 2016.
- UKIERI-AICTE Further Education Leadership Programme, NITTTR, Chandigarh, October 12-14, 2015.
- UKIERI-AICTE Further Education Leadership Programme, NITTTR, Chandigarh, March 2-4, 2015.
- UKIERI-AICTE Further Education Leadership Programme, NITTTR, Chandigarh, January 21-24, 2015.
- TEQIP-II Workshop on Curriculum Development in Material Science & Chemical Engineering at IIT, Kanpur, February 22-23, 2014.
- National Workshop on Advanced Functional Materials and Structures at MNIT, Allahabad, July 12-14, 2012.
- One day Workshop on Virtual Instrumentation and Data Acquisition by National Instruments at Kanpur, May 8, 2012.
- Recent Advances in Mechanical Engineering, BSA College of Engineering and Technology, Mathura, March, 2011.
- IV IPS Collaboration Symposium, Waseda Univ., Japan, Nov.17-20, 2010.
- Workshop on Natural Gas Processing and Natural Gas / LPG Pipeline Transportation, GAIL (India) Ltd., NOIDA, June 29- July 01, 2009.
- SPIE Conference on Smart Materials + Nano- & Micro- Systems, Melbourne, Australia, December 8-12, 2008.
- National Conference on ‘Padarth Vigyan-Nai Chunautiyan’ at DMSRDE, Kanpur, February, 2008.
- International Conference on Recent Developments in Mechanical Engineering. SUSCET, Tangori, Mohali, Punjab, January, 2008.
- National Conference STEM-2007, College of Technology, G.B.Pant University, Pantnagar, October, 2007.
- National Symposium SMDISA, IIT, Kanpur, March, 2007.
- International Conference on Recent Advances in Composite Materials, India Habitat Centre, New Delhi, February, 2007.
- International & INCCOM-6 Conference on Future Trends in Composite Materials & Processing, IIT Kanpur, December, 2007.
- International Conference on Advances in Mechanical Engineering, BBSBEC, Punjab, December, 2006.
- One day Workshop on Intellectual Property Rights and Patents at SSI, Kanpur, 2006.
- International Workshop on Recent Advances in Biometric Systems at IIT, Kanpur, March, 2005.
- International Symposium on Advanced Materials and Processing at IIT, Kharagpur, December, 2004.
- International Conference on Recent Advances in Composite Materials at IT-BHU, December, 2004.

## LIST OF PUBLICATIONS

### INTERNATIONAL JOURNALS: 07

1. A K Jaiswal, **Anand Kumar** and Bishakh Bhattacharya, *Structural health monitoring of ribbon reinforced composite laminate using piezoelectric sensory layer*, Journal of COMADEM, **11**(1), p 9-17, **2008**, ISSN:1363-7681.
2. **Anand Kumar**, and Bishakh Bhattacharya, *Delamination sensing of composite laminate using magnetostrictive sensory layer*, International Journal of Nano- Systems Technology, Electrical Engineering and Electronics Systems, **1**(1), p 49-55, **2008**.
3. **Anand Kumar** and Bishakh Bhattacharya, *Real time integrity monitoring of composite laminates with magnetostrictive sensory layer*, Proceedings of SPIE International Conference on Smart Materials, Nano- and Micro- Smart Systems, paper no. 7268-24, Melbourne, Australia, **2008**. doi: 10.1117/12.810614.
4. **Anand Kumar**, *Tribological performance evaluation of tin bronzes with varying tin percentages*, International Journal of Material Research, Electronics and Electrical Systems, **2**(1-2), p1-9, Jan., **2009**, ISSN:0974-6978.
5. **Anand Kumar**, Peter J Fleming and Bishakh Bhattacharya, *Vibration suppression and damage detection in smart composite laminate using high precision finite element*, Proceedings of SPIE International Conference on Smart Structures and Materials + Nondestructive Evaluation and Health Monitoring, paper no. 7982-41, San Diego, USA, **2011**, doi: 10.1117/12.880351.
6. **Anand Kumar** and Priyanka Katiyar, *A study on damping characteristics of alumina filled epoxy nano-composites*, Proceedings of SPIE International Conference on Smart Materials, Nano- and Micro- Smart Systems, San Diego, USA, **2013**. doi:10.1117/12.2012150.
7. Jitendra Bhaskar, **Anand Kumar** and Bishakh Bhattacharya, *Dynamic response of selected fruits using Laser Doppler Vibrometer*, ELK Asia- Pacific Journal- Special Issue for Proceedings of International Conference ARIMPIE-2015, ITS Engineering College, Greater Noida, April 10-11, **2015** (ISBN 978-81-930411-4-7).

### NATIONAL JOURNALS: 01

1. Priyanka Katiyar and **Anand Kumar**, *Characterization of damping behavior of alumina filled nano-composites*, Journal of the Institution of Engineers (India) Part C (Under Print), **2015**.

## INTERNATIONAL CONFERENCES: 13

1. Arpit Kumar Srivastava and **Anand Kumar**, *Comparative studies on laminated composite beam using narrow and wide beam criterion*, Proceedings of International Conference on Research and Innovation in Mechanical Engineering, GNDREC, Ludhiana, October, **2013**.
2. Ankit Saini and **Anand Kumar**, *Development and performance evaluation of water resistant corrugated board for packaging*, Proceedings of International Conference on Research and Innovation in Mechanical Engineering, GNDREC, Ludhiana, October, **2013**.
3. **Anand Kumar**, *Structural health monitoring of composite plate using experimental modal analysis on Laser Doppler Vibrometer*, IVth IPS International Collaboration Symposium, Waseda University, Japan, 17-19 Nov., **2010**.
4. **Anand Kumar** and Bishakh Bhattacharya, *Delamination sensing in composite laminates using magnetostrictive sensory layer*, International Symposium on Procession and Fabrication of Advanced Materials – XVII, paper no. AC-028, IIT Delhi, pp600-614, **2008**.
5. **Anand Kumar** and Bishakh Bhattacharya, *Health and usage monitoring of composite structures with smart magnetostrictive sensory layer*, Proceedings of ISRS-2008, IIT. Madras, **2008**.
6. J Bhaskar, **Anand Kumar** and Vinay Pratap Singh, *Non-uniform rational B-Spline (NURBS) for object modeling*, ICRDME 2008, pp 644-649, SUSCET, Mohali, Punjab, Jan **2008**.
7. **Anand Kumar** and Bishakh Bhattacharya, *Studies on effectiveness of magnetostrictive sensors in delamination sensing of laminated composites*, Proceedings of International & INCCOM-6 Conference on Future Trends in Composite Materials and Processing, IIT, Kanpur, **2007**.
8. Ajai Prasad Nigam and **Anand Kumar**, *Analysis of failure through delamination in composite laminate using Terfenol-D layer*, Proceedings of International & INCCOM-6 Conference on Future Trends in Composite Materials and Processing, IIT, Kanpur, **2007**.
9. **Anand Kumar** and Bishakh Bhattacharya, *Structural health monitoring of composite laminate with embedded smart magnetostrictive sensors*, International Conference on Recent Advances in Composite Materials, India Habitat Centre, New Delhi, pp571-574, Feb., **2007**, ISBN: 81-8424-175-5.
10. **Anand Kumar** and Bishakh Bhattacharya, *Failure prediction of composite laminate with embedded smart magnetostrictive sensors*, Proceedings of International Conference on Advances in Mechanical Engineering, BBSB Engineering College, Punjab, pp227-232, Dec, **2006**.
11. **Anand Kumar**, *Integrity monitoring of composite structures using Terfenol-D*, International Conference on Recent Advances in Composite Materials, IT-BHU, Dec., **2004**.



12. **Anand Kumar** and B. Bhattacharya, *Delamination detection in composite beam using magnetostrictive materials as sensor*, International Conference on Recent Advances in Composite Materials, IT-BHU, Dec., **2004**. (Awarded best poster presentation prize).
13. **Anand Kumar** and B. Bhattacharya, *Delamination sensing of composite laminates using magnetostrictive materials as distributed sensor*, International Symposium on Advanced Materials and Processing, IIT, Kharagpur, vol. 2, pp 1602-1613, Dec., **2004**.

#### NATIONAL CONFERENCES: 20

1. Ankit Saini, **Anand Kumar** and S B Yadaw, *Development of aluminum foil corrugate board for packaging*, Proceedings of National Conference on Innovations in Materials, Design & Manufacturing, HBTI Kanpur, p3-9, **2015**, ISBN:978-93-84869-47-2.
2. Ankit Singh and **Anand Kumar**, *Damage detection in composite laminate using experimental modal analysis*, Proceedings of National Conference on Innovations in Materials, Design & Manufacturing, HBTI Kanpur, p56-68, **2015**, ISBN:978-93-84869-47-2.
3. Ashish Awasthi, **Anand Kumar** and S B Yadaw, *Strength properties of polymer matrix composites and its validation through ANSYS*, Proceedings of National Conference on Innovations in Materials, Design & Manufacturing, HBTI Kanpur, p115-133, **2015**, ISBN:978-93-84869-47-2.
4. Mohit Katiyar, J N Srivastava, **Anand Kumar** and R K Singh, *Study of mechanical and microwave absorption properties of rubber-ferrite composites*, Proceedings of National Conference on Innovations in Materials, Design & Manufacturing, HBTI Kanpur, p181-190, **2015**, ISBN:978-93-84869-47-2.
5. Kartikeya Dixit and **Anand Kumar**, *Performance evaluation of aluminum honeycomb sandwich panels with different cell sizes*, Proceedings of National Conference on Innovations in Materials, Design & Manufacturing, HBTI Kanpur, p234-244, **2015**, ISBN: 978-93-84869-47-2.
6. Varun Kumar Singh and **Anand Kumar**, *Analytical and experimental performance evaluation of glass fiber composite and conventional steel leaf spring*, Proceedings of National Conference on Innovations in Materials, Design & Manufacturing, HBTI Kanpur, p255-265, **2015**, ISBN:978-93-84869-47-2.
7. A P Sharma and **Anand Kumar**, *Improvement in wear resistance of M-35 HSS hob cutter by plasma nitriding*, Proceedings of National Conference on Innovations in Materials, Design & Manufacturing, HBTI Kanpur, p321-325, **2015**, ISBN: 978-93-84869-47-2.
8. Arpit Kumar Srivastava, Arpit Srivastava, Yastuti Rao Gautum and **Anand Kumar**, *Design optimization of recuperator for micro turbine*, Proceedings of National Conference on Technological Development in Mechanical Engineering, SRM College of Engineering & Technology, April, **2014**.

9. Kartikeya Dixit and **Anand Kumar**, *A review on sandwich and honeycomb panel composites for structural usages*, Proceedings of National Conference on Emerging Frontiers in Mechanical Engineering, HBTI, Kanpur, February, **2014**.
10. Avanindra Nath Yadav and **Anand Kumar**, *Buckling load analysis of laminated composite plates with different fiber orientations*, Proceedings of All India Seminar on Advances in Materials & Material Selection in Design HBTI, Kanpur, p191-200, August 24-25, **2012**.
11. Mahipal Singh and **Anand Kumar**, *Improvement in the strength of gun barrel by modified autofrettage regime*, Proceedings of All India Seminar on Advances in Materials & Material Selection in Design HBTI, Kanpur, p201-213, August 24-25, **2012**.
12. Anil Kumar Yadav and **Anand Kumar**, *Thermal and mechanical characterization of aero-grade PMMA for cockpit windscreen*, Proceedings of All India Seminar on Advances in Materials & Material Selection in Design HBTI, Kanpur, p183-190, August 24-25, **2012**.
13. Rashmi Rani Maheshwari and **Anand Kumar**, *Damage prediction through modal analysis using Laser Doppler Vibrometer*, Proceedings of All India Seminar on Advances in Materials & Material Selection in Design HBTI, Kanpur, p231-2238, August 24-25, **2012**.
14. Dinesh Kumar Pandey and **Anand Kumar**, *Experimental modal analysis for health monitoring of composite structures using Laser Doppler Vibrometer*, Proceedings of All India Seminar on Advances in Materials & Material Selection in Design HBTI, Kanpur, p50-58, August 24-25, **2012**.
15. **Anand Kumar**, *Structural health monitoring of composite laminate using smart magnetostrictive sensory layer*, National Workshop on Advanced Functional Materials and Structures, MNIT, Allahabad, July 12-14, **2012** (Won second prize in poster presentation).
16. **Anand Kumar**, *Real time structural integrity monitoring using piezo-ceramics*, National Workshop on Appropriate Technologies and Equipments for Non Destructive Testing of Industrial Products, G.B. Pant University, April, **2003**.
17. **Anand Kumar**, *Effect of operating variables on tribological behavior of aluminum and tin bronzes*, Proceedings of 11<sup>th</sup> ISME Conference, IIT, Delhi, **1999**.
18. **Anand Kumar**, *Evaluation of wear performance of commercial brass and muntz metal*, Proceedings of Recent Advances in Mechanical Engineering, REC, Kurukshetra, pp 9-14, **1997**.
19. **Anand Kumar**, *Tin bronzes as bearing materials: A tribological study*, Proceedings of 10<sup>th</sup> ISME Conference, Delhi College of Engineering, pp 1-107-113, **1996**.
20. **Anand Kumar**, *Tribological behavior of tin bronzes against mild steel*, Proceedings of 9<sup>th</sup> ISME Conference, University of Roorkee, vol. 2, pp 1019-1022, **1994**.

## MEMBERSHIP OF SCIENTIFIC / PROFESSIONAL BODIES

- Fellow, Institution of Engineer's (India)
- Executive Member, Institution of Engineer's (India) for 4 terms
- Member, SPIE (International Society of Optics and Photonics), 2008-09
- Member, Indian Science Congress, 2010
- Life Member, IIT Kanpur Alumni Association

## OTHER IMPORTANT ASSIGNMENTS

- Member, Selection Committee for Technical Personnel's at IIT Kanpur
- Technical Expert / Advisor, Public Service Commission, U P
- Technical Expert / Advisor, Public Service Commission, M P
- Technical Expert / Advisor, Public Service Commission, Uttarakhand
- Member, Selection Committee, GCTI, Kanpur for CAS promotions
- Expert Member, AICTE Visits for Evaluation of Technical Institutes
- Member, Course Curriculum Committee, IRDT, Kanpur
- Member, Course Curriculum Committee, CSJM, Kanpur
- Project Evaluator and Supervisor, The Institution of Engineers (India)
- Member, Enquiry Committee, CSJM, Kanpur
- Elected Vice-President, HBTI Teachers' Association, 2008-09
- Elected President, HBTI Teachers' Association, 2011-12 & 2013-14

**(Dr. Anand Kumar)**  
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