CURRICULUM VITAE

Name : Ravi Prakash Tewari

Designation : Associate Professor

Department of Applied Mechanics

Motilal Nehru National Institute of

Technology, Allahabad, U.P.

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Research Area : Biomechanics, Robotics and Biomaterials

Educational Qualifications:

Degree	Examinatio n Passed	Year of Passing	Institute	Board/ University	Subject/ Discipline/ Specialization	Class/ Divisio n	% of marks/grades
X [10]	High School	1983	B.T.H.S. Varanasi	U.P.Board	All essential science and other subjects	1 st	74
XII [10+2]	Intermediate	1985	Queen's College, Varanasi	U.P.Board	P.C.M.	1 st	71.8
UG Degree	B.E.	1990	M.M.M.Engg.Coll ege, Gorakhpur	Gorakhpur University	Mechanical	1 st	70.73
PG Degree	M.Tech.	1993	Institute of Technology, B.H.U., Varanasi	I.T.,B.H.U.	BioMedical Engg.	1 st	8.95(C GPA)
Doctoral	Ph.D.	1999	Institute of Technology, B.H.U., Varanasi	I.T.,B.H.U.	Title of the thesis: Three Dimensional Kinematic & Dynamic Analysis of Below Knee Lower Limb Model for Artificial Design & Control		w Knee



Professional Experience:

Address of the office, Firm or	Post Held	Duration		Specific Experience P.G.	Salary
Institution		-	l m	Teaching/Industrial	
		From	То		
Department of Applied Mechanics, M.N.I.T, Allahabad	Associate Prof.	15 th Feb 2012	Till Date	Teaching (U.G. &P.G.) and Research	PB- IV
Department of Applied Mechanics, M.N.N.I.T, Allahabad	Assistant Prof. (Reader)	15 th Feb 2009	14 th Feb 2012	Teaching (U.G. &P.G.) and Research	Rs 30350 (Basic, as per sixth pay commission, PB- III)
Department of Applied Mechanics, M.N.N.I.T, Allahabad	Assistant Prof. /Lecturer (Senior Scale)	15 th Feb 2006	14 th Feb 2009	3 Years, Teaching (U.G. &P.G.) and Research	Rs 10000-15000
Department of Applied Mechanics, M.N.N.I.T, Allahabad	Lecturer	1 st Dec. 2005	15 th Feb 2006-	1 Years and Two Months, Teaching (U.G. &P.G.) and Research	Rs. 8000-13500
Division of Instrumentation & Control, NSIT, New Delhi	Lecturer	15 th Feb. 2002	30 th Nov. 2005	Nearly 3 Years & 9 Months, Teaching(U.G. &P.G.) and Research	Rs. 8000-13500
Centre of Psychosomatic & Bio Feed Back Medicine I.M.S., B.H.U.	Scientific Officer	19 th Nov. 1996	30 th Sept 2000	Nearly 4 Years, Research experience	Rs. 8000-13500

Research Experience (excluding research done for M.Tech./ M.Pharm./ M.Phill./ Ph.D. Degrees)

Duration	Organization	Area(s)
19-11-1996 to 30-9-200	Centre of Psychosomatic &	Biomedical Instrumentation
	Bio Feed Back Medicine	
	I.M.S., B.H.U.	

Teaching Experience

Duration	Organization	Area(s)
15 th Feb. 2002 to Till Date	N.S.I.T., New Delhi	Biomedical Engineering,
	& MNNIT Allahabad	Biomechanics & Robotics

Courses Taught

UG level:

Sl. No.	Course No. & Title	Level	Number of	Developed by
		(UG/PG)	Times	you?
1	Material Science & Engg	UG	06	No
2	Theory of Machines	UG	04	Yes
3	Biomedical Instrumentations	UG	06	Yes
4	Robotics	UG	03	Yes

PG level:

Sl. No.	Course No. & Title	Level (UG/PG)	Number of Times	Developed by you?
1	Biomechanics	PG	03	Yes
2	Biomaterials	PG	05	Yes
3	Robotics	PG	03	Yes

4	Polymer Science Engineering	PG	04	Yes

RESEARCH SUPERVISION

S.No.	Name	Year of	Title of Thesis	Co-guides (if any)
1	Mr. Dinesh	Completed Completed	Some Studies On	Prof. K.K. Shukla
1	Bhatia	(2011)	Biomechanical Aspects of	,AMD
	Dilatia	(2011)	The Human Leg	AMD
2	Mr. J.K. Rai	Completed	Trajectory Planning and	Prof. Dinesh Chandra
2	MII. J.K. Kai	Completed		
		(2011)	Control Strategies of Biped	,EED
			Robot for Human-like	
			Walking	
3	Mr.Ashish	State of Art	Mathematical Modelling of	Prof. Rakesh Mathur,
	Kumar	Completed	Lower Limb Muskulo-	AMD
	Mishra		Skeletal System	
4	Ms. Laxmi	State of Art	Synthesis, Characterization	Dr. Vishnu Agarwal,
	Upadhyaya	Completed	and In-Vitro Study of	Deptt. Of
			Polymer-Metal Oxide based	BioTechnology
			Nano	
			Composite for Drug Delivery	
			Application	
5	Mr. Yogesh	State of Art	Mechanical Behaviour of	Prof. Anuj Jain,
	Chandra	Completed	Human Skeletal Muscle	AMD
6	Mr. Avinash	State of Art	Control Strategy for Sensors	
	Kumar	Completed	and Actuators Used for Bio-	
			Robotic Applications	

LIST OF MASTER OF ENGINEERING THESIS SUPERVISED:

S.No.	Topic	Student
1	Engineering for an emergency Shut Down System for a	Ashok Kumar. P(2005)
	Cracker Plant	
2	Modelling and Simulatoin of 7 Link 6 Joints	Avinash Kumar(2006)
	"BIPED"Walking Robot	
3	Finite Element Analysis of Femur and Hip Prosthesis	A.K. Richhariya(2007)
	Under Static and Dynamic Loading	

4	Finite Element Analysis to Determine Effect of friction at Socket-Limb Interface fro Above Knee prosthetic	Vikas Kumar Pandey(2007)
5	Socket Mathematical Modelling of Humanoid robot using Human Gait Data	Ashish KumarMishra(2008)
6	Trajectory Planning for Biped Robot with Human Data (Rakesh Mathur & R.P.Tewari)	Shraddha Pandey(2009)
7	Mechanical Behaviour of Human Leg Skeletal Muscle for Gait Cycle	Vipul Saxena(2009)
8	Design of ANN controller and Comparative Study for Seven Link Biped Robot (Dinesh Chandra & R.P.Tewari)	Vinay Pratap Singh(2009)
9	Coating of Silver Nenoparticles on Bio-Material Surface For Preventation and Control of Candida Albicans Biofilm (R.P. Tewari & Vishnu Agrawal)	Sheikh Abdel Naser(2010)
10	Preparation and Characterization of Chitosan-Pectin- Alginate Scaffolds for Tissue Engineering (P.K.Dutta& R.P.Tewari)	Laxmi Upadhyaya(2010)
11	Digital Signal Processing method for Identification of Protein Coding Region in a Gene (V.K.Srivastava& R.P.Tewari)	Saroj Mandal(2010)
12	Circuit Development for Functional Electrical Stimulation (R.P.Tewari & Anirudha Narain)	Indu Kushwaha(2010)
13	Optimization Trajectory Planning for Biped Robot (Rakesh Mathur & R.P.Tewari)	Amit Kumar Rai(2010)
14	Finite Element Analysis of Heterogeneous Objects using Material Based Graded Elements (R.P.Tewari & A.D. Bhatt)	Lokesh Singh(2010)
15	Characterization of Porous Tissue Scaffolds Using Computer Added Tissue Engineering (R.P.Tewari &P.K.Dutta)	Nitin Sahai(2010)
16	Biomechanical and EMG Analysis of Ankle Foot System	Amit Srivastava(2011)
17	A Comparative Study on the effect of cross linking agents on Chitosan films	Astha Gupta(2011)
18	Study on the Effect of Yoga (asana) on activity of Human lower limb muscles	Prasanna Kumar charaya(2011)
19	Fuzzy Rule Based ZMP criteria for a stable biped robot walking	Himanshu Minotra(2011)

20	Modeling and Simulation of Micro Gripper for Biomedical Application	Pravin Kumar Shukla(2011)
21	A Mathematical Model for Computation of Mechanical	Kaushal Kumar
	Properties of Human Bone	Shukla(2011)
22	Synthesis and Characterization of Chitosan-Metal Oxide	Rachna Sagar(2012)
	Nanocomposite for Antimicrobial Drug Delivery	
23	Synthesis and Characterization of Metal Oxide -Polymer	Neeraj Kumar Gupta(2012)
	Nanocomposite for Drug Delivery System	
24	Anti-infective Coating Over Biomaterial	Jeevika(2012)
25	Comparative Analysis of EMG of Lower Limb Muscles	Nityanand Singh(2012)
	of Healthy and Polio Affected Persons	
26	Comparative Study of Coating of Polyethylene Glycol,	Sarita(2012)
	Cross Linked Polyethylene Glycol and Polyethylene	
	glycol Chitosan Conjugate	
27	Digitization and Compression of ECG Records	SanjeevKumar Sachan(2012)
28	Image Registration and Quality Assessment of	Karun Prakash(2012)
	Registered Images	
29	Analysis and Design of Femur Shaft Under Buckling	Mukesh Kumar Singh(2012)
	Using CT Scan Data	
30	Preparation and Characterization of Poly Vinyl Alcohol	Suman Shekhar(2012)
	Sodium Alginate Blend Gel for Wound Dressing	
31	Fabrication and Characterization of Jute-Rice-Natural	SandeepKumar Gupta(2012)
	Rubber Latex Based Bio-Composites	
32	Synthesis and Characterization of Silica Nanoparticle	Anuj Kumar poonia(2012)
	for Control Drug Delivery	
33	CT Image Based Modeling and Finite element Analysis	C.S. Aparana (2013)
	of Lumber Spine	
34	Preparation and characterization of Noel Double-	Abijeet Singh Mehta (2013)
	Hybrid silk Fibroin bio-mimetic composite scaffold for	
	Biomedical Application	
35	Characterization and Utilization of Self –Assembling	Kirti Snigdha (2013)
	Fmoc Modified Phenylalanine Hydrogel	
36	Synthesis and Characterization of Psylium Seed Husks	Md. Shamim Rizvi (2013)
	based Novel Film for Wound Healing Application	
37	Heterogeneous Material Modeling of Lumber Spine	Garvit Singh (2013)
38	Mechanical Modeling of Lower Limb Musculoskeletal	Sanyam Sharma (2013)
	System for Normal and Pathological Gait.	

Consultancy / Testing:

Sl.	Details	Period	Organisation	Amount	Со-
No.				[` in	Investigator[s],
				lakhs]	if any
1	Testing and	2006-	Various State Govt.	4 Lakhs	
	Consultancy	2012	Organisations, Central	(Approx.)	
			Govt. Organisations &		
			Public/Private Sectors		

Administrative Experience:

- 1. Faculty In charge Technical and Cultural Festivals at NSIT, New Delhi from 2003-2005.
- 2. O.C. Robotics at NSIT, New Delhi from 2002-2005.
- **3.** O.C. Engineering Mechanics lab at MNNIT, Allahabad from 2006-2009.
- **4.** O.C. DST-FIST Lab, Department of Applied Mechanics, MNNIT, Allahabad, 2009-2010.
- **5.** O.C. Information & Web page, Department of Applied Mechanics, MNNIT, Allahabad.(2008-2011)
- **6.** Member, Central Purchase Committee, MNNIT, Allahabad(2008-2011)
- **7.** O.C. Information & Web page, Department of Applied Mechanics, MNNIT, Allahabad.(2008-2011)
- 8. O.C. Biomedical Engineering Laboratory, MNNIT, Allahabad(July2011 –Till date)
- **9.** Warden-I, Tagore Hostel, MNNIT, Allahabad(Jan2012-Till Date)

Publications

Papers in Refereed Journals (List those published and accepted separately)

International Journals:

- **1.** J.K.Rai, **R.P.Tewari** and Dinesh Chandra, "Hybrid Control Strategy for Robotic Leg Prosthesis using Artificial Gait Synthesis", Int. J. Biomechatronics and Biomedical Robotics, Vol. 1, No. 1, pp.44–50, 2009.
- **2.** J.K.Rai, **R.P.Tewari** and Dinesh Chandra, 'Trajectory Planning for All Sub-Phases of Gait Cycle for Human-like Walking', Int. J. Engineering Systems Modelling and Simulation, Vol. 1, No. 4, pp.206-210, 2009.

- **3.** Dinesh Bhatia, Gagan Bansal, **R.P Tewari**, K K Shukla, 'State of Art Functional Electrical Stimulation (FES)', International Journal of Biomedical Engineering and Technology, Volume 5, No. 1, 2011, pp 77-99.
- **4.** Gagan Bansal, Dinesh Bhatia, Deepak Joshi, Sneh Anand and **R.P.Tewari** 'Coordination beween lower limb muscles in different locomotion activities' International Journal of Biomedical Engineering and Technology, Volume 6, No.2, 2011, pp 23-30.
- **5.** J.K.Rai, **R.P.Tewari,** Shraddha Pandey and Dinesh Chandra, 'Optimised Torque Trajectory for Humanoid Robot Based on Human Gait Data', *International Journal of Mechatronics and Manufacturing Systems*, Vol. 4, No. 2, pp. 171-184, 2011.
- **6.** Astha Gupta, Brijesh Kumar Singh, **R.P.Tewari**, P.K.Dutta "A comparative study on the effect of different cross linkers on chitosan films" Asian chitin J. 7(1), 51-58 (2011)
- **7.** Amit Srivastava, Ashish Kumar Mishra, **R.P.Tewari** "Electromyography Analysis of High Heel Walking" International Journal on Electronics & Communication Technology, Vol. 3, Issue 1, Jan. March 2012, pp- 166-169
- **8.** Poushpi Dwivedi, S. S. Narvi, **R. P. Tewari**, Keshav Shukla, P.C.Pandey, Avinash.C.Pandey "Green synthesis of Silver bionanocomposite and its application in biomedical engineering: a perspective towards combating implant related infection" International journal- 'Mindshare'
- **9.** Nitin Sahay, **R.P.Tewari** "Recent Development in Finite Element Methods and Computer Aided design in the Development of Porous Scaffolds-A Review" Journal of Tissue Science and Engineering, 2012, 3:1
- **10.** Dinesh Bhatia, **R.P. Tewari**, Shahanaz Ayub, K. K. Shukla, M. A. Ansari "Study the role of muscles under different loading conditions using EMG analysis of lower extremities" Advances in Applied Science Research, 2010, 1 (3):118-128
- **11.** Biomedical Application of Carboxymethyl Chitosan. (**2012**) Laxmi Upadhyaya, Jay Singh, Vishnu Agarwal and **Ravi Prakash Tewari**, *Carbohydrate Polymers* Vol. 91 pp. 452-466
- **12.** Nanospheres Chitosan as a target drug delivery system. **(2012)** Sarvesh kumar Pathak, Laxmi Upadhyaya, **R.P. Tewari**. *International Journal of Nano Science & Technology*. Vol. 1 pp. 25-40
- **13.** Ashish Mishra, Amit Srivastava, R.P.Tewari& Rakesh Mathur "EMG Analysis of Lower Limb Muscles for Developing Robotic Exoskeleton Orthotic Device" Procedia Engineering Volume 41, Pages 32-36, 2012.
- **14.** Recent progress in antimicrobial applications of nanostructured materials. (**2012**) Laxmi Upadhyaya, Jay Singh, Vishnu Agarwal and **Ravi Prakash Tewari**. *Journal of Nanopharmaceutics and Drug Delivery* (*Accepted*)
- **15.** Chitosan-pectin-alginate as a novel scaffold for tissue engineering applications. (**2013**). D. Archana, Laxmi Upadhyay, **R. P. Tewari**, Joydeep Dutta, Y.B.Huang & P. K. Dutta. *Indian Journal of Biotechnology*, (*Accepted*)

- 16. Poushpi Dwivedi, S. S. Narvi, R. P. Tewari, "Potentiality of the plant *Pseudotsuga menzietii* to combat implant related infection in the nanoregime," International Journal of Biomedical Nanoscience and Nanotechnology (IJBNN) (Accepted)
- **17.** Poushpi Dwivedi, S. S. Narvi, **R. P. Tewari**, "Application of polymer nanocomposites in the nanomedicine landscape: envisaging strategies to combat implant associated infections," Journal of Applied Biomaterials and Biomechanics (*Accepted*)
- **18.** Poushpi Dwivedi, S. S. Narvi, **R. P. Tewari**, "Chitosan modification through natural route: Development of Ag/CS-g-PAAm using *Curcuma longa*," Journal of Chinese Medicine Research and Development (JCMRD) (*Accepted*)
- **19.** J.K.Rai, R.P. Tewari, D. Chandra, An Optimal Control Of Biped Robot For Human-Like Walking, International Journal of Robotics and Automation, (Acta Press, Accepted)

National Journals:

- **1.** Dinesh Bhatia, Gagan Bansal, **R.P. Tewari**, K.K.Shukla "Determination of activity of significant muscle groups for lower limb exercise" Indian Journal of Biomechanics 2009.
- **2.** Vipul Saxena and **R.P.Tewari**, "Mathematical Modeling Skeletal Muscle System", Indian Journal of Biomechanics 2009.
- **3.** Singh S, Pandey VK, **Tewari R.P**. and Agarwal V. "Nanoparticle based drug delivery system: Advantages and application". Indian Journal of Science and Technology 2011. Vol 4 (3), pp 167-169

Papers Published in Conference Proceedings

International Conference Proceeding:

- 1. V.K.Pandey & R.P.Tewari, "FEA to determine effect of friction at interface for developing CAD model of prosthetic Socket" CAE 2007, December13 -15, 2007 IIT Madras, Chennai.
- **2.** J.K.Rai, Avinash Kumar and **R.P.Tewari**, "Modelling & Simulation of Humanoid Robot", Proceedings of 4th International Conference on Theoretical, Applied, Computational and Experimental Mechanics, December 27-29, 2007, IIT Kharagpur, India, ICTACEM-2007.
- **3.** J.K.Rai, **R.P.Tewari,** Vinay Pratap Singh and Dinesh Chandra, "Hybrid Control of Biped Robot Leg", Proceedings of the 14th IASTED International Conference Robotics and Applications (RA 2009), November 2-4, 2009, Cambridge, Massachusetts, USA, pp. 464-469.
- **4.** Rakesh Mathur, **R.P.Tewari** & Vipul Saxena, "Mechanical Behaviour of Human Leg Skeletal Muscles for Gail Studies", 6th World Congress on Biomechanics, August 1-6, 2010, Singapore.

- **5.** Dinesh Bhatia , **R.P.Tewari** & K.K.Shukla "Mathematical Modelling & Simulation of Knee-Ankle Muscles for Different Locomotion Activities", 6th World Congress on Biomechanics , August 1-6, 2010, Singapore .
- **6.** Indu Kushwaha, **R.P. Tewari**, Anirudha Narain and Prasanna Kumar Acharya "Design and Development of Functional Electrical Stimulator to Minimise Muscle Fatigue Problem" International Conference on Biomedical Engineering and Assistive Technologies, December 17-19, 2010, Dr. B R Ambedkar National Institute of Technology Jalandhar, Punjab.
- **7.** J.K.Rai, **R.P.Tewari** and Dinesh Chandra, 'Hybrid Adaptive Fuzzy Control of Bio-Robotic Leg', *Proceedings of the IEEE International Conference on Power, Control and Embedded Systems, (ICPCES-2010)*, Nov 29-Dec 01, 2010, **MNNIT Allahabad**, India.
- **8.** J.K.Rai, **R.P.Tewari** and Dinesh Chandra, 'An Optimal Control of Bio-Robotic Leg for Human-like Walking', *Proceedings of the IEEE International Conference on Industrial Electronics, Control and Robotics (IECR-2010)*, Dec 27-29, 2010, **NIT Rourkela**, India, pp. 19-23.
- **9.** Amit Srivastava, Ashish Kumar Mishra, **R.P.Tewari** and Rakesh Mathur "Effect Of Shoe Heel Height On Lower Limb Muscles Electromyographic Activity During Walking" ICMET 2011, August 26-27, 2011 Dalian, China.
- **10.** Laxmi Upadhyaya. **R.P.Tewari** and Rakesh Mathur "Synthesis And Characterization Of Carboxymethyl Chitosan Based Hybrid Biopolymer Scaffold", ICNMS 2011, August 26-27, 2011 Dalian, China.
- **11.** Ashish Mishra, Amit Srivastava, R.P.Tewari& Rakesh Mathur "EMG Analysis of Lower Limb Muscles for Developing Robotic Exoskeleton Orthotic Device", 2nd International Symposium on Robotics and Intelligent Sensors 2012(IRIS 2012), September 4-6,2012, Kuching, Sarawak, Malaysia.
- **12.** Mukesh Kr.Singh, A.K.Govil & R.P.Tewari, Biomechanical and Material Model Analysis of Femur Shaft under Buckling Using CT-Scan Data, The Third Asian Conference on Mechanics of Functional Materials and Structures (*ACMFMS* 2012), December 5-8,2012, IIT, New Delhi.
- **13.** Neeraj Kumar Gupta, **Laxmi Upadhyaya**, Rachna Sagar, Kumar Abhishek & R.P. Tewari ,"Synthesis and characterization of chitosan-zinc-oxide nanocomposite incorporated doxycycline drug for the purpose of antimicrobial drug delivery applications".. In 4th International Conference on Recent Advances in Composite Materials held on 18-21 Feb., 2013, at International Centre, Goa, India.

National conference proceedings:

- **1. R.P. Tewari** & Dr. R. Patnaik, "Alpha EEG Bio Feedback Training", Sixth National Conference on Biomechanics,14 16 January 1998, Department of Mathematics & Computer Application, Maulana Azad College of Technology, Bhopal (M.P.).
- **2. R.P. Tewari**, N.P. Rai, and others, "Effect of Drug Amrita on Hydraulic Permeability of Cell Membrane", National Symposium on Recent Trends in Membrane Transport, 19 20 March 1998, I.T. B.H.U., Varanasi.
- **3. R.P. Tewari**, R. Patnaik & R.B. Mishra, "Neuro Fuzzy Control of Artificial Lower Limb", National Conference on Biomedical Engineeing, 9 11 April 1998, Manipal Institute of Technology, Manipal.
- **4.** R.B. Mishra, **R.P. Tewari** & others, "A Petrinet Model of Flexible Manufacturing System", National Conference on Manufacturing Challenges in 21st Century, 8 9 January 2000, Deptt. Of Mechanical Engineering, I.T. B.H.U., Varanasi.
- **5. R.P. Tewari** & R.B. Mishra, "Neural Network Based EEG Waveform Pattern Recognition", National Seminar on Intelligent Computing & Software Engineering, 25 26 March 2000, Deptt. Of Computer Science and Engineering, I.T. B.H.U., Varanasi.
- **6.** R.B. Mishra & **R.P. Tewari**, "Neural Network Based Robot Arm Manipulator Control Analysis", National Seminar on Intelligent Computing & Software Engineering, 25 26 March 2000, Deptt. Of Computer Science and Engineering, I.T. B.H.U., Varanasi.
- **7. R.P.Tewari** & Sachin, "Neural Network Based Inverse Kinematic Analysis for Design & Control of Artificial Leg", National Conference on Biomechanics, 19-21 Nov, 2004, IIT ,New Delhi.
- **8.** Y.V.Hote & **R.P.Tewari**, "Dynamic Control of Robotic Lower Limb Prosthesis", National Conference on Biomedical Engineering, 23-24 Dec., 2004, GITAM College of Engineering, Vishakhapatnam.
- **9. R.P.Tewari**, Y.V.Hote, S.K.Pandey & S.K.Dubey, "EMG Based Human Gait Analysis Using Artificial Neural Net Work", National Conference on Emerging Trends in Biomedical Engineering, 15-16 Sept, 2005, Bharati Vidyapeeth Deemed University College of Engineering, Pune.
- **10.** Dinesh Bhatia, Sneh Anand, J.R.P Gupta & **R.P. Tewari**, "Functional Electrical Stimulator", National Conference on Emerging Trends in Biomedical Engineering, 15-16 Sept,,2005, Bharati Vidyapeeth Deemed University College of Engineering, Pune.
- **11. R. P.Tewari**, S. J.Pawar, S. K. Pandey & S. K. Dubey, "A Reliable Gait Phase Detection System using Artificial Neural Network", National Conference on "Biomedical Engineering, 28-29 March, 2006, Sadar Patel Institute of Technology, Andheri, Mumbai,.
- **12. R.P.Tewari** delivered special lecture, "Musculo-Skeletal Modelling of Human Leg for Gait Pattern Analysis", National seminar on Biomedical Engineering Key to Global Health, 12-13 April, 2008, AIET, Alwar.
- **13.** Vipul Saxena & **R.P.Tewari**, "Mathematical Modeling Skeletal Muscle System", National Conference on Biomechanics, 7-8 March, 2009, IIT, Roorkee.

- **14.** Dinesh Bhatia, Gagan Bansal, **R.P.Tewari** & K.K.Shukla "Determination of Activity of Significant Muscle Groups for Lower Limb Exrecise", National Conference on Biomechanics, 7-8 March, 2009, IIT, Roorkee.
- **15.** Sheikh Abdel Naser, **R.P. Tewari** & V. Agarwal, "Silver coating: A Promissing approach against C.albicans biofilm", Souvenir of National Conference on Bioprospecting: Access for Sustainable Development (BIOPROSP-2010), 19 20 February 2010, Motilal Nehru National Institute of Technology, Allahabad.
- 16. Laxmi Upadhyaya, Nitin Sahai, R.P. Tewari & P.K.Dutta "Synthesis and Characterization of Chitosan based Hybrid Biopolymer Scaffolds", Proceedings of National Conference on Bioprospecting: Access for Sustainable Development (BIOPROSP-2010), 19 20 February 2010, Motilal Nehru National Institute of Technology, Allahabad.
- 17. Nitin Sahai, R.P. Tewari & Laxmi Upadhyaya, "Application of Computer Aided Designing and Finite Element Methods in Tissue Engineering", National Biotechnology Conference -New horizon in Biotechnology (in Hindi), 23-24 Feb, 2010, organized by National Institute for Interdisciplinary Science and Technology (NIIST), Council of Scientific & Industrial Research (CSIR), Trivandrum.
- **18.** Laxmi Upadhayaya, **R.P. Tewari** & P.K. Dutta "Synthesis & Characterization of Chitosan Based Hybrid Biopolymer Scaffolds for Tissue Engineering Application", 23-24 Feb, 2010, National Biotechnology Conference -New horizon in Biotechnology (in Hindi), organized by National Institute for Interdisciplinary Science and Technology (NIIST), Council of Scientific & Industrial Research (CSIR), Trivandrum.
- 19. Dinesh Bhatia, Ashish Mishra, R.P.Tewari & K.K. Shukla,"Modelling and Simulation of Hip Knee Muscles using EMG for Different Locomotion Activities". 11-12 May, 2010, National Conference on Emerging Medical Instrumentation (CEMI-2010) organised by CSIO, Chandigarh
- **20.** Poushpi Dwivedi , S. S. Narvi , **R. P. Tewari**, Keshav Shukla, P.C.Pandey and Avinash.C.Pandey "Green synthesis of a silver bionanocomposite and its application in biomedical engineering: a perspective towards combating implant related infection" Published in the International refereed journal- 'Mindshare' (ISSN 2229 4872) as proceedings of '3rd National Conference on Nanomaterials and Nanotechnology', 21st-23rd December 2010,Lucknow.
- **21.** Abhijeet Singh,Kirti Snigdha& R.P.Tewari, To investigate the appearance of Brain Waves During Mental Calculation and Memory Based Task,Medical Engineering & Technologies:Issues,Challenges&Benefits(MEDITECH-13),April4- 5,2013,DCRUSTM, ,Murthal,Sonepat,India.

Membership in Professional Bodies:

- 1. Life Member ISTE New Delhi
- 2. Life Member, Biomedical Engineering Society of India.

Development of New Post Graduate Programmes & Laboratories:

- M-Tech (Biomedical Engineering) at MNNIT, Allahabad
- Development of Biomedical Engineering Laboratory at MNNIT, Allahabad

Conferences/Workshops/Short Term Courses Organized:

- 1. Organized ISTE-AICTE Sponsored Two Weeks Short Term Course on Mechatronics systems (9-21 June 2003).
- 2. Organized workshop for Matlab range of software's at MNNIT, Allahabad (21-22 January, 2008).

Conferences/Seminars/Workshops Attended:

- Sixth National Conference on Biomechanics (14 16 January 1998), Department of Mathematics & Computer Application, Maulana Azad College of Technology, Bhopal (M.P.).
- 2. National Symposium on Recent Trends in Membrane Transport (19 20 March 1998), I.T. B.H.U., Varanasi.
- 3. National Conference on Biomedical Engineeing (9 11 April 1998), Manipal Institute of Technology, Manipal.
- 4. National Conference on Manufacturing Challenges in 21st Century (8 9 January 2000), Deptt. Of Mechanical Engineering, I.T. B.H.U., Varanasi.
- 5. National Seminar on Intelligent Computing & Software Engineering (25 26 March 2000), Deptt. Of Computer Science and Engineering, I.T. B.H.U., Varanasi.
- 6. National Workshop on DSP Theory and Practices (19-21 April, 2002), Amity School of Engg & Tech., New Delhi.
- 7. National Symposium on Nanostructured Material (5-6 Dec. 2002), IIT, New Delhi.
- 8. National Seminar on Telemedicine (19 Mar. 2004), IIT, New Delhi.
- 9. National Conference on Biomechanics (19-21 Nov., 2004), IIT, New Delhi.
- 10. International Confrence on Computer Aided Engineering (13 Dec-15 Dec. 2007), IIT Madras Chennai.
- 11. National seminar on Biomedical Engineering Key to Global Health (12-13 April, 2008), AIET, Alwar.
- 12. MEMS & smart structures workshop (11- 16 December, 2006), ISSS, IISc. Banglore.
- 13. Finite Element Analysis -Theory and Practices short term course (29 January 3 Februrary, 2007), MNNIT, Allahabad.
- 14. Entrepreneurship & Innovation (22 December 03 January, 2009), FDP, MNNIT, Allahabad.
- **15.** Workshop on Virtual Instrumentation and its Applications (18 20 March, 2009), MNNIT, Allahabad.
- **16.** 14th IASTED International Conference Robotics and Applications (RA 2009), Nov 2-4, 2009, Cambridge, Massachusetts, USA.

Invited Lectures:

- 1. "Role of Engineers in Rehablitation of physically challenged persons", One Day Sensitization Programme for the Engineering & Technical Students on Disabilities & Rehablitation (31 March, 2008) MNNIT, Allahabad.
- **2.** "Biofluid Modeling", AICTE/MHRD sponsored staff Development Programme on Experimental & Computational Fluid Mechanics (7 19 July, 2008), MNNIT, Allahabad.

Others:

Academic Visit to various US Universities and Colleges for Academic and Research Collaboration (9-21 August, 2009).