

## Publications

### Papers in Refereed Journals

#### International Journals: (38)

1. J.K. Rai, **R.P. Tewari** and Dinesh Chandra, “*Hybrid Control Strategy for Robotic Leg Prosthesis using Artificial Gait Synthesis*”, Int. J. Bio-mechatronics 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, pp 77-99,2011.
4. Gagan Bansal, Dinesh Bhatia, Deepak Joshi, Sneha Anand and **R.P. Tewari** “*Coordination between lower limb muscles in different locomotion activities*” International Journal of Biomedical Engineering and Technology, Volume 6, No.2, pp 23-30, 2011.
5. J.K. Rai, **R.P. Tewari**, Shraddha Pandey and Dinesh Chandra, “*Optimized 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, p.p.- 166-169, Jan. - March 2012.
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, 3:1, 2012.(**Impact Factor** )
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, 1 (3):118-128, 2010.(**Impact Factor 0.421**)
11. Laxmi Upadhyaya, Jay Singh, Vishnu Agarwal and **Ravi Prakash Tewari**, “Biomedical Application of Carboxymethyl Chitosan ”Carbohydrate Polymers Vol. 91 pp. 452-466,2012.(**Impact Factor 1.11** )
12. Sarvesh Kumar Pathak, Laxmi Upadhyaya, **R.P. Tewari** “Nano-spheres Chitosan as a target drug delivery system” International Journal of Nano Science & Technology. Vol. 1 pp. 25-40, 2012.(**Impact Factor 1.15**)
13. Ashish Mishra, Amit Srivastava, **R.P. Tewari** & Rakesh Mathur “EMG Analysis of Lower Limb Muscles for Developing Robotic Exoskeleton Orthotic Device”, Procedia Engineering Vol. 41, Pages 32-36 ,2012.
14. Laxmi Upadhyaya, Jay Singh, Vishnu Agarwal and **Ravi Prakash Tewari** “Recent progress in antimicrobial applications of Nano-structured materials” Journal of Nano-pharmaceutics and Drug Delivery, Vol. 1, pp. 4-17, 2012.(**Impact Factor 4**)
15. Poushpi Dwivedi, S. S. Narvi, **R. P. Tewari**, “Potentiality of the plant *Pseudotsugamenziitiito* combat implant related infection in the nanoregime”, International Journal of Biomedical Nano-science and Nanotechnology (IJBNN); Vol. 2 (3/4): 187 DOI: 10.1504/IJBNN.2012.051217, 2012.
16. D. Archana, Laxmi Upadhyay, **R. P. Tewari**, Joydeep Dutta, Y.B. Huang & P. K. Dutta, “Chitosan-pectin-alginate as a novel scaffold for tissue engineering applications”, Indian Journal of Biotechnology, 2013 (**Impact Factor 0.55**).
17. Poushpi Dwivedi, S. S. Narvi, **R. P. Tewari**, “Application of polymer Nano-composites in the Nano-medicine landscape: envisaging strategies to combat implant associated infections”, Journal of Applied Biomaterials and Biomechanics, Vol.11 (3) pp. 129-142 doi: 10.5301/JABFM.2013.11544, 2013. (**Impact Factor 1.16**)
18. Poushpi Dwivedi, S. S. Narvi, **R. P. Tewari**, “Phytofabrication characterization and comparative analysis of Ag nanoparticles by diverse bio-chemicals from *Elaeocarpus ganitrus* Roxb., *Terminalia arjuna* Roxb. *Pseudotsugamenziitii*, *Prosopis spicigera*, *Ficus religiosa*, *Ocimum sanctum*, *Curcuma longa* (2014)” Industrial Crops and Products, Vol. 54 pp. 22-31, doi: 10.1016/j.indcrop.2013.12.050.(**Impact Factor 3.208**)
19. Laxmi Upadhyaya, Jay Singh, Kavyanjali Shukla, Vishnu Agarwal and **R. P. Tewari**. “Advances in strategies for Preventive and Diagnostic Health Care”, International Journal of Nano-science & Technology, Vol. 2, pp 11-18, 2013.
20. Jaynendra Kumar Rai, **Ravi Prakash Tewari** and Dinesh Chandra, “An Optimal Control Of Bio-Robot leg for Humanlike Walking”, International Journal of Robotics and Automation, Vol. 28, No. 2, pp. 129-136, 2013.(**Impact Factor 0.407**)

21. Poushpi Dwivedi, S. S. Narvi, **R. P. Tewari** “*Novel Scientific Appraisal of Elaeocarpus ganitrus the Rudraksha: Nano Silver Synthesis with Aspects of Variation in Concentration Antimicrobial Activity and In vitro Biocompatibility*” Annual Research & Review in Biology Vol.4(7): pp.1059-1069, 2014
22. 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), JCMRD, Vol. 1, Issue 1 April PP. 23-27, 2012.
23. Laxmi Upadhyaya, Jay Singh, Vishnu Agarwal and **R. P. Tewari** “*The implications of recent advances in carboxymethyl chitosan based targeted drug delivery and tissue engineering*” Application in Journal of Controlled Release (journal ISSN : 0168-3659 DOI 10.1016/j.jconrel.2014.04.043-2014) Vol.186 PP.54-87, 2014 (**Impact Factor-7.63**)
24. Mehta A.S., Singh B.K., Singh N., Archana D., Snigdha K., Harniman R., Rahatekar S.S., **Tewari R. P.**, Dutta P.K. “*Chitosan silk-based three-dimensional scaffolds containing gentamicin-encapsulated calcium alginate beads for drug administration and blood compatibility*” International Journal Biomaterial Application 2015 Apr; Vol. 29(9): pp.1314-25. (**Impact Factor 2.76**)
25. Upadhyaya, L., Singh, J., Agarwal, V., Das, P., **Tewari, R.P.** “*Efficient water soluble nanostructured ZnO grafted O-carboxymethyl chitosan/curcumin-nanocomposite for cancer therapy*”, Process Biochemistry,(Elsevier), ISSN:13595113,CODEN: PBCHE, DOI:10.1016/j.procbio.2014.12.029, Vol. 50 (4), pp. 678-688, April 2015.
26. P. Shakti Prakash, S. J. Pawar, **R. P. Tewari** “*Synthesis, characterization, and coating of forsterite (Mg<sub>2</sub>SiO<sub>4</sub>) based material over medical implants: A review*” Proceedings of the Institution of Mechanical Engineers, Part L: Journal of Materials: Design and Applications, DOI: 10.1177/1464420717705151, SCIE journal, Impact factor 0.793, April 2017.
27. Yogesh Chandra, Anuj Jain, **R. P. Tewari** “*Experimental Studies on Acrylic Dielectric Elastomers as Actuator for Artificial Skeletal Muscle Application*” International Journal of Biomedical Engineering and Technology, Volume 10, May 2018, Inderscience Publishers.
28. Aarti Sharma, J. K. Rai and **R. P. Tewari**, “*Prior Forecasting of Epileptic Seizure and Localization of Epileptogenic Region*”, International Journal of Biomedical Engineering, Publisher World Scientific (Accepted).
29. Jitendra Mehta, Yogesh Chandra, **R. P. Tewari**, “*The Use of Dielectric Elastomer Actuators for Prosthetic, Orthotic and Bio-Robotic Applications*” DOI: 10.1016/j.procs.2018.07.085, Procedia Computer Science Elsevier, 133, 569-575, 2018.
30. Tribedi Sarma, Divya Pandey, Nitin Sahai, **Ravi Prakash Tewari** “*Material Selection and Development Of Ankle Foot Orthotic Device*”, Journal of Material today: Proceeding, Elsevier B.V. (Cite Score -.09, IF-.837, Scopus Indexed), DOI: - 10.1016/j.matpr.2019.07.107, 2019.
31. P. Shakti Prakash, T. S. Sharan, S. J. Pawar, **R. P. Tewari**, S. Sharma “*Wavelet based noise removal from Raman signal to study PLD coated Forsterite-Hydroxyapatite thin film on*

*Stainless Steel 316L substrate*”, Journal of Applied Spectroscopy (2020)- Springer, Vol.87, No.3.

32. Srivastava, Rohini; Ray, Sonali; Sharma, Meenakshi; Sahai, Nitin; **Tewari, R.P.**; Kumar, Basant, “*Low Delay Rate Adaptive Pacemaker using FPGA Embedded Piezoelectric Sensor*”, communicated in Journal of Medical Engineering & Technology, Taylor & Francis.
33. Poushpi Dwivedi, Dhanesh Tiwary, Shahid S. Narvi, **Ravi P. Tewari**, Keshav P. Shukla, “*Curcuma longa Aided Ag/CS Nanocomposite Coating of Surfaces as SARS-CoV-2 Contamination Minimizing Measure Towards Containment of COVID-19: a Perspective*”, Letters in Applied Nano Bio Science, DOI: 10.33263/LIANBS94.14851493, Vol. 9, pp. 1485-1493, August 2020.
34. Poushpi Dwivedi, Dhanesh Tiwary, Pradeep Kumar Mishra, Shahid Suhail Narvi, **Ravi Prakash Tewari**, “*Dual approach transformation of human finger and toe nail pruning into MgO/CaO nanoalloy*”, Inorganic Chemistry Communications, Elsevier, DOI: 10.1016/j.inoche.2021.108479, Vol. 126, January 2021.
35. Rohini Srivastava, Ch Kalyan Kumar Prusty, Nitin Sahai, **Ravi Prakash Tewari**, Basant Kumar, “*An FPGA-based design for power efficient low delay rate adaptive pacemaker using accelerometer and heart rate sensor*”, Journal of Medical Engineering & Technology, DOI: 10.1080/03091902.2021.1967490, August 2021.
36. Yogesh Chandra, Anuj Jain, **R.P. Tewari**, “*Experimental studies on acrylic dielectric elastomers as actuator for artificial skeletal muscle application*”, Int. J. Biomedical Engineering and Technology, DOI: 10.1504/IJBET.2021.117515, Vol. 37, No. 1, September 2021.
37. P. Shakti Prakash, Suryappa Jayappa Pawar, **Ravi Prakash Tewari**. “*Preparation and Biological Evaluation of PLD based Forsterite-Hydroxyapatite Nanocomposite Coating on Stainless Steel 316L.*”, Surface Review and Letters, World Scientific Publishing. (Accepted).
38. Ankit Prakash, Nishant Sati, Piyush Pratap Singh, Sajal K. B. Degala, Anubhav Rawat, Ramesh Pandey, **R.P. Tewari**, “*Design of economic PODS to safeguard against contagious diseases using computational fluid dynamics (CFD).*”, Journal of Physics: Conference Series, DOI: 10.1088/1742-6596/1849/1/012006/meta, Vol. 1849, 2021

#### **National Journals: (4)**

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 V.K., **Tewari R.P.** and Agarwal V. “*Nano-particle based drug delivery system: Advantages and application*” Indian Journal of Science and Technology 2011. Vol. 4 (3), pp167-169.
4. S. Kumar, P. S. Prakash, S K. Barnwal, S. J. Pawar, **R. P. Tewari**, Gopal Ji, R. Prakash “*Dip Coating of Forsterite-Hydroxyapatite-Poly ( $\epsilon$ -Caprolactone) nanocomposites on Ti6Al4V substrates for its corrosion prevention*” (Accepted in SCI journal, Indian Journal of Chemical Technology, June, 2019).

## Papers Published in Conference Proceedings

### International Conference Proceeding: (37)

1. V.K. Pandey & **R.P. Tewari**, “*FEA to determine effect of friction at interface for developing CAD model of prosthetic Socket*” CAE 2007, December 13 -15, 2007 IIT Madras, Chennai.
2. J.K. Rai, Avinash Kumar and **R.P. Tewari**, “*Modelling & Simulation of Humanoid Robot*”, Proceedings of 4<sup>th</sup> 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 14<sup>th</sup> 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 Behavior of Human Leg Skeletal Muscles for Gait Studies*”, 6<sup>th</sup> 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*”, 6<sup>th</sup> 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 Minimize 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 Electro-myographic 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*”, 2<sup>nd</sup> International Symposium on Robotics and Intelligent Sensors 2012 (IRIS 2012), September 4- 6, 2012, Kuching, Sarawak, Malaysia.
12. Mukesh Kumar 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. J. K. Rai, **R. P. Tewari**, V. P. Singh and Dinesh Chandra, “*Artificial Neural Network Controllers for Biped Robot*”, Proceedings of the IEEE 2<sup>nd</sup> International Conference on Power, Control and Embedded Systems, (ICPCES-2012), 17-19 Dec 2012, MNNIT Allahabad, India, pp. 625-630.
14. Neeraj Kumar Gupta, Laxmi Upadhyaya, Rachna Sagar, Kumar Abhishek & **R.P. Tewari**  
,”*Synthesis and Characterization of Chitosan-zinc-oxide Nano-composite incorporated doxycycline drug for the purpose of antimicrobial drug delivery applications*”, 4<sup>th</sup> International Conference on Recent Advances in Composite Materials held on 18-21 Feb., 2013, at International Centre, Goa, India.
15. Jaynendra Kumar Rai and **Ravi Tewari**, “*Quintic Polynomial Trajectory of Biped Robot for Human-Like Walking*”, IEEE 6<sup>th</sup> International Symposium on Communications, Control, and Signal Processing (ISCCSP 2014), May 21-23, 2014, Athens, Greece. (Accepted)
16. Jaya Sharma, J.K. Rai & **R.P. Tewari** “*Co-occurrence Matrix and Statistical Features as an Approach for Mass Classification*” International Conference on Advances in Computing, Communications and Informatics (ICACCI-2014), September 24-27, 2014, New Delhi, India, pp. 2369-2373, ISBN No. 978-1-4799-3078-4, DOI No. 10.1109/ICACCI.2014.6968364, Accession No. 14779113 (IEEE).
17. Jaya Sharma, J.K. Rai & **R.P. Tewari** “*Identification of Pre-processing Technique for Enhancement of Mammogram Images*” International Conference on Medical

Imaging m- Health and Emerging Communication Systems (MedCom), November 07-08, 2014, Greater Noida, UP, India, pp. 115-119, ISBN No. 978-1-4799-5096-6, DOI No. 10.1109/MedCom.2014.7005987, Accession No. 14850361 (IEEE).

18. Jaya Sharma, J.K. Rai & **R.P. Tewari** “*A Combined Watershed Segmentation Approach using K-Means Clustering for Mammograms*” 2<sup>nd</sup> International Conference on Signal Processing and Integrated Network (SPIN-2015), February 19-20, 2015, Greater Noida, UP, India, pp. 109-113, ISBN No978-1-4799-5990-7, DOI No. 10.1109/SPIN.2015.7095345, Accession No. 15090295 (IEEE).
19. Aarti Sharma, J. K. Rai and **R. P. Tewari**, “*Epileptic Seizure Prediction and Identification of Epileptogenic Region using EEG Signal*”, Proceedings of the IEEE International Conference on Green Computing and Internet of Things (ICGCIoT 2015), Oct 8-10, 2015, Greater Noida, India, pp. 1194-1198.
20. Aarati Sharma, J.K. Rai & **R.P. Tewari**“ *Multivariate EEG Signal Analysis for Early Prediction of Epileptic Seizure*” 2<sup>nd</sup> International Conference on Recent Advances in Engineering and Computational Sciences (RAECS-2015), December 21-22, 2015, University Institute of Engineering & Technology, Punjab University, Chandigarh, Punjab (Accepted).
21. Aarti Sharma, J. K. Rai and **R. P. Tewari**, “*Anticipation of Epileptic Seizure in Advance and Localization of Seizure Onset Zone using Power Spectral Density*”, Proceedings of the IEEE 2<sup>nd</sup>International Conference on Innovative Applications of Computational Intelligence on Power, Energy and Control with their Impact on Humanity (CIPECH-2016), Nov 18-19, 2016, Ghaziabad, India.
22. Giri, S., Borotikar, B., **Tewari, R.P.**, “*Evaluation of muscle activity during swing phase using OpenSim: Implications for Lower Limb Prostheses Design*”, World Congress of Biomechanics, Dublin, Ireland, July 8-12, 2018.
23. Jitendra Mehta, Yogesh Chandra, **R. P. Tewari**, “*The Use of Dielectric Elastomer Actuators for Prosthetic, Orthotic and Bio-Robotic Applications*” International Conference on Robotics and Smart Manufacturing (RoSMA-2018), 19-21 July, 2018, IIITDM Kancheepuram, Chennai.
24. Giri, S., **Tewari, R.P.**, Rai, J.K., “*Significant Lower Limb Muscles in Walking and Running for Design of Low-Cost Swing-Assist Rehabilitation Device*”, International Conference on Bioinformatics and Systems Biology (BSB-2018), IIT Allahabad- October 26-28, 2018.
25. Aarti Sharma, J. K. Rai, **R. P. Tewari**, “*Relative Measures to Characterize EEG Signals for Early Detection of Alzheimer*” 5th International Conference on Signal Processing & Integrated Networks" (SPIN-2018), 22-23 February, 2018, Amity University, Noida.
26. Vikas Patidar, Rohini Srivastava, Basant Kumar, **R. P. Tewari**, Nitin Sahai & Dinesh Bhatia, “*Arrhythmia Classification Based on Combination of Heart Rate,*

*Auto Regressive Coefficient and Spectral Entropy Using Probabilistic Neural Network*”, INDICON-2018.

27. T. Sarma, D. Pandey, N. Sahai, D. Bhatia, **R. P. Tewari** “*Manufacturing of Patient Specific Ankle Foot Orthotic Device using 3D Printing*” International Conference on Recent Innovations and Developments in Mechanical Engineering, NIT Meghalaya, Shillong, India, November 8 – 10, 2018. Springer Book Volume (Scopus Indexed).
28. Sonali Ray, Meenakshi Sharma, Rohini Srivastava, Nitin Sahai, **R. P. Tewari** & Basant Kumar, “*Implementation of Low Delay Dual Chamber Pacemaker Using Verilog*”, SPIN- 2019.
29. Devashish Sen, Rohini Srivastava, Nitin Sahai, **R. P. Tewari** & Basant Kumar, “*Development of IoT enabled Low Cost Management System for m-Cardiology*”, ICAEEC-2019.
30. Aarti Sharma, J. K. Rai and **R. P. Tewari**, “*Identification of Various Neurological Disorders using EEG Signals*”, Proceedings of the 3rd International Conference on Advances in Computing and Data Sciences (ICACDS 2019), Part of the Springer Communications in Computer and Information Science book series (CCIS, volume 1045), 12-13 Apr, 2019, Ghaziabad, India, pp. 95-103.
31. Aarti Sharma, J. K. Rai and **R. P. Tewari**, “*Detection of Alzheimer’s Disease at Mild Cognitive Impairment Stage using EEG Signals*”, Proceedings of the IEEE 2019 International Conference on Electrical, Electronics and Computer Engineering (UPCON), Nov 8-10, 2019, Aligarh, India.
32. Shivangi Giri, Bhushan Borotikar, **R.P. Tewari**. “*Evaluation of muscle activity during swing phase using OpenSim: Implications for Lower Limb Prostheses Design*”, Poster presented at World Congress of Biomechanics, Dublin, Ireland, July 8-12 2018.
33. Shivangi Giri, Asma Salhi, Mathieu Lempereur, **R.P. Tewari**, Bhushan Borotikar. “*Effect of gait speeds on lower limb muscle synergy and joint moments*”, Poster presented at the Congress of International Society of Biomechanics 2019, Calgary, Canada, July 31- Aug 04 2019.
34. Tribedi Sarma, Kuldeep Kumar Saxena, Vinayak Majhi, Divya Pandey, **Ravi Prakash Tewari**, Nitin Sahai. “*Development of active ankle foot orthotic device.*”, Materialstoday Proceedings, Volume 26, Part 2, 2020, Pages – 918-921.
35. Vipin Kumar, **R.P Tewari**, “*Impact of Ankle- Foot Orthosis Stiffness and Muscle Coactivation on Ankle Injury During Landing*”, International Conference on Emerging Trends in Communication, Control and Computing (ICONC3-2020), Paper ID – 164.
36. Avinash Kumar, D. Sajal Kumar Babu, **Ravi Prakash Tewari**. “*Development of Novel Feed forward Neural Network Controller with feedback PID for Control of Pneumatic Artificial Muscle Actuator.*”, International Conference on Robotics, Intelligent Automation and Control Technologies (RIACT – 2020).



37. Astha Shekhar, **R.P.Tewari**. “*Biomimetics in Biomedical Application.*”, Biotechnological intervention for societal development (BioSangam 2020).

**National conference proceedings: (27)**

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 Engineering, 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 21<sup>st</sup> 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, Department 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, Department 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, Sneha 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, 07-08 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 Exercise", National Conference on Biomechanics, 07-08 March, 2009, IIT, Roorkee.
15. Sheikh Abdel Naser, **R.P. Tewari** & V. Agarwal, "Silver coating: A Promising approach against Calbicans biofilm", Souvenir of National Conference on Bio-prospecting: 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 Bio- prospecting: 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 ‘3<sup>rd</sup> National Conference on Nanomaterial’s and Nanotechnology’, 21<sup>st</sup>-23<sup>rd</sup> 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, Sonapat, India.
22. P. Shakti Prakash, Ankur Pandey and **R. P. Tewari**, “Experimental Studies on Hydroxyapatite based Coating over Ti6Al4V Implants” National Conference on Biomechanics and Rehabilitation Engineering (BIOREHAB 2016), September 15th -16th, 2016, ISBN: 978-81- 929998-2-1, Department Of Biomedical Engineering, North- Eastern Hill University, Shillong, Meghalaya, India.
23. Yogesh Chandra, Jitendra Mehta and **R. P. Tewari**, “*Some Experimental Studies on properties of Acrylic Dielectric Elastomers as Actuator for Artificial Skeletal Muscle Application*” National Conference on Biomechanics and Rehabilitation Engineering (BIOREHAB 2016), September 15th -16th, 2016, ISBN: 978-81-929998-2-1, Department Of Biomedical Engineering, North- Eastern Hill University, Shillong, Meghalaya, India.
24. Vikas Patidar, Rohini Srivastava, Basant Kumar, **R. P. Tewari**, Nitin Sahai & Dinesh Bhatia, “Arrhythmia Classification Based on Combination of Heart Rate, Auto Regressive Coefficient and Spectral Entropy Using Probabilistic Neural Network”, INDICON-2018, DOI: 10.1109/INDICON45594.2018.8987120.
25. Sonali Ray, Meenakshi Sharma, Rohini Srivastava, Nitin Sahai, **R. P. Tewari** & Basant Kumar, “Implementation of Low Delay Dual Chamber Pacemaker Using Verilog “, SPIN 2019, DOI: 10.1109/SPIN.2019.8711746
26. Devashish Sen, Rohini Srivastava, Nitin Sahai, **R. P. Tewari**, and Basant Kumar, “Development of IoT Enabled Low Cost Management System for m-Cardiology (April 11, 2020). Proceedings of the International Conference on Advances in Electronics, Electrical & Computational Intelligence (ICAEEC) 2019. Available at SSRN: <https://ssrn.com/abstract=3573502> or <http://dx.doi.org/10.2139/ssrn.3573502>, ICAEEC-2019,
27. Naveen Kumar, Arun Kumar, Prabal Gupta, Rohini Srivastava, **R. P. Tewari**, Nitin Sahai and Basant Kumar, " Development of Cloud Based Multi Modal m-Cardiac Management System", Accepted and Presented in VCAS-2019.