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| <b>Name</b>                    | Dr. V. Rama Raju  |  |
| <b>Designation</b>             | Professor   |   |
| <b>Edu. Qualifications</b>     | B.Sc.(Hon` s), B.Tech (CSE), M.Tech (CSE), MS (AI-CS) UK, PhD.                        |   |
| <b>PhD Specialization</b>      | Neuroscience: Computational & Cognitive, Artificial Intelligence - Neural Engineering |   |
| <b>PG Specialization</b>       | CSE – AI/Natural Language Processing & Machine Translation                            |   |
| <b>Experience</b>              | 30 years  |   |
| <b>UG Experience</b>           | Post B.Tech 2 ½ Yrs, B.Sc.(Hon` s) 1 Year   |   |
| <b>PG Experience</b>           | M.Tech with 6 ½ Years, MS 2 Yrs   |   |
| <b>Research PhD Experience</b> | 21  |   |
| <b>Date of Joining</b>         | 20/05/2015  |   |
| <b>Phone Number</b>            | 8425901286  |   |

## Awards & Achievements

Awarded and received the following International Travel Grants (ITG) and Fellowships to participate/present/chair the prestigious world famous world congresses/international congresses, conferences, colloquiums, etc.

- ITG by International Parkinson and Movement Disorders (PD and MDS) WI, USA to participate and present 4 papers in Hong Kong, Oct 5-9, 2018.  
Biosensors 2018, 28<sup>th</sup> International Congress on Biosensors, 12-15 June, Miami (Florida), USA
- 2018 International Union for Physical & Engineering Sciences in Medicine (IUPESM) June 3-8, 2018 (Prague, Czech Republic) and June 6-11, 2015 (Toronto, Canada) World Congress on Medical Physics & Biomedical Engineering, International Federation of Medical & Biological Engineering (IFMBE), and International Organization for Medical Physics (IOMP).
- 2017 ITG by University Grants Commission (UGC) for IEEE Intelligent Systems International Conference, London Sept 5-7, 2017
- ITG by International Parkinson and Movement Disorders (PD and MDS) WI, USA to participate and present 4 papers in Vancouver (Canada), June 2017.
- ITG by Science & Engineering Research Board (SERB) of Department of Science & Technology (DST), Ministry of Science & Technology, Govt of India, New Delhi for 20<sup>th</sup> International Congress of Parkinson`s Disease & Movement Disorders (PD and MDS), June, 2016, Berlin (Germany).
- 2017 Bursary Award received from International Society for Parkinson`s Disease & Movement Disorders, WI, USA for participating in Ist Middle East Neuroscience - Neurology School, Oct 2-4, 2017, Kuwait City, Kuwait State, Middle East
- 2017 Bursary Award received from International Society for Parkinson`s Disease & Movement Disorders, WI, USA for participating in Ist Middle East Neuroscience - Neurology School, Oct 22-25, 2017, University of Nara, Nara, Osaka (Kansai) Japan
- 2017 Bursary Award received from *IEEE Intelligent Systems*, Sept 7-8, 2017, SAI, London
- 2017 Bursary Award received from International Neuromodulation Society (INS), Edinburgh (Scotland, UK), May 27, 2017 – June 1, 2017
- EMBC2017 International Travel Grant by the Academic University Grants Commission (UGC), Hyderabad, India to participate and present my research paper in the **38<sup>th</sup> Annual International Conf of IEEE Engineering in medicine & Biology, EMBC 2016, Aug 16-20, 2016, Orlando, FL, USA**

- 2016 International Travel Grant by the **Science & Engineering Research Board (SERB), Dept of Science & Technology (DST)**, Ministry of Science & Technology (MST), *Government of India*, New Delhi to participate and present my research paper in the **20<sup>th</sup> International Congress of Parkinson's Disease and Movement Disorders**, MDS Society, June 19-23, 2016, **Berlin (Germany)**
- EMBC2015 International Travel Grant by the Pentagram Research Center (PRC) International (Pvt.) Ltd, Bombay (Mumbai branch), India to participate and present my research paper in the **37<sup>th</sup> Annual International Conf of IEEE Engineering in medicine & Biology, EMBC 2015, Aug 2015, Milano (Milan), ITALY**
- 2015 *International Travel Grant by International Federation for Medical & Biological Eng (IFMBE), 2015 to participate in the International union for Physical and Engineering Sciences in Engineering & Medicine (IUPESM) World Congress 2015 - WC'15 IUPESM, June 7-12, 2015, Toronto (Canada)*
- EMBC2014 International Travel Grant by the Pentagram Research Center (PRC) International (Pvt.) Ltd, Hyderabad Hqrs., India to participate and present my research paper in the **36<sup>th</sup> Annual International Conf of IEEE Engineering in medicine & Biology, EMBC 2015, Aug 26-30, 2015, Chicago, Illinois (IL), USA**
- EMBC2013 International Travel Grant by the Gautami Educational Society, AP, India to participate and present my research paper in the **35<sup>th</sup> Annual International Conf of IEEE Engineering in medicine & Biology, June 3-7, 2013, Osaka (Kansai Region), JAPAN**
- 2009/10 Best PhD Thesis and Gold Medal Award**, awarded by Pentagram Research Center (PRC) International (Pvt.) Ltd, an Apex R&D Center, India <http://www.pentagramresearch.com>  
[Based on Competition Organized by PRC, IN RECOGNITION of my outstanding contribution to the Academic Community in the form of Doctoral Thesis titled: "A Study of Advanced Multi-Channel EMG in Writer's Cramp"]

## **PROFESSIONAL SOCIETIES – SCIENTIFIC BODIES**

- 2016 Member (**ID # 46708**) of International Parkinson and Movement Disorder Society (**MDS**), USA
- 2016 Life Member of Indian Academy of Neurosciences (**IAN**) **LS-267**
- 2016 Member of Movement Disorders Society (**MDS**), India
- 2015 Member of International Federation of Medical & Biological Engineering (**IFMBE**), USA
- 2012 Member of International Society for Developmental Neuroscience (**ISDN**)
- 2007 Fellow of Indian Society for Technical Education (**ISTE**), New Delhi
- 2006 Life Member of Indian Society for Technical Education (**ISTE, ID # LM 51709**)
- 2002 Member of Indian Epilepsy Society (**IES**)
- 2001 Senior Member of International Stroke Society (**ISS**)
- 1999 Life Associate member of Indian Academy of Neurology (**IAN, ID # LAM006**)
- 1999 Member of Neurological Society of India (**NSI, ID # RA-68**)
- 1997 Member of Twin Cities Neuroclub (**TCN**)
- 1997 Member of Andhra Pradesh Neuroscientists Association (**APNSA**)
- 1996 Senior Member (**ID # 40159294**) of *Institute of Electrical and Electronics Engineering (IEEE) – Eng in Medicine & Biology (EMB) Society (EMBS)*, Piscataway, New jersey, USA
- 1995 Senior Member (**ID # M09263764**) of British Computing Society (**BCS**), UK
- 1995 Fellow of Institution of Engineers (IE), Kolkata, India
- 1985 Member of Computer Society of India
- 1984 Member of **Computer Forum** School of Computer/Information Sciences, University of Hyderabad, and Indian Institute of Science (IIS)/TATA Institute Bangalore
- 1984 Computer Forum University of Hyderabad (UoH)/ Hyderabad Central University (HCU), P.O. Central University, India

## **Research Publications**

- V. Rama Raju, Principal component latent variate factorial analysis of MER signals of STN-DBS in Parkinson's disease (Electrode Implantation), Springer Nature, 2018
- V. Rama Raju, The probabilistic random forest clinic-statistical regression analysis with STN-DBS and enhancement of UPDRS, Springer Nature, 2018
- V. Rama Raju, A clinic-statistical analysis of Writer's cramp signals: Study with indigenously developed multichannel intramuscular EMG, Springer nature, 2018
- V. Rama Raju, Design and development of advanced multi-channel EMG Micro electrode recording system, Springer Nature, 2018
- V. Rama Raju, Latent Variate Factorial and Clustering Analysis of EMG Writer's Cramp Neuromuscular Signals, *Research Journal of Engineering and Technology. Vol. 9, Issue. 2: April-June, Pages: 120-126, 2018*
- V. Rama Raju, A smart microelectroneuro—sensor (microelectrode) multichannel EMG for effective medical diagnostics', *Journal of Biosensors, ELSEVIER Publications, 2018.*
- V. Rama Raju, Latent Variate Factorial Principal Component Analysis of Microelectrode Recording of Subthalamic Nuclei Neural Signals with Deep Brain Stimulator in Parkinson Disease et.al. Springer Briefs in Forensic and Medical Bioinformatics, Soft Computing and Medical Bioinformatics, [https://doi.org/10.1007/978-981-13-0059-2\\_9](https://doi.org/10.1007/978-981-13-0059-2_9), Chapter 9, pages: 73-83, 2018.

**Papers printed/published in Springer Nature IFMBE Proceedings (Scopus Indexed)**

- V. Rama Raju, ID: 857 Title: Fragile electrical potential along the roots of the elaeocarpus ganitrus
- V. Rama Raju, ID: 524 Title: Development of microminiaturized electrode intramuscular advanced multichannel EMG system
- V. Rama Raju, ID: 47 Title: Design and development of advanced multi-channel EMG micro electrode recording system
- V. Rama Raju, ID: 49 Title: A Clinico-statistical Analysis of Intramuscular EMG Writer's Cramp Signals Multidimensional Scaling—Study With Indigenously Built Advanced Automated Intelligent-ARTEMG-System
- V. Rama Raju, ID: 34 Title: Canonical Correlational Empirical Data Analysis of Intramuscular EMG Writer's Cramp Signals Multidimensional Scaling—A study With Indigenously Built Automated Intelligent-ARTEMG-system
- V. Rama Raju, ID: 32 Canonical correlational analysis of invasive EMG writer's cramp signals multidimensional scaling for multidimensionality—a study with advanced multichannel ARTEMG system
- V. Rama Raju, ID: 31 Title: Probabilistic random forest clinic-statistical regression analysis of MER signals with STN-DBS and improvement of UPDRS

- [J1] V. Rama Raju, R.K. Mridula, R. Borgohain, Goutham R.Chakravarthy, B. Anuradha. Microrecording of Writer's Cramp Signals with Indigenously Developed Advanced Real-Time Multi-Channel Intelligent-EMG-System. *IEEE Intelligent Systems*. Sept, 2017; [http://www.ieee.org/conferences\\_events/conferences/conferencedetails/index.html?Conf\\_ID=39997](http://www.ieee.org/conferences_events/conferences/conferencedetails/index.html?Conf_ID=39997)
- [J2] V.R. Rama Raju, R.K. Mridula, R. Borgohain, V. Rama Raju. Objective methods for quantifying the deep brain stimulation (DBS) efficacy in subthalamic-nuclei (STN) neurons with microelectrode recording (MER) technology. *Mov Disord.* 2016; 31 (suppl 2). <http://www.mdsabstracts.org/abstract/objective-methods-for-quantifying-the-deep-brainstimulation-dbs-efficacy-in-subthalamic-nuclei-stn-neurons-with-microelectrode-recording-mertechology/>.
- [J3] V. Rama Raju, R. Borgohain. Effectiveness of lead position with MER to determine STNs: A study of MER with DBS for quantifying the effects of DBS in Parkinson's disease. *Mov Disord.* 2017; 32 (suppl 2). <http://www.mdsabstracts.org/abstract/effectiveness-of-lead-position-with-mer-todetermine-stns-a-study-of-mer-with-dbs-for-quantifying-the-effects-of-dbs-in-parkinsons-disease/>.
- [J4] V. Rama raju, R. Borgohain. Multivariate analysis of writer's cramp: a study with advanced multichannel microelectrode recording system [abstract]. *Mov Disord.* 2017; 32 (suppl 2). <http://www.mdsabstracts.org/abstract/multivariate-analysis-of-writers-cramp-a-study-withadvanced-multi-channel-microelectrode-recording-system/>.
- [J5] V. Rama Raju, R. Borgohain, R. Kandadai. Mirror dysonia in writer's aramp: a study with advanced multi-channel micro-electrode recording EMG system. *Mov Disord.* 2017; 32 (suppl 2). <http://www.mdsabstracts.org/abstract/mirror-dysonia-in-writers-aramp-a-study-with-advanced-multi-channel-micro-electrode-recording-emg-system/>. Accessed July 1, 2017.
- [J6] V. Rama Raju, R. Borgohain, R. Kandadai. Mirror dysonia in writer's aramp: a study with advanced multi-channel micro-electrode recording EMG system [abstract]. *Mov Disord.* 2017; 32 (suppl 2). <http://www.mdsabstracts.org/abstract/mirror-dysonia-in-writers-aramp-a-study-with-advanced-multi-channel-micro-electrode-recording-emg-system/>.
- [J7] V. Rama Raju, R. Borgohain, R. Kandadai. Role of microelectrode recording in accurate targeting of STN Neurons with DBS (Electrode Implantation) in Parkinson's Disease, 13<sup>th</sup> INS World Congress on Neuromodulation. Edinburgh (Scotland) UK, May 27- Jun 1, 2017
- [J8] V. Rama Raju, R. Borgohain, R. Kandadai. Multivariate Analysis of MER Signals of Subthalamic-Nuclei (STN) Neurons with Deep Brain Stimulation (MER with STN-DBS) for Quantifying the Efficacy of DBS. 13<sup>th</sup> INS World Congress on Neuromodulation. Edinburgh (Scotland) UK, May 27- Jun 1, 2017

- [J9] **V. Rama Raju**, Rukmini K. Mridula, B. Roopam, “**Objective Methods for Quantifying the DBS Efficacy in Subthalamic-Nuclei (STN) Neurons with MER Technology**”, *Movement Disorders, Official Journal of the Movement Disorder Society*, Vol.31, Issue Supplement S2, Pages:S1-S851, S1-697,Pp:S240/739<http://onlinelibrary.wiley.com/doi/10.1002/mds.26688/epdf>  
<http://www.mdsabstracts.org/tag/microelectrode-recording/>  
*AMA Style of article*  
V.R. Rama Raju, R.K. Mridula, R. Borgohain, V. Rama Raju. Objective methods for quantifying the deep brain stimulation (DBS) efficacy in subthalamic-nuclei (STN) neurons with microelectrode recording (MER) technology [abstract]. *Mov Disord.* 2016; 31 (suppl 2). <http://www.mdsabstracts.org/abstract/objective-methods-for-quantifying-the-deep-brain-stimulation-dbs-efficacy-in-subthalamic-nuclei-stn-neurons-with-microelectrode-recording-mer-technology/>.
- [J10] **V. Rama Raju**, Narasimha Sastry Narahari Pandit Rukmini K. Mridula, B. Rupam, “**Microelectrode recording System for Acquiring EMG Writer’s Cramp Signals**”, *38<sup>th</sup> IEEE International Conf of Engineering in Medicine and Biology*, IEEE EMB, PubMed, MEDLINE–US National Library of Medicine Aug 16-20, 2016, Orlando, FL, USA. [Under print], USA, 7\_Fr2FrCT15, ISBN: 978-1-4244-9271-8, ISSN: 1557-170X. <http://embc2016.embs.org>, [www.embc.org](http://www.embc.org)
- [J11] **V. Rama Raju**, Narasimha Sastry Narahari Pandit, “**Development of a Multi-Channel Multisite Micro-Electrode Signal Acquisition of EMG Writer’s Cramp and Principal Component Analysis**” *IETE Journal of Research*, [Accepted under review]
- [J12] **V. Rama Raju**, R. Borgohain, Rukmini Mridula K, SNN Pandit, “**Microelectrode Signal Recording with ARTEMG System in Mirror Movements of Writer’s Cramp Data – Part I: Design Techniques, Theory, Implementation (A Diagnostic Clinico—Statistical Analysis)**”, *The Journal of BMESI*, April 2016, April Issue, Pp: 35-46
- [J13] **V. Rama Raju**, R. Borgohain, Rukmini Mridula K, SNN Pandit, “**Microelectrode Signal Recording with ARTEMG System in Mirror Movements of Writer’s Cramp – Part II: Execution, and Test for Accuracy (Multivariate Diagnostic Clinico—Statistical Analysis)**”, *The Journal of BMESI*, April 2016, April Issue, Pp: 47-54
- [J14] V. Rama Raju, R. Borgohain, and Rukmini K. Mridula, “**Mirror dystonia movements in writer's cramp – A study with advanced multi-channel EMG system**”, *International Journal of Developmental Neuroscience* 47:18, Dec, 2015.  
DOI: 10.1016/j.ijdevneu.2015.04.058
- [J14] **V Rama Raju**, Rukmini K. Mridula, R. Borgohain, “**Effectiveness of Lead Position with Microelectrode Recording in Determining the Subthalamic Nuclei-Based Deep Brain Stimulation**”, *37<sup>th</sup> IEEE Annual International Conf of the Engineering in Medicine and Biology (IEEE-EMBC)*, IEEE EMB, PubMed, MEDLINE–US National Library of Medicine, Pp: 114, FrFPoT4.43, Aug 25-29, 2015, Milano, ITALY, IEEE Catalog No.CFP15EMB, ISBN:978-1-4244-9271-8, ISSN: 1557-170X. <http://embc2015.embs.org>, [www.embc.org](http://www.embc.org)
- [J15] **V Rama Raju**, et.al., “**Noise suppression of Microelectrode Recordings of Multi-Channel EMG Writer’s Cramp Signals and Principal Components Analysis**”, *37<sup>th</sup> IEEE Annual International Conf of EMBS Engineering in Medicine and Biology*, Aug 25-29, 2015, Milano, ITALY, IEEE EMB, PubMed, MEDLINE–US National Library of Medicine, Pp: 134, SaBPoT1.40, Aug 25-29, 2015, Milano, ITALY, IEEE Catalog No.CFP15EMB, ISBN:978-1-4244-9271-8, ISSN: 1557-170X. <http://embc2014.embs.org>, [www.embc.org](http://www.embc.org)
- [J16] Rajani Badi, **V. Rama Raju**, Storage Way of Utilization the Infrastructure Clouds”, *International Journal of Innovative Research in Computer and Communication Engineering*, Vol.3, Special Issue 6, Pp: 87-98, Aug 2015, <http://www.ijirce.com>
- [J17] **V Rama Raju**, et.al., “**Micro-Neuro-Sensor Recording of STN Neurons of the Human Brain**”, *International Journal of Computing Algorithm*, Vol. 4(1), June 2015, Pp: 101-103, ISSN(Print):2278-2397, [www.ijcoa.com](http://www.ijcoa.com)
- [J18] **V Rama Raju**, et.al., **Microelectrode recordings of STN Neurons of Human Brain**, *International Journal of Intelligent Computing Algorithm*, Special Issue, Vol. 5, March 2015, Pp 1295 – 1297.
- [J19] **V. Rama Raju**, et.al., “**Stimulations to Basal Ganglia and the Efficiency of Microminiaturized Electrode Recording (MER) to Quantify STN Neurons with Deep Brain Stimulator (DBS)- the Lead Point in Parkinson Diseased Conditions**”, *IFMBE Proceedings, Springer*, Vol. 51, World Congress on Medical Physics and Biomedical Engineering, June 7-12, 2015, Toronto, Canada, Pp: 1200-12003, [www.wc2015.org](http://www.wc2015.org) ISBN No`s: 9783319193878 (online), 9783319193861 (print).
- [J20] **V. Rama Raju**, et.al., “**The Role of Microelectrode Recording (MER) in STN DBS Electrode Implantation**”, *IFMBE Proceedings, Springer*, Vol. 51, World Congress on Medical Physics and Biomedical Engineering, June 7-12, 2015, Toronto, Canada, Pp: 1204-1208, [www.wc2015.org](http://www.wc2015.org) ISBN No`s: 9783319193878 (online), 9783319193861 (print).
- [J21] **V. Rama Raju**, et.al., “**EMG-EMG Coherence in Multisite Writer's Cramp Waveforms - A Study with Advanced Multi-Channel EMG System**”, *IFMBE Proceedings, Springer*, Vol. 51, World Congress on

- Medical Physics and Biomedical Engineering, June 7-12, 2015, Toronto, Canada, Pp: 1096-1100, [www.wc2015.org](http://www.wc2015.org) ISBN No's: 9783319193878 (online), 9783319193861 (print).
- [J22] **V. Rama Raju, et.al., "Multivariate Analysis Classification Based on Multi-Channel EMG Multisite Microelectrode Recording, Principal Component Analysis, and Hierarchical Clustering", IFMBE Proceedings, Springer, Vol. 51, World Congress on Medical Physics and Biomedical Engineering, June 7-12, 2015, Toronto, Canada, Pp: 1200-1203, [www.wc2015.org](http://www.wc2015.org) ISBN No's: 9783319193878 (online), 9783319193861 (print).**
- [J23] **V. Rama Raju, et.al., "Mirror Movements in Writer's Cramp—A Study with Multi-Channel EMG", IFMBE Proceedings, Springer, Vol. 51, World Congress on Medical Physics and Biomedical Engineering, June 7-12, 2015, Toronto, Canada, Pp: 1092-1096, [www.wc2015.org](http://www.wc2015.org), ISBN No's: 9783319193878 (online), 9783319193861 (print).**
- [J24] **V. Rama Raju, et.al., "A Decade of Experience with Intraoperative Microelectrode Recording in Determining the Subthalamic Nuclei (STN) Deep Brain Stimulation – Lead Positions in 260 Parkinson Diseased Conditions in South India – A Retrospective Study", IFMBE Proceedings, Springer, Vol. 51, World Congress on Medical Physics and Biomedical Engineering, June 7-12, 2015, Toronto, Canada, Pp: 1200-12003, [www.wc2015.org](http://www.wc2015.org) ISBN No's: 9783319193878 (online), 9783319193861 (print).**
- [J25] **V. Rama Raju, et.al., "Effectiveness of Micro-Electrode-Recording(MER) in Determining Subthalamic-Nuclei Deep Brain Stimulation (STN-DBS) Lead Position in PD Conditions", IFMBE Proceedings, Springer, Vol. 51, World Congress on Medical Physics and Biomedical Engineering, June 7-12, 2015, Toronto, Canada, [www.wc2015.org](http://www.wc2015.org) ISBN No's: 9783319193878 (online), 9783319193861 (print).**
- [J26] **V. Rama Raju, et.al., "Effectiveness of Micro-Miniaturized Electrode Recording in Determining Subthalamic Nuclei Deep Brain Stimulator (STN DBS) Lead Position" [latest research breaking submission accepted], 7<sup>th</sup> International IEEE EMBS Conf on Neural Engineering (NER'15), 22-24 April 2015. <http://NER2015.embs.org>, [www.ner.embs.org](http://www.ner.embs.org)**
- [J27] **V. Rama Raju, et.al., "Coherence Technique in Multisited EMG Writer's Cramp Signals, Research Journal of Engineering and Technology", ISSN: 0976-2973, Vol. 05, Issue 04, Oct-Dec, 2014, Pp:190-194**
- [J28] **V. Rama Raju, et.al., "Energy Conservation Through Smart Grid Technologies, Research Journal of Engineering and Technology", ISSN: 0976-2973, Vol. 05, Issue 04, Oct-Dec, 2014, Pp:204-208**
- [J29] **Raju VR, Borgohain R, Rukmini K. Mridula, "Mirror dystonia movements in writer's cramp - A study with advanced multi-channel EMG system". International journal of developmental neuroscience: the official journal of the International Society for Developmental Neuroscience 47: Pt A 2015 Dec pg 18**
- [J30] **V. Rama Raju, Rukmini K. Mridula, R. Borgohain, and SNN Pandit, "Statistical processing of Parkinson and other movement disorders examination using multi-channel ENMG system", International Journal of Developmental Neuroscience (IJDNEU), Dec 2015, DOI: 10.1016/j.ijdevneu.2015.04.082, International Journal of Developmental Neuroscience, The Official Journal of the International Society for Developmental Neuroscience**
- [J22] **V. Rama Raju, Rukmini K. Mridula, R. Borgohain, and SNN Pandit, "Mirror dystonia movements in writer's cramp – A study with advanced multi-channel EMG system", International Journal of Developmental Neuroscience (IJDNEU), Dec 2015, DOI: 10.1016/j.ijdevneu.2015.04.058, International Journal of Developmental Neuroscience, The Official Journal of the International Society for Developmental Neuroscience.**
- [J23] **V. Rama Raju, et.al., Microelectrode recordings of EMG Writer's Cramp. IEEE EMB, PubMed, MEDLINE–US National Library of Medicine, Pp: 110, FrFPoT1.42, Aug 25-30, 2014, Chicago, Illinois (IL), USA, IEEE Catalog No.CFP14EMB, ISBN:978-1-4244-7928-3, ISSN: 1557-170X. <http://embc2014.embs.org>, [www.embc.org](http://www.embc.org)**
- [J24] **V. Rama Raju, et.al., "Statistical Analysis of Microelectrode recordings of EMG Writer's Cramp", IEEE EMB, PubMed, MEDLINE–US National Library of Medicine, Pp: 132, FrFPoT2.43, Aug 25-30, 2014, Chicago, Illinois (IL), USA, IEEE Catalog No.CFP14EMB, ISBN:978-1-4244-7928-3, ISSN: 1557-170X. <http://embc2014.embs.org>, [www.embc.org](http://www.embc.org)**
- [J25] **RNSK Kartheek, Dr V Rama Raju and Dr. R. Md. Shafi, "Blue-Brain –A New Subway to Artificial Intelligence and Human Machine: A Proposal", International Journal of Tedchnology", Vol 4, Issue 2, July-Dec, 2014, pp: 287-290., 5(4): Oct.-Dec., 2014; Pp: [www.anvpublication.org](http://www.anvpublication.org)**
- [J26] **V. Rama Raju, etc.al., "Mirror Movements in Writer's Cramp - A Study with Advanced Real-Time Multi-Channel EMG (A Clinico-statistical analysis)", 35<sup>th</sup> Annual International Conf of IEEE Engineering in Medicine & Biology (EMB), Osaka, Kansai Region, Japan, 2013, IEEE EMB, PubMed, MEDLINE–US National Library of Medicine, Pp: 100, SaB.11.3, July 3-7, 2013, IEEE Catalog No.CFP15EMB, ISBN:978-1-4244-9271-8, ISSN: 1557-170X. <http://embc2013.embs.org>, [www.embc.org](http://www.embc.org)**
- [J27] **V. Rama Raju, Rukmini K. Mridula, R. Borgohain, and SNN Pandit, "Mirror Dystonia in Writer's Cramp- A Study with Advanced Multichannel EMG", International Journal of Developmental Neuroscience, The Official Journal of the International Society for Developmental Neuroscience, 2012**

- [J28] **V Rama Raju**, et.al, “A Study of Multi-Channel EMG in Writer’s Cramp”, *International Journal of Movement Disorders*, Volume 19/Supplement 9, 2010, Pp: S106-S107, P278; WILEY-LISS ISSN 0885-3185.
- [J29] **V. Rama Raju**, et.al., **Effectiveness of Micro-Electrode-Recording(MER) in Determining Subthalamic-Nuclei Deep Brain Stimulation (STN-DBS) Lead Position in PD Conditions** [Abstract 137], International Union for Physical Engineering Sciences in Medicine (IUPESM) Toronto, June, 2015
- [J30] **V. Rama Raju**, et.al., **Mirror Movements in Writer’s Cramp—A Study with Multi-Channel EMG** [Abstract 2015], International Union for Physical Engineering Sciences in Medicine (IUPESM) Toronto, June, 2015
- [J31] **V. Rama Raju**, et.al., **EMG-EMG Coherence in Multisite Writer's Cramp Waveforms - A Study with Advanced Multi-Channel EMG System** [Abstract 2017 & Full Length paper], International Union for Physical Engineering Sciences in Medicine (IUPESM) Toronto, June, 2015
- [J32] **V. Rama Raju**, et.al., **Stimulations to Basal Ganglia and the Efficiency of Microminiaturized Electrode Recording (MER) to Quantify STN Neurons with Deep Brain Stimulator (DBS)— the Lead Point in Parkinson Diseased Conditions** [Abstract 2033 & Full Length paper], International Union for Physical Engineering Sciences in Medicine (IUPESM) Toronto, June, 2015
- [J33] **V. Rama Raju**, et.al. **The Role of Microelectrode Recording (MER) in STN DBS Electrode Implantation** [Abstract 2383 & Full Length paper], International Union for Physical Engineering Sciences in Medicine (IUPESM) Toronto, June, 2015
- [J34] **V. Rama Raju**, et.al., **A Decade of Experience with Intraoperative Microelectrode Recording in Determining the Subthalamic Nuclei (STN) Deep Brain Stimulation – Lead Positions in 260 Parkinson Diseased Conditions in South India – A Retrospective Study** [Abstract 2852], International Union for Physical Engineering Sciences in Medicine (IUPESM) Toronto, June, 2015
- [J35] **V. Rama Raju**, et.al., **Multivariate Analysis Classification Based on Multi-Channel EMG Multisite Microelectrode Recording, Principal Component Analysis, and Hierarchical Clustering** [Abstract 2860], International Union for Physical Engineering Sciences in Medicine (IUPESM) Toronto, June, 2015
- [J36] **V. Rama Raju**, **MR Imaging and Microelectrode Recording in Determining of STN and GPi Neurons DBS Surgery**, 9<sup>th</sup> IBRO World Congress, July 7-11, 2015, Rio de Janeiro, Brazil
- [J37] **V Rama Raju**, et.al., **Microelectrode recordings of STN Neurons of Human Brain**, International Journal of Intelligent Computing Algorithm, Special Issue, Vol. 5, March 2015, Pp 1295 – 1297.
- [J38] **V. Rama Raju**, et.al., **Micro-Neuro-Sensor Recordings of Nucleus**, International Journal of Intelligent Computing Algorithm, Special Issue, Vol. 5, March 2015, Pp 1295 – 1297.
- [J39] **V. Rama Raju**, et.al., **Effectiveness of Micro-Miniaturized Electrode Recording in Determining Subthalamic Nuclei Deep Brain Stimulator (STN DBS) Lead Position** [latest research breaking submission]
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- [J51] **V. Rama Raju**, “Computer Modeled Deep Brain Stimulator:- Stimulations with DBS in Parkinson’s Disease, WC and Gait and Other Movement Disorders”, 20<sup>th</sup> Annual Biennial meet, International journal of Neurodevelopment, ELSEVIER Publi, Montreal (Canada), July, 2014.
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- [J64] **V. Rama Raju**, “Computer Software Engineering Empirical Research: theory, techniques and methodology ” International Research journal of engineering and technology”, October 2011
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### **CONFERENCES NATIONAL AND INTERNATIONAL, INVITED SEMINARS, PRESENTATIONS, CHAIRING SESSIONS, SYMPOSIUMS & WORKSHOPS**

- 2018 22<sup>nd</sup> International Congress of Parkinson’s Disease and Movement Disorders, Hong Kong, Oct 5-9, 2018
- 2018 40<sup>th</sup> IEEE International Conf of Engineering in Medicine and Biology, July 17-21, 2018 16-20, **Honolulu**, Hawaii, USA, The theme of the meeting is "Learning from the Past, Looking to the Future"
- 2018 Biosensors 2018, 28<sup>th</sup> Anniversary World Congress on Biosensors 12–15 June 2018, Miami, Florida (FL), USA.
- 2018 IUPESM 2018 – World Congress of IUPESM 2018 - World Congress on Medical Physics & Biomedical Engineering, June 3-8, 2018, Prague, Czech Republic, Europe
- 2017 Ist Middle East Neuroscience school for young scientists at Kuwait city, Kuwait State, Middle East, Oct 2-4, 2017.
- 2017 Ist Asian & Oceanian Neuro school, Oct 27-8, 2017, Nara, Japan
- 2017 International Congress of Parkinson’s Disease and Movement Disorders Society ISPD & MD, WI, USA invited to present a paper at Vancouver (Canada), June 2017.
- 2017 13<sup>th</sup> INS World Congress International Neuromodulation Society (INS) invited to present my TWO accepted papers in 13<sup>th</sup> World Congress at Edinburgh (Scotland, UK), May 27-June 1, 2017
- 2016 Invited presentation on my paper “**Microelectrode recording System for Acquiring EMG Writer’s Cramp Signals**”, at 38<sup>th</sup> IEEE International Conf of Engineering in Medicine and Biology, Aug 16-20, **Orlando, Florida** (FL), USA
- 2016 Invited presentation on “**Objective Methods for Quantifying the DBS Efficacy in Subthalamic-Nuclei (STN) Neurons with MER Technology**”, 20<sup>th</sup> International Congress of Parkinson’s Disease and Movement Disorders, June 19-23, **Berlin, Germany**
- 2016 Invited presenter to 21<sup>st</sup> Biennial Meeting of the International Society for Developmental Neuroscience (ISDN), Theme: **Developmental Neuroscience, Nervous Systems, Neurodevelopment**, at Antibes - **Juan Les Pins, France** [Did not participate]
- 2015 Invited presentation on my paper “**Effectiveness of Lead Position with Microelectrode Recording in Determining the Subthalamic Nuclei-Based Deep Brain Stimulation**”, at 37<sup>th</sup> IEEE Annual

- International Conf of the Engineering in Medicine and Biology (IEEE-EMBC)*, Aug 25-29, Milano (Milan), ITALY
- 2015 Invited presentation on my paper “Noise suppression of Microelectrode Recordings of Multi-Channel EMG Writer’s Cramp Signals and Principal Components Analysis”, at *37<sup>th</sup> IEEE Annual International Conf of EMBS Engineering in Medicine and Biology, Aug 25-29, ITALY, IEEE EMB, Milano (Milan), ITALY*,
- 2015 Invited presentation on my paper “Stimulations to Basal Ganglia and the Efficiency of Microminiaturized Electrode Recording (MER) to Quantify STN Neurons with Deep Brain Stimulator (DBS)- the Lead Point in Parkinson Diseased Conditions”, at *International Union for Physical and Engineering Sciences in Medicine IUPESM World Congress WC`15 on Medical Physics and Biomedical Engineering, June 7-12, Toronto, Canada (CA)*. [www.wc2015.org](http://www.wc2015.org)
- 2015 Invited presentation on “The Role of Microelectrode Recording (MER) in STN DBS Electrode Implantation”, at *IUPESM International Union for Physical and Engineering Sciences in Medicine World Congress WC`15 on Medical Physics and Biomedical Engineering, June 7-12, Toronto, Canada (CA)*, [www.wc2015.org](http://www.wc2015.org)
- 2015 Invited presentation on “EMG-EMG Coherence in Multisite Writer's Cramp Waveforms - A Study with Advanced Multi-Channel EMG System” at *IUPESM International Union for Physical and Engineering Sciences in Medicine World Congress WC`15 on Medical Physics and Biomedical Engineering, June 7-12, Toronto, Canada (CA)*, [www.wc2015.org](http://www.wc2015.org)
- 2015 Invited presentation on “Multivariate Analysis Classification Based on Multi-Channel EMG Multisite Microelectrode Recording, Principal Component Analysis, and Hierarchical Clustering” at *IUPESM International Union for Physical and Engineering Sciences in Medicine World Congress WC`15 on Medical Physics and Biomedical Engineering, June 7-12, Toronto, Canada*, [www.wc2015.org](http://www.wc2015.org)
- 2015 Invited presentation on “Mirror Movements in Writer’s Cramp—A Study with Multi-Channel EMG” at *IUPESM International Union for Physical and Engineering Sciences in Medicine World Congress WC`15 on Medical Physics and Biomedical Engineering, June 7-12, Toronto, Canada (CA)*, [www.wc2015.org](http://www.wc2015.org)
- 2015 Invited presentation on “A Decade of Experience with Intraoperative Microelectrode Recording in Determining the Subthalamic Nuclei (STN) Deep Brain Stimulation – Lead Positions in 260 Parkinson Diseased Conditions in South India – A Retrospective Study” at *IUPESM International Union for Physical and Engineering Sciences in Medicine World Congress WC`15 on Medical Physics and Biomedical Engineering, June 7-12, Toronto, Canada (CA)*, [www.wc2015.org](http://www.wc2015.org)
- 2015 Invited presentation on “Effectiveness of Micro-Electrode-Recording(MER) in Determining Subthalamic-Nuclei Deep Brain Stimulation (STN-DBS) Lead Position in PD Conditions” at *IUPESM International Union for Physical and Engineering Sciences in Medicine WC`15, World Congress on Medical Physics and Biomedical Engineering, June 7-12, Toronto, Canada (CA)*, [www.wc2015.org](http://www.wc2015.org)
- 2015 Accepted presentation on “Effectiveness of Micro-Miniaturized Electrode Recording in Determining Subthalamic Nuclei Deep Brain Stimulator (STN DBS) Lead Position [latest research breaking submission accepted but not participated], at *7<sup>th</sup> International IEEE EMBS Neural Engineering Conference (NER`15), April 22th-24th Montpellier, France Corum Convention Center 22-24 April 2015*. <http://NER2015.embs.org>, [www.ner.embs.org](http://www.ner.embs.org)
- 2015 Invited Talk on “Microelectrode Recording How Do We Do That” organized by *National Brain Research Center (NBRC)*, April 17, New Delhi, India
- 2015 Invited speaker on “Microelectrode Recording” at *INDO – EURO Park Summit on Parkinson’s Disease and Movement Disorders: Latest in Science, Indian National Science Academy (INSA), New Delhi, April 13-15*
- 2015 Invited speaker to *4<sup>th</sup> GITAMs-EMERGE-2k12, Kadapa, India*
- 2014 Invited presentation at *20th Biennial Meeting of the International Society for Developmental Neuroscience (ISDN), Theme: Development, Functions and Disorders of the Nervous System, July 19-23*
- 2014 Invited speaker to *3<sup>rd</sup> GITAMs-EMERGE-2k14, Kadapa, India*
- 2014 Invited Speaker to *IIInd IEEE Middle East Conf on Biomedical Eng (II IEEE MEC-BME), Doha, Qatar, Middle East, Feb 6-8*
- 2014 Invited Speaker to *International Conf on Systemics, Cybernetics and Informatics (ICSCI), Jan 6-10, Hyderabad, India.*
- 2013 Accepted presentation on “Mirror Movements in Writer’s Cramp - A Study with Advanced Real-Time Multi-Channel EMG (A Clinico-statistical analysis)” at *35<sup>th</sup> Annual International Conf of IEEE Engineering in Medicine & Biology (EMB), Osaka, Kansai Region, JAPAN, July 3-7*. <http://embc2013.embs.org>, [www.embc.org](http://www.embc.org)
- 2013 Invited speaker to *3<sup>rd</sup> GITAMs-EMERGE-2k14, Kadapa, India*
- 2013 Invited Spear to *International Conference on Systemics, Cybernetics and Informatics (ICSCI), Hyderabad, India, Jan 6-10*

- 2012 Invited presentation in the **International Workshop on Nerve Muscle disorders**, February 22-24, at **G.B. Pant Hospital, New Delhi, India**
- 2012 Invited Speaker to **NEUROBIONICS 2013, Indo-German Workshop on Clinical Neurology**, Feb 15-17, at **Jawaharlal Nehru Institute of Postgraduate Medical Education and Research (JIPMER)**, Pondicherry, India
- 2012 Invited speaker to 3<sup>rd</sup> **GITAMs-EMERGE-2k14**, Kadapa, India
- 2012 Invited Speaker to **19th Biennial Meeting of the International Society for Developmental Neuroscience (ISDN)**, Theme: **Neurodevelopment and Neurological Diseases** at held **TATA Institute of Fundamental Research (TIFR)**, Mumbai, India, Jan 12-14.