

### Personal Information

Name	Dr. Raju AEDLA
Years of Experience	Teaching: 3.6 Years Research: 9 Years Industry: Nil
Email Id	raju.aedla@bvrithyderabad.edu.in
CN Id	
Areas of Specialization	Remote Sensing, GIS, and Image Processing



### Educational Qualifications

Postdoctoral Fellow	PDF	Remote Sensing, FAST, Kumamoto University, Kumamoto, Japan
Doctoral Degree	Ph.D.	Remote Sensing, NITK Surathkal, Karnataka, India
PG Degree	M.Tech.	Remote Sensing, IST, JNTUH, Hyderabad, India
UG Degree	B.Tech.	Electrical & Electronics Engineering, JNTUH, Hyderabad, India

### Papers Published

#### International Journal Publications

- [1]. Momotomi, Fuzuki, **Aedla Raju\***, Dongxing Wang, Doaa H. M. Alsaadi, and Takashi Watanabe. (2022). "Phytochemical Analysis and Habitat Suitability Mapping of *Cardiocrinum cordatum* (Thunb.) Makino Collected at Chiburijima, Oki Islands, Japan" *Molecules* 27, no. 23: 8126. <https://doi.org/10.3390/molecules27238126>
- [2]. Alsaadi, Doaa H. M., **Aedla Raju\***, Ken Kusakari, Faruk Karahan, Nazim Sekeroglu, and Takashi Watanabe. (2020). "Phytochemical Analysis and Habitat Suitability Mapping of *Glycyrrhiza glabra* L. Collected in the Hatay Region of Turkey" *Molecules* 25, no. 23: 5529. <https://doi.org/10.3390/molecules25235529>
- [3]. Takashi, W., **Raju, A.\***, Hiraga, Y., Sugimura, K. (2018), Development of Geospatial Model for Preparing Distribution of Rare Plant Resources using UAV/Drone, *Indian Journal of Pharmaceutical Education and Research*, 52(4), Pp. S146-S150
- [4]. Jayaprakash M C, Poorvi Shetty, **Raju Aedla**, D V Reddy (2018), Desalination Approach of Seawater and Brackish Water by Coconut Shell Activated Carbon as a Natural Filter Method, *International Journal of Trend in Scientific Research and Development (IJTSRD)*, pp. 129-135
- [5]. **Raju Aedla\***, R H Basha and Shuichi TORII (2016), Identification of Potential Sites for Biomass Resources Using Remote Sensing and Geographical Information System- A Review, *International Journal of Earth Sciences and Engineering*, Vol. 09, No. 01, pp. 176-181
- [6]. Edwin D Thangam, Narayanan RM and **Raju Aedla** (2016), Pollution Dispersion Modelling For Concentrations of PM, SO<sub>x</sub> and NO<sub>x</sub> around Manali Region, India, *International Journal of Earth Sciences and Engineering*, Vol. 09, No. 03, pp. 584-595

- [7]. Chitla N R Santhoshini, **Raju Aedla**, Kazuhisa Iki and Riken Homma (2016), Landscape Architecture with Floriculture for Hyderabad City Planning Using Geographical Information System, International Journal of Earth Sciences and Engineering, Vol. 09, No. 01, pp. 196-200
- [8]. Basha R H, **Raju Aedla\*** and Shuichi TORII (2015), Application of Geospatial Software in Mapping the Biomass Resources Based on Its Availability and Location, International Journal of Earth Sciences and Engineering, Vol. 7, No. 2, pp 522-529
- [9]. **Raju Aedla\***, Dwarakish G S, D Venkat Reddy (2015), Automatic Shoreline Detection and Change Detection Analysis of Netravati-Gurpur Rivermouth Using Histogram Equalization and Adaptive Thresholding Techniques, Elsevier Aquatic Procedia, 4, 563–570
- [10]. **Raju A\***, Dwarakish G S and D Venkat Reddy (2014), A Comparative Analysis of Histogram Equalization based Contrast Enhancement Techniques for Detection of Shoreline using Satellite Images, International Journal of Earth Sciences and Engineering, Vol. 7, No. 2, pp 522-529
- [11]. **Raju A\***, Dwarakish G S and D Venkat Reddy (2013), A Comparative Analysis of Histogram Equalization based Techniques for Contrast Enhancement and Brightness Preserving, International Journal of Signal Processing, Image Processing and Pattern Recognition, Vol. 6, No. 5, pp 353-366
- [12]. **Raju A\***, Dwarakish G S and D Venkat Reddy (2013), A state-of-the-art and comparative analysis of mean brightness preserving histogram equalization based contrast enhancement techniques, International Journal of Remote Sensing and GIS, Vol.2, No.1, pp. 41-51
- [13]. Ganasri BP, **Raju A**, and G S Dwarakish (2013), Different Approaches for Land Use Land Cover Change Detection: A Review, Research, and Reviews: Journal of Engineering and Technology, Vol. 2, No. 3, pp. 44-48
- [14]. P R Reddy, D Venkat Reddy, and **A Raju\***, Remote Sensing in Controlling Deforestation, International Journal of Biological Sciences and Engineering, Vol. 04, No. 02, 2013
- [15]. Basha R H, **Raju A**, Prakash P N (2012), Charging method for an Electric Vehicle using a computerized Ultra Fast Charger at Recharge Stations in India. International Journal of Industrial Electronics, Control & Robotics, Vol. 2 No. 1, pp. 27-31
- [16]. **Raju A\***, A G S Reddy and D Venkat Reddy (2011), Identification of Artificial Recharge sites in Hard rock terrain using RS and GIS in Chintapally Mandal, Nalgonda District, Andhra Pradesh, INDIA, International Journal of Earth Sciences and Engineering, Vol. 03, No.4, pp. 599-608.

### *International Conferences*

- [1]. Takashi Watanabe, Faruk Karahan, Nazim Sekeroglu and **Raju Aedla**, An Integrated GIS Study of Medicinal Barley from Turkey and Himalaya with Phytochemical Evaluation to Control Intestinal Flora of Human, The Sixth International Mediterranean Symposium on Medicinal and Aromatic Plants MESMAP - 6, October 15th - 17th, 2020, Izmir, Turkey, pp. 4, ISBN: 978-605-612-61-8-5
- [2]. Doaa H. M. Alsaadi, **Raju Aedla**, Ken Kusakari, Faruk Karahan, Nazim Sekeroglu, Takashi Watanabe, Phytochemical Analysis and Habitat Suitability Mapping of Glycyrrhiza glabra L. Collected in the Hatay Region of Turkey, The Sixth International Mediterranean Symposium on Medicinal and Aromatic Plants MESMAP - 6, October 15th - 17th, 2020, Izmir, Turkey, pp. 38, ISBN: 978-605-612-61-8-5

- [3]. **Aedla Raju**, Doaa H. M. Alsaadi, Koji Sugimura, Nobuyuki Takakura, Sevgi Gezici, Takashi Watanabe, Influence of Environmental Factors on Inhibitory Activity Against PSF1 Gene Expression and Habitat Suitability Mapping of *Cardiocrinum cordatum* (Thunb.) Makino in Chiburijima Island, Japan, The Sixth International Mediterranean Symposium on Medicinal and Aromatic Plants MESMAP-6, October 15th-17th, 2020, Izmir, Turkey, pp. 27, ISBN: 978-605-612-61-8-5
- [4]. Takashi Watanabe, Faruk Karahan, Nazim Sekeroglu, Koji Sugimura, Ken Kusakari, **Raju Aedla**, and Doaa Husham AL-Saadi (2019), An Integrated GIS-Based Model for Distribution of Significant Plants and Habitat Properties with Cosmetic Values in Turkey, The Third International Cosmetic Congress, November 7-9, 2019, Antalya, Turkey
- [5]. Takashi Watanabe and **Aedla Raju** (2019), Utilization of Genetic Plant Resources in Himalaya with Remote Sensing Technology, Himalaya International Academic Forum, August 21, 2019
- [6]. **Raju Aedla**, D. Venkat Reddy and Takashi Watanabe (2019), Advanced Satellite/Drone Image Processing and Remote Sensing Techniques with Sustainable Approaches, Three-Day International Conference on Advances in Civil Engineering (ICACE 2019), 21-23 March 2019, KL University, India
- [7]. Takashi Watanabe, Pattaravadee Srikoon, Yasuhide Hiraga, **Aedla Raju**, Investigation of Mangrove Plant Characteristics and Soil Properties in Kung Krabaen Bay Royal Development Study Center, Tha mai District, Chanthaburi Province, Thailand, Proceedings of The 4th International Symposium on Pharmaceutical and Biomedical Sciences, 17-18 March 2018, Kumamoto University, Kumamoto, Japan
- [8]. **Raju Aedla**, Takashi Watanabe, Yasuhide Hiraga, Advanced Image Processing and Remote Sensing Techniques for Rare Plant Resources, Proceedings of 3rd International Conference on Frontline Areas of Civil Engineering (ICFACE-2018), Department of Civil Engineering, Sri Krishna College of Technology, Coimbatore – 641042. January 5 th & 6th, 2018
- [9]. Takashi Watanabe, Yasuhide Hiraga, **Aedla Raju** and K Sugimura, Development of Geospatial Model for Preparing Distribution of Rare Plant Resources using UAV/Drone, 'JATUSPAB-2 ABSTRACTS (The Second Japan – Turkey International Symposium on Pharmaceutical and Biomedical Sciences)', September 11th-12th, 2017, Trabzon, Turkey.
- [10]. Takashi Watanabe, **Aedla Raju**, Koji Sugimura, Development of Geospatial Model for Identification and Estimation of Geographical Distribution of Rare Plant Resources using Remote Sensing and GIS Techniques, Turkish-Japanese Workshop on Bioorganic Medicinal Chemistry & Natural Products, 14th September 2017, Anadolu University, Turkey, pp. S-2
- [11]. **Raju Aedla** and Takashi Watanabe, Advanced Satellite Digital Image Processing and Remote Sensing Techniques with Application, The 1st Annual International Conference on Engineering (AICE 2017), Sam Ratulangi University, Manado, Indonesia, 3rd November 2017
- [12]. **Aedla Raju**, Yasuhide Hiraga and Takashi Watanabe, A Study of Distribution of Ubayuri (*Lilium Cardiocrinum cordatum* (Thunb.)) in Chiburi Jima, Oki Islands, Japan using Geographical Information System (GIS), International Conference on Advanced Engineering & Information Technology (ICAEIT 2017), 7-9 December 2017, Linton University College, Mantin, Malaysia, ISBN: 978-967-1556
- [13]. **Raju Aedla**, Takashi Watanabe and Yasuhide Hiraga, Advanced Image processing and Remote sensing Techniques for Rare Plant Resources, Proceedings of 3rd International Conference on Frontline Areas of Civil Engineering (ICFACE-2018), January 5th & 6th,

- 2018, Department of Civil Engineering, Sri Krishna College of Technology, Coimbatore, India, pp. 5053, ISBN: 978-93-5291-141-7 2.
- [14]. Takashi Watanabe, **Aedla Raju** and K. Sugimura (2017), An Evaluation of Correlation between Geographical Distribution and Bio-Activities for Rare Plant Resources Using GIS Technology, ASP 2017 Conference, Drug Discovery, Mysuru, India, October 27th-29th, 2017
- [15]. **Raju Aedla** and Shuichi TORII, Mean-Self Adaptive Plateau Histogram Equalization for Biomass Classification using Satellite Images, 11th Pacific Symposium on Flow Visualization and Image Processing (PSFVIP-11), December 1-3, 2017, Kumamoto, JAPAN
- [16]. **Raju Aedla** and Shuichi TORII, Remote Sensing and Image Processing Techniques for Biomass Estimation using Satellite Images, 3rd International Conference on Computational Methods in Engineering and Health Sciences (ICMEH-2016), Kyushu Institute of Technology, Japan, 17th-18th December 2016
- [17]. **Raju Aedla**, Basha R H and Shuichi TORII, A State-of-the-Art to Identify Potential Sites for Biomass Resources Using Remote Sensing and Geographical Information System, 5th International Engineering Symposium (IES 2016), Kumamoto University, Japan, March 2-4, 2016 pp. M2-4-1 - M2-4-5
- [18]. Edwin D Thangam, Narayanan RM and **Raju Aedla**, Pollution Dispersion Modelling For Concentrations of PM, SO<sub>x</sub> and NO<sub>x</sub> around Manali Region, India, 3rd International Conference on Earth Sciences and Engineering (ICEE 2016), 17-18 June 2016, ISBN: 978-93-5265-658-5
- [19]. **Raju Aedla**, Basha R H and Shuichi TORII, Identification of Potential Sites for Biomass Resources Using Remote Sensing and Geographical Information System- A Review, International Conference on Innovative Trends in Civil Engineering for Sustainability (ICICES - 2016), 8th–9th January 2016
- [20]. Chitla N R Santhoshini, **Raju Aedla**, Kazuhisa IKI and Riken Homma, Landscape Architecture with Floriculture for Hyderabad City Planning Using Geographical Information System, International Conference on Innovative Trends in Civil Engineering for Sustainability (ICICES - 2016), 8th–9th January 2016
- [21]. **Raju Aedla**, Ganasri B P, G S Dwarakish and D Venkat Reddy, Automatic Shoreline Detection and Change Detection Analysis of Netravati-Gurpur Rivermouth Using Histogram Equalization and Adaptive Thresholding Techniques. International Conference on Water Resources, Coastal and Ocean Engineering (ICWRCOE-2015), March 2015
- [22]. **Raju A.**, Dwarakish G. S., D. Venkat Reddy " Histogram Equalization Based Mean Self – Adaptive Plateau Histogram Equalization for Brightness Preserving and Contrast Enhancement" Proceedings of the 3rd World Conference on Applied Sciences, Engineering and Technology 27-29 September 2014, Kathmandu, Nepal, ISBN 13: 978-81-930222-0-7, pp 232-239 (Young Scientist Award)
- [23]. Ganasri B. P., **Raju A.**, Dwarakish G. S. "Relocation of Waste Bins: A GIS Approach" Proceedings of the 3rd World Conference on Applied Sciences, Engineering and Technology 27-29 September 2014, Kathmandu, Nepal, ISBN 13: 978-81-930222-0-7, pp. 775-779.
- [24]. **Raju Aedla**, Satish Kumar V., Ranipet Hafeez Basha, Meng Qing Tao "Identification of groundwater quality zones in hard rock terrain using RS & GIS at Chintapally Mandal, Nalgonda District, Andhra Pradesh, India" Proceedings of the 3rd World Conference on Applied Sciences, Engineering and Technology 27-29 September 2014, Kathmandu, Nepal, ISBN 13: 978-81-930222-0-7, pp 789-796.

- [25]. **Aedla Raju**, Dwarakish G S and D Venkat Reddy, Satellite Image Contrast Enhancement Algorithm based on Plateau Histogram Equalization, 2014 IEEE Region 10 Symposium, Kaula Lumpur, Malaysia, IEEE Xplore, pp.202-207.
- [26]. **Raju A**, Dwarakish G S and D Venkat Reddy, A Comparative Analysis of Histogram Equalization based Contrast Enhancement Techniques for Detection of Shoreline using Satellite Images, Fifth Indian National Conference on Harbour and Ocean Engineering (INCHOE-2014), NIO, Goa, India.
- [27]. **Aedla Raju**, Dwarakish G S and D Venkat Reddy, Modified Self-Adaptive Plateau Histogram Equalization with Mean Threshold for Brightness Preserving and Contrast Enhancement, Proceedings of the 2013 IEEE Second International Conference on Image Information Processing (ICIIP-2013), IEEE Xplore, pp.208-213.
- [28]. Nujuma Nazimudhin, P. Sri Ram Kumar, Deepthi I Gopinath, Ganasri B.P., **Raju A**, Archana V, G.S. Dwarakish, Evaluation of Catchment Characteristics through Morphometric Analysis using Remote Sensing and GIS, National Conference on Emerging Trends in Environment and Energy Management (NCEEM - 2013), 18-19 October 2013, Shri Madhwa Vadiraja Institute of Technology and Management, Karnataka, India, Pp. 98-101
- [29]. **Raju A**, Dwarakish G S and D Venkat Reddy, Histogram Equalization based Mean Brightness Preserving and Contrast Enhancement Techniques – A Review, International Engineering Symposium (IES-2013), Kumamoto University, Japan, PP. E1-7-1-E1-7-7.
- [30]. Basha R H, **Raju A**, Prakash P N (2012), Charging method for an Electric Vehicle using a computerized Ultra Fast Charger at Recharge Stations in India. International Engineering Symposium (IES-2012), Kumamoto University, Japan.
- [31]. S S Asadi, C H Hanumantha Rao, **Raju A** and M Anji Reddy (2010), Creation of village level land use/land cover information system using RS, GIS and vb .net for Sustainable Development: A Model Study from Prakasam District, Andhra Pradesh, India, International Conference on Earth Sciences and Engineering (ICEE-2010), Hyderabad, India.
- [32]. **Raju A**, Impacts of the Climate Change due to Green House Gases (GHGs), International Conference on Emerging Trends in Engineering (IETE-2010), Dr. JJ Magdum College of Engineering, Maharashtra, India (Green Environment Award).
- [33]. **Raju A** and Radha D, Radar Engineering, International Conference on Systemics, Cybernetics and Informatics (ICSCI-2007), Hyderabad, India (Best Student Paper Award).

### ***International/National Workshops/Training Programs attended***

- [1]. **Outstanding Issues for Hydrological Research in India**, on 21<sup>st</sup> October 2013, organized by the Department of Applied Mechanics and Hydraulics, National Institute of Technology Karnataka, Surathkal, sponsored by MoEs, GoI, India.
- [2]. **Remote Sensing Applications in Coastal and Marine Area Management**, conducted by Integrated Coastal and Marine Area Management (ICMAM)-Pd, Chennai, India from 23<sup>rd</sup> - 27<sup>th</sup> September 2013.
- [3]. BRITISH COUNCIL Sponsored the event of “**YOUNG INDIA ON CLIMATE CHANGE**” held at JNTU, Kukatpally, Hyderabad on 5<sup>th</sup> March 2009 and I had taken part in the panel discussion at the event.
- [4]. **Green Chemistry** was organized by the Centre for Pharmaceutical Sciences, Institute of Science and Technology, JNTU, Hyderabad from 14<sup>th</sup> - 15<sup>th</sup> February 2009.

- [5]. **Environmental Issues in Chemical & Pharmaceutical Industries** organized by Centre for Environment, Institute of Science and Technology, JNTU, Hyderabad during 1<sup>st</sup> - 2<sup>nd</sup> September 2008.

***Books, Proceedings, Manuals – Authored/Edited***

- [1]. **Book - Author**, Takashi Watanabe, **Aedla Raju**, Hiroshi Frusawa (2019), *A Handbook of Geographical Information System (GIS) for Distribution Mapping of Plant Resources, Data Science of Biological Environment in Kochi University of Technology*, published by Soft-sync Pvt. Ltd., Kochi, JAPAN 1-79
- [2]. **Editor** for *Proceedings of 3rd International Conference on 3<sup>rd</sup> International Conference on Frontline Areas of Civil Engineering (ICFACE-2018)*, January 5th & 6th, 2018, Department of Civil Engineering, Sri Krishna College of Technology, Coimbatore, India, ISBN: 978-93-5291-141-7
- [3]. **Editor** for *Proceedings of International Conference on Advanced Engineering and Information Technology (ICAEIT 2017)*, 7-9 December 2017, Cafet Innova Technical Society and Linton University College, Mantin, MALAYSIA, ISBN: 978-967-15567
- [4]. **Editor** for *Proceedings of 4th International Conference on Earth Sciences and Engineering (ICEE 2017)*, 29-31 August 2017 jointly organized by Andalas University, Padang, West Sumatra, Indonesia and Cafet Innova Technical Society, Hyderabad, INDIA
- [5]. **Editor** for *Proceedings of 6th World Conference on Applied Sciences, Engineering, and Technology (WCSET 2017)*, Basha Research Corporation and Universitas Muhammadiyah Ponorogo, Indonesia, 26-27 August 2017, INDONESIA
- [6]. **Editor** for *Proceedings of 3rd International Conference on Earth Sciences and Engineering (ICEE 2016)*, 17-18 June 2016 jointly organized by Department of Civil Engineering, Nehru Institute of Technology, Coimbatore, Tamil Nadu and Cafet Innova Technical Society, Hyderabad, INDIA
- [7]. **Editor** for *Proceedings of 5th World Conference on Applied Sciences, Engineering and Technology (WCSET 2016)*, Basha Research Corporation and Ho Chi Minh City University of Technology (Vietnam National University), VIETNAM, 02-04 June 2016
- [8]. **Editor** for *Proceedings of International Conference on Innovative Trends in Civil Engineering for Sustainability (ICICES 2016)* TIST, Kerala, INDIA, 8-9 January 2016
- [9]. **Editor** for *Proceedings of 2nd International Conference on Earth Sciences and Engineering (ICEE 2015)* NIT, Coimbatore, INDIA, 20-21 March 2015
- [10]. **Editor** for *Proceedings of 4th World Conference on Applied Sciences, Engineering, and Technology (WCSET 2014)*, Basha Research Corporation and Kumamoto University, JAPAN, 24-26 October 2015
- [11]. **Editor** for *Proceedings of 3rd World Conference on Applied Sciences, Engineering, and Technology (WCSET 2014)* Kathmandu, NEPAL, 27-29 September 2014, ISBN 13: 978-81-930222-0-7
- [12]. **Editor** for *Proceedings of International Conference on Advances in Water Resources Development and Management (AWRDM-2013)* October 23-27, 2013 published in *International Journal of Earth Sciences and Engineering (IJEE)*, Centre of Advanced Study, Department of Geology, Panjab University, Chandigarh & National Institute of Hydrology, Roorkee, Uttarakhand, October 23-27, 2013



- [13]. **Editor** for *Proceedings of 1st World Conference on Applied Sciences, Engineering, and Technology (WCSET-2012)*, 17-19 August 2012, Haailand Resort, Vijayawada City, Andhra Pradesh, INDIA
- [14]. **Editor** for *Proceedings of International Conference on Advances in Civil Engineering ACE-2011* published in *International Journal of Earth Sciences and Engineering (IJEE)*, K L University, Andhra Pradesh, India during 21-23 October 2011
- [15]. **Editor** for *Proceedings of International Conference on Advances in Civil Engineering ACE-2011* published in *International Journal of Earth Sciences and Engineering (IJEE)*, K L University, Andhra Pradesh, India during 21-23 October 2011
- [16]. **Chapter Author** of *Importance of Technical Programs and Publications* for a book titled *How to Become a Researcher?* published by Cafet-Innova Technical Society, India, 2011, pp.25-34
- [17]. **Editor** for *Proceedings of International Conference on Biological Sciences and Engineering (ICBE-2010)* 22nd August 2010 organized by CAFET INNOVA Technical Society and St. Ann's College, Mehdipatnam, Hyderabad, INDIA
- [18]. **Editor** for *Proceedings of International Conference on Earth Sciences and Engineering (ICEE-2010)* 21st August 2010 organized by CAFET INNOVA Technical Society and Malla Reddy Group of Institutions, Hyderabad, Andhra Pradesh, INDIA
- [19]. **Editor** for *PADAM- 2007*, A Student level innovative magazine organized by IEEE Student Chapter, Shadan College of Engineering and Technology, Hyderabad, Andhra Pradesh, India, 22nd February 2007

### ***International & National Conferences/Workshops Organized & Managed***

- [1]. **Conference Co-chair**, Global Conference on “*Advanced Smart and Sustainable Technologies in Engineering*“ (GCASSTE-2020), 30th & 31st of January 2020 at MITE, Karnataka, INDIA
- [2]. **Advisory Committee Member**, *Three-day International Conference on Advances in Civil Engineering (ICACE-2019)*, 21-23 March 2019 at KL University, INDIA
- [3]. **Advisory Committee Member**, *3<sup>rd</sup> International Conference on Frontline Areas of Civil Engineering (ICFACE-2018)*, January 5th & 6th, 2018, Department of Civil Engineering, Sri Krishna College of Technology, Coimbatore, INDIA
- [4]. **Organizing Chair**, *International Conference on Advanced Engineering and Information Technology (ICAEIT 2017)*, 7-9 December 2017, Cafet Innova Technical Society and Linton University College, Mantin, MALAYSIA
- [5]. **Organizing Chair**, *4<sup>th</sup> International Conference on Earth Sciences and Engineering (ICEE 2017)*, 29-31 August 2017 jointly organized by Andalas University, Padang, Indonesia, and Cafet Innova Technical Society, Hyderabad, INDIA
- [6]. Organizing Chair**, *3<sup>rd</sup> International Conference on Earth Sciences and Engineering (ICEE 2016)*, 17-18 June 2016 jointly organized by the Department of Civil Engineering, Nehru Institute of Technology, Coimbatore, Tamil Nadu and Cafet Innova Technical Society, Hyderabad, INDIA
- [7]. **Organizing Chair**, *International Conference on Innovative Trends in Civil Engineering for Sustainability (ICICES 2016)* 8-9 January 2016 jointly organized by the Department of Civil Engineering, Toc H Institute of Technology (TIST), Kerala and Cafet Innova Technical Society, Hyderabad, INDIA

- [8]. **Organizing Co-Chairman**, *4<sup>th</sup> World Conference on Applied Sciences, Engineering, and Technology* [WCSET 2015], 24-26 October 2015, Kumamoto University, JAPAN
- [9]. **Advisory Committee Member**, *2<sup>nd</sup> International Conference on Disaster Management & Mitigation* (ICDMM 2015), 27-28 August 2015, at PSNA College of Engineering & Technology, Dindigul, Tamilnadu, INDIA
- [10]. **Organizing Chair**, *2<sup>nd</sup> International Conference on Earth Sciences and Engineering* (ICEE 2015), 20-21 March 2015 jointly organized by Department of Civil Engineering, Nehru Institute of Technology, Coimbatore, Tamil Nadu and Cafet Innova Technical Society, Hyderabad, INDIA
- [11]. **Advisory Committee Member**, *International Conference on Advances in Sustainable Materials and Innovative Technologies in Civil Engineering* (ICASMITCE 2014), 13-14 October 2014, at Nehru Institute of Technology (NIT), Coimbatore, Tamil Nadu, INDIA
- [12]. **Organizing Co-Chairman**, *3<sup>rd</sup> World Conference on Applied Sciences, Engineering, and Technology* [WCSET 2014], 27-29 September 2014, Kathmandu, NEPAL
- [13]. **Advisory Committee Member**, *International Conference on Ingenious Technologies and Sustainable Developments in Civil Engineering* (ICICE-2014), 8th-9th October 2014 organized by Noorul Islam University, Tamilnadu, INDIA
- [14]. **Advisory Committee Member**, *National Conference on Advancement in Materials, Construction & Sustainable Environment* (AMCSE 2014), 29th March 2014 organized by Kalasalingam University in association with CITS Tamilnadu, INDIA
- [15]. **Advisory Committee Member**, *National Workshop on Civil Engineering Challenges in 21<sup>st</sup> Century* (CEC21-2014), 21-22 February 2014 organized by DCE, MITE, Mooddbidri in association with Cafet-Innova Technical Society, Hyderabad, INDIA
- [16]. **Editorial Committee Member**, *International Conference on Advances in Water Resources Development and Management* (AWRDM-2013) October 23-27, 2013 organized by Centre of Advanced Study, Department of Geology, Panjab University, Chandigarh & National Institute of Hydrology, Roorkee, Uttarakhand, INDIA
- [17]. **Organizing Committee Member**, *International Conference on Conserving Biodiversity for Sustainable Development* (INCCBSD 2013), 16-18 August 2013 organized by NIT Rourkela, ODISHA PGIS, UoP, SRI LANKA & CITS, INDIA
- [18]. **Advisory Committee Member**, *National Workshop on Advances in Remote Sensing and Its Applications* (ARSA-2013), 15th March 2013, Christ The King Engineering College, Coimbatore, Tamil Nadu, INDIA
- [19]. **Advisory Committee Member**, *National Conference on New Trends in Civil Engineering and Earth Sciences* (NTCE- 2013), 05-06 February 2013, organized by Vasavi College of Engineering, Hyderabad, INDIA
- [20]. **Advisory Committee Member**, *National Conference on Advances in Earth Sciences, Structural, Geotechnical and Earthquake Engineering* (AESG2E -2012), 04-05 October 2012 organized by Chaitanya Bharathi Institute of Technology(CBIT), Hyderabad, INDIA
- [21]. **Organizing Joint Secretary**, *1<sup>st</sup> World Conference on Applied Sciences, Engineering, and Technology* [WCSET 2012], 17-19 August 2012, Haailand Resort & Theme Park, Vijayawada, INDIA
- [22]. **Organizing Committee Member**, *International Conference on Advances in Civil Engineering* ACE- 2011 during 21-23 October 2011 organized by CED, K L University, Andhra Pradesh, INDIA



- [23]. **Co-Convener**, *National Workshop on Paper Presentation Awareness & Research Methodology*, 26<sup>th</sup> June 2011, International Institute of Information Technology, IIIT-Hyderabad, INDIA
- [24]. **Organizing Secretary**, *International Conference on Earth Sciences and Engineering (ICEE-2010)*, 21<sup>st</sup> August 2010 organized by CAFET INNOVA Technical Society and Malla Reddy Group of Institutions, Hyderabad, Andhra Pradesh, INDIA
- [25]. **Organizing Committee Member**, *International Conference on Emerging Trends in Engineering [ICETE 2010]*, 20-21 February 2010, Dr. J. J. Magdum College of Engineering, Maharashtra, INDIA
- [26]. **Organizing Committee Member**, *IEEE National Symposium [PADAM 2007]*, 22nd February 2007, Shadan College of Engineering & Technology, Hyderabad, INDIA
- [27]. **Maintenance and Facilities Manager**, *IEEE National Symposium [PADAM 2007]*, A Student level innovative magazine organized by IEEE Student Chapter, Shadan College of Engineering and Technology, Hyderabad, Andhra Pradesh, India, 22nd February 2007.
- [28]. **Volunteer**, *International Conference on Systemics, Cybernetics, and Informatics (ICSCI-2007)*, during 03-07 January 2007 organized by Pentagram Research Centre, Hyderabad, Andhra Pradesh, INDIA

### ***Awards / Recognitions***

- [1]. **Research Excellence Award** for “A Study of Distribution of Ubayuri (*Lilium Cardiocrinum cordatum* (Thunb.)) in Chiburi Jima, Oki Islands, Japan using Geographical Information System (GIS)”, International Conference on Advanced Engineering & Information Technology (ICAEIT 2017), 7-9 December, 2017, Linton University College, Mantin, Malaysia
- [2]. **Young Scientist Award** for “Pollution Dispersion Modeling for Concentrations of PM, SO<sub>x</sub> and NO<sub>x</sub> around Manali Region, India” during *3rd International Conference on Earth Sciences and Engineering (ICEE 2016)*, 17-18 June 2016 at Nehru Institute of Technology, Coimbatore, INDIA.
- [3]. **Young Scientist Award** for “Histogram Equalization Based Mean Self – Adaptive Plateau Histogram Equalization for Brightness Preserving and Contrast Enhancement” presented during 3rd World Conference on Applied Sciences, Engineering, and Technology (WCSET-2014) organized by BR Corp, 27-29 September 2014, Khatmandu, Nepal.
- [4]. **Green Environment Award** for “Impacts of the Climate Change due to Green House Gases (GHGs)” presented during the *International Conference on Emerging Trends in Engineering (IETE-2010)* organized by Dr. JJ Magdum College of Engineering, Maharashtra, India.
- [5]. **Institution Fellowship** from Ministry of Human Resource Development (MHRD), GoI, to pursue Ph.D. program at NITK, Surathkal, India.
- [6]. **AICTE Scholarship** to pursue M.Tech. program at Jawaharlal Nehru Technological University (JNTU), Hyderabad, India.
- [7]. **NITK TEQIP-II Travel Grant** to attend and present paper at *2013 IEEE Second International Conference on Image Information Processing (ICIIP-2013)*, Shimla, INDIA

- [8]. **Best Student Paper Award** for “Radar Engineering”, presented during International Conference on Systemics, Cybernetics and Informatics (ICSCI-2007), during 03-07 January 2007 organized by Pentagram Research Centre, Hyderabad, Andhra Pradesh, INDIA
- [9]. **Appreciation Award** in *National Conference on Advances in Earth Sciences, Structural, Geotechnical and Earthquake Engineering (AESG2E -2012)*, 04-05 October 2012 organized by Chaitanya Bharathi Institute of Technology (CBIT), Hyderabad, INDIA

### **Editorial / Expert Committees**

- [1]. **Guest Editor** - *Special Issue "Medicinal Plants and Industrial Crops: Phytochemistry and Metabolic Diseases - II"*, *Molecules - an Open Access Journal* by MDPI. (IF = 4.6, WoS – SCIE, Scopus)
- [2]. **Guest Editor** - *Special Issue "Medicinal Plants and Industrial Crops: Phytochemistry and Metabolic Diseases"*, *Molecules - an Open Access Journal* by MDPI. (IF = 4.6, WoS – SCIE, Scopus)
- [3]. **Editor**, *International Journal of Earth Sciences and Engineering (IJEE)*, publishing by Cafet-Innova Technical Society, Hyderabad, INDIA
- [4]. **Editor**, *International Journal of Coastal and Ocean Research (IJCOR)*, publishing by Cafet-Innova Technical Society, Hyderabad, INDIA

### **Technical Talks Delivered**

- [1]. **Panel Member**, Industry Conclave, 2 - 4 September 2021, Organized by Dept. of Civil Engineering, Karunya University, Coimbatore, INDIA
- [2]. **International Lecturer**, International Virtual Course on Integrated Green Technology Towards a Sustainable Planet (MOST 109-2927-I-035-001), August 23<sup>rd</sup> - September 2<sup>nd</sup>, 2021, Feng Chia University, TAIWAN
- [3]. **Invited Speaker**, Webinar on Advanced Satellite/UAV Image Processing and Remote Sensing Techniques with Sustainable Approaches, 30<sup>th</sup> July 2021, organized by Dept. of Civil Engineering, Sri Sai Ram Engineering College, Chennai, INDIA
- [4]. **Keynote Speaker**, 3<sup>rd</sup> International Conference on Advances in Civil Engineering, 25-26 June 2021, Department of Civil Engineering, KLEF, KL University, INDIA
- [5]. **Keynote Speaker**, 3<sup>rd</sup> International Conference (Virtual) on Digital Technologies for Design, Construction & Management in Civil Engineering (DigiTeC 2021), 23<sup>rd</sup> - 24<sup>th</sup> April 2021, organized by Dept. of Civil Engineering, PSG Institute of Technology and Applied Research, Coimbatore, INDIA
- [6]. **Keynote Speaker**, on Advanced Satellite/Drone Image Processing and Remote Sensing Techniques with Sustainable Approaches, Live TWO Days Webinar series, 22<sup>nd</sup> -23<sup>rd</sup> January 2021 at Jagannath Institute of Technology, Thandalam, Chennai, INDIA
- [7]. **Keynote Speaker**, One-Week Online FDP On Image and Signal Processing, 4<sup>th</sup> - 8<sup>th</sup> January 2021, JSS Academy of Technical Education (JSSATE), Bengaluru, INDIA
- [8]. **Keynote Speaker**, Third Online Program on Applications of GIS & Remote Sensing in Civil Engineering, STTP Sponsored by AICTE, New Delhi, 14<sup>th</sup> – 19<sup>th</sup> December 2020 at Sri Siddhartha Institute of Technology (SSIT), Tumakuru, Karnataka, INDIA

- [9]. **Keynote Speaker**, Second Online Program on Applications of GIS & Remote Sensing in Civil Engineering, STTP Sponsored by AICTE, New Delhi, 23<sup>rd</sup> – 28<sup>th</sup> November 2020 at Sri Siddhartha Institute of Technology (SSIT), Tumakuru, Karnataka, INDIA
- [10]. **Chief Guest and Keynote Speaker**, International E-conference on “Novel Innovations and Sustainable Development in Civil Engineering” (NISDCE’20), 13<sup>th</sup> – 14<sup>th</sup> June 2020, Dept. of Civil Engineering, Vel Tech University, Chennai, INDIA
- [11]. **Keynote Speaker**, International Webinar on Computational Trends and Applications in Civil Engineering, 8<sup>th</sup> – 10<sup>th</sup> June 2020, Dept. of Civil Engineering, JSS Academy of Technical Education, Noida, INDIA
- [12]. **Keynote Speaker**, 3-day Online FDP on Recent and Emerging Trends in Civil Engineering from 28<sup>th</sup> to 30<sup>th</sup> May 2020, Department of Civil Engineering, Andhra Loyola Institute of Engineering & Technology, Vijayawada, Andhra Pradesh, INDIA
- [13]. **Guest Lecture** on Smart Agriculture and Sustainable Farming, 31<sup>st</sup> January 2020, College of Horticulture, Mojerla, INDIA
- [14]. **Guest Lecture** on Advanced Satellite Image Processing and Remote Sensing Techniques for Coastal Applications, Department of Marine Engineering, 30<sup>th</sup> August 2019, Academy of Maritime Education and Training (AMET), Chennai, INDIA
- [15]. **Guest Lecture** on Advanced Remote Sensing and GIS Techniques in Plant Resources Applications, 13<sup>th</sup> August 2019, Burapha University, Chonburi, THAILAND
- [16]. **Chief Guest and Keynote Speaker**, 2<sup>nd</sup> International Conference on 'Global Environmental Changes and Sustainable Development (ICGECSD 2019), 4-5 April 2019, at Vel Tech University, Chennai, INDIA
- [17]. **Keynote Speaker**, International Conference on Smart Materials and Techniques for Sustainable Development (SMTS-2019), April 4-5, 2019 at Dr.N.G.P.Institute of Technology, Coimbatore, INDIA
- [18]. **Guest lecture** on Advanced Satellite/Drone Image Processing and Remote Sensing Techniques with Sustainable Approaches, & Higher Education Opportunities in Kumamoto University, Japan“, 2<sup>nd</sup> April 2019, MITE, Karnataka, INDIA
- [19]. **Keynote Speaker**, Three-day International Conference on Advances in Civil Engineering (ICACE-2019), 21-23 March 2019 at KL University, INDIA
- [20]. **Keynote Speaker** for 3<sup>rd</sup> International Conference on Frontline Areas of Civil Engineering (ICFACE-2018), January 5<sup>th</sup> & 6<sup>th</sup>, 2018, Department of Civil Engineering, Sri Krishna College of Technology, Coimbatore, INDIA
- [21]. **Keynote Speaker** for 1<sup>st</sup> Annual International Conference on Engineering 2017, 3<sup>rd</sup> November 2017, Faculty of Engineering, Sam Ratulangi University, Manado, INDONESIA
- [22]. **Invited Talk** for Spring Internship Program 2017 for Taiwan University of Science and Technology, 08<sup>th</sup> March 2017 at GSST, Kumamoto University, JAPAN
- [23]. **Invited Talk** for Spring Internship Program 2017 for NITK Students, 6<sup>th</sup> March 2017 at GSST, Kumamoto University, JAPAN
- [24]. **Guest of Honor & Keynote Speaker** for Andalas Civil Engineering Conference 3<sup>rd</sup> ACE 2016, 22 - 23 October 2016, Organized by Civil Engineering Department, Faculty of Engineering, Andalas University, Padang, INDONESIA
- [25]. **Keynote Speaker** for 3<sup>rd</sup> International Conference on Earth Sciences and Engineering (ICEE 2016), 17 - 18 June 2016 at Nehru Institute of Technology, Coimbatore, INDIA
- [26]. **Keynote Speaker** for the 5<sup>th</sup> World Conference on Applied Science, Engineering and Technology (WCSET-2016), 02 - 04 June 2016 at Ho Chi Minh City, VIETNAM

- [27]. **Invited Talk** for Spring Internship Program 2016 for Taiwan University of Science and Technology, 15<sup>th</sup> March 2016 at GSST, Kumamoto University, JAPAN
- [28]. **Invited Talk** for Spring Internship Program 2016 for NITK Students, 8<sup>th</sup> March 2016 at GSST, Kumamoto University, JAPAN
- [29]. **Keynote Speaker** for International Conference on Innovative Trends in Civil Engineering for Sustainability (ICICES 2016) 8 - 9 January 2016 at Department of Civil Engineering, Toc H Institute of Technology (TIST), Kerala, INDIA
- [30]. **Keynote Speaker** for One Day National Level Conference on Design, Materials, Manufacturing and Construction Technologies, 31<sup>st</sup> March 2016 at NSN College of Engineering and Technology, Karur, Tamil Nadu, INDIA
- [31]. **Keynote Speaker** for One Day International Workshop on Innovative Trends in Civil Engineering, 11<sup>th</sup> January 2016 at Nehru Institute of Technology (NIT), Coimbatore, Tamil Nadu, INDIA
- [32]. **Keynote Speaker** for 2<sup>nd</sup> International Conference on Disaster Management & Mitigation (ICDMM 2015), 27 - 28 August 2015, at PSNA College of Engineering & Technology, Dindigul, Tamil Nadu, INDIA
- [33]. **Keynote Speaker** for International Conference on Advances in Sustainable Materials and Innovative Technologies in Civil Engineering (ICASMITCE 2014), 13 - 14 October 2014, at Nehru Institute of Technology (NIT), Coimbatore, Tamil Nadu, INDIA
- [34]. **Keynote Speaker** for 3rd World Conference on Applied Sciences, Engineering, and Technology (WCSET 2014), 27 - 29 September 2014, Kathmandu, NEPAL
- [35]. **Keynote Speaker** for National Workshop on Paper Presentation Awareness & Research Methodology, 26th June 2011, International Institute of Information Technology, IIIT-Hyderabad, INDIA on Importance of Technical Programs and Publications
- [36]. **Keynote Speaker** for GITAM University, Hyderabad, India on How to Prepare a Research Paper for Presentation / Publication and Importance

### ***Membership in Professional Bodies***

- [1]. Member - The Cross-Ministerial Research and Development Management System (e-Rad), Ministry of Education, Culture, Sports, Science and Technology (MEXT), Japan; Researcher number: 10897218
- [2]. Member - Institute of Electrical & Electronics Engineers (IEEE); Member # 92778236

### ***Courses Taught***

#### **Under Graduation Level**

- Introduction of Remote Sensing
- Introduction of Geographical Information System
- Environmental Studies
- Disaster Management and Mitigation

#### **Post Graduation Level**

- Introduction of Remote Sensing and Image Processing
- Introduction of Geographical Information System
- Satellite Digital Image Analysis
- Applications of Remote Sensing

## **Experimental Labs for UG and PG**

- Remote Sensing Lab.
- Geographical Information System Lab.

## ***Computer Skills***

**Image Processing Software:** ERDAS Imagine, ENVI, Pix4D Mapper, Pix4D Fields, FieldAgent Desktop, Agisoft Metashape

**GIS Software Professional:** ARC/INFO, ARCVIEW, ARC GIS, ARC MAP; QGIS; DSAS

**Programming Software:** MATLAB, RStudio

**Machine Learning Tools:** MaxENT, SVM, WEKA Explorer, RStudio

## ***Research Platforms and Publication Databases***

- ORCID iD: 0000-0002-3712-2189 (<https://orcid.org/0000-0002-3712-2189>)
- Scopus ID: 56426965700  
(<https://www.scopus.com/authid/detail.uri?authorId=56426965700>)
- Researchmap ID: 10897218 (<https://researchmap.jp/rajuaedla>)
- J-GLOBAL ID : 202001003206695663  
([https://jglobal.jst.go.jp/en/detail?JGLOBAL\\_ID=202001003206695663](https://jglobal.jst.go.jp/en/detail?JGLOBAL_ID=202001003206695663))