CURRICULUM VITAE

Dr. Srinivas Pasupuleti

Associate Professor

Department of Civil Engineering

Indian Institute of Technology (ISM), Dhanbad

Dhanbad – 826004, Jharkhand.

Office Phone Number: +91-326-2235100

Email Id: srinivas@iitism.ac.in



ACADEMIC QUALIFICATIONS

- ▶ Ph.D. Civil Engineering from Sri Venkateswara University, Tirupati in 2011.
- ➤ M.E. Hydrology and Water Resources Engineering from Anna University, Chennai in 2002.
- ▶ B.Tech. Civil Engineering from Acharya Nagarjuna University, Guntur in 2000.

TEACHING EXPERIENCE :

- ✓ Total Teaching Experience : 19.0 Years
- ✓ Working as Associate Professor at IIT (ISM), Dhanbad from April, 2021 to till date.
- ✓ Worked as Assistant Professor at IIT (ISM), Dhanbad from May, 2013 to April, 2021 (8 Years).
 - Founder Faculty of the Civil Engineering Department at IIT (ISM), Dhanbad Extensively Involved in development of Department Various Laboratories, Department Office, BOCS for B.Tech. in Civil Engg. Courses Syllabus and procuring necessary Infrastructure facilities.
- ✓ Earlier worked as Faculty in various reputed Institutes for 9.5 Years in the capacity of Associate Professor for 5.5 Years and Assistant Professor for 4.0 Years from July, 2003 to April, 2013.

Details of Publications:

Publications in SCI / SCIE Journals Indexed in Web of Science :

- ★ Kumar S., Chanda K., Pasupuleti S., 2022, "Pre- and post-1975 scaling relationships of monsoon and non-monsoon hourly precipitation extremes with coincident temperature across urban India", Journal of Hydrology, (published online), 612 (2022),128180, https://doi.org/10.1016/j.jhydrol.2022.128180. (I.F. 6.71). Q1.
- * Chowdary, P.P., Kumar, V.V.G., and **Pasupuleti, S.**, A. Banerjee, Venkatesh A.S., **2022**, "A holistic approach for understanding the status of water quality and causes of its deterioration in a drought-prone agricultural area of Southeastern India", **Environmental Science and Pollution Research**, (Published online), https://doi.org/10.1007/s11356-022-22906-z. (I.F.- **5.19**). Q2.
- ★ Pasupuleti S., Singha S.S., Singha S, Kumar S., Singh R., Indramani D., 2022, "Groundwater characterization and non-carcinogenic and carcinogenic health risk assessment of nitrate exposure in the Mahanadi River Basin of India", Journal of Environmental Management, (published online), 319, (2022) 115746, https://doi.org/10.1016/j.jenvman.2022.115746 (I.F.- 8.91). Q1.
- * Agrawal, P; Sinha, A; Pasupuleti, S; Sinha, J; Chatterjee, A., Kumar, S., 2022, "Mathematical Approach to Evaluate the Extent of Groundwater Contamination using Polynomial Approximation", Water Supply, https://doi.org/10.2166/ws.2022.219(I.F.-1.77) Q4.
- * Akash P. B., Lutukurthi D.N.V.V. Konda, **Pasupuleti,S**; Krishna S.D., **2022**, "Synthesis of MgO/MgSO4 nano catalyst by thiourea—nitrate solution combustion for biodiesel production from waste cooking oil", **Renewable Energy**, 190, pp.474-486. https://doi.org/10.1016/j.renene.2022.03.127 (I.F.- 8.63) Q1.
- Singha S.S., Singha S, Pasupuleti S., Venkatesh A.S., 2022, "Knowledge-driven and machine learning decision tree-based approach for assessment of geospatial variation of groundwater quality around coal mining regions, Korba district, Central India.", Environmental Earth Sciences, 81:36.(published online), https://doi.org/ 10.1007/s12665-021-10147-1 (I.F. 3.11). Q2.
- S. Kumar, R.K. Guntu, A. Agarwal, V.G.K.Villuri, Pasupuleti S., D.R. Kaushal; A. K. Gosain, A. Bronstert, 2022, "Multi-objective optimization for storm water management by green-roofs and infiltration trenches to reduce urban flooding in central Delhi", Journal of Hydrology, Volume 606, 2022,127455. (published online), https://doi.org/10.1016/j.jhydrol.2022.127455. (I.F.- 6.71). Q1.
- * A. Banerjee, Sarath Chandra K.J., Pasupuleti S., A.C.S. Rao, 2022, "Alternative Relationships to Enhance the Applicability of Non-linear Filtration Models in Porous Media", Acta Geophysica, (published online), https://doi.org/ 10.1007/s11600-022-00950-0 (I.F.- 2.29). Q3.

- * A. Banerjee, Pasupuleti S., K. Mondal, M.M. Nezhad, 2021, "Application of data driven machine learning approach for modelling of non-linear filtration through granular porous media", International Journal of Heat and Mass Transfer, (published online), 179 (2021) 121650, https://doi.org/10.1016/j.ijheatmasstransfer. 2021.121650 (I.F.- 5.43). Q1.
- Singha S., Pasupuleti S., Singha S.S., Singh R., Kumar S., 2021, "Prediction of groundwater quality using efficient machine learning technique", Chemosphere, 276 (2021) 130265 (published online), https://doi.org/10.1016/j.chemosphere.2021.130265 (I.F.- 8.94). Q1.
- S. Kumar, A. Agarwal, G. Abinesh, V.G.K.Villuri, Pasupuleti S., D. Kumar; D.R. Kaushal; A. K. Gosain; B.S. Kumar, 2021, "Impact of climate change on storm water drainage in urban areas", Stochastic Environmental Research and Risk Assessment (published online), https://doi.org/10.1007/s00477-021-02105-x. (I.F.- 3.82). Q1.
- ★ A. Banerjee , Pasupuleti S., Singh, M.K., Dandu, J.M., 2021, "Influence of Fluid Viscosity and Flow Transition over Non-Linear Filtration through Porous Media", Journal of Earth System Science, 130 201, (published online), https://doi.org/10.1007/s12040-021-01686-z. ((I.F. 1.91) .Q3.
- S. Kumar, A.Agarwal, V.G.K.Villuri, Pasupuleti S., D.Kumar, D.R. Kaushal, A.K. Gosain, A. Bronstert, B.S. Kumar, 2021, "Constructed wetland management in urban catchments for mitigating floods", Stochastic Environmental Research and Risk Assessment, (published online), https://doi.org/10.1007/s00477-021-02004. (I.F.- 3.82). Q1.
- ♣ P. Agrawal, A.Sinha, S.Kumar, A. Agarwal, A,Banerjee, V.G.K.Villuri, A.C.S. Rao, R.Dwivedi, V.V.R. Dera, J.Sinha, Pasupuleti S., 2021, "Exploring Artificial Intelligence Techniques for Groundwater Quality Assessment", Water*, 13 (9),1172; (Published online), https://doi.org/10.3390/w13091172. (I.F.- 3.53). Q2.
- * A. Banerjee, **Pasupuleti S.**, V.G.K. Villuri, A.K. Pushkar, R. Nune, S. Dutta, **2021**, "Non-linear filtration through stratified porous media: An experimental approach to model the volumetric flow Rate and pressure drop relationship", **Journal of Porous Media**, 24, 10, pp:17-30 (published online), DOI:10.1615/ JPor Media.2021035082. (I.F.- 1.78). Q3.
- Singh, R. K., Villuri, V. G. K., and Pasupuleti, S. 2021, "Evaluation of water quality and risk assessment by coupled geospatial techniques and statistical approach along lower Damodar river", International Journal of Environmental Science and Technology (Published online), https://doi.org/10.1007/s13762-021-03644-0 (I.F.- 3.51). Q3.
- ★ Singha S., Pasupuleti S., Singha S.S., Kumar S., 2020, "Effectiveness of groundwater heavy metal pollution indices studies by deep-learning ", Journal of Contaminant Hydrology, 235 (11), 103718. (Published online), https://doi.org/10.1016/j.jconhyd. 2020.103718. (I.F.- 4.18). Q2.
- ★ K. Pandey, M. K. Singh, Pasupuleti S., 2020, "Solution of 1D Space Fractional Advection-Dispersion Equation with Nonlinear Source in Heterogeneous Medium", Journal of Engineering Mechanics, 146(12): 04020137 (published online), https://doi.org / 10.1061/(ASCE)EM.1943-7889.0001870. (I.F.- 3.12). Q2.

- * R. K. Singh, A. Soni, S. Kumar **Pasupuleti S.,** V.G. K. Villuri, **2020**, "Zonation of flood prone area in integrated framework of hydrodynamic model and ANN", **Water Supply**, 21 (1): 80–97. https://doi.org/10.2166/ws.2020.252 (I.F.- 1.77). Q4.
- ★ Singha S., Pasupuleti S., 2020, "Delineation of groundwater prospect zones in Arang block, Raipur district, Chhattisgarh, Central India, using Analytical Network Process", Journal of the Geological Society of India, 95 (6), pp.609-615, https://doi.org/10.1007/s12594-020-1487-z. (I.F.- 1.46). Q4.
- ★ M. K. Singh, R. K. Singh, Pasupuleti S., 2020, "Study of forward-backward solute dispersion profiles in a semi-infinite groundwater system", Hydrological Sciences Journal, 65 (8),pp. 1416-1429 (published online), https://doi.org/10.1080/02626667. 2020.1740706. (I.F.- 3.94). Q2.
- ★ R. K. Singh, V. G. K. Villuri, Pasupuleti S., Rajesh N.,2020, "Hydrodynamic modeling for identifying flood vulnerability zones in lower Damodar river of eastern India", Ain Shams Engineering Journal*, (published online), https://doi.org/10.1016/j.asej. 2020. 01.011. (I.F.- 4.79). Q1.
- * R. K. Singh, M. Pandey, J. H. Pu, **Pasupuleti S.,** V.G. K. Villuri, **2020,** "Experimental study of clear-water contraction scour", **Water Supply,** 20 (3), pp.943-952, (published online), https://doi.org/10.2166/ws.2020.014. (I.F.- 1.77). Q4.
- ★ Kumar S., Chanda K., Pasupuleti S., 2020, "Spatio-temporal Analysis of Extreme Indices derived from Daily Precipitation and Temperature for Climate Change Detection over India", Theoretical and Applied Climatology. (published online), https://doi.org /10.1007/s00704-020-03088-5 (I.F.- 3.40). Q3.
- * Singha S, Pasupuleti S., Sandilya D K, Singha S.S, Singh R, Venkatesh A.S., 2019, "An analytical hierarchy process-based geospatial modeling for delineation of potential anthropogenic contamination zones of groundwater from Arang block of Raipur district, Chhattisgarh, Central India", Environmental Earth Sciences, 78 (24): 694. (published online), https://doi.org/10.1007/s12665-019-8724-z. (I.F.- 3.11). Q2.
- ★ Singha S.S., Pasupuleti S., Singha S, Singh R, Venkatesh A.S., 2019, "A GIS-based modified DRASTIC approach for geospatial modeling of groundwater vulnerability and pollution risk mapping in Korba district, Central India", Environmental Earth Sciences, 78 (21): 628. (published online), https://doi.org/10.1007/s12665-019-8640-2 (I.F.- 3.11). Q2.
- ★ Singha S.S., Pasupuleti S., Singha S, Singh R, Venkatesh A.S., 2019, "Analytic Network Process based approach for delineation of groundwater potential zones in Korba district, Central India using remote sensing and GIS" Geocarto International (published online):1-22. https://doi.org/10.1080/10106049.2019.1648566. (I.F.- 3.45). Q2.
- ★ Banerjee, A. Pasupuleti, S., Singh, M.K., Dutta S.C., Kumar, G.N.P., 2019, "Modeling of Flow through Porous Media over the Complete Flow Regime", Transport in Porous Media,129 (1), pp.1-23. https://doi.org/10.1007/s11242-019-01274-2. (I.F.- 3.61). Q2.

- ★ R.K. Singh, V.G.K. Villuri, Pasupuleti, S., 2019, "Assessment of parameters and preparation of hydrodynamic model for lower Damodar Basin using geomatic techniques", Mausam, 70, 4, pp. 815-824. DOI: 551.509.331: 556.166.(I.F. 0.90). Q4.
- * A.Chawla, Pasupuleti,S., S.Chawla, A. C. S. Rao, K.Sarkar, R. Dwivedi, 2019, "Landslide Susceptibility Zonation Mapping: A Case Study from Darjeeling District, Eastern Himalayas, India", Journal of the Indian Society of Remote Sensing, 47 (3), pp. 497-511. https://doi.org/10.1007/s12524-018-0916-6. (I.F.- 1.89). Q4.
- ★ Banerjee, A., Pasupuleti, S., 2019, "Effect of convergent boundaries on post laminar flow through porous media", Powder Technology, 342, pp.288-300. https://doi.org/ 10.1016/j.powtec.2018.09.085. (I.F.- 5.64). Q1.
- * Saha, A.K., Sinha, A., **Pasupuleti, S.**, **2019**, "Modification, Characterization and Investigations of Key Factors Controlling the Transport of Modified Nano Zero Valent Iron (nZVI) in Porous Media", **Environmental Technology**, 40 (12), pp.1543-1556. https://doi.org/10.1080/09593330.2018.1426637. (I.F.- 3.47). Q3.
- ★ V.G.K. Villuri, Pasupuleti, S., K. Jain, A.Gairola, R.K. Singh, 2018, "Hydrodynamic simulation of a cloudburst event in Asi Ganga Valley of Indian Himalayan region using MIKE11 and GIS techniques", Mausam, 69, 4, pp.523-534. DOI: 551.577.37 (235.243). (I.F. 0.90). Q4.
- * A.Chawla, S.Chawla, **Pasupuleti, S.,** A. C. S. Rao, K. Sarkar, R. Dwivedi, **2018,** "Landslide Susceptibility Mapping in Darjeeling Himalayas, India", **Advances in Civil Engineering***, Article ID 6416492, 17 pages, https://doi.org/10.1155/2018/6416492. (I.F.- 1.84). Q3.
- R.Singh, A. S. Venkatesh, T. H. Syed, L. Surinaidu, Pasupuleti, S., S. P. Rai, M. Kumar, 2018, "Stable isotope systematics and geochemical signatures constraining groundwater hydraulics in the mining environment of the Korba Coalfield, Central India", Environmental Earth Sciences, 77: 548. Published Online, https://doi.org/10.1007/s12665-018-7725-7. (I.F.- 3.11). Q2.
- ★ Banerjee, A., Pasupuleti, S., Singh, M.K., Kumar, G.N.P., 2018, "An Investigation of Parallel Post-Laminar Flow through Coarse Granular Porous Media with the Wilkins Equation". Energies*, 11, 320, pp.1-19. DOI:10.3390/en11020320. (I.F.- 3.25). Q3.
- ★ Singaraju, S., Pasupuleti, S., Hernandez, E.A., Uddameri, V., 2018, "Prioritizing Groundwater Monitoring in Data Sparse Regions using Atanassov Intuitionistic Fuzzy Sets (A-IFS)", Water Resources Management, 32(4), pp.1483–1499. https://doi.org/ 10.1007/s11269-017-1883-3. (I.F.- 4.42). Q1.
- ★ Banerjee, A., Pasupuleti, S., Singh, M.K., Kumar, G.N.P., 2018, "A study on the Wilkins and Forchheimer equations used in coarse granular media flow", Acta Geophysica, 66(1), pp.81-91. https://doi.org/10.1007/s11600-017-0102-1. (I.F.- 2.29). Q3.

Papers Published as Book Chapter:

- * Kumar, S., Chanda, K., Pasupuleti S., 2021. "Influence of Air Temperature onLocal Precipitation Extremes Across India", Climate Change Impacts on Water Resources: Hydraulics, Water Resources and Coastal Engineering, Water Science and Technology Library 98, Springer, https://doi.org/10.1007/978-3-030-64202-0 14149-160.
- * Agrawal P., Sinha A., **Pasupuleti S.,** Nune R., Saha S., **2021**, "Geospatial Analysis Coupled with Logarithmic Method for Water Quality Assessment in Part of Pindrawan Tank Command Area in Raipur District of Chhattisgarh", **Climate Impacts on Water Resources in India**. Water Science and Technology Library, vol 95. pp: 57-78. Springer, Cham. https://doi.org/10.1007/978-3-030-51427-3 6.
- ★ Banerjee, A., Pasupuleti, S., Singh, M.K., Kumar, G.N.P., 2019, "An Investigation of Parallel Post-Laminar Flow through Coarse Granular Porous Media with the Wilkins Equation", Emerging Advances in Petrophysics Porous Media Characterization and Modeling of Multiphase Flow, MDPI, pp:180-198. ISBN 978-3-03897-795-7.
- Banerjee, A., Pasupuleti, S., Kumar, G.N.P., 2018, "A Critical Study on the Applicability of Forchheimer and Wilkins Equations for Nonlinear Flow through Coarse Granular Media. Water Quality Management, Water Science and Technology Library, Springer, Vol. 79, pp. 307-316.
- ★ Banerjee, A., Pasupuleti, S., Kumar, G.N.P., Dutta, S.C., 2018. "A Three-Dimensional CFD Simulation for the Nonlinear Parallel Flow Phenomena through Coarse Granular Porous Media", Lecture Notes in Mechanical Engineering, Springer, pp. 469-480.
- * Chawla, S., Chawla, A., Pasupuleti, S., 2017. A Feasible Approach for Landslide Susceptibility Map using GIS. Geo-Risk 2017: Impact of Spatial Variability, Probabilistic Site Characterization, and Geohazards, ASCE, pp. 101-110.

Book Published:

A book entitled "Water and its Sustainability in Mining and other Environment: Vision 2050" Edited by B.C. Sarkar, Pasupuleti, S. and Sreevalsa K., ISBN 978-93-5156-850-6 published by ISM, Dhanbad in 2014.

Publications in SCOPUS Journal:

- * Pasupuleti, S., Sandilya D. K., S.Singha., S.S. Singha, S.Saha, 2019, "Delineation of groundwater potential zones utilising geospatial techniques in Kadiri watershed of Anantapur district, Andhra Pradesh, India", Journal of Environmental Biology*, 40, pp.61-68. http://doi.org/10.22438/jeb/40/1/MRN-935.
- ★ Singha, S., Pasupuleti, S., Singha, S., Villuri, V.G.K., 2017, "An integrated approach for evaluation of groundwater quality in Korba district, Chhattisgarh using Geomatic techniques", Journal of Environmental Biology*, 38(5), pp.865-872. http://doi.org/10.22438/jeb/38/5/MRN-600.

- * Kumar, G.N.P., Sujatha, P., **Pasupuleti, S., 2010.** "Groundwater level forecasting using feed forward neural network trained with different algorithms", **ISH Journal of Hydraulic Engineering,** 16(1), pp.20-35.
- ★ Pasupuleti, S., Satya N.T., Kumar, G.N.P, 2010. "Evaluation of subsurface water quality by estimation of physico chemical parameters A case study", Asian Journal of Microbiology, Biotechnology and Environmental Sciences*, 12(4), pp 839 842.
- * Pasupuleti, S., Satya N.T., 2010. "Hydro geochemical study of groundwater in Sarada river basin in Andhra Pradesh", Asian Journal of Microbiology, Biotechnology and Environmental Sciences*, 12(3), pp 623-626.

Publications in Other Journals:

- ★ Singha S.S., Pasupuleti S., 2020, "Hydrogeochemical modeling based approach for evaluation of groundwater suitability for irrigational use in Korba district, Chhattisgarh, Central India", SN Applied Sciences, 2:1551 | https://doi.org/10.1007/s42452-020-03357-y
- * Kumar, G.N.P., **Pasupuleti, S.,** Jaya C.K., Sujatha, P., **2011,** "Evaluation of Groundwater Potential zones and Identification of Groundwater Augmenting Structures in a basin A case study", **Journal of Indian Water Resources Society,**31,(1-2), pp 1-11.
- * Pasupuleti, S., Sarala, C., Kumar, R.V., Satya N.T., Kumar, G.N.P., 2008, "Value addition for sewage effluent generated from the designed Sewage treatment system A case study", Journal of Applied Hydrology, XXI(3-4), pp 21-28.
- * Pasupuleti, S., Kumar, G.N.P., Sarala, C., Chowdary, P.P., 2008, "Application of Remote Sensing and Geographical Information Systems techniques for integrated management of Boothpur watershed in A.P.", Journal of Applied Hydrology, XXI (1-2), pp 65-74.
 - * Open Access Journal

Papers presented in International / National Conferences:

- * Chowdary, P.P., Kumar S., Kumar S., Kumar, V.V.G., and **Pasupuleti, S., 2021**, "Exploring Geospatial Technology in Kadiri basin of Ananthapuramu district, A.P. for demarcation of GWPZ and Identification of Recharge Structures", **International Conference HYDRO 2021**, organized by NIT Surat during December 23-25.
- * Kumar, S., Chanda, K. and **Pasupuleti, S., 2020**, "Spatio-temporal variation of extreme indices derived from observed and reanalysis products for detection of climate change across India", **EGU General Assembly 2020** in the online format Sharing Geoscience Online, **Vienna, Austria** during May 4-8.
- * R. K. Singh, **Pasupuleti, S.,** Kumar, V.V.G. **2020**, "Investigation on Spatio-temporal Changes in River Morphology of Lower Damodar between Durgapur barrage to

- Bardhhaman town over a time Period of 1990- 2015", **International Conference** "Roorkee Water Conclave" Organised by IIT Roorkee during February 26 28.
- * Chowdary, P.P., Kumar, V.V.G., and **Pasupuleti, S., 2020**, "Quantitative and qualitative analysis of groundwater resources in drought prone watershed in Anantapur district of Andhra Pradesh, India", **National conference on "Recent trends in Environmental Pollution and disaster risk reduction"**, Organized by ESE dept., IITISM and FICCI at New Delhi during February 6-7.
- * Kumar, S., Chanda, K. and **Pasupuleti, S., 2018**, "Influence of Air Temperature on Local Precipitation Extremes across India", **International Conference HYDRO 2018**, organized by NIT Patna during December 19-21.
- * Saha, S., Pasupuleti, S., 2018. "Groundwater prospect zonation of Kadiri watershed in the drought prone areas of Anantapur district, Andhra Pradesh A GIS based approach using AHP Technique", International Conference on Sustainable Technologies for Intelligent Water Management, Organized by DWRDM, IIT Roorkee and Indian Water Resources Society (IWRS) during February 16-19.
- * Singha, S.S, Pasupuleti, S., Singha, S. and Venkatesh, A. S., 2018. "Assessing groundwater vulnerability using DRASTI-LM model in Katghora block of Korba District, Chhattisgarh, India", International Conference on Sustainable Technologies for Intelligent Water Management, Organized by DWRDM, IIT Roorkee and Indian Water Resources Society (IWRS) during February 16-19.
- Singh, R.K., Kumar, V.V.G. and Pasupuleti, S., 2018. "Assessment and study Hydrology of Floods in Lower Damodar Basin using GIS Techniques", International Conference on Sustainable Technologies for Intelligent Water Management, Organized by DWRDM, IIT Roorkee and Indian Water Resources Society (IWRS) during February 16-19.
- ★ Saha,S. and Pasupuleti, S., 2017. "Identification of groundwater potential zones using geospatial techniques in Kadiri watershed of Anantapur region in Andhra Pradesh, India", 7th International Groundwater Conference on Groundwater vision 2030-"Water security, challenges & climate change adaptation", organized by NIH Roorkee in New Delhi during December 11-13.
- ★ Singh, R.K., Pasupuleti, S., and Kumar, V.V.G., 2017. "Flood Routing of Lower Damodar using GIS and HEC-RAS", 7th International Groundwater Conference on Groundwater vision 2030-"Water security, challenges & climate change adaptation", organized by NIH Roorkee in New Delhi during December 11-13.
- * Chawla, S., Chawla, A. and **Pasupuleti, S., 2017**. "A Feasible Approach for Landslide Susceptibility Map using GIS", **GEO-RISK 2017**, organized by ASCE, in **Denver, Colarado**, **USA** during June 4-7.
- * Banerjee, A., **Pasupuleti, S.,** Kumar, G.N.P. and Dutta, S.C., **2016**. "A Three-Dimensional CFD Simulation for the Nonlinear Parallel Flow Phenomena Through Coarse Granular

- Porous Media", **International conference on Applications of Fluid Dynamics**, organized by IIT(ISM), Dhanbad, Jharkhand during December19-21.
- * Banerjee, A., **Pasupuleti, S.,** and Kumar, G.N.P., **2016.** "A Critical Study on the Applicability of Forchheimer and Wilkins Equations for Nonlinear Flow Through Coarse Granular Media", **International Conference on Water Environment, Energy & Society,** organized by AISECT University, Bhopal, India during March 15-18.
- **★ S. Pasupuleti,** Pradeep Kumar, and K. Jayachandra, **2014**, "Quantification of effect of convergence in porous media flow", **5th International Conference on Porous Media and Their Applications in Science, Engineering and Industry** at Kona, **Hawaii, USA** during June, 2014.

Awards and Honours Received

- ➤ Received **BEST TEACHER GOLD MEDAL AWARD** for the Services rendered as a **Faculty** in Civil Engg. Department in **K. L. University** (erstwhile **K. L. College of Engg.)**, Vaddeswaram, Guntur District for the Academic Year 2006-2007.
- MHRD Scholarship during M.E. Programme.

Research Projects:

- > SERB, DST, Govt. of India funded research project entitled "Assessment of groundwater quality and zonation of Kadiri watershed in the drought prone areas of Anantapur region" for Rs. 28.76 Lakhs in the capacity of Principal Investigator was completed in September, 2020.
- DMC funded project "Preparation of Master Plan-2020 for Dhanbad Municipal Corporation" for Rs. 32.15 Lakhs in the capacity of Co-Principal Investigator is under progress.
- Vedanta funded project "Preparation of Catchment treatment plan" for Rs. 35.40 Lakhs in the capacity of Co-Principal Investigator is under progress.
- SCCL funded project "Scientific study on stability of proposed diversion of Bokkalavagu nallah over goaved out Longwall Panels of GDK-10 Incline on the surface and assessment of Impact of blasting in RG OCP-I on embankment of proposed divertion nallah and assessment of water danger to Adriyala Longwall Project, RG OCP-I Expansion" for Rs. 9.735 Lakhs in the capacity of Principal Investigator is under progress.
- > IIT(ISM), Dhanbad funded project "Identification of suitable sites and designing of environmental friendly rainwater harvesting structures for catching the rain where it

- falls in the IIT(ISM) campus area" for Rs. 8.80 Lakhs in the capacity of one of Principal Investigator is under progress.
- ➤ IIT(ISM) funded project "Parametric Study on flow through Porous media", under FRS for Rs. 5.3 Lakhs in the capacity of Principal Investigator was completed in 2017.
- ➤ IIT(ISM) funded project "Non-Linear modeling for converging flow through Porous media", under TEQIP-II for Rs. 2.0 Lakhs in the capacity of Principal Investigator was completed in 2018.
- Submitted research projects to DST, MoES, MoWR for funding are currently under review.

Consultancy Projects:

- Involved in project entitled "Techno Economic study for Transportation of ash from NTPC Korba to Bishrampur & Manikpur Open cast mines for its utilization" funded by NTPC for Rs. 24 Lakhs.
- Involved in project entitled "Third party evaluation of DPR for Water supply Project under JMADA" funded by **JMADA** for **Rs. 19.96 Lakhs.**

Outreach Programmes:

- ▶ MHRD, Govt. of India funded GIAN programme One week short term course entitled "Geo informatics and Geo computational Modeling for Water Resources Engineering and Environmental Science" for Rs 5.44 Lakhs was organized during September 17 - 22, 2018 at IIT(ISM), Dhanbad in the capacity of Principal Investigator.
- ➤ Organized One Professional Development Programme entitled "Recent Advances in Water Resources and Environmental Engineering Computation" during 22-26 December, 2015 at ISM IIIF, Kolkata in the Capacity of Co-Coordinator.
- ➤ **DST** Sanctioned **Rs. 10 Lakhs** for conducting 21 days Summer/Winter School (Level-1) for 2021-2022 on "**Geospatial Science and Technologies**" under National Geospatial Program (NGP) in the Capacity of Coordinator.
- Organized 2-days Online training programme on "Analysis & Application of open-source Remote Sensing data using Google Earth Engine" during 07-08 July,2022 in the capacity of Co-Coordinator.

MOU Signed:

➤ Instrumental in Signing MOU between IIT (ISM), Dhanbad and Texas Tech University Lubbock, USA on 28-12-2015 along with Prof. Venki Uddameri, Director, Water Resource Center, Texas Tech University, Lubbock, USA.

International Collaborations:

Prof. Venki Uddameri, Texas Tech University, USA – Jointly conducted training courses including GIAN Short term Program and have a Joint Publication.

Prof. Mohaddeseh M. Nezhad, University of Warwick, UK – Have a Joint Publication.

Prof. Jaan H. Pu, University of Bradford, UK – Have a Joint Publication.

Dr. Rajesh N., ICRISAT – Have Joint Publications & submitted a Collaborative R&D Project.

Other Accomplishments:

- Actively involved in Organizing a National Conference entitled "Water and its sustainability in mining and other environment Vision 2050 (WSME 2014)" during 28-29 March 2014.
- ➤ Established two Labs completely Fluid Mechanics Lab and Hydraulics and Hydraulic Machines Lab and involved in development of Water Resources Engineering Lab at CED.
- ➤ Reviewed three **Text books** on Flow in Open Channels, Fluid Mechanics and Engineering Geology by leading authors published by **Mc Graw Hill Education (I) Pvt. Ltd.**
- ➤ Delivered **Expert lectures** in Training Programs / Faculty Development Programs organized by Environmental Science and Engg., Dept, Applied Mathematics Dept. and Mining Engg. Dept. at IIT(ISM), Dhanbad.
- > Attended workshops/training programs organized at IIT Roorkee, BMTPC and IIT(ISM), Dhanbad.

Membership of Professional Societies:

- ❖ Life Member of Indian Society for Technical Education (MISTE)
- ❖ Life Member of Indian Association of Hydrologists (MIAH)
- Life Member of Indian Water Resources Society (MIWRS)
- Life Member of Association of Hydrologists of India (MAHI)
- Life Member of Indian Society for Hydraulics (MISH)

Software Knowledge:

ArcGIS, ERDAS Imagine, TNT mips, SMS, GMS, WMS, Visual modflow, C, C++, Java, .NET.

Courses Taught at P.G. Level

(M.Tech. - Water Resources Management / Civil Engineering)

- ✓ Engineering Hydrology
- ✓ Engineering Hydrology and Hydraulics
- ✓ Irrigation Management
- ✓ Water Resources Systems Analysis
- ✓ Channel and River Hydraulics
- ✓ E.I.A. of Water Resources Projects
- ✓ Watershed Management
- ✓ C and C++ Computer Programming

Courses Taught at U.G. Level:

(B.Tech.- Civil Engineering)

- ✓ Fluid Mechanics
- √ Water Resources Engineering I
- ✓ Water Resources Engineering II
- ✓ Hydraulics and Hydraulic Machines
- ✓ Open Channel and River Hydraulics
- ✓ Hydrology and Hydraulic Structures
- ✓ Water Resources Engineering Design and Drawing
- ✓ Building Materials and Construction
- ✓ Environmental Studies
- ✓ Basics of Soil Mechanics
- ✓ Geo -Technical Engineering-II
- ✓ Engineering Mechanics
- ✓ Solid Mechanics-I
- ✓ Solid Mechanics-II
- ✓ Remote Sensing and GIS
- ✓ Surveying

Ph.D. Guidance

Awarded : 06 No.

(03 No. Sole Guide + 02 No. Principal Guide + 01 No. Co-Guide)

- **Dr. Ashes Banerjee (2014DR0124)** was **awarded Ph.D.** on **04 02 2020** for thesis entitled "Applicability and Behavior of the Forchheimer and Wilkins Equations for the Velocity and Hydraulic Gradient Characteristics in Post-Laminar Flow through Porous Media subjected to Parallel and Convergent Boundaries".
- **Dr. Soumya S. Singha (2014DR1085)** was **awarded Ph.D.** on **17 12 2020** for thesis entitled "Integrated Geospatial Modeling for Groundwater Vulnerability Assessment and Risk Mapping of Coal Mining Region, Korba district, Chhattisgarh, India".
- **Dr. Sudhakar Singha (2014DR1086)** was **awarded Ph.D.** on **06 09 2021** for thesis entitled "Development of a geospatial framework coupled with advanced data driven techniques for the impact assessment of anthropogenic pollution on groundwater resources in Chhattisgarh, India".
- **Dr. Ravindra Kumar Singh (2016DR0048)** was **awarded Ph.D.** on **02 12 2021** for thesis entitled "Hydrodynamic Modeling to Demarcate Flood-Prone Areas and Subsurface Water Contamination Zones along the Lower Damodar River using Geomatic Techniques".
- **Dr. Amit Chawla (2015DR1018)** was **awarded Ph.D.** on **05 09 2022** for thesis entitled "Analysis, Modelling and Mitigation Methods for Landslides in Darjeeling region, West Bengal A Geospatial and Geotechnical Approach".
- **Dr. Purushottam Agrawal (2015DR1174)** was **awarded Ph.D.** on **17 10 2022** for thesis entitled "Optimal Irrigation Planning for Command Area of Pindrawan Tank in Chhattisgarh, India".

Under Progress : 04 No.

Mr. Sachidanand Kumar (17DR000533) (Co-Guide - CE Dept.)

"Spatial and Temporal Characteristics of Hydrological Extremes across India under Climate Change".

Mr. P. Prabhakara Chowdary (18DP000363) (Co-Guide - ME Dept.)

"Integrated Watershed Management in drought prone area by In-situ and Ex-situ interventions for sustainable development - A Geospatial approach".

Ms. Aparna Singh (20DR0024) (Co-Guide - ChE Dept.)

"Mitigation of groundwater contamination using hybrid techniques".

Mr. Subodh Shrivastava (21DR0190) (Principal Guide - CE Dept.)

"Seepage and Stability analysis of Earthen and Rockfill Dam using Physical, Mathematical and Numerical Models".

PDF Guidance : 01 No. (Co-Supervisor)

"Preparation of Master Plan - 2020 for Dhanbad Municipal Corporation"

M.Tech. Guidance : 05 No.

B.Tech. Guidance : 10 No.

Administrative Responsibilities:

Department Level:

Present:

- Coordinator, Department Documentation Cell
- JRF Selection Committee member
- Chairman, Doctoral Scrutiny Committee (DSC) for JRFs
- Member of Departmental Faculty Screening Committee (DFSC)
- Member of Departmental Purchase Advisory Committee (DPAC)
- Performed the duties as HOD, CE (CD) on several occasions whenever entrusted.

Former:

- Secretary, Departmental Advisory Committee (DAC)
- Faculty In-charge Time Table
- Faculty In-Charge Department Library
- Faculty In-Charge Store and Stock Verification
- Faculty In-Charge -Technical and Cultural Fest
- Faculty In-Charge Water Resources Engineering Lab

- Faculty In-Charge Fluid Mechanics Lab
- Faculty In-Charge Hydraulics and Hydraulics Machines Lab
- Faculty In-Charge Computer Lab
- Member, Departmental Under Graduate Committee (DUGC)
- Member of Departmental Research Committee (DRC)
- ➤ Member of Departmental Tender Advisory Committee (TAC)
- Member, Board of Courses Studies (BOCS) for B.Tech. (Civil Engineering) program
- Vice-President, Civil Engineering Society
- Coordinator- B.Tech. Engineering Graphics Course
- Member of Survey Committee
- Tabulator End examination
- Moderator UG Courses

Institute Level:

Present:

- Coordinator WST Division, Centre for Water Resource Management (CWRM)
- Co-Coordinator Geospatial Technology Group (GTG)
- Member of maintenance of artificial recharge and rain water harvesting structures in the IIT (ISM) campus
- Secretary, Centre Advisory Committee (CWRM)
- Treasurer, Scolomin Club

Former:

- ➤ Member of Centre for Societal Mission (May, 2017 May, 2021)
- Chief Warden Emerald Hostel (September, 2018 June, 2020)
- Warden Jasper Hostel (June, 2017 August, 2018)

Participation in Co-Curricular activities:

- Moderator, ESE Dept. (UG and PG Courses)
- Sister Dept. member for selection of JRF's (AM and ESE Dept.)
- > Sister Dept. member for DSC of JRF's (AM, Mech, ME, MME and ESE Dept.)
- Sister Dept. member of DPAC for ESE Dept.
- Sister Dept. member for M.Tech. Project evaluation for ESE Dept.

Inter-Institutional responsibilities - Represented IIT (ISM), Dhanbad:

- Visited IIT Madras, IIT Bhubaneswar and SERC, Chennai for collecting information for development of various labs at IIT(ISM) with other faculty member in 2013.
- ➤ Carried out Survey work in different villages of Sahibgunj district as a part of Ganga Gram Project with other faculty members in 2016.
- Visited various companies in Bangalore and Chennai for Placement related work with other faculty member in 2017.

Participation in Academic Activities Outside the Institute:

- Expert member for Engineers recruitment for Coal India Limited at Kolkata in 2016.
- Expert member for selection of Scientist in Jharkhand Space Application Centre at Ranchi in 2015.
- Institute Representative during JEE Advanced Examination, 2018.
- Question paper setter for J.N.T. University, Hyderabad in 2017, 2018 and 2019.
- ➤ Member, Board of Examiners for Ph.D. Thesis evaluation for S.V. University, Tirupati in 2018.
- Acted as Micro Observer in Lok Sabha General Elections during 2014 and 2019.
- ➤ Acted as External Examiner for evaluation of M.Tech. dissertation Viva-voce examination at Department of Water Engineering and Management, Central University of Jharkhand in 2022.

Reviewer of Journals:

- ✓ Natural Hazards Review (ASCE)
- ✓ Journal of Hydrology (Elsevier)
- ✓ Environmental Monitoring and Assessment (Springer)
- ✓ Computer Modeling in Engineering & Sciences (TSP)
- ✓ Arabian Journal of Geosciences (Springer)
- √ Water (MDPI)
- ✓ SN Applied Sciences (Springer)
- ✓ International Journal of Environmental Research and Public Health (MDPI)
- ✓ Water Supply (IWA)
- ✓ Computers and Geosciences (Elsevier)

- ✓ Applied Sciences (MDPI)
- ✓ Environmental Earth Sciences (Springer)
- ✓ Groundwater for Sustainable Development (Elsevier)
- ✓ Geocarto International (Taylor & Francis)
- ✓ Environmental Science and Pollution Research (Springer)
- ✓ Journal of Hydrology : Regional Studies (Elsevier)
- ✓ Science of the Total Environment (Elsevier)

DECLARATION

I hereby declare that all the information and particulars furnished are true to the best of my knowledge and belief.

Place: Dhanbad

Date: 17 - 10 - 2022

SRINIVAS PASUPULETI

P. Sorinives