

FACULTY PROFILE

Name : Dr. Veena S. Soraganvi



Designation : Professor, Dean (R & D)
Department : Civil Engineering
Employee ID : TCV008
E mail ID : vssev@becbgk.edu, veena_snv@yahoo.co.in

Contact details : Civil Engineering Department
Basaveshwar Engineering College
BAGALKOT -587 102
Cell Phone No.: +91 98455 85878

Orcid ID : 0000-0001-5239-2024
Scopus ID : 25928106500
Vidwan Id : 153368
Researcher ID : ABH-1974-2020
Google Scholar ID : RIHselwAAAAJ
Qualification : Ph.D.

Professional Experience
Teaching experience : 34 years

Administrative Responsibilities :

1. Dean (Research & Development)
2. Nodal Officer of Equity TEQIP-II
3. Deputy Chief Warden, BEC-Ladies Hostel

Educational Qualifications

1. Ph.D. (Water Resources & Environmental Engg.) from IISc. Bangalore 2001-2005
2. M.Tech (Hydromechanics) from IIT Kanpur 1992-94
3. B.E. (Civil Engg.) BEC., KUD Dharwad 1982-86

Research Areas

- :
1. Water Resources Engineering
 2. Environmental Engineering
 3. Remote Sensing & GIS Applications
 4. Numerical Modelling
 5. Stochastic Modelling
 6. Scale Issues in Hydrology
 7. Wastewater Treatment

No. of Research Scholars

Pursuing : **05**
Awarded : **05**

Research Grants

- :
1. Rs. 78.40 Lakhs for Setting up of Research Laboratory titled "Center for Water and Wastewater Research" by Karnataka Council for Technological Upgradation; A joint venture of Govt. of Karnataka and Govt. of India, in 2018
 2. Rs. 24.57 Lakhs for a Project titled "A study of Groundwater Exploration using GIS" by Visveswaraya Technological University Belagavi, in 2010
 3. Rs. 6.00 Lakhs for a Project titled "Integrated Study of Surface and Subsurface Water : A Case Study of Back Water Effect of Alamatti Reservoir" from AICTE. New Delhi in 2008

Publications
Books/Chapters

:

1. Hiremath G.M., Soraganvi Veena S. (2020) Performance Analysis of Treatment of Distillery Spent Wash Using EGSB Reactor with Addition of Iron and Manganese. In: Ghosh S., Bhattacharya C., Satyanarayana S., Varadarajan S. (eds) Emerging Technologies for Waste Valorization and Environmental Protection. Springer, Singapore. https://doi.org/10.1007/978-981-15-5736-1_10
2. Naveen N. Desai, Veena S. Soraganvi (2019) “Performance of TiO₂ Photocatalytic Nanomaterial in Removal of Lead from Sanitary Landfill Leachate Using Sunlight” Waste Valorisation and Recycling, Springer Nature Singapore Pte Ltd. 2019, https://doi.org/10.1007/978-981-13-2784-1_44

Journals

1. Veena S. Soraganvi, Rachid Ababou, M. S. Mohan Kumar, (2020) “Effective flow and transport properties of heterogeneous unsaturated soils” Advances in Water Resources (Elsevier), Spl Issue Volume 143, 103655 <https://doi.org/10.1016/j.advwatres.2020.103655>. <http://www.sciencedirect.com/science/article/pii/S0309170820300348>)
2. Anuradha Tanksali, and Veena S. Soraganvi (2020) “Assessment of impacts of land use/land cover changes upstream of a dam in a semi-arid watershed using QSWAT” Modeling Earth Systems and Environment (Springer) pp-16, <https://link.springer.com/article/10.1007/s40808-020-00978-5>
3. Naveen N. Desai, Veena S. Soraganvi and Vijay Kumar Madabhavi (2020) “Solar Photocatalytic Degradation of Organic Contaminants in landfill leachate using TiO₂ Nanoparticles by RSM and ANN” Nature environment and pollution technology 19(2) pp651-662
4. Naveen N. Desai, Veena S. Soraganvi, (2020) “Solar Photocatalytic Degradation of Lead in Aqueous Solution using TiO₂ Nanoparticles: Process optimization by response surface methodology (RSM)” Indian Journal of Environmental Protection – Vol.40 (6) pp616-622, <https://ijep.co.in/uploads/journals/15952559398504.pdf>
5. Anuradha Tanksali, Veena S. Soraganvi (2020) “GIS-based assessment of Hydrochemical characteristics of groundwater in a DOAB of Krishna basin, Karnataka” Indian Journal of Environmental Protection, Volume 40(5), pp451-461
6. Madhumala Y, Veena S Soraganvi and Nikhita H Ingalagi (2020) “Chromium Reduction using bacterial Biofilms” International Journal Applied Sciences and Technology

7. Madhumala Y, Manjula Mathapati and Veena S Soraganvi (2019) "Removal of heavy metal from industrial waste water using biofilm producing bacteria" International Journal of Bio-Technology and Research (IJBTR), Vol. 09 pp15-30
8. G. M. Hiremath and Dr, Veena S. Soraganvi, (2018) "Performance analysis of Hybrid electrolysis enhanced anaerobic digestion reactor in treating distillery spent wash", International Journal of Technical Innovation in Modern Engineering and Science [IJTimes], Vol. 4, Issue 11, , pp. 241-249.
9. Madhumala Y., Veena S. Soraganvi, and Bharati S Meti (2018) "Reduction of hexavalent chromium using biofilm forming isolates" ,International Journal of technical innovation in modern engineering and science,November, Vol 4, issue 11, pp.197-205
10. Veena S. Soraganvi, Rachid Ababou and M.S. Mohan Kumar (2017) "Analysis and upscaling of unsaturated flow through randomly heterogeneous soil, ASCE journal of Hydrologic Engineering, Vol 22(4) - 04016063 pp 1-13 ASCE, ISSN 1084-0699. DOI: 10.1061/(ASCE)HE.1943-5584.0001480
11. Madhumala Y., Soraganvi, Veena S .,Vishal Managutti., Pooja B Patil (2017) "Comparative study of Bioreduction of water containing hexavalent chromium using biofilm forming and non-biofilm forming bacteria", International Journal of Advanced research Methodology in Engineering and Technology, March 2017,Vol.1 issue 2, pp.41-14.
12. Naveen Desai, Anuradha Tanksali, Veena S. Soraganvi (2016) "Vermicomposting: Solution for milk sludge , Proceedia Environmental Sciences (Elsevier) vol. 35: pp 441-449.
13. Anuradha Tanksali, Veena S. Soraganvi (2015) "Groundwater quality analysis of Hungund Taluk with Emphasis on Fluoride", International journal of research in engineering and technology, Vol. 4 spl issue 11, pp 55-60
14. Naveenkumar, Veena S. Soraganvi, Satish S Hooli (2015) "Groundwater potential mapping in a part of Malaprabha river basin using remote sensing data and geographic information system (GIS)" Journal of Environmental earth science Vol. 5 No 5; ISSN (Paper) 2224-3216 ISSN (Online) 2225-0948
15. Naveenkumar Subhashchandra Polic Patil, Veena S.

- Soraganvi, (2015) “Groundwater quality: with focus on fluoride concentration in rural parts of Bagalkot district, Karnataka and defluoridation studies” Journal of Environmental earth science vol 5, No 11 2015; ISSN (Paper) 2224-3216 ISSN (Online) 2225-0948 pp 68-75
16. Guruprasad M. Hugar and Veena. S. Soraganvi (2014) “Effect of SOC in the form of amendments on hydraulic properties of arid soils”, International journal of civil and structural engineering vol 4, No 3, pp450-468
 17. Guruprasad M. Hugar and Veena. S. Soraganvi, (2014) “Impact of soil organic carbon on bulk density and plasticity index of arid soils of Raichur district, India”, International research journal of environment sciences Vol. 3(2), pp48-58
 18. Veena S Soraganvi (2013) “ A study of reservoir induced land use / land cover changes using GIS ; A case study of submergence due to Alamatti Dam in Karnataka, India” International journal of remote sensing and GIS , Vol. 2(3), pp92-103
 19. Guruprasad M. Hugar, Veena S. Soraganvi and G.M. Hiremath (2012) “Effect of organic Carbon on soil moisture”. Indian Journal of Natural Science; VOL 3/ Issue 15/ 2012. 1191-1199.
 20. Veena S. Soraganvi and M. S. Mohan Kumar, (2009) “Modeling of flow and advection dominant solute transport in variably saturated porous media” ASCE Journal of hydrologic engineering, Vol. 14(1), pp1-14 [https://ascelibrary.org/doi/abs/10.1061/\(ASCE\)HE.1943-5584.0001480](https://ascelibrary.org/doi/abs/10.1061/(ASCE)HE.1943-5584.0001480)
 21. Soraganvi Veena S., M. S. Mohan Kumar and Srinivas Muttineni (2003) Modeling of seepage flow through layered soils” Springer proceedings in physics, Vol. II, 2003, pp313-325

Conferences

- :
1. Anuradha Tanksali & Veena S Soraganvi Seasonal Water balance of groundwater dominated irrigational watershed of Krishna basin, India 2nd International conference of River Corridor, Research & Management by IIT Guwahati 30th May-1st June 2022
 2. Shashank Bangi & Veena S Soraganvi Estimation of Actual Evapotranspiration using LANDSAT 8 OLI/TIRS imagery over Ghataprabha river basin International Conference on Water and Environmental Management by KSCSTE-Centre for Water Resources Development and Management Kozhikode 162-163 June 2022

3. Veena S. Soraganvi and Anuradha Tanksali, "Impact of LULC on the seasonal water balance of groundwater dominated irrigational watershed of Krishna basin, India" Virtual International Conference on Innovative Trends in Hydrological and Environmental Systems (ITHES-2021) 28-30 April 2021
4. Veena S. Soraganvi and Anuradha Tanksali, "Assessment of Water Balance of a Watershed under varied Land Use and Land Cover", National Conference, INGWC-2020; 18th to 20th Feb 2020, KSCSTE-Center for Water Resources Development and Management, Kozhikode, Kerala.
5. Veena S. Soraganvi, Gururaj, B and Anuradha Tanksali "Integrated Groundwater studies in a part of Krishna Basin using GIS", National Conference, INGWC-2020; 18th to 20th Feb 2020, KSCSTE-Center for Water Resources Development and Management, Kozhikode, Kerala
6. G. M. Hiremath and Dr, Veena S. Soraganvi, "Performance Analysis of Treatment of Distillery Spent-wash Using EGSB Reactor with Addition of Iron and Manganese ", 8th International Conference on Sustainable waste management, Acharaya Nagarjuna University, Guntur, A.P, Nov. 22-24, 2018.
7. Rashmi Urabinhatti and Veena S. Soraganvi, "Formulation of reactive mixture for Permeable Barrier in retention of heavy metals" Paper presented in International Conference on soil and Environment 2017, conducted by Indian Geotechnical Society at IISc, Bangalore.
8. Anuradha Tanksali and Veena S. Soraganvi (2017) "Hydro-chemical characteristics and GIS-based assessment of groundwater quality in Doab region of Krishna basin, Karnataka, India" at 7th International Ground Water Conference (IGWC-2017) on 'Groundwater Vision 2030:Water Security, Challenges and Climate Change Adaptation', held in New Delhi from 11th to 13th December 2017.
9. Veena Soraganvi, Bhargavi, Anuradha Tanksali, "Anaerobic Treatment of Landfill Leachate using EGSB Reactor", paper accepted for presentation in International Conference on Solid waste Mangement at Jadavpur University Kolkata Nov 24 to 26 2016
10. G.M. Hiremath and Veena S. Soraganvi, "Accelerated Granulation in Expanded Granular Sludge Bed (EGSB) Reactor using Distillary Spent Wash with Chitosan and Aluminium Sulphate" The Third Intl. Conf. on Advances in Civil, Structural and Environmental Engineering – ACSEE 2015 Institute of Research: Engineers and Doctors , Zurich Switzerland , ISBN :98-1-63248-065-1doi:

11. Veena S. Soraganvi, Geyir Loya, Deepika Munavalli, Redong Dai, "Assessment of groundwater quality parameters using GIS" Invited speaker/paper in National conference CSWM-2015 at NIT Warangal.
12. Anuradha Tanksali, Veena S. Soraganvi "Groundwater quality analysis of Hungund Taluk with Emphasis on Fluoride", paper presented in National Conference CSWM- 2015 at NIT Warangal
13. Guruprasad M. Hugar and Veena S. Soraganvi, "Short term effect of soil Organic Carbon on Soil Shrinkage Limit and friability Index", proceedings of International conference on recent in engineering science. September 4-5, 2014
14. Guruprasad M. Hugar and Veena S. Soraganvi, "Effect of organic carbon on soil shrinkage limit and friability index", National Conference on beneficial use of Flyash in construction industry and agriculture-May 23-24, 2014
15. Veena S. Soraganvi, Sanket Balikai, Swati Gudagudi "Groundwater Balance and Water Quality Studies of a DOAB in Basalt Aquifers , 5th International Groundwater Conference (IGWC-2012)(December 18-21, 2012) Maulana Azad College of Arts, Science and Commerce, Aurangabad, India.
16. Soraganvi Veena S, Rachid Ababou, M.S.Mohan Kumar , "Modelling and upscaling unsaturated flow through randomly heterogeneous soils". Proceedings of the XVIII International Conference on Water Resources Computation methods in water Resources (CMWR) 2010 J.Carrera (Ed) CIMNE, Barcelona 2010.
17. Soraganvi Veena S., Ababou, Rachid and M.S.Mohan Kumar, "Stochastic Modelling of unsaturated Flow and Transport : Numerical Experiments, Macroscopic behaviour and upscaling, Proceedings of International Conference IAHR GW 2006 conference "Groundwater in complex environments" held from June 12-16, 2006 at Toulouse, France.
18. Soraganvi V. S. and M.S. Mohan Kumar, "Modelling the flow through layered soils". Proc. int. Conf. From Experimental Evidence towards numerical modelling of unsaturated soils. Weimar, Germany, 2003.
19. Soraganvi V.S. and Mohan Kumar " Finite analytical numerical model for unsaturated flow and transport" Proc. Of Int. Conference for the analytic element method, Saint Etienne, France, 2003.
20. Veena S. Soraganvi, M.S. Mohan Kumar, and Srinivas

Muttineni “Modelling the flow through layered soils”, Proc. Int. Conf. From experimental evidence towards numerical modelling of unsaturated soils, Weimar, Germany, 2003.

21. Datta, B., and Veena S. Soraganvi (1996), “Water quality control and hydropower generation as conflicting objective of optimal reservoir operation”, Proceedings of International Conference on :Aspects of Conflicts in Reservoir Development and Management , City University, London, September 1996.

Invited Talks

- : 1. Invited Resource person for lecture on “ Applications of RS & GIS in Water Resources and Agriculture” in 5 Days VGST sponsored FDP titled “Advance Technical Trainingg on RS & GIS” 1-7th Nov. 2022 in GND College of Engineering, Bidar
2. Invited Guest Lecture on “Remote sensing & GIS Applications in Groundwater Mapping” in TIER-III training program on “Groundwater Development & Management Practices” organized by CGWB SW Zone Bangalore in BEC on 18.10.2022
3. Lecture on " Integrated Watershed Modelling using RS & GIS" in Webinar titled " Geospatial Technology for LowLAnd and Upland Watershed Management" 8-11 Dec 2020, Global Academy of Technology, Bangalore
4. Resource person on “Applications of RS and GIS in Civil Engineeering” in a STTP on “Recent Advances in GIS and Its Applications in Civil Engineering”, from 20th to 24th January 2020 Sanjay Godhavath University Kolhapur.
5. Invited Speaker on “Assessment of groundwater quality parameters using GIS” in National conferences CSWM-2015 at NIT Warangal.
6. Keynote Speaker in UGC workshop on “Teachings in GIS & GPS for teachers and Researchers” at R.P.D. College of Arts and Science, Belgaum. 2015
7. Invited Guest lecture at “Sustainable management of water resources” in a workshop titled “Water Resources Management” by CGWB, 2015

Events Organized

- :
1. Work shop on Rainwater Harvesting, 6 to 8th Nov 2008
 2. CEP on Design and Construction of Water storage structures, 1st to 5th Aug 2006
 3. CEP Soil mechanics and Hydrology, 2nd to 6th Sept 2013
 4. SDP on QGIS, 27-31st Jan 2014
 5. SDP Recent trends in GIS and exploring Career opportunities, 4-5th April 2014
 6. SDP program in ArcGIS, 21-26 July 2015
 7. SDP on C&C++, 21-26 July 2015
 8. SDP Orientation towards learning and research 8-11 Jan 2016
 9. SDP for Aspiring College Teachers @ IIT Madras, 23-25 July 2016

**Conferences/ Symposiums/
Workshops/ Training
Programs Attended**

1. Virtual International Conference on Innovative Trends in Hydrological and Environmental Systems (ITHES-2021) 28-30 April 2021
2. National Conference, INGWC-2020; 18th to 20th Feb 2020, KSCSTE-Center for Water Resources Development and Management, Kozhikode, Kerala.
3. FDP on “Achieving Academic excellence”, 1-21 Nov 2015
4. Senior Faculty Development Program, 11-13 Nov 2013 at BEC, Bagalkot by IISc. Bangalore
5. Winter School on “Research tools for Evaluating Availability and Safety of Surface Water and Ground Water”, 6-10 Feb 2012, KSCST & IISc., Bangalore
6. Workshop on “Identifying Weak Students”, 20th June 2013 at SJCE, Mysore
7. FDP on “Recent Trends in Management of Environmental Systems”, 28-30 Nov 2013
8. Training program “Introduction to ArcGIS 9”, 18-22 Aug.

2008 NIIT GIS Bangalore

9. Training on “Modeling Water flow and contaminant transport in soils and Groundwater using the HYDRUS Computer Software Packages”, 4-5 Feb 2012, KSCST & IISc., Bangalore
10. National conference CSWM-2015 at NIT Warangal.
11. International Conference IAHR GW 2006 conference “Groundwater in complex environments” held from June 12-16, 2006 at Toulouse, France
12. International Conference on soil and Environment 2017, conducted by Indian Geotechnical Society at IISc, Bangalore

Awards and Honors

- :**
1. **Award for Research Publications (ARP)** in Civil engineering Stream, for the academic Year 2020-2021 from Vision Group of Science and Technology (VGST), Govt. of Karnataka
 2. **Scholarship from French Govt.** for a short stay for Collaborative research in Institute of Mechanics of fluids, IMFT France, 2004
 2. **Visiting Scientist invitation** from the Institute of Fluid Mechanics Toulouse France for Collaborative research work, 2006