Year	Student Authors	Faculty Name	Title of The Paper	Journal
		Academic Y	ear: 2023-2024	
2024	Abhijith S, Abhilash G, Mohamed Sabir, Najeem, Sanjay Krishnan R.	Ramaswamy K. P., Chinsu Mereena Joy	Properties of eco-friendly concrete with partial replacement of fine aggregate with recycled plastic waste and cement by silica fume	Journal of Emerging Technologies and Innovative Research
2024	Fathima S.	Adarsh S.	Multiscale teleconnection analysis of rainfall patterns over Calicut, India using wavelet coherence	Journal of Earth System Science
2024	Sruthi S, Sreelekshmi C R, Urmila Dileep, Ameesha J Fathima	Adarsh S.	Analysing the impact of meteorological drought on crop yield of Kerala, India: A Wavelet coherence approach	Paddy and Water Environment
2024	Sreelekshmi S, Anakha Remesh, VarshaVenkidesh, Krishna A. J.	Priya K. L.	A hybrid electrocoagulation- biocomposite adsorption system for the decolourization of dye wastewater	Environmental Research
2024	Thamanna Rahuman A, Hridya J., Devi P. S., Mariyam Salkka S.	Priya K. L., Indu M. S.	Evaluating the performance of electrocoagulation system in the removal of polystyrene microplastics from water	Environmental Research
2024	K. Vidyalashmi, Megha Chandana L, Nandana J. S.	Priya K. L.	Analysing the performance of the NARX model for forecasting the water level in the Chikugo River estuary, Japan	Environmental Research
2023	Shamseena Vahab, Aayisha Salim	Adarsh S.	Assessment of Multifractal Fingerprints of Reference Evapotranspiration Based on Multivariate Empirical Mode Decomposition	Atmosphere
2023	S. Fathima, Nimisha Baiju, S. Meenakshi, M. Soumya Krishnan	Adarsh S.	Analyzing the streamflow teleconnections of greater Pampa basin, Kerala, India using wavelet coherence	Physics and Chemistry of the Earth

# List of student journal publications

Year	Student Authors	Faculty Name	Title of The Paper	Journal
2023	Shabana Iqbal, Archana A R, Gopika B, Michi Mina,	Priya K. L., Athul M. Madhu	Implications of solid waste dumps on the microplastic abundance in groundwater in Kollam, India	Journal of Environmental Management
		Academic Y	Year: 2022-23	
2023	Sneha Binoy, Jyoma J P, Alisha A, Sreeshma T	Adarsh S., Muhammed Siddik A.	Flood risk analysis and Mapping under Compound Hazards: A Copula Approach for tropical coastal district of Alappuzha, India	
2022	Aggie Suman, Archana D. S.	Adarsh S.	Unveiling the climatic origin of streamflow persistence though multifractal analysis of hydro- meteorological datasets of India	Hydrological Sciences Journal
2022	M. Soorya Gayathri, K. Shehinamol, Zaina Nizamudeen, Mahima R. Lal	S. Adarsh	Evaluation of change points and persistence of extreme climatic indices across India	Natural Hazards
		Academic Y	Year: 2021-22	
2021	Nityanjaly L. J., Sarang R., Nandhineekrishna P.	Adarsh S.	Multifractal characterization and cross correlations of reference evapotranspiration time series of India	The European Physical Journal, Special Topics
	L	Academic Y	Year: 2020-21	L
2021	Ashima Noushad, Athira C. M., Jiss Theresa Jose, Kiyum Padu	Munavar Fairooz C., Sai Niveditha M. G.	Identifying areas of intervention for enhancing the attractiveness of Inland waterway transport based on users' perception: A case study of Kerala	Case Studies on Transport Policy
2020	Akshay Sunil, B. Deepthi	Adarsh S.	Modeling future irrigation water demands in the context of climate change: a case study of Jayakwadi command area, India	Modeling Earth Systems and Environment
2020	Archana D. S., Nityanjaly L. J., Vandana T, NandhineeKrishna P.	Adarsh S.	Multifractal Cross Correlation Analysis of Agro - Meteorological Datasets (Including Reference Evapo transpiration) of California, United States	Atmosphere
2021	Archana D. S., Drisya S. Dharan	Adarsh S.	Spatiotemporal variability of multifractal properties of fine	Natural Hazards

Year	Student Authors	Faculty Name	Title of The Paper	Journal
			resolution daily gridded rainfall fields over India	
2021	Arya C. A.	Muhammed Siddik A.	Environmentally Useful Life of Interlocking Concrete Block Pavements: Critical Time Period Concept Environment	
2020	B. Deepthi, Akshay Sunil	S. Adarsh	Ranking of CMIP5-Based General Circulation Models Using Compromise Programming and TOPSIS for Precipitation: A Case Study of Upper Godavari Basin, India	International Journal of Big Data Mining for Global Warming
2021	Jesna Fathima, Anamika B., Athira V. R.	Udayakumar J.	Environmental implications of the soil settlement in Munroe Island Kollam, Kerala, India	Ecology, Environment and Conservation
2021	Mufeed V. T., Pranav P. S., Sethu C. Joseph, Sooraj A. R., Viswajith S.	Udayakumar J.	Implications of the solid waste management practices on the socio-economic status and quality of life of people: A case study from Kollam urban area, Kerala	Pollution Research
2021	Muhammed Ajmal, Akhil R., Muhammed Farooq Z., Rahul R.	Udayakumar J.	Environmental implications of the organic carbon content of soils from different land uses in Kollam district, Kerala	Ecology, Environment and Conservation
		Academic	Year: 2019-20	
2020	Archana D. S., Drisya S. Dharan	Adarsh S.	Multifractal Description of Daily Rainfall Fields over India	Journal of Hydrology
2019	A. Anandalekshmi, Seenu T. Panicker, Sajna Aloysius, M. Mehjabin	S. Adarsh, A. Muhammed Siddik	Modeling the concurrent impact of extreme rainfall and reservoir storage on Kerala floods 2018: a Copula approach	Modeling Earth Systems and Environment
2020	Drisya S. Dharan, A. R. Nandhu, B. Anand Vishnu, Vysakh K. Mohan	S. Adarsh	Multifractal description of streamflow and suspended sediment concentration data from Indian river basins	Acta Geophysica
		Academic	Year: 2018-19	
2018	Ajin P. John, Abi Abraham, R. N. Anagha, M. P.	S. Adarsh	Developing stage-discharge relationships using multivariate empirical mode decomposition-	Applied Water Science

Year	Student Authors	Faculty Name	Title of The Paper	Journal
	Afiya, K. K. Arathi, Aaliya Azeem		based hybrid modeling	
2019	B. Deepthi, G. Gayathri, S. S. Aswathy, S. Bhagyasree	S. Adarsh	Multifractal characterization of meteorological drought in India using detrended fluctuation analysis	
2018	Drisya S. Dharan, P.K. Anuja, Aggie Suman	S. Adarsh	Unravelling the scaling characteristics of daily streamflows of Brahmani river basin, India, using arbitrary order Hilbert spectral and detrended fluctuation analyses	SN Applied Sciences
2018	S. Drisya Dharan, P. K. Anuja	S. Adarsh	Analyzing the Hydrologic Variability of Kallada River, India Using Continuous Wavelet Transform and Fractal Theory	Water Conservation Science and Engineering

Year	Authors	Faculty Name	Title of the Paper	Conference
		Academic	Year: 2023-24	
2023	Beema Mussafina M N, Navya Prasad A, Shana S George, NourinFathima R	Priya K. L.	Influence of the Covid-19 Pandemic on Plastic Debris Accumulation in the Ashtamudi Estuary	4 <sup>th</sup> International Association for Hydro-Environment Engineering and Research (IAHR) Young Professionals Congress
2023	Vidyalashmi K, Nandana J S, MeghaChandana L	Priya K. L.	A study on salinity intrusion of Ashtamudi estuary during pre-monsoon period	4 <sup>th</sup> International Association for Hydro-Environment Engineering and Research (IAHR) Young Professionals Congress
2023	Megha R Raj, Krishnapriya K, Hisana N,	Priya K. L.	Evaluating the Performance of ANN and ANFIS Models for the Prediction of Chlorophyll in the Ashtamudi Estuary, India	Advances in Data-Driven Computing and Intelligent Systems. ADCIS 2023 (Lecture Notes in Networks and Systems, Vol 891. Springer, Singapore)
		Academic	Year: 2022-23	
2023	Meenakshi Pradeep, Ridhin Jacob Karukayil, Shafna S H, Muhiyadheen Arshak M S	Ramaswamy K. P.	Effect of Bio- Admixtures on Hardened Properties of Alkali-Activated Mortar (AAM)	International Conference on Sustainable Practices in Engineering &Technology (ICSPET'23) organised by Department of Civil Engineering, Sree Buddha College of Engineering, Pattoor, June 14-16, 2023.
2023	Meenakshi Pradeep, Ridhin Jacob Karukayil, Shafna S H, Muhiyadheen Arshak M S	Ramaswamy K. P.	Effect of Bio- Admixtures on Fresh and Hardened Properties of Alkali- Activated Concrete (AAC)	International Conference on Sustainable Practices in Engineering &Technology (ICSPET'23) organised by Department of Civil Engineering, Sree Buddha College of Engineering, Pattoor, June 14-16, 2023.

### List of student conference publications

Year	Authors	Faculty Name	Title of the Paper	Conference
2022	Nikhil Jose, Gokul Mohan, Mohammed Zayan, Mansoor Ali	Indu M. S.	A Comparative Assessment of GIS Integrated ILP and MILP Techniques for Solid Waste Routing	6 <sup>th</sup> International Conference on Modeling and Simulation in Civil Engineering (ICMSC 2022)
2022	Shamna S, Amina B, Surya Suresh, Arun Krishna P J	Adarsh S.	Multiscale Analysis of Drought Teleconnections of West Central India Using Wavelet Coherence	on Modeling and Simulation
		Academic	Year: 2021-22	I
2021	Ashwin Rajeev, Nikhil S Varghese, Amala Michal, R Megha	Priya K L, Adarsh S.	Influence on non- cohesive sediments on settling velocity of clay floc in Bouregreg Estuary	Twenty-sixth biennial conference held on 1-4, 8-11 November 2021 organized by The Coastal and Estuarine Research Federation (CERF 2021)
2021	Haritha. R, Athulya. R.S, Gopika.S, Sankeerthana Suresh	Priya K. L.	Study on the settling velocity of suspended sediments in the Pasig river estuary, Phillippines	Twenty-sixthBiennialConference held on 1-4 and 8-11 November 2021, organizedby The Coastal and EstuarineResearch Federation (CERF2021)
2021	Allen Mathew, Hanna C. Joshy, Simon J. Maramangalam, Sreya Jose	M. Sirajuddin, Amal Azad Sahib	A Study on Enhancement of Thamarachal Clay and its Utilization in Brick Making	Indian Young Geotechnical Engineers Conference, 2021
	1	Academic	Year: 2020-21	
2021	Hanna C Joshy, Rameez Z, Sarath S, Mansoor Ali K	Ramaswamy K. P.	A Suitability Study of Using Crushed Fluorescent Lamp Waste as Fine Aggregates	Conference in Civil

Year	Authors	Faculty Name	Title of the Paper	Conference
2021	Aiswarya K, Deepak R, Devadath V S, Alfiya A A	Ramaswamy K. P.	Development of Alkali Activated Pervious Cementless Concrete	International Web Conference in Civil Engineering for a Sustainable Planet (ICCESP 2021), 5 <sup>th</sup> and 6 <sup>th</sup> March 2021, Organised by Habilete Learning Solutions, with American Society of Civil Engineers (ASCE), TKM College of Engineering, Kollam, and Baselios Mathews II College of Engineering, Kollam, Kerala, India.
2021	Amala Michal, Sneha Binoy, Akshay Mohan, Alisha A	Ramaswamy K. P.	A Review and Laboratory Trials on the Development of Geopolymer Mortar from Ceramic Waste	International Web Conference in Civil Engineering for a Sustainable Planet (ICCESP 2021), 5 <sup>th</sup> and 6 <sup>th</sup> March 2021, Organised by Habilete Learning Solutions, India in association with American Society of Civil Engineers (ASCE), TKM College of Engineering, Kollam, and Baselios Mathews II College of Engineering, Kollam, Kerala, India.
2021	Rugma Sunil, Parvathy Panicker L, R Megha, Athira K. Vijayan	Ramaswamy K. P.	Preparation and Properties of Alkali Activated Coarse Aggregates using Fly Ash and Slag	Conference in Civil Engineering for a Sustainable

Year	Authors	Faculty Name	Title of the Paper	Conference
2021	Archana D. S., Anjali Jayan, Ashly Johnson	Adarsh S.	Multifractal fingerprinting of Fine Resolution Daily Gridded Rainfall of Kerala Meteorological Subdivision, India Using Detrended Fluctuation Analysis	Modelling, Computing and Soft Computing (CSMCS 2020) 10–12 September 2020 NIT Calicut, Kozhikode,
2021	Ayyappan U., Adithya G. Murickan, Balagopal J., Arun S. Kumar	Indu M. S., Priya K. L.	Continuous flow electrocoagulation system for the treatment of coir industry wastewater	Conference in Civil Engineering for a Sustainable
2021	Namitha S., Mohammed Nabil K., Mohammed Rafeeque N. V., Reshma Sundhar	Ramaswamy K.P., B. Saraswathy	Effect of alkali content and slag content on the fresh and hardened properties of air cured alkali activated mortar containing fly ash	ConferenceinCivilEngineering for a Sustainable
2020	Akshay Vikram, Alex Abraham S M, Greeshma M R, Iswarya Ani	Adarsh S, Muhammed Siddik A	Evaluation of Liquefaction Susceptibility of Soils in Kerala, India, based on equivalent N- Value & Equivalent Acceleration	Geotechnical Conference 2020 (Published in Springer
2020	Mohammed Sahad M., Vijeesh K. P., Syamjith C. K., Mohammed Raneesh M.	Mohammed Thowsif, M. Nazeer, Ramaswamy K. P.	Mechanical properties of blended cement mortar systems exposed to ammonium chloride environment	Proc. IOP Conference Series: Materials Science and Engineering (ERTSE 2020, Organised by VIT Chennai)

Year	Authors	Faculty Name	Title of the Paper	Conference
2020	Mohammed Sahad M., Vijeesh K. P., Syamjith C. K., Mohammed Raneesh M.	Mohammed Thowsif, M. Nazeer, Ramaswamy K. P.	Durability Studies on Blended Cement Paste Exposed to Ammonium Chloride Environment	Proc. IOP Conference Series: Materials Science and Engineering (ERTSE 2020, Organised by VIT Chennai)
2020	Namitha S., Muhammed Nabil K., Mohammed Rafeeque N. V., Reshma Sundhar	Ramaswamy K. P.	A study on the setting and flow behaviour of alkali activated slag/fly ash composites in ambient condition	
2020	Nidhu M. S., Sniktha V. R., Libin Benny, Jerin Thomas	Ramaswamy K. P.	Degradation Kinetics of Alkali-Activated Mortar in Aggressive Citric Acid Environment	Proc. IOP Conference Series: Materials Science and Engineering (ERTSE 2020, Organised by VIT Chennai)
2020	Sreelekshmi S., Sera Rachel Varghese, Naeem, Remya S. Chandran	Ramaswamy K. P.	Rheological and Strength Behaviour of Red Mud – Slag Geopolymer Composites	
2020	Sithara S. K., Surya S., Sayana Parveen, Liz Maria Damiyan, Vinayak Mohan	Muhammed Siddik A., Adarsh S.	Liquefaction Susceptibility Mapping of Kollam Coastal Stretch, Kerala, considering Geotechnical Parameters	Geohazards (Published in Springer Lecture Notes in Civil Engineering, Vol. 86)
2021	Soorya Gayathri M., Mahima R. Lal, Shehinamol K., Zaina Nizamudeen	Adarsh S.	Spatio-temporal Analysis of Extreme Temperature Indices of India Using Non- parametric Tests	Proc. Hydro 2020 International Conference
		Academic	Year: 2019-20	
2020	Mohammed Sahad M., Vijeesh K. P., Syamjith C. K., Mohammed Raneesh M.	Mohammed Thowsif, M. Nazeer, Ramaswamy K. P.	Durability Studies on Blended Cement Mortar System exposed to Ammonium Chloride Environment	National Conference on Sustainable Practices in Civil Engineering (SPICE'20), organised by Department of Civil Engineering, Sree Buddha College of Engineering, Pattoor, Alappuzha.

Year	Authors	Faculty Name	Title of the Paper	Conference
2020	Richu Diya, Jeena Jose, Sreya Jose, Riya S., Shyma M.	Adarsh S.	Trend Analysis of Indian Summer Monsoon Onset and Withdrawal	National Conference on Sustainable Practices in Civil Engineering (SPICE'20), organised by Department of Civil Engineering, Sree Buddha College of Engineering, Pattoor, Alappuzha.
2020	Adarsh Nair, R. Padmanabhan, Tom Isac, Vishnu Anilkumar	Anu V. Thomas, Ramaswamy K. P.	Strength of Concrete with Wood Ash and Waste Glass as Partial Replacement Materials	IOP Conference Series: Earth and Environmental Science (5 <sup>th</sup> International Conference on Modeling and Simulation in Civil Engineering, ICMSC 2019)
2020	Athira S., Anjali Cletus, Anjana G. Ramesh	Indu M. S., K. L. Priya	Performance evaluation of electrocoagulation with hybrid electrodes in decolourisation of methyl orange dye	International Conference on Advances in Civil Engineering (ACE 2020), VNIT Nagpur (Published in Springer Lecture Notes in Civil Engineering, Vol. 172)
2020	Muhammed Nabil K., Namitha S., Reshma Sundhar, Mohammed Rafeeque N. V.	Ramaswamy K. P.	Effect of Superplastizicer Type on the Fresh and Strength Properties of Alkali Activated Slag Composites	IOP Conference Series: Earth and Environmental Science (5 <sup>th</sup> International Conference on Modeling and Simulation in Civil Engineering, ICMSC 2019)
2020	P. M. Raji, S. Surendran, N. Navab, A. S. Nath, K. Padu	Munavar Fairooz Cheranchery	Are the preferences of travelers same across cities? A tale of two Indian cities	IOP Conference Series: Earth and Environmental Science (5 <sup>th</sup> International Conference on Modeling and Simulation in Civil Engineering, ICMSC 2019)
2019	Syam S., Sreehari R., Jithin Jose, Rahul T. P.	Indu M. S.	Design of a Green Stormwater Control Infrastructure (GSI) using bioretention in Thiruvananthapuram Museum Botanical Garden	9 <sup>th</sup> International Conference on Waste Management towards Circular Economy, School of Civil Engineering, KIIT Deemed to be University
	_	Academic	Year: 2018-19	
2018	Anand Vishnu B., Drisya S. Dharan, Anuja P. K., Govindan Unnithan	Adarsh S.	Trend Analysis of Extreme Temperature over India using Non- Parametric Tests and Empirical Mode Decomposition	Proc. National Conference on Water, Environment & Society (NCWES 2018), Organized by Centre For Water Resources Institute of Science and Technology, Jawaharlal Nehru

Year	Authors	Faculty Name	Title of the Paper	Conference
				Technological University, Hyderabad
2019	Athira S., Anjali Cletus, Anjana G. Ramesh	Priya K. L., Indu M. S.	Performance evaluation of electrode characteristics in electrocoagulation of grey wastewater	All India Seminar on Kerala's water woes - challenges & mitigation, organized by The IEI (India)
2018	Nandhu A. R.	Adarsh S., Athul M. Madhu	Trend and Change Point Analysis of Annual Maximum Streamflows of Krishna Basin Using Nonparametric Tests and Empirical Mode Decomposition	International Conference on Infrastructure Development: Issues, Innovations & The Way Forward, ICID – 2018, MBCET Trivandrum
2018	Roshan Jha	Adarsh S.	Multifractal Description of Daily Streamflows of Koshi Basin, Nepal using Detrended Fluctuation Analysis	Proc. International Conference on Hydrology and Watershed Management (ICHWAM 2018), Organized by Centre For Water Resources Institute of Science and Technology, Jawaharlal Nehru Technological University, Hyderabad

## List of student publications in book chapter

Year	Student Authors	Faculty Name	Title	National/ International		
		Academi	c Year: 2023-24			
2024	Megha R. Raj Krishnapriya K., Hisana N.	Priya K. L.	Evaluating the Performance of ANN and ANFIS Models for the Prediction of Chlorophyll in the Ashtamudi Estuary, India.	International Springer Lecture Notes in Networks and Systems, Vol. 891		
	Academic Year: 2021-22					
2021	Anjali Cletus, Athira S., Anjana G. Ramesh	Priya K. L., Indu M. S.	Performance Evaluation of Electrocoagulation with Hybrid Electrodes in the Decolourisation of Methyl Orange Dye	International Springer Lecture Notes in Civil Engineering, Vol. 172		
2021	Akshay Vikram, Alex Abraham S. M., Greeshma M. R., Iswarya Ani	Adarsh S., Muhammed Siddik A.	Evaluation of Liquefaction Susceptibility of Soils in Kerala, India based on Equivalent N- Value and Equivalent Acceleration.	International Springer Lecture Notes in Civil Engineering, Vol. 167		
		Academi	c Year: 2020-21			
2020	Sithara S. K., Surya S., Sayana Parveen, Liz Maria Damiyan, Vinayak Mohan	Muhammed Siddik A., Adarsh S.	Liquefaction Susceptibility Mapping of Kollam Coastal Stretch, Kerala, considering Geotechnical Parameters	International Springer Lecture Notes in Civil Engineering, Vol. 86		

### List of student publications which has received awards

Year	Student Authors	Faculty Name	Publication	Award
Academic Year: 2022-23				
2023	Meenakshi Pradeep, Ridhin Jacob, Shafna S H, Muhiyadheen Arshak M S	Ramaswamy K P	Effect of Bio-Admixtures on Hardened Properties of Alkali-Activated Mortar	Best paper award in International Conference on "Sustainable Practices in Engineering & Technology (IC- SPET'23)" organized by Department of Civil Engineering, SBCE, Pattoor, June 14-16, 2023.
Academic Year: 2021-22				
2021	Ashwin Rajeev Pillai, Nikhil Solomon Varghese, R. Megha, Amala Michal	Priya K L	Estuarine contaminant dynamics – Assessing the impact of human interventions	\$300 participation award for the International Conference of Coastal and Estuarine Research Federation (CERF 2021)
2021	Haritha R, Gopika S., Sankeerthana Suresh, Athulya R. S.	Priya K L	Estuarine contaminant dynamics – Assessing the impact of human interventions	\$400 participation award for the International Conference of Coastal and Estuarine Research Federation (CERF 2021)
2022	Aggie Suman, Anuja P K	Priya K L, Adarsh S	Prediction of multivariate trophic state index of lentic water bodies in Kerala using machine learning	

The list of other student awards received for the paper presentations is summarised below.

#### Academic Year: 2022-23

 Megha R. Raj, Keerthy Ramesh, Sarath S. S., K. Vidyalashmi, Sudheep K. S. (2020-2024 Batch) were awarded the certificate of achievement for successfully participating in Vishwakarma Awards for Engineering Innovation 2022 on the theme "Water and Sanitation". Their proposal was shortlisted among the top 10 finalists of the competition. The event was organised by the Maker Bhavan Foundation, Win Foundation, and Dr. Kiran C. Patel Centre for Sustainable Development (KPCSD), IIT Gandhinagar.

#### Academic Year: 2018-19

- Anuja P. K. (2015-2019 Batch), for the paper entitled "A Framework for Diagnostic Evaluation of Trophic States of Lentic Water Bodies: A Composite Parametric-Nonparametric Approach" won the First Prize in the paper presentation contest BluePrint at Thathva 2018 held at NIT Calicut Oct 12-14, 2018.
- Aggie Suman (2015-2019 Batch), for the paper entitled "Climatic Evolution of Hydrologic Persistence of Krishna River Basin", won the 3<sup>rd</sup> Prize in the paper presentation contest BluePrint at Thathya 2018 held at NIT Calicut Oct 12-14, 2018.
- 4. **Anuja P. K.** (2015-2019 Batch), for the paper entitled "Development of Modified Trophic State Index for Classification of Lentic Water Bodies", won the First Prize in the paper presentation contest of the technical Fest PANTHEON2018 held at the College of Engineering Trivandrum.
- Aggie Suman (2015-2019 Batch), for the paper entitled "Climatic Evolution of Hydrologic Persistence of Krishna River Basin", won the Second Prize in the paper presentation contest of the technical fest PANTHEON2018 held at the College of Engineering Trivandrum.

### Academic Year: 2017-18

 Anand Vishnu B., Drisya S. Dharan, Anuja P. K., Govindan Unnithan (2015-2019 Batch) won the best paper award for the paper "Trend Analysis of Extreme Temperature over India using Non-Parametric Tests and Empirical Mode Decomposition" in NCWES 2018, JNTU Hyderabad, 4-6 June, 2018.