

CURRICULUM VITAE

Sr. Prof. M. Gopal Naik

M.E. (O.U.), PhD (IIT- Bombay)

Senior Professor of Civil Engineering



University College of Engineering (Autonomous)

Osmania University, Hyderabad - 500 007

Telangana State, India.

(M): +91-9490685098; Email: mgnaikc@gmail.com; mgnaikc@osmania.ac.in

CURRICULUM VITAE

Name	: Sr. Prof. M. Gopal Naik ^{M.E., (O.U), Ph.D. (IIT-B)}
Designation	: Senior Professor of Civil Engineering
Employment	: Department of Civil Engineering, University College of Engineering (Autonomous) Osmania University, Hyderabad-07, T.S., India. Mobile: +91-9490685098; Email: mgnaikc@gmail.com , mgnaikc@osmania.ac.in Website: https://www.uceou.edu/pdfs/faculty/1269108446MGN%20resume.docx.pdf
Date of Birth	: 08-05-1972
Social Background	:
Professional & Industrial Experience	: 28 years
Professional Memberships	: AM-ASCE, FIE, ISRS, IWRS, ISG, ISH
International visits	: Texas, Los Angeles (USA), London (UK), Venice (Italy), Kuala Lumpur (Malaysia), Singapore, Beijing (China), Bangkok (Thailand), Hong Kong (China)
Short-Term courses and Workshops	: 22 nos
Consultancy Experience	: GHMC, QQSUDA, HMWSSB, PMGSY, PR & RWS (I&CAD)
Publications	: 95
Awards/Achievements	: ● Telangana State Best Teacher Award- 2020 by the Government of Telangana. ● Engineer of the Year award-2020 by Institute of Engineers (IEI) Hyderabad on the eve of 160th birthday celebration Bharat Ratna Sir Mokshagundam Vishveshvaraya ● Irrigation Engineer Award- 2019 by Institute of Engineer, Telangana Centre and Govt. of Telangana ● Best Faculty-2019 awarded by EET CRS 8th Science and Technology Awards-2019, Bangalore. ● Distinguished Faculty in Civil Engineering-2017 by Centre for Advanced Research and Design, Venus International Foundation, Chennai.
Research Projects	: ● Awarded SPARC-MHRD Major Research Project, Collaboration with Texas A&M University, USA (Rs.74.38Lakhs), for the Academic year 2018-19. ● Awarded DST-SERB Major Research Project Rs.40.135 Lakhs for the Academic year 2018-19. ● Awarded DST Major Research Project Rs.15.15 Lakhs for the Academic year 2012-15. ● Awarded UGC Minor Research Project Rs. 5.0 Lakhs for the Academic year 2013-15



Research Guidance : Ph.D.: **09 PhD Awarded; 01 Thesis submitted 3 PhD In Progress**
Masters Degree Awarded (M.E./ M.Tech): 65

Research Area Work : Water and Environmental Engineering, Urban Watershed Modelling, Geospatial Techniques to Civil Engineering, Finite Element Method, Construction Planning and Scheduling, Project Cost and duration optimization, Soft Computing Techniques and BIM Modeling,

Ph.D. Research Work : Soil Erosion and Sediment yield Modelling of Watershed Using Finite Element Method, Geographical Information system and Remotely Sensed Data.

Software : Programming in C & C++, MS Office, Origin,

Professional Software : AutoCAD, Primavera, ArcGIS and ERDAS Image Processing, InfoSWMM, EPANet, WaterGems, and MATLAB Softwares.

Educational Qualifications:

Exam Passed	University/Institute	Year of Passing	Subject	Division
B.E.	Osmania University	1995	Civil Engineering	First Division
M.E.	Osmania University	2001	Water Resources Engineering	First Division
Ph.D.	Indian Institute of Technology Bombay (IIT Bombay)	2009	Soil Erosion and Sediment Yield Modelling of Watershed Using Finite Element Method, Geographical Information System and Remotely Sensed Data	

Employment Details:

Position	Organization	Duration	Responsibilities
Senior Professor	University College of Engg., Osmania University	Jan. 2023 onwards	Teaching, Research, Consultancy works, Administrative assignments,
Professor	University College of Engg., Osmania University	2012-2023	Teaching, Administrative assignments, Research and Consultancy works, Nodal Officer, Centenary Celebrations, Nodal Officer RUSA, Nodal Officer (TEQIP- II&III), UCE, OU, Director-Infrastructure, Osmania University, Hyderabad
Sr. Associate Professor	University College of Engg., Osmania University	2009-2012	Teaching, Administrative assignments, Research and Consultancy works, SpecialOfficer(Infrastructure) OUCE.
Associate Professor	University College of Engg., Osmania University	2006-2009	Teaching, Administrative assignments, Research and Consultancy works, Special Officer(Infrastructure)OUCE
Sr. Assistant Professor	University College of Engg., Osmania University	2001-2006	Teaching, Research, Consultancy & Administrative works
Assistant Professor	University College of Engg., Osmania University	1998-2001	Teaching, Research and Administrative works
Associate Lecturer	G.M.R.Polytechnic, Srisailam, Kurnool, A.P.	1996-1998	Teaching and Examination works

Research Guidance for Ph.D. Scholars:

S.No	Name of the Scholars	Title of the Thesis	Year of completion
1	B. Madhusudana Rao	Environmental Sustainability and Solid Waste Management	2015 Awarded
2	G. Rameshwar Rao	Evaluation of Distributed Water Supply Network System and District Metered Area Using Genetic Algorithms and Hydraulic Modeling	2018 Awarded
3	Qamar Sultana	Simulation of Reservoir Sedimentation of Sriramsagar Reservoir	2018 Awarded
4	G. Srinivas	Urban watershed modeling using remotely sensed data and Geographical Information System	2018 Awarded
5	Seyed Ali Mousavi Deh Mourdi	An Investigation on Construction Crisis Framework based on the Multiple Criteria Decision Making Models	2023 Awarded (Co-supervisor)
6	G. Srikanth	Construction Delay Assessment using Fuzzy Expert System: A Case Study of Hyderabad Construction Sector	2024 Awarded
7	A. Naresh	Hydrodynamic Studies for water-sensitive Urban Design of urban Flooding in Hyderabad City, India.	2025 Awarded
8	M. Aditya	Data-Driven Approach to Evaluate supplier Sustainability in Construction supply chains: A Study of Ready Mix Concrete Supply Chains in Hyderabad Metropolitan Area	2025 Awarded
9	T. Dhilip	Urban growth Modeling using soft-computing techniques	2025 Awarded
10	Allapuram Swetha	Sustainable Building Information Modeling in Construction Industry	2025 Submitted
11	Adla Andalu	A Study on Urbanization and its effects on environment using Geospatial techniques	2018 In Progress
12	Ajmeera Ravinder	Comparative study on Land Use Land cover Classifier using high resolution satellite Imagery and Machine Learning Techniques	2023 In Progress
13	Dammaiahgari Bhaskar	Strength Properties of Flexible Pavement using Geogrid	2023 In Progress

Improvement of Professional Competence: *Short-Term Courses attended*

S. No	Course – Title	Institute/ Organization	Sponsored Agency	Duration
1	Five Days Professional Development Training Programme	IIM Shillong	NPIU, MHRD TEQIP-III	10.09.2018 to 14.09.2018
2	Academic Leadership Program for TEQIP Institutions	IIM Kozhikode	TEQIP-II	30.07.2013 to 09.08.2013
3	MATLAB & Simulink for Engineering Education	MathWorks India. PARK Hotels, Hyd	MathWorks India Pvt. Ltd	31-08-2012

4	Faculty Development Programme on Geospatial Technology	TATA Consultancy Services, Hyderabad	TATA Consultancy Services, Hyd	26-03-2012 to 27-03-2012
5	Global Positioning System & Its Applications in Atmospheric and Ionospheric Studies	Civil Engg. Dept., IIT Bombay	DST Short –Term Course	27-02-07 to 04-03-07
6	Advanced Techniques in Water Resources Management	Civil Engg. Dept., IIT Bombay	QIP Short –Term Course	13-11-06 to 17-11-06
7	Soft Computing Techniques	Civil Engg.ept., IIT Bombay	QIP Short –Term Course	02-01-06 to 07-01-06
8	Methodology for Assessment of Reservoir Sedimentation	CWPRS Khadakwasla, Pune	Ministry of WaterResources Govt. of India.	04-07-05 to 07-07-05
9	Integrated Water Resources Management using Numerical, Remote Sensing &GIS	Dept. Civil Engg., IIT Bombay	QIP Short – Term Course	22-01-04 to 26-11-04
10	Application of RS and GIS Tech. in Water ResourcesDevelopment and Mangt.	NWA Khadakwasla Pune	ISRO & MHRD Bangalore	06-01-04 to 16-01-04
11	Digital Image Processing for Remote sensing	CSRE IIT Bombay	QIP Short -Term Course	08-12-03 to 12-12-03
12	Finite Element and Boundary Element methods with application in Civil Engg.	Civil Dept., IIT Bombay	QIP Short-term course	01-12-03 to 05-12-03
13	Spatial Information Technology	ASC, JNTU Hyderabad	UGC Refresher Course	02-05-02 to 22-05-02
14	Spatial Information Technology and water resources Management	ASC, JNTU Hyderabad	UGC Orientation Course	12-12-01 to 10-01-02
15	Training Programme for Young Faculty of Engineering Colleges	UCE (A), O.U. Hyderabad	SDP Programme	26-12-2000 to 13-01-2001
16	Short-term course on C++ Programming	Dept. of ECE, OUCE, OU.	IMPACT Project	07-06-99 to 07-07-99
17	Orientation course for degree College teachers	ASC O.U. HYD.	UGC Sponsored	30-11-98 to 22-12-98

Memberships / Participation in Scientific and Professional Societies:

- Affiliate Member **AM. ASCE (444107)**: American Society of Civil Engineering
- **FIE (F-117551-5)**: Fellow Institute of Engineers India
- Member **IWRS (L-5590)**: Indian Water Resources Society
- Member **ISRS (LM-2645)**: Indian Society of Remote Sensing
- Member **ISH (L-563)**: Indian Society for Hydraulics
- Member **ISG (L-678)**: Indian Society of Geomatics

Awards / Achievements:

- **Telangana State Best Teacher Award- 2020** by the Govt. of Telangana.
- **Engineer of the Year award-2020** by Institute of Engineers (IEI) Hyderabad on the eve of 160th birthday celebration Bharat Ratna Sir Mokshagundam Vishveshvaraya
- **Irrigation Engineers Award-2019**, The Institute of Engineers (India), Telangana State Centre and Govt. of Telangana on the Occasion of 3rd Telangana Irrigation Day.
- Awarded: **Best Faculty-2019** awarded by EET CRS 8th Science and Technology Awards-2019, Bangalore,
- **Distinguished Faculty in Civil Engineering-2017** by Centre for Advanced Research and Design, Venus International Foundation, Chennai.
- Awarded **SPARC-MHRD Major Research Project International Collaboration with Texas A&M University, USA Rs.74.38Lakhs** Academic year 2018-19.
- Sanctioned Major Research Project **DST-SERB of Rs.40.135 Lakhs**: Sustainable Development of Urban Storm Water System by Considering Climate Change and Urban Impact.
- Awarded: **Distinguished Faculty in Civil Engineering-2017** awarded by Centre for Advanced Research and Design, Venus International Foundation, Chennai.
- Awarded **UGC Minor Research Project (Rs.5.0 lakhs)**: *Surface Flow Measurement Using Large Scale Particle Image Velocimetry*. The duration of the project is two years from 2013- 2015.
- Awarded **DST Major Project (Rs.15.15 lakhs)**: *Urban Watershed Modelling Using Geospatial Technique*. The duration of the project is three years from 2012-2015.
- Appointed as one of the **Reviewer of reputed International Journals of Elsevier Publications. (J. Hydrology (JHYDROL), J. Hydro-Environment Research (JHER), ASCE Journals and Taylor & Francis Journals.**
- **Editorial Board Member**: International Journal Urban and Regional Planning, (e-ISSN: 2575-1697), SciencePG Journals, 2025.
- **Editorial Board Member**: International Conferences organized by Institute of Research Engineers and Doctors (IRED), USA at Malaysia-2014 and Turkey-2015.
- **Editorial Board Member**: International Journal of New Technologies in Science and Engineering (IJNTSE).
- Awarded International Travel Grant fellowship sponsored by Government of India, University Grants Commission, UGC, New Delhi, in year2010.
- Awarded International Travel Grant fellowship sponsored by Government of India, Ministry of Science & Technology, DST, New Delhi, in year2010.
- Awarded Ph. D. from Indian Institute of Technology Bombay, 2009.
- Awarded Q.I.P. Scholarship as a Ph.D. Research Scholar at I.I.T Bombay for the period of three years during (2004-07).
- Selected for International Travel grant sponsored by Indian Institute of Technology, Bombay in the 2007.

Selected Government Services:

- Associate Lecturer worked at Govt. GMR Poly Technic Colleges, Srisailam A.P. from Nov.1996-Mar.1998.
- Selected as Assistant Executive Engineer (1996) through APPSC, A.P., India
- Selected Assistant Engineer (1996) through APSEB, A.P., India
- Selected Trainee Engineer (1996) by National Mineral Development Corporation (NMDC), India

Participation in Corporate Life:

Service to the Institution and University:

1. **TASK Force Committee Member** for Telangana State Pollution Control Board (TSPCB) from 2023 onwards
2. **Selection Committee Member** for Recruitment of Faculty-Maulana Azad National University
3. **Selection and Review Committee member**, Indian Space Research Organization, ISRO, Bangalore last 10 years.
4. **Departmental Promotion Review committee (DPC) Member**, National Remote Centre (NRSC) and U R Rao Satellite Centre (URSC). Hyderabad last fifteen years.
5. **Chief Engineer**, University Building Division, Appointed by Vice Chancellor, Osmania University, Hyderabad, Telangana from November 2021 to August 2023.
6. **Head, Department of Civil Engineering**, University College of Engineering (Autonomous), Osmania University, appointed by Registrar on approval of Vice Chancellor, Osmania University for two-year term from July, 2018 to July,2020.
7. **Nodal Officer Centenary Celebrations, Osmania University:** Appointed by Registrar on approval of Vice Chancellor, Osmania University, Hyderabad for the centenary year from 26th April, 2017 to 25th April2018.
8. **Nodal Officer RUSA-I (Rashtriya Uchatat Shiksha Abhiyan):** Appointed by Registrar on approval of Vice Chancellor, Osmania University, Hyd, from 2016-2018
9. **Director (Infrastructure), Osmania University:** Appointed by Vice Chancellor, Osmania University, Hyderabad from March 2015 toDec.,2018
10. **Regional Coordinator TSLPRBT-2018 (SI& Police) [Hyderabad Zone-I]:** Appointed by Convener –TSLPRBT-2016 conducted by Jawaharlal Nehru Technological University, Hyderabad, and Telangana State Level Police Recruitment Board Test, Government of Telangana, conducted on 26th August,2018 and 30th September,2018.
11. **Nodal Officer (Academic), TEQIP - III:** Appointed by Principal, University College of Engineering, Osmania University, Hyderabad, from 2018 to 2020
12. **Chairman, Board of Studies (University):** Appointed by Registrar on approval of Vice Chancellor, Osmania University for Department of Civil Engineering, Osmania University, Hyderabad from September 2015 to October,2017
13. **Regional Coordinator TSLPRB-FWE--2016 (Police) [Hyderabad Zone]:** Appointed by Coordinator conducted by Jawaharlal Nehru Technological University, Hyderabad, and Telangana State Level Police Recruitment Board Test, Government of Telangana conducted on 23, October, 2016.
14. **Regional Coordinator EAMCET-III 2016 [Hyderabad Zone-C]:** Appointed by Convener with approval of Vice-Chancellor & conducted by Jawaharlal Nehru Technological University, Hyderabad, and Telangana State Council of Higher Education, Government of Telangana conducted on 9th July, 2016.
15. **Regional Coordinator EAMCET-II 2016 [Hyderabad Zone-C]:** Appointed by Convener

with approval of Vice-Chancellor & conducted by Jawaharlal Nehru Technological University, Hyderabad, and Telangana State Council of Higher Education, Government of Telangana conducted on 9th July, 2016.

16. **Regional Coordinator EAMCET-I 2016 [Hyderabad Zone-V]:** Appointed by Convener with approval of Vice-Chancellor & conducted by Jawaharlal Nehru Technological University, Hyderabad, and Telangana State Council of Higher Education, Government of Telangana conducted on 15th May, 2016.

17. **Regional Coordinator TSLPRBT-2016 (SI & PC) [Hyderabad Zone-III]:** Appointed by Coordinator conducted by Jawaharlal Nehru Technological University, Hyderabad, and Telangana State Level Police Recruitment Board Test, Government of Telangana conducted on 17th April, 2016 and 24th April, 2016.

18. **Regional Coordinator EAMCET-2015 & ECET [FDH & B.Sc. (Mathematics) -2015 [Hyderabad Zone-V]:** Conducted by Jawaharlal Nehru Technological University, Hyderabad, Government of Telangana and Telangana State Council of Higher Education.

19. **Regional Coordinator ICET -2015:** Conducting **ICET-2015** entrance examination, Hyderabad Zone organized by Kakatiya University.

20. **Expert Member:** (Selection Committee Coal India Limited) for recruitment of Trainee Engineers conducted during July 19-21, 2014.

21. **State Quality Monitor (SQM):** Appointed by State Quality Coordinator Telangana State Rural Roads Development Agency (TSRRDA), under the scheme of Pradhan Mantri Gram Sadak Yojana (PMGSY), Ministry of Rural Development, Government of India, in the year 2014.

22. **Member, Fact Finding Committee (FFC-JNTUH):** Appointed by Vice-Chancellor, Jawaharlal Nehru Technological University (JNTU) Hyderabad for Inspection of Telangana State Engineering Colleges in the year 2014.

23. **Joint Director (Directorate of Academic Audit Cell, Osmania University):** Appointed by Vice-Chancellor, Osmania University, Hyderabad from July, 2014 to till date.

24. **Expert Member:** (Selection Committee Coal India Limited) for recruitment of Trainee Engineers conducted during July 19-21, 2014.

25. **Dy. Centre in charge CSAB_2014 Admission:** CSAB-2014 NIT Admission Reporting Centre, University College of Engineering, Osmania University, Hyderabad from July 14-28, 2014.

26. **Regional Coordinator ECET [FDH & B.Sc. (Mathematics) -2014 :** Conducting **ECET [FDH & B.Sc. (Mathematics) -2014** entrance examination, Hyderabad Zone-II organized by JNTU Kakinada, A.P.

27. **Student Advisor, NIRMAAN-2014,** National Level Technical Symposium, organized by Department of Civil Engineering, University College of Engineering, Osmania University, Hyderabad from March 14-16, 2014.

28. **Chairman, Board of Studies (BOS),** Department of Civil Engineering, University College of Engineering (Autonomous), Osmania University, Hyderabad from 2013 to 2015.

29. **Nodal Officer (Academic), TEQIP - II:** Appointed by Principal, University College of Engineering, Osmania University, Hyderabad, from 2012 to 2017.

30. **Coordinator:** Conduct of APCPDCL-2012 Jr. Asst. Recruitment Examination: Appointed by Principal, University College of Engineering, Osmania University, Hyderabad.

31. **Co-Convener (PGECET-2011):** Appointed by Chairmen PGECET and Vice-Chancellor, Osmania University, Hyderabad, Government of Andhra Pradesh, A.P.

32. **Member (EAMCET-2011 Confidential Team):** Appointed by Convener EAMCET-2011, JNT University, Hyderabad.

33. **Departmental Committee Member (DCM):** Re-appointed as Departmental Committee Member, Department of Civil Engineering, University College of Engineering (Autonomous),

Osmania University, Hyderabad from 2011 to till date.

34. **Co-Convener (PGECET-2010):** Appointed by Chairmen, Andhra Pradesh State Council for Higher Education (APSCHE), Government of Andhra Pradesh, Hyderabad, A.P.

35. **Departmental Committee Member (DCM):** Appointed as Departmental Committee Member, Department of Civil Engineering, University College of Engineering (Autonomous), Osmania University, Hyderabad from 2008 to2010.

36. **Special Officer (Infrastructure):** University College of Engineering (A), Osmania University, from 2008 to2012.

37. **Coordinator, M.E. (CEM):** Construction and Management Engineering, Department of Civil Engineering, University College of Engineering, Osmania University, from2008-2015.

38. **B.O.S. Member (Autonomous):** Department of Civil Engineering, University College of Engineering (A), Osmania University from 2008 to2010.

39. **Convener Scrap Committee:** University College of Engineering (A), Osmania University, Hyderabad, from 2009 to2012.

40. **Member Purchase Committee:** University College of Engineering (A), Osmania University, Hyderabad, from 2009 to2012.

41. **In-charge Computer Laboratory:** Department of Civil Engineering, University College of Engineering (A), Osmania University, Hyderabad from 2007 to2012.

42. **Warden Ganga Hostel:** Osmania University from November 1998 to July2004

43. **In-charge Hydraulics Laboratory:** Department of Civil Engineering, University College of Engineering (A), Osmania University, Hyderabad from 2002 to2004.

44. **Time-Table Coordinator:** Department of Civil Engineering, University College of Engineering (A), Osmania University, Hyderabad from 2002 to2004.

45. **Coordinator IES Special Coaching for SC/ST students:** Civil Engineering Department, conducted by A.P. study circle, Govt. of A.P., Academic year2003.

46. **Assistant Regional Coordinator ECET [FDH & B.Sc. (Mathematics) -2003:** for conducting ECET [FDH & B.Sc. (Mathematics) -2003, entrance examination, Hyderabad Zone-II.

47. **Appointed Observer/Special Observer (ECET and EAMCET):** Appointed by respective Conveners every year wise examinations, A.P.

48. **Involved confidential works of APPSC:** Appointed as Examiner for paper setter and valuation for competitive examinations, Govt. of Andhra Pradesh.

49. **Involved confidential works of APSEB:** for conducting competitive examinations and valuation conducted by Andhra Pradesh State Electricity Board, Govt. of Andhra Pradesh.

50. **In charge:** Attendance and Marks compilation for U.G. students, Department of Civil Engineering, University College of Engineering (A), OU, Hyderabad, (1999 to 2003).

51. **Involved:** Paper settings and valuations in U.G. and P.G. examinations in Osmania University and other Universities (Andhra University, Jawaharlal Nehru Technological Universities, REC Warangal, Kakatiya University, Sri Venkateswara University and JNT University Hyderabad, JNT University Ananthapur, JNT University Kakinada).

Conferences, Seminars, Symposium and Workshops etc. Attended and Organized:

1. **Session Chair** in 28th International Conference on Hydraulics, Water Resources and River Engineering (**Hydro 2023**) organized by the Department of Civil Engineering, National Institute of Technology, Warangal, India, under the aegis of Indian Society of Hydraulics (ISH) held during 21-23, December 2023.

2. **Session Chair** in 4th Indian National Ground water Conference (INGWC-2021) organized by Centre for water Resources Institute of Science and Technology JNTU-H, Hyderabad, and

Association of Global Groundwater Scientists (AGGS), Coimbatore, India in Collaboration with IIT-Hyderabad and CSIR-National Geographical Research Institute, Hyderabad held during 22-24 March 2021.

3. **Technical Chairman** in All India Seminar on Water and Sanitation Management organized by IEI, Telangana State Centre in association with HMWSSB, Rural Development forum, SRC, Hyderabad, Sustainable Development Forum, PATNA, held during 19-20 March 2019

4. **Chairman and Organizing Secretary:** 24th **HYDRO-2019**, International Conference organized by the Department of Civil Engineering, University College of Engineering (Autonomous), Osmania University, Hyderabad, in Association with Indian Society of Hydraulics (ISH) held during 18-20, December 2019

5. **Coordinator:** One Day Induction Program for parents of First year B.E. Engineering students, organized by University College of Engineering, Osmania University, Hyderabad on 1st September, 2018.

6. **Convener** for World Water Day -2018: One-Day National seminar on World Water Day: “Groundwater” organized by Department of Civil Engineering, Osmania University, Hyderabad held on 22nd March, 2018.

7. **Invited Talk** on “The Global Water Crisis: Issues and Challenges” in one day seminar on Water Scarcity- Possible Water Wars in Future, under the aegis of Environmental Engineering Division, IEI, organized by the Institution of Engineers (India) Telangana State Centre in association with HMWSSB, OU-Hyderabad, IWWA, Hyderabad Centre, Water Management Forum, SRC, Hyderabad, held on 21 March 2018,

8. **Organizing Secretary:** One-Day National seminar on World Water Day: “Wastewater” organized by Department of Civil Engineering, Osmania University, Hyderabad held on 22nd March, 2017.

9. **Invited Talk** on “Estimation of Sediment retaining in Sriramsagar reservoir using Artificial Neural Network Techniques and Conventional Method” in 2nd 2 day National Conference on Water, Environment and Society, organized by Centre for Water Resources, Institute of Science and Technology, JNTU-Hyderabad, Kukatpally, Hyderabad- 500085, held during 30-31 July 2015.

10. **Faculty Coordinator and Student Advisor:** **NIRMAAN-2014** “13th National Level Technical Symposium.” Organized by Department of Civil Engineering, Osmania University, Hyderabad from March 14-16, 2014.

11. **Organizing Secretary:** One-Day National seminar on World Water Day: “The Nexus of Water and Energy” organized by Department of Civil Engineering, Osmania University, Hyderabad held on 22nd March, 2014.

12. **Co-Chairman** in 4th International Conference on Hydrology and watershed Management (ICHWAM-2014) organized by Centre for water Resources, Institute of Science and Technology, JNTU-H, Kukatpally, India Held during 29 Oct- 1 Nov 2014.

13. **Invited Talk** on “ GIS Based Sewer Network Analysis for Part of Hyderabad City using Remotely Sensed Data” in Proceedings of National Conference on Sustainable Water Resources Planning Management and Impact of Climate Change, Organized by CEWRM, Civil Engineering Department, BITS-Pilani Hyderabad Campus held during 5-6 April 2013

14. **Organizing Secretary:** One-Day National seminar on World Water Day: “Water and Food Security-Issues and Challenges” organized by Department of Civil Engineering, Osmania University, Hyderabad held on 22nd March, 2012.

15. **Organizing Secretary & Coordinator:** A One-Day National seminar on World Water Day: “Water and Nature-Needs & Challenges,” organized by Department of Civil Engineering, Osmania University and IST, JNTU Hyderabad on 22nd March, 2009.

16. **Coordinator:** A Two-Day Workshop on “Geomatics Applications for Water Resources

Management (GeoWarm-2009)”, organized by Department of Civil Engineering, Osmania University and IST, JNTUH, Hyderabad, from 16th and 17th March, 2009.

17. **Attended and Member** of Organizing Committee: Workshop on *“Recent Advances in Climatic Modeling for Water Resources Planning and Management”* Organized by Centre of excellence in Water Resources Management, Department of Civil Engineering, BITS, Pillani-Hyderabad Campus on November 19, 2011.

18. **Attended:** First National Seminar on *“Advances in Flood & Cyclone Forecasting in India.”* Organized by Andhra Pradesh State Disaster Mitigation Society, Planning Department, A.P. Secretariat, Hyderabad, on November 10-11, 2011.

19. **Attended** *“Hyderabad City Dialogue on Air Quality and Transportation Challenges: An Agenda for Action.”* Organized by Centre for Science (CSE) and Environment and Andhra Pradesh Pollution Control Board (APPCB), Hyderabad on 7th October, 2010.

20. **Attended and Member** of Organizing Committee: *“53rd Congress of Indian Society of Theoretical and Applied Mechanics (ISTAM-2008):* Organized by University College of Engineering (Autonomous), Osmania University, Hyderabad, from 27th -30th Dec., 2008.

21. **Attended:** *“Water Resources Development with Special Reference to Lift irrigation.”* Organized by The Institute of Engineers (India), Hyderabad, from July 15-16, 2008.

22. **Attended:** *“ISH Symposium on Cities and Floods”* organized by Department of Civil Engineering, Indian Institute of Technology Bombay and Indian Society of Hydraulic (ISH) on November 17- 18, 2006, Mumbai.

23. **Attended:** *“Jal Sangrah Shibir”* organized by Indian Institute of Technology Bombay, Mumbai, December 6-7, 2003.

24. **Attended:** *“National workshop on Research Methodologies and Report writing”*, organized by Department of Mechanical Engineering, University College of Engineering, Osmania University, Hyderabad, June 27 and 28, 2003.

25. **Attended and Member** of Organizing Committee: *“National Conference on Sports Management”* organized by Department of Physical education and University College of Engineering, Osmania University, Hyderabad, March 26-29, 2003.

Expert Lectures Delivered:

1. Expert Lectures delivered on *“Sustainable Urban Infrastructure Development.”* at the Short-Term training programme for Assistant Executive Engineers (AEEs) of GHMC, organized by ESCI Gachibouli, Hyderabad, on 26th April, 2025.

2. Invited talk delivered on *“Integrated Watershed Management using Geospatial applications”* at Two day workshop on *Integrated Water Resource Management as a Nature Based Solution to Climate Change*, organized by Environment Protection and Training Institute (EPTRI), held on 22nd March, 2025.

3. Expert Lectures delivered on *“Impact of Climate Change over Urban Region: A Case Study of Hyderabad City, Telangana State.”* Organized 3 days Short-Term training program on Disaster Risk Reduction and Management during 11-13 December, 2024 for Assistant Executive Engineers (AEEs) of GHMC, at ESCI Campus, Gachibouli, Hyderabad, on 12th December, 2024.

4. Expert Lectures delivered on *“Optimizing Urban Flood Modeling: Enhancing Channel Flow Monitoring with Advanced Sensor Technologies and Hydrological Models.”* Organized by ESCI on Continuing Professional Development Programme on *“Impact of Climate Change on Water Resources: Monitoring and Management”* at ESCI Campus, Gachibouli, Hyderabad, on 25th April, 2024.

5. Invited talk delivered on *“Sewage Treatment Plan Designs”* at MCRHRD during a short term

training program for Municipal Engineers held on 22-24 January, 2024.

6. Invited talk delivered on "*Water Supply Network System*" at MCRHRD during a short term training program for Municipal Engineers held on 22-24 January, 2024.

7. Invited talk delivered on "*Rainwater harvesting and urban watershed modelling*" at Andhra Pradesh Human Resource Development Institute (APHRDI), Mangalagiri, Vijayawada during a 3 day training program held on 04-01-2024.

8. Invited talk delivered on "*Building Information Modelling (BIM) in Construction Industry*" at International Conference on "Paradigms in Engineering and Technology (ICPET-2018)" organized by Methodist College of Engineering and Technology during December 28-29, 2018.

9. Guest Lecture delivered on "*Applications of Remote Sensing and Geographical Information System to Civil Engineering.*" At Nalla Narsimha Reddy College of Engineering and Technology, Narapally, Uppal on October, 2018

10. Guest Lecture delivered on "*Watershed Management using Geospatial Techniques*" at JNTU College of Engineering Sulthanpur, Medak on September, 2018

11. Expert Lecture delivered on "*Urban storm water management and watershed modelling*" during Three-day residential training programme on "*Rainwater Harvesting in Urban Areas*" organized by Andhra Pradesh Human Resource Development Institute (APHRDI) on 22nd November, 2017.

12. Expert Lecture delivered on "*Geospatial applications for watershed modelling and development*" during (13th -25th November, 2017) Two-week Faculty Development programme (FDP) organized by Centre for Water Resources, IST, JNTU Hyderabad on 17th November, 2017.

13. Expert Lecture delivered on "*Urban Watershed modelling using Geospatial Techniques*" during Three-week workshop organized by UGC-HRDC, JNTU Hyderabad on 26th November, 2016.

14. Keynote Lecture delivered in view of World Water Day 2016 on *Water and Jobs* at Institute of Engineers India (IEI) Hyderabad organized by Institute of Engineers Hyderabad Chapter, Khairatabad on 22nd March, 2016.

15. Expert Lectures delivered on "*Overview of Geographical Information System and its Applications to Town Planning and Development.*" at the Short-Term training programme for Municipal Engineer, organized by ESCI Gachibouli, Hyderabad, on 9th February, 2015.

16. Expert Lectures delivered on "*Urban Water Supply Distribution Network System.*" at a two-day Training programme for Municipal Engineer, organized by Regional Centre for Urban and Environment Studies, Osmania University, Hyderabad, from November 6-7, 2014.

17. Expert Lectures delivered on "*Applications of Geospatial Techniques in Civil Engineering.*" At a two-day workshop on Engineering Research Methodology, organized by the Department of Civil Engineering, University College of Engineering (A), Osmania University, Hyderabad, from 12- 13 September, 2014.

18. Expert Lectures delivered on "*CAD and Advanced Techniques like GPRS, GIS and Remote Sensing for Polytechnic Teachers.*" at ISTE-Short Term Training Programme organized by Jawaharlal Government Polytechnic, Ramanthapur, Hyderabad on July 3, 2014.

19. Expert Lectures delivered on "*FEM Base Rainfall-Runoff and Sediment yield modelling GIS and Remotely Sensed Data.*" at Department of Civil Engineering, BITS-Pilani Hyderabad on February 16, 2014

20. Expert Lectures delivered on "*Urban Watershed Modelling Using Geospatial Techniques.*" AICTE sponsored Short-Term Training Programme organized by Centre for Water Resources Division, IST, JNTU Hyderabad on January 10, 2014.

21. Invited Lecture delivered on "*Effect of Climate Change on Watershed Modelling Using Geospatial Techniques.*" Annual International Conference on "Climate Change and Sustainable

Development in a Global Perspective”, Organized by Advanced Centre for American Studies, OUCIP, Osmania University, Hyderabad, from 17th -18th January, 2012.

22. Invited lectures delivered on “*Rainfall-Runoff and Sediment Yield Modelling of Watershed using GIS and Remotely Sensed Data.*” One-day National Workshop on “Recent Advances in Climatic Modeling for Water Resources Planning and Management.” Organized by Centre of excellence in Water Resources Management, Department of Civil Engineering, BITS, Pillani-Hyderabad Campus on November 19, 2011.

23. Expert Lectures delivered on “*Soil Erosion and Sediment Yield Modelling of Watershed using FEM, GIS and Remotely Sensed Data.*” AICTE sponsored Short-Term Training Programme organized by Centre for Water resources, IST, JNTU Hyderabad on August 9, 2011.

24. Expert Lectures delivered on “*Applications of Remote Sensing and GIS techniques to Water resources engineering.*” AICTE sponsored Short-Term Training Programme organized by Centre for Water resources, IST, JNTU Hyderabad on August 2, 2011.

25. Expert Lectures delivered on “*Watershed modelling Using Remote Sensing and GIS techniques.*” TEQIP sponsored One-Day National Seminar on “*Water and Nature-Issues and Challenges*” (in view of World Water Day), organized by Department of Civil Engineering, Osmania University and IST, JNTUH, Hyderabad, on March 22, 2009 at UCE, Osmania University, Hyderabad.

26. Expert Lectures delivered on “*Introduction of Geospatial techniques to Civil Engineering Applications.*” TEQIP sponsored a Two-Day Workshop on “*Geomatic Applications for Water Resources Management (GeoWarm-2009)*”, organized by Department of Civil Engineering, Osmania University and IST, JNTUH, Hyderabad, from March 16-17, 2009 at IST, JNTU, Hyderabad.

27. Presentation given at QIP short-term course on “Remote Sensing and GIS Applications to Watershed Modelling of Soil Erosion and Sediment Yield-CaseStudies”, organized by Prof. T.I. Eldho and Prof. V. Jothiprakash, Department of Civil Engineering, Indian Institute of Technology Bombay, on November 13-17, 2006, Mumbai.

28. Presentation given at short term DST-Sponsored training course, on “Mathematical Modelling of Soil Erosion and Sediment yield using Remote Sensing and GIS Techniques.” organized by Prof. Madhav N. Kulkarni, Department of Civil Engineering, Indian Institute of Technology Bombay, during February 27 to March 04, 2007, Mumbai.

29. Conducted Engg Mechanics tutorials for 1st Year B.Tech. students at IIT Bombay, 2005-07.

Research Publications:

Book Chapter:

1. Qamar Sultana, **M. Gopal Naik**, (2023). “Trap Efficiency of Reservoirs: Concept Review and Application”, *Water, Land and Forest Susceptibility and Sustainability*, Chapter 2, Volume 1, 2023, ISBN: 978-0-323-91880-0, pp. 29-60,, Science of Sustainable Systems, **Elsevier Publications**.

2. Naresh A., Harish Gupta, **Gopal Naik M.**, Sandeep Hamsa, Manne Mohan Raju, Dinesh C. S. Bisht (2022) “Rainfall-runoff modeling using SWAT model: A case study of middle Godavari basin, Telangana State, India” *Advances in Mathematical and Computational Modeling of Engineering Systems*, CRC, Press **Taylor & Francis** Group,

3. Aadhi Naresh, Ravali Bharadwaj, **M. Gopal Naik**, Harish Gupta, M. Mohan Raju and Dinesh. C. S. Bisht (2021), “A Comprehensive Review on Urban Floods and it's Modeling Techniques”, *Recent Advances in Time Series Forecasting*, chapter 10, Vol. 1, September 2020, pp. 151-180, ISBN 9780367607753, Routledge, **Taylor and Francis Group**, CRC Press.

4. M. Mohan Raju, Dinesh. C. S. Bisht, A. Naresh, Harish Gupta, **M. Gopal Naik** (2021), “Artificial Neural Networks (ANNs) and their Application in Soil and Water Resources Engineering”, *Recent Advances in Time Series Forecasting*, chapter 12, Vol. 1, September 2020, pp. 151-180, ISBN 9780367607753, Routledge, **Taylor and Francis Group**, CRC Press.

International and National Journals Publications:

1. Adla Andalu, **M. Gopal Naik**, and Sandeep Budde (2025), “AI and ML in Groundwater Exploration and Water Resources Management: Concepts, Methods, Applications, and Future Directions”, *Journal of Groundwater Science and Engineering*, Vol. (ISSN: 2305-7068; Web of Science Q3;IF:1.7).
2. Naresh Aadhi, Ravali Bharadwaj, **M. Gopal Naik**, Harish Gupta, Fouad H. Jaber, Srinivasulu Ale (2025), “Optimization of parameters for the HEC-HMS model based on real time flow monitoring data: a case study of Hyderabad metropolitan area, India” *Modeling Earth Systems and Environment*, (2025) 11:351, 12 July 2025.
3. Adla Andalu, **M. Gopal Naik**, Sandeep Budde (2025), “Spatio-temporal analysis of land use and land cover (LULC) changes using an object-based image analysis (OBIA) approach: a case study of Telangana state agglomeration, India”, *GeoJournal* Vol.90:135, 2025 (ISSN-1572-9893, Web of Science, IF:2).
4. Allapuram Swetha, **M. Gopal Naik**, Srikanth Gundurouthula (2024), “A Study on Exploring and Prioritizing Critical Risks in Construction Project Assessment” *International Journal for Multidisciplinary Research (IJFMR)*, Volume 6, Issue 4, July-August 2024
5. Allapuram Swetha, **M. Gopal Naik**, Togiti Dhilip (2024), “Assessment Of Construction Risk Using Mamdani Fuzzy Inference System: A Case Study Of The Construction Industry In Hyderabad City” *Nanotechnology Perceptions* 20 No. 12 (2024) 686-707
6. T. Dhilip, **M. Gopal Naik**, Ramesh Chandra Bagadi (2023). “Investigation on Built-up, Population and Road Network Density Dynamics using GIS,Regression and Causation Analysis– A Case Study of Hyderabad City, India” *ASCE-Journal of Urban Planning and Development*, DOI: 10.1061/JUPDDM/UPENG-4186 .
7. Aadhi Naresh, **M. Gopal Naik** (2023), “Urban Rainfall-Runoff Modeling Using HEC-HMS and Artificial Neural Networks: A Case Study”, *International Journal of Mathematical, Engineering and Management Sciences*, Vol 8 (3), pp 403-423.
8. Aadhi Naresh, **M. Gopal Naik** (2023), “Flood Inundation Mapping for a Kukatpally Gauged Basin Using HEC-RAS: A Case Study of Hyderabad Metropolitan Area, Telangana State, India”, *Advances in Engineering Research*, *Atlantis Press, Springer*, pp: 320-333, https://doi.org/10.2991/978-94-6463-252-1_36.
9. Gundurouthula Srikanth, **M. Gopal Naik**, Togiti Dhilip (2023), “Construction Delay Assessment using Compound Index and Fuzzy Optimization Technique: A Case Study of Hyderabad Construction Industry”, *Journal of Advanced Research in Applied Sciences and Engineering Technology*, Vol 34(2), pp 30-49.
10. T. Dhilip. **M. Gopal Naik**, Aditya Mudigonda (2022) “Residential Property Value Modeling using the Group Methods of Data Handling-Neural Network and Regression Analysis: A Case Study of GHMC, India” *International Journal of Intelligent Systems and Applications in Engineering*, 10(4), pp.391-397.
11. Aditya Mudigonda, **M. Gopal Naik**, T. Dhilip (2022) “Sustainable Construction Supply Chain Management in India, An Industry Perspective” *International Journal of Intelligent Systems and Applications in Engineering*, 10(3), pp.437-443.
12. Aditya Mudigonda, **M Gopal Naik**, T. Dhilip (2022) “An investigation on the barriers in the

Implementation of Sustainable Supply Chain Management in Indian Construction Industry”, *Mathematical Statistician and Engineering Applications*, 71(3s), Special Issue on Mathematical Computing and Engineering Artificial Intelligence, pp. 867

13. Aditya Mudigonda, **M Gopal Naik**, Dileep Vadlamudi (2022) “A Comprehensive framework on Supplier Selection based on Sustainability Scores -A study of RMC Supply Chain in HMA”, *Specialusis Ugdyimas/ Special Education*, Vol 1 No. 43, pp. 5032

14. M. Harini Reddy, N. Manikumari, M. Mohan Raju, Dinesh C. S. Bisht, A. Naresh, Harish Gupta, and **M. Gopal Naik** (2022). Neural Networks Analysis of Suspended Sediment Transport Time Series Modeling in a River System, *Computational Intelligence-based Time Series Analysis, River Publishers Series in Automation, Control and Robotics*, Available: March 2022, e-ISBN: 978877022416, Pp:81-97

15. Dhilip, T., Bagadi, R. C., **M. Gopal Naik**, & Suresh Kumar N. (2022). “Bi-Directional Causal Analysis using a Novel Coefficient of Causation”. *Asian Research Journal of Current Science*, 4(1), 217-223.

16. **M. Gopal Naik**, Ravande Kishore, Seyed Ali Mousavi Dehmourdi (2021), “Modeling a Multi-Criteria Decision Support System for Prequalification Assessment of Construction Contractors using CRITIC and EDAS Models”, *Operational Research in Engineering Sciences: Theory and Applications*, Vol. 4, Issue 2, 2021, pp. 79-101 ISSN: 2620-1607 eISSN: 2620-1747, DOI: <https://doi.org/10.31181/oresta20402079n>.

17. Seyed Ali Mousavi Dehmourdi, **M. Gopal Naik**, Ravande Kishore (2021), “An Investigation on Construction Crisis Framework Based on the CRITIC and WASPAS Methods, a Case Study; Khuzestan province (Iran)”, *International Journal of Engineering and Advanced Technology (IJEAT)*, Volume-10 Issue-4, April 2021, ISSN: 2249-8958.

18. **M. Gopal Naik** a, Mohammed Asif (2020), “Prediction of Stability Analysis of Highwall mining in MOCP Mine using combined finite element modeling and statistical approach” *International Journal of Rock Mechanics & Mining Sciences* 127 (2020) 104221.

19. Ravande Kishore, Seyed Ali Mousavi Dehmourdi, **M. Gopal Naik**, Malek Hassanpour (2020), “Designing a framework for subcontractor's selection in construction projects using an MCDM model” *Operational Research in Engineering Sciences: Theory and Applications* Vol. 3, Issue 3, 2020, pp. 48-64, ISSN: 2620-1607eISSN: 2620-1747

20. Qamar Sultana and **M. Gopal Naik**, (2019). “Comparison of Soft Computing Techniques for Trap Efficiency- A Reservoir Case Study.” *International Journal of Innovative Knowledge Concepts*, ISSN: 2454-2415, Vol. 7(7), Pp: 78-90.

21. Dr. G. Rameshwar Rao, A.Naresh, **M.Gopal Naik** (2019): “Management Of Water Supply And Sewage System In Hyderabad” *Journal of Indian Water Works Association (JIWWA)*, ISSN 0970-275X, Vol. LI, No. 2, April-June,2019

22. G. Rameshwar Rao, Aadhi Naresh and **M. Gopal Naik** (2018). “Evolutionary Design and Calibration of District Metered Area of Water Supply Network Systems Using Numerical Methods and Hydraulic Softwares”. *Journal of Indian Water Works Association (JIWWA)*, ISSN 0970-275X, Vol. L, No. 2, April-June,2018.

23. Ali Kadhim Manea, and **M. Gopal Naik** (2018). “Analysis of Construction Delay due to Poor Planning using Fuzzy Logic Technique.” *International Journal for Research in Applied Science & Engineering Technology (IJRASET)*, Vol.6 (VII),Pp.491-498.

24. Srinivas,G., and **Gopal M Naik**. (2017). “Hydrological Modeling of Musi River Basin India and Sensitive Parameterization of Stream Flow using SWAT CUP model.” *Journal of Hydrogeology and Hydraulic Engineering (JHHE)*, Vol.6(2),Pp.1-10.

25. Rameshwar rao G., and **M.Gopal Naik** and Mahadev Hrishikesh (2017). “Evolutionary Design

and Calibration of DMA of water supply networks Using H2OMAP Model.” *Journal of Hydrogeology & Hydrologic Engineering*, Vol. 1(1), Pp.1-6.

26. Srinivas, G., and **Gopal M Naik**. (2017). “Hydrological Modeling of Musi River Basin and Impact Assessment of Land Use Change on Urban Runoff.” *International Journal of Engineering Research and Technology (IJERT)*, ISSN: 2278-0181, July, 2017, Vol. 6(7), Pp. 305-312.

27. Qamar Sultana and **M. Gopal Naik**. (2017). “Useful Life of a Reservoir and its Dependency on Watershed Activities.” *Journal of Agricultural Research and Technology*, ISSN: 2471-6774, Vol. 8(5), Pp. 01-09, July, 2017.

28. Aadhi Naresh, **M Gopal Naik**, (2016). “Experimental Study On Surface Flow Measurement Using Large Scale Particle Image Velocimetry Techniques”. *Journal of Environmental Science and Technology*, ISBN: 979-1-5323-2260-0, American Science Press, Vol. 2, Pp: 350-358.

29. Qamar Sultana and **M. Gopal Naik**. (2016). “Forecast of Reservoir Sediment Trap Efficiency using Artificial Neural Networks Techniques.” *International Journal of Research in Engineering and Technology*, eISSN: 2319-1163, Vol. 5(2), Pp. 1-5, Feb. 2016

30. Madhusudhan Rao, and **M. Gopal Naik** and Aadhi Naresh. (2015). “Experimental Study on Characterization and Pollution Potential of Contaminated Chromium Hazardous Waste.” *International Journal of Research in Engineering and Technology*, Vol. 4(11), Pp. 93-99.

31. Qamar Sultana and **M. Gopal Naik**. (2015). “Estimation of Trap Efficiency of Sriramsagar Reservoir.” *International Journal of Research in Engineering and Technology*, Vol. 4(11), Pp. 116-122.

32. **M. Gopal Naik** and V. Siva Bala Radhika (2015). “Time and Cost Analysis for Highway Road Construction Project Using Artificial Neural Networks.” *KICEM Journal of Construction Engineering and Project Management*. Vol. 4(3), Pp. 26-31.

33. Mahammed Sami Mahdi and **M. Gopal Naik**. (2014). “Development of Green Building Information Model Using Revit Software and Tally Applications.” *Global Journal of Engineering Research and Technology (GJERT)*, Vol. 4 (1), Pp. 57-64.

34. **M. Gopal Naik** and Poojitha, P.B. (2014). “Cash Flow Analysis of Construction Project Using Artificial Neural Network.” *International Journal of Advances in Computer Science and Its Applications (IJCSIA)*, Vol. 4 (3), Pp. 118-122.

35. **M. Gopal Naik** and Vindhya Katarla (2014). “Performance Evaluation of Construction Project Using Multi Criteria Decision Making Methods.” *International Journal of Civil & Structural Engineering (IJCSE)*, Vol. 1 (2), Pp. 46-50.

36. **M. Gopal Naik**, and M. Kumar. (2013). “Project Cost and Duration Optimization Using Soft Computing Techniques.” *International Journal of Advanced Management Sciences, (JOAMS)*, Vol. 1 (3), Pp. 284-288.

37. **Gopal M. Naik**, Aditya M., Suman B. Naik. (2011). “GIS based 4D Model Development for Planning and Scheduling of a Construction Project.” *International Journal of Innovation, Management and Technology, (IJIMT)*, Vol. 2 (6), Pp. 447-451.

38. **M. Gopal Naik**, and N. Sri Hari Rao. (2011). “Resource Optimization Using Artificial Neural Networks.” *International journal of Civil Engineering Research, (IJCER)*, Vol. 2 (1), Pp. 63-78.

39. **M. Gopal Naik**, E.P.Rao and T.I.Eldho. (2009). “FEM and GIS based distributed model for soil erosion and sediment yield in a watershed.” *Journal of Water Resources Management*, Vol. 23 (3), Pp. 553-579.

40. **M. Gopal Naik**, E.P.Rao and T.I.Eldho. (2009). “A kinematic wave based watershed model for soil erosion and sediment yield.” *Catena*, Vol. 77, Pp. 256-265.

International and National Conferences Publications:

41. Gundurouthula, S., Gopal Naik, M., Bagadi, R.C., Togiti, D. (2025). Construction Delay

Parameters-Importance, Severity, and Frequency Ranking Using RCB-JR Bi-directional Causal Analysis. *Proc. Recent Advances in Structural Engineering*, Vol. 3. RAISE 2024, Pp:175-193, Springer. doi.org/10.1007/978-981-96-8834-0_18

42. Aadhi Naresh, **M. Gopal Naik** (2023), "Statistical Downscaling of CMIP6 Projections for a Hyderabad City", HYDRO-2023 International Conference, NIT Warangal (Accepted).

43. Aadhi Naresh, **M. Gopal Naik**, S. Harish (2022), "Urban Flood Modeling and Analysis of Recent Floods of Hyderabad 2020 Using PCSWMM: A Case Study", Proceedings of the 23rd IAHR-APD Congress 2022, IIT Madras, India.

44. **M. Gopal Naik**, A Naresh and A. Rajeswari (2022) "Urban Flood Modelling using PCSWMM and Geo-Spatial Techniques: A case study of Hyderabad Metropolitan City" National Symposium on *Geospatial Technology: Journey from Data to Intelligence*, held by Indian Society of Remote Sensing, and Indian Society of Geomatics on 15-17 November 2022.

45. A Naresh, **M. Gopal Naik**, M Mohan Raju, Dinesh C.S. Bisht, (2021), "Urban Rainfall-Runoff Modeling Using HEC-HMS and Artificial Neural Networks (ANN): A Case Study of Hyderabad Metropolitan City, Telangana State, India", 5th International Conference on Mathematical Techniques in Engineering Applications (ICMTEA2021), 3rd to 4th December 2021, Dehradun, Uttarakhand, India, Department of Mathematics Graphic Era Deemed to be University & Graphic Era Hill University, Pp 141.

46. M. Harini Reddy N. Manikumari M. Mohan Raju Dinesh. C. S. Bisht A. Naresh Harish Gupta, **M. Gopal Naik**, (2021), "Suspended Sediment Transportation Analysis using Soil Water Assessment Tool (SWAT) for Peddavagu Tributary in Godavari River Basin in India", 5th International Conference on MATHEMATICAL TECHNIQUES IN ENGINEERING APPLICATIONS (ICMTEA 2021), December 2021, Pp 139.

47. A. Naresh, Sandeep Hamsa, **M. Gopal Naik**, M. Mohan Raju, Dinesh. C. S. Bisht, (2021), "Rainfall-Runoff Modeling using SWAT Model: A Case Study of Middle Godavari Basin, Telangana State, India", 5th International Conference on MATHEMATICAL TECHNIQUES IN ENGINEERING APPLICATIONS (ICMTEA 2021), December 2021, Pp 142.

48. Qamar Sultana, **M. Gopal Naik** (2019), "Prediction of Suspended Sediment Load by Sediment Rating Curve" 24th HYDRO-2019, International Conference organized by the Department of Civil Engineering, University College of Engineering (Autonomous), Osmania University, Hyderabad, in Association with Indian Society of Hydraulics (ISH) held during 18-20, December 2019, V2 Pp 2787-2794

49. M. Harini, N. Manikumari, A. Naresh, **M. Gopal Naik**, Harish Gupta, M. Mohan Raju (2019), "Artificial Neural Networks Application in simulation of Sediment process for Peddavagu: A Tributary of Pranahitha River, India" 24th HYDRO-2019, International Conference organized by the Department of Civil Engineering, University College of Engineering (Autonomous), Osmania University, Hyderabad, in Association with Indian Society of Hydraulics (ISH) held during 18-20, December 2019, V2, Pp 3074-3081

50. A. Naresh, M. Mohan Raju, **M. Gopal Naik**, Harish Gupta, Anil Kumar and Archana Sarkar (2019) "Sediment Transport Modelling and Hysteresis study for pranahitha sub basin of Godavari River system in india" 24th HYDRO-2019, International Conference organized by the Department of Civil Engineering, University College of Engineering (Autonomous), Osmania University, Hyderabad, in Association with Indian Society of Hydraulics (ISH) held during 18-20, December 2019, V2, Pp 1474-1483

51. B. Santhosha, C. Sarala, A. Naresh, **M. Gopal Naik**, Harish Gupta and M. Mohan Raju (2019), "GIS and SPI based Spation- Temporal Drought Analysis of Mahaboobnagar District of Telangana State in India" 24th HYDRO-2019, International Conference organized by the Department of Civil Engineering, University College of Engineering (Autonomous), Osmania University, Hyderabad, in

Association with Indian Society of Hydraulics (ISH) held during 18-20, December 2019, V2, Pp 2477-2490

52. A.Naresh, Harish Gupta, **M. Gopal Naik** (2019): “water sensitive urban design as way forward to sustainable water management for Hyderabad city” presented at all India seminar on “water and sanitation management” organized by Institute of Engineers (India), Telangana State Centre at khairtabad, Hyderabad-500004, from 19-20 March 2019

53. **Gopal M. Naik** and Srinivas G. (2017). “Case Study on Impact of land use Change on Urban Runoff with Hydrological Modelling of Musi River basin, India.” *Proc. HYDRO-2017 International*, organized by L.D. College of Engineering, Ahmedabad, from 21st -23rd December, 2017, India.

54. Qamar Sultana and **M. Gopal Naik**. (2017). “Simulation of Trap Efficiency for Sriramsagar Reservoir using Artificial Neural Network Techniques.” *eProc. of 37th IAHR World Congress*, organized at Kaula Lampur, Malaysia from 13th -18th August, 2017.

55. Aadhi Naresh and **Prof. M.Gopal Naik**. (2016). Experimental Study on Stream Flow Measurement Using Large Scale Particle Image Velocimetry Techniques. 8Th International Conference on Environmental Science and Technology, American Academy of Sciences, Houston, Texas, the USA, from 6th to 10th June 2016.

56. Qamar Sultana and **M. Gopal Naik**. (2016). “Forecast of Reservoir Sediment Trap Efficiency using Artificial Neural Networks” , *Proc. National Conference on “Disaster Preparedness, Mitigation and Reconstruction of Sustainable Society (DPMRSS)”*, organized by the Centre of Excellence for Disaster Mitigation, Department of Civil Engineering, VNR VJiet in association with TEQIP-II, from Feb’ 11-12, Vol-1, pp.67-73.

57. M. Pramod Kumar, **M. Gopal Naik** (2015) “Urban Watershed Runoff Modelling using Geospatial Techniques” International Conference on Innovations in structural Engineering 2015, Organized by Department of Civil Engineering, University College of Engineering, Osmania University, ISBN 9788173719868, Pp 1774-1795

58. Qamar Sultana and **M. Gopal Naik** (2015). “Estimation of Trap Efficiency of Sriramsagar Reservoir using Artificial Neural Network Technique.”, *Proc. International Conference on “Innovations in Structural Engineering (IC-ISE-2015)”*, organized by University College of Engineering (A), Osmania University, held at Osmania University, Hyderabad, India, from 14th - 16th December, 2015, Vol.1, pp.1868-1882.

59. Qamar Sultana and **M. Gopal Naik**. (2015). “Estimation of Sediment Retained in Sriramsagar Reservoir using Artificial Neural Technique and Conventional Method”, *Proc. National Conference on “World, Environment and Society(NCWES-2015)”*, organized by Centre for Water Resources, Institute of Science and Technology, JNTUH, held at IST, JNT University of Hyderabad, Kukatpally, Hyderabad from July 30th -31st , Vol.1, pp.580-586.

60. Madhusudhan Rao, **M. Gopal Naik** and Aadhi Naresh. (2015). “Experimental Study on Characterization and Pollution Potential of Contaminated Chromium Hazardous Wate.” *Proc. National Conference on Climate Change and Sustainable Water Resources Management (CSWM-2015)*, organized by National Institute of Technology Warangal from 3-5 September, 2015.

61. Qamar Sultana and **M. Gopal Naik**. (2015). “Estimation of Trap Efficiency of Sriramsagar Reservoir.” *Proc. National Conference on Climate Change and Sustainable Water Resources Management (CSWM-2015)*, organized by National Institute of Technology Warangal from 3-5 September, 2015.

62. Qamar Sultana and **M. Gopal Naik**. (2015). “Estimation of Sediment Retained in Sriramsagar Reservoir using Artificial Neural Network Techniques and Conventional Method.” *Proc. 2nd National Conference on Water, Environment and Society (NCWES-2015)*, organized by Centre for Water Resources, Institute of Science and Technology, JNT University, Hyderabad from 30th and

31th July, 2015,Pp.580-586.

63. **Gopal M. Naik** (2015). “ Urban Watershed Storm Water Modelling using Geographical Information System and Remotely Sensed Data.” *Proc. Indian Geospatial Forur*, organized by ESRI India at HICC, Hyderabad from February 9-12,2015.

64. **Gopal M. Naik**, Zainab Masood and Srinivas G. (2014). “ Urban Watershed Rainfall-Runoff Modelling using Geospatial Techniques.” *Proc.19th APD-IAHR Congress*, organized by Water Resources University, Honai, Vietnam from September21-24.

65. **M.Gopal Naik** and D. Rupesh Kumar (to be held :2015). “Construction project Cost and Duration Optimization using Artificial Neural Network.” *Accepted at AEI Professional International Conference*, organised by AEI, ASCE to be held at Milwaukee, Wisconsin,USA, during March 24-27,2015.

66. **M.Gopal Naik**, and V.Shiva Bala Radhika (2014). “Estimation of Time and Cost for Highway Road Construction Using Artificial Neural Networks.” *Proc. National Conference on Recent Research Advances In Civil Engineering*”, organized by Department of Civil Engineering, University College of Engineering, Osmania University, Hyderabad, Telangana State, India from November 7th and 8th,2014.

67. **M.Gopal Naik**, and Zainab Masood (2014). “Long Term Trends Analysis in Water Demand and Water Use Pattern in Godavari Basin using Geospatial Techniques.” *Proc. National Conference on Recent Research Advances In Civil Engineering*”, organized by Department of Civil Engineering, University College of Engineering, Osmania University, Hyderabad, Telangana State, India from November 7th and 8th,2014.

68. **M.Gopal Naik**, and G. Srinivas (2014). “Urban Runoff Modelling Using Geographical Information System and Remotely Sensed Data; Case study of semi-urban watershed.” *Proc. 4th International Conference on Hydrology and Watershed Management: Ecosystem Resilience-Rural and Urban Requirements*, organized by Centre for Water Resources, IST, JNTUH, Hyderabad, Telangana State, India from October 29 to November1, 2014, Vol.1,271-278.

69. Rameshwar Rao, G and **Gopal Naik, M.** (2014). “Continuous Water Distribution Network System Using District Metered Area Concept and Geographical Information System.” *Proc. of International Conference Seminar on Ensuring Sustainable Urban Water Supply Management: Best Practices and Case Studies*, organized by Indian Water Works Association Hyderabad Centre from July 24-25,2014.

70. **M.Gopal Naik**, Zainab Masood, G. Srinivas and G.Ra,meswar Rao (2014). “Urban Watershed Modelling Using Geographical Information Systemand Remotely Sensed Data.” *Proc. of International Conference Seminar on Ensuring Sustainable Urban Water Supply Management: Best Practices and Case Studies*, organized by Indian Water Works Association Hyderabad Centre from July 24-25,2014.

71. Naresh A. and **Gopal Naik, M.** (2014). “Surface flow measurement using Large Scale Particle Image Velocimetry.” *Proc. of Two-day National Conference on Water, Environment and Society (NCWES-2014)* organized by Centre for Water Resources, IST, JNTUH, Hyderabad from 3^{0th} June and 1st July,2014.

72. **Gopal Naik, M.** And Poojitha, P.B. (2014). “Cash Flow Analysis of Construction Project Using Artificial Neural Networks.” *Proc. of International Conference on Advances in Civil, Structural and Mechanical Engineering (CSM-2014)*. organized by Institute of Research and Engineers and Doctors (IRED) held at **London**, United Kingdom, during June 1-2, 2014, Pp:61- 65.

73. **Dr. M. Gopal Naik** and Vindhya Katarla (2014). “Performance Evaluation of Construction Project Using Multi Criteria Decision Making Methods.” *Proc. International Conference on Advances in Civil , Structural and Mechanical Engineering (ACSME-2014)* organized by Institute of Research and Engineering and Doctors (IRED) held at **Bangkok, Thailand**, during January, 4- 6,

2014.

74. **M. Gopal Naik** (2013), "GIS Based Sewer Network Analysis for Part of Hyderabad City using Remotely Sensed Data" in Proceedings of National Conference on Sustainable Water Resources Planning Management and Impact of Climate Change, Organized by CEWRM, Civil Engineering Department, BITS-Pilani Hyderabad Campus held during 5-6 April 2013

75. **Dr. M. Gopal Naik** and Dr. M. Kumar (2013). "Project Cost and Duration Optimization Using Soft Computing Techniques." *Proc. 4th International Conference on Construction and Project Management (ICCPM-2013)* organized by International Economics Development Research Center (IEDRC) to be held at **Beijing, China**, during September 1-3, 2013.

76. Kumar Molugaram and **Gopal Naik M.** (2013). "Development of Traffic Prediction Model for National Highway Corridors in Hyderabad, India." *Proc. of the International Conference on Environmental Pollution and Remediation (ICEPR-2013)* organized by ASET, held at Toronto, Ontario, Canada from July 15-17, 2013, Pp:203 (1-8).

77. **Dr. M. Gopal Naik**, G. Rameshwar Rao and M. Sukanya (2013). "Development of Continuous Water Supply Network System Using District Metered Area Concept and Geographical Information System." *Proc. of International Conference & Exhibition on Water Wastewater and Isotope Hydrology (ICE-WWISH2013)*, organized by Bangalore University, **Bangalore** from July 25-27, 2013.

78. **Dr. M. Gopal Naik**, and Rokhsareh Badamahgan. (2013). "Development of Building Information model for Resource Optimization in Construction Project." *Proc. Fifth International Conference on Construction Engineering and Project Management (ICCEPM-2013)*, organized by The University of North Carolina at Charlotte from January 9-11, 2013, Orange County, **California, USA**.

79. **Dr. Gopal M. Naik**, Aditya M., and Suman B. Naik. (2011). "Integrated 4D Model Development for Planning and Scheduling of a Construction Project Using Geographical Information System." *Proc. 2nd International Conference on Construction and Project Management (ICCPM-2011)*, IPEDR, held at **Singapore** from September 16-18, 2011, Vol.15, Pp. 281-285.

80. **Dr. M. Gopal Naik**. (2011). "Soil Erosion and Sediment yield Modelling of Watershed Using FEM, Remote Sensing and GIS." *Proc. 2011 World Environmental & Water Resources Congress: "Bearing Knowledge for Sustainability."* Organized by American Society of Civil Engineering (ASCE & EWRI), held at Palm Springs, California, **USA**, from May 22-26, 2011.

81. **Dr. Gopal M. Naik** and G. Srinivas. (2011). "Assessment of Irrigation Infrastructure and Potential Creation Using Geospatial Techniques." *Proc. National Conference on Sustainable Development of Water Resources and Environmental management 2011* organized by Sri Balaji College of Engineering & Technology, **Jaipur**, from February 24-25, 2011.

82. **Dr. M. Gopal Naik**. (2010). "GIS Based Modelling of Watershed for Rainfall-Runoff and Soil-Erosion using Remotely Sensed Data." *Proc. 4th International Perspective on Water Resources and the Environment (IPWE-2011)* organized by National University of Singapore, **Singapore** from March 4-6, 2011.

83. **Dr. M. Gopal Naik**. (2010). "Diffusion Wave based Modeling of Watershed for Soil Erosion and Sediment Yield Using FEM, GIS and Remotely Sensed Data." *Proc. EWRI Watershed Management 2010 International Conference: "Innovations in Watershed Management Under Land Use and Climate Change"*. Organized by American Society of Civil Engineering (ASCE & EWRI), held at Madison, Wisconsin, **USA**, from August 23-27, 2010.

84. **Dr. M. Gopal Naik**. (2010). "FEM and GIS Based Simulation Modelling of Watershed for Soil-Erosion and Sediment Yield." National Conference on Sustainable Water Resources Management and Impact of Climate Change, organized by BITS-Pilani **Hyderabad**, from March 5-6, 2010, Pp. 280-291.

85. **Dr. M. Gopal Naik.** (2010). "Integrated Watershed Modelling for Soil-Erosion and Sediment Yield Using FEM, GIS and Remotely Sensed data." *Proc. 3rd International Conference on Hydrology and Watershed Management ICHWM*) organized by Jawaharlal Nehru Technological University **Hyderabad**, from February 3-6, 2010, Pp.1047-1052.
86. **Dr. M. Gopal Naik.** (2009). "Watershed Modelling for Soil-Erosion and Sediment Yield Using GIS and Remotely Sensed data." *Proc. International Conference on Advances in Mechanical and Building Sciences in the 3rd Millennium (ICAMB)* organized by Vellore Institute of Technology held at Vellore, **Tamil Nadu**, from December 14-16, 2009.
87. **M. Gopal Naik.** (2007). "GIS based rainfall-runoff modelling for agricultural watershed." *Proc. 28th Asian International Conference on Remote Sensing (ACRS-2007)*, organized by Malaysian Centre for Remote Sensing (MACRES), held at **Kuala Lumpur, Malaysia**, from November 12- 16, 2007, pp109.
88. **M. Gopal Naik**, E.P.Rao and T.I.Eldho (2007). "Watershed Modelling for Soil Erosion and Sediment yield Processes." *Proc. "International Workshop on Complex Systems in Fluid Flows and Sedimentation Processes (IWCSFFSP-07)"*, organized by Indian Statistical Institute, **Kolkata**, from August 27-30, 2007.
89. **M.Gopal Naik**, E.P.Rao and T.I.Eldho. (2007). "Soil Erosion and Sediment yield Modelling of Watershed Using FEM, Remote Sensing and GIS." *Proc. 32nd Congress of IAHR on "Harmonizing the Demands of Art and Nature in Hydraulics"* organised by the International Association of Hydraulic Engineering & Research (IAHR) and COPRI-ASCE Coastal Structures 2007 held at **Venice, Italy**, from July 1-5, 2007, Vol.1, 417(pp.435).
90. **M.Gopal Naik**, E.P.Rao and T.I.Eldho. (2007). "Simulation of Soil Erosion and Sediment yield Using Remotely Sensed data and GIS Techniques." *Proc. 6th R & D International conference on "Sustainable Development of Water and Energy Resources - Needs and Challenges,"* organized by CBIP from 13-16 February, 2007, **Lucknow**, U.P., India, Vol. I, 557-567.
91. **M.Gopal Naik**, E.P.Rao, T.I. Eldho and K. Venkata Reddy. (2006). "Modelling of Soil Erosion and Sediment yield Using Finite Element Method and Geographical Information Systems." *Proc. 2nd International conference on "Hydrology and Watershed management (ICHWAM)"*, December 5-8, 2006, organized by Centre for Water Resources, JNTU Institute of Science and Technology, **Hyderabad**, India, Vol. I, 584-591.
92. **Gopal Naik, M.**, Rao, E.P., Eldho, T.I. and Venkata Reddy, K. (2006). "FEM and GIS based modelling of watershed for soil erosion and sediment yield." *Proc. "15th Congress of Asia and Pacific Division of International Association of Hydraulic Engineering and Research (APD-IAHR)"*, August 7-10, 2006, organized by Indian Institute of Technology Madras, **Chennai**, India, Vol. 1, 676-691.
93. **M. Gopal Naik** and G.K.Sudha. (2006). "GIS and Remote Sensing techniques to groundwater fluctuations." *Proc. of National Conference on "Civil Engineering Systems"*, organized by Department of Civil Engineering, University College of Engineering, Osmania University, Hyderabad, India, June 1-3, 2006.
94. **M. Gopal Naik**, E.P.Rao and T.I.Eldho. (2006). "Soil Erosion and Sediment yield Modelling of Watershed Using FEM, Remote Sensing and GIS." *The International Conference of "World Water and Environmental Congress-2007"*, organized by EWRI, ASCE, at Florida, USA. *Abstract accepted.*
95. **M. Gopal Naik**, E.P.Rao and T.I.Eldho. (2006). "GIS based Watershed Modelling for Estimating Soil Erosion and Sediment yield." *The International Conference of "MAP INDIA-2006"*, organized by GIS Development, New Delhi, India. *Abstract accepted.*
96. G.K.Sudha, **M. Gopal Naik** and S.Madhav Rao. (2003). "A study on groundwater monitoring using GIS and Remote Sensing", *Proc., Sixth Annual User Conference*, organized by ESRI India,

New Delhi, April 23-24,2003.