

Name of Faculty

Dr. Kamalini Devi

Designation

Assistant Professor

Nature of Job/Appointment

Regular

Date of Joining

21- 02 -2023

E-mail

kamalinidevi_civil@cbit.ac.in



Education Qualifications

Name of the Degree

Class

Ph. D

Doctorate of Philosophy (Civil Engineering)

Awarded

PG

M.Tech (Water Resource Engineering)

First Class

UG

B.Tech (Civil Engineering)

First Class

Work Experience

Teaching

6 Years

Research

10 years

Industry

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Others

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1. Open channel flow hydraulics
2. Surface water hydrology and hydraulics
3. Experimental and numerical hydro dynamic modeling for compound river channels
4. Computational fluid dynamics
5. Unsteady flow analysis

Area of Specialization

Professional Memberships

1. Indian Society for Hydraulics (ISH), LM – 1277, Life Membership
2. The Institution of Engineers, India (IEI), AM1914718, Associate Member

Responsibilities held at Institution Level

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Responsibilities held at Department Level

Mentor-UG Projects, Class Teacher, Mentor

Research Guidance

2 Projects in M.Tech. level and 10 projects at B. Tech. Level

Awards Received

1. Received "**Gold Medal**" for the Best Ph.D. Thesis of 2017-18" in 16th Convocation at NIT Rourkela.
2. Received financial assistance from International **Travel Support (ITS)** Scheme by Science and Engineering Research Board, **DST India** to present one research paper in an International Conference of River Flow-2018 held at Irstea, Lyon-Villeurbanne, France during 5-8 September 2018
3. Received '**Er. Govinda Chandra Sahu award**' for the research paper from the **Institution of Engineer (India)** Odisha State Centre, Bhubaneswar during 60th Annual technical session held on 30th March 2019.
4. Received **Elite+Gold** certificate from NPTEL (Top 1 % of Certified Candidates) for the course Hydraulic Engineering in 2021.
5. Received **Elite+Gold** certificate from NPTEL (Top 5 % of Certified Candidates) for the course Water Supply Engineering in 2020.
6. Received **ISH G.M. Nawathe Puraskar** (Best Paper in Hydro-2020 International) for the year 2021 at 26th International Conference on Hydraulics, Water Resources and Coastal Engineering (Hydro 2021), SVNIT Surat, India, 23rd-25th December, 2021.
7. Received Best Paper Award in one parallel session at 25th International Conference on Hydraulics, Water Resources and

	Coastal Engineering (Hydro 2020), NIT Rourkela, India, 26 th -28 th March, 2021.
	8. Received Best Paper Award in one parallel session at 26 th International Conference on Hydraulics, Water Resources and Coastal Engineering (Hydro 2021), SVNIT Surat, India, 26 th -28 th March, 2021.
	9. Second Topper in M. Tech of Water Resource Specialization at NIT, Rourkela, 2014.
Courses Handled at Under Graduate / Post Graduate Level.	Fluid Mechanics, Hydraulics and Hydraulic Machinery, Ground Water Hydrology, Environmental Engineering, Fluid Mechanics Lab, Hydraulics and Hydraulic Machinery lab
No. of Papers Published	National Journals – -- International Journals – 25 National Conference – 01 International Conference – 53
Projects Carried out	---
Patents	<p>Title of invention: IBAM-Mineral Water Quality Testing System: IoT-Based Automatic Mineral Water Quality Testing and Management System</p> <p>Status: Granted</p> <p>Name of inventor(s): Devi, Kamalini; Mehar Ganesh, Kolli; Lakshmi, A. Sri; Murugan, P.C.; Chandel, Garima; PRATHEEP, V. G.; Garg, Setu; Kumar Yadav, Rakesh; Venkata Suman, Jami and Chordiya, S. B.</p> <p>Filed Patent No. and Date: 2020103845, 30 Nov. 2020, Innovation Patent Australia</p> <p>Published and Granted Date: 2 Dec 2020 and 27 Jan 2021</p> <p>Term of Patent: Eight years from 2 December 2020</p>
Technology Transfer	<p>An expert lecture delivered in:</p> <ol style="list-style-type: none"> 1. TEQIP-III sponsored one week short term course on “Computer Application in Water Resources Engineering (CAWRE 2018)” organised by Department of Civil Engineering during 01st-06th October, 2018 at National Institute of Technology, Rourkela 2. Three-day National Level Faculty Development Programme on “Innovation, Entrepreneurship & its Relevance in Civil Engineering (IERCE)” conducted from 10-12 May, 2021 at Saint Martin Engineering College. 3. Two-week National Level Faculty Development Programme on “Computer Application in Civil Engineering” conducted by Vidya Institute of Technology in September 2022. 4. Four week Internship Programme on “Computer Application in Civil Engineering” conducted by Vidya Institute of Technology in September 2022.
No. of Books/Chapter Published with details	<ol style="list-style-type: none"> 1. Khuntia, J.R., Devi, K., Das, B.S., Khatua, K.K., Jena, S. (2023). Effect of Emergent Rigid Vegetation on Flow Properties in an Open Channel. In: Timbadiya, P.V., Patel, P.L., Singh, V.P., Barman, B. (eds) Fluid Mechanics and Hydraulics. HYDRO 2021. Lecture Notes in Civil Engineering, vol 314. Springer, Singapore. https://doi.org/10.1007/978-981-19-9151-6_1, pp: 1-14. 2. Sahoo, S., Devi, K., Khuntia, J.R., Khatua, K.K. (2023). Numerical Investigation of Secondary Flow Structures in a Gravel Bed Asymmetric Compound Channel. In: Timbadiya, P.V., Patel, P.L., Singh, V.P., Barman, B. (eds) Fluid Mechanics and Hydraulics. HYDRO 2021. Lecture Notes in Civil Engineering, vol 314. Springer, Singapore. https://doi.org/10.1007/978-981-19-9151-6_9, pp: 101-113. 3. Devi K., Das B.S., Khuntia J.R., Khatua K.K. (2022) Boundary Shear Stress Distributions in Compound Channels Having Narrowing and Enlarging Floodplains. In: Jha R., Singh V.P., Singh V., Roy L.B., Thendiyath R. (eds) River Hydraulics. Water

- Science and Technology Library, vol 110, pp; 127-141. Springer, Cham. DOI: 10.1007/978-3-030-81768-8_11
4. Das B.S., Devi K., Khuntia J.R., Khatua K.K. (2022) Flow Distributions in a Compound Channel with Diverging Floodplains. In: Jha R., Singh V.P., Singh V., Roy L.B., Thendiyath R. (eds) River Hydraulics. Water Science and Technology Library, vol 110, pp: 113-125. Springer, Cham. DOI: 10.1007/978-3-030-81768-8_10.
 5. Khuntia J.R., Devi K., Das B.S., Khatua K.K. (2022) Turbulence Characteristics in a Rough Open Channel under Unsteady Flow Conditions. In: Jha R., Singh V.P., Singh V., Roy L.B., Thendiyath R. (eds) River Hydraulics. Water Science and Technology Library, vol 110, pp: 143-155. Springer, Cham. DOI: 10.1007/978-3-030-81768-8_12.
 6. Sahoo S., Khuntia J.R., Devi K., Khatua K.K. (2022) Energy and Momentum Correction Coefficients in Compound Open Channel Flow. In: Jha R., Singh V.P., Singh V., Roy L.B., Thendiyath R. (eds) River Hydraulics. Water Science and Technology Library, vol 110, pp: 309-320. Springer, Cham. DOI: 10.1007/978-3-030-81768-8_26.
 7. Devi, K., Khuntia, J. R., and Khatua, K. K. (2018) Depth-Averaged Velocity Distribution for Symmetric and Asymmetric Compound Channels, *In proceedings of MCCS*, Springer, Singapore, Chapter 25, DOI: 10.1007/978-981-10-5565-2_25 pp. 281-292.
 8. Devi, K., Khatua, K. K., and Khuntia, J. R. (2017) Flow Computation in Symmetric and Asymmetric Compound Channels Using Conveyance Estimation System. In *Proceedings of NCCS*, Springer, Singapore, Chapter 35, 403, DOI: 10.1007/978-981-10-2999-8_35, pp. 409-415.

Details of Short-Term Training Programs/Faculty Development Programs/Seminars/Workshops. Other Trainings (Attended and/or Organized).

- Attended training program on **"MIKE-FLOOD and MIKE-BASIN"** organised at Civil Engineering Department, NIT Rourkela, during 21st -24th January 2014.
- Attended **"Flow measurements and modelling in Water resources Engineering"** organised by Civil Engineering Department, NIT Rourkela, during 23rd -28th September 2014.
- Attended **"International Symposium on River Flow 2016"** organised by Civil Engineering Department, NIT Rourkela, on 25th February 2016.
- Attended Three-day National Level Faculty Development Programme on **"Innovation, Entrepreneurship & its Relevance in Civil Engineering (IERCE)"** at SMEC, Secunderabad conducted from 10-12 May, 2021.
- Participated in Online **International Conference on "Computing for Sustainable Development in Civil Engineering" (ICCSDC-2021)** during 24th – 25th June, 2021.
- Actively participated in the International Three - Day Workshop on **"Intellectual Property Rights and Innovations in Civil Engineering"** held during 08-10 June, 2021.
- Completed Faculty Development Program on "Water Supply Engineering" from NPTEL for the course in 2020.

Details of Journal Publications/Conferences (National and International)

International Journal / National Journal:

1. **Devi, K., Das, B. S., Khuntia, J. R. & Khatua, K. K., (2021).** Analytical solution for depth averaged velocity and boundary shear in a compound channel, *Water Management, ICE Publishing*, 174 (3), pp: 143-158, DOI: 10.1680/jwama.18.00062, ISSN: 1741-7589.
2. **Devi, K. & Khatua, K. K., (2020).** Boundary shear distribution in a compound channel with differential roughness, *Water Management, ICE Publishing*, 173 (6), pp: 274-292, DOI: 10.1680/jwama.19.00035, ISSN: 1741-7589.

3. **Devi, K. & Khatua, K. K.**, (2019). Discharge prediction in asymmetric compound channel, *Journal of Hydro-environment Research, Elsevier*, 23, pp: 25–39, DOI: 10.1016/j.jher.2019.02.001, ISSN: 1570-6443.
4. **Devi, K. & Khatua, K. K.** (2018, Feb). Prediction of apparent shear stress in an asymmetric compound channel, *ISH Journal of Hydraulic Engineering, Taylor & Francis*, 26 (1), pp: 1-11, DOI: 10.1080/09715010.2018.1429326, ISSN: 0971-5010 (P), 2164-3040 (E).
5. **Devi, K. & Khatua, K. K.** (2017). Depth-Averaged Velocity and Boundary Shear Stress Prediction in Asymmetric Compound Channels, *Arabian Journal for Science and Engineering, Springer*, 42 (9), pp: 3849–3862, DOI: 10.1007/s13369-017-2486-2, ISSN: 2191-4281.
6. **Devi, K. & Khatua, K. K.**, (2017). An Analytical method for over bank flow modeling, *ISH Journal of Hydraulic Engineering, Taylor & Francis*, 25(2), pp: 1-9, DOI: 10.1080/09715010.2017.1398113, ISSN: 0971-5010 (P), 2164-3040 (E).
7. **Devi, K. & Khatua, K. K.** (2017). Flow Distribution in an Unsymmetrical Compound Channel, *ISH Journal of Hydraulic Engineering, Taylor & Francis*, 24(1), pp: 16-24, DOI: 10.1080/09715010.2017.1340096, ISSN: 0971-5010 (P), 2164-3040 (E).
8. **Devi, K. & Khatua, K. K.**, (2016). Prediction of depth averaged velocity and boundary shear distribution of a compound channel based on the mixing layer theory, *Flow Measurement and Instrumentation, Elsevier*, 50, pp: 147–157, DOI: 10.1016/j.flowmeasinst.2016.06.020, ISSN: 0955-5986.
9. **Devi, K., Khatua, K. K. & Khuntia, J. R.** (2016). Boundary Shear Stress Distribution for a Two Stage Asymmetric Compound Channel, *Arabian Journal for Science and Engineering, Springer*, 42 (3), pp: 1077-1091, DOI: 10.1007/s13369-016-2321-1, ISSN: 2191-4281.
10. **Devi, K., Khatua, K. K. & Das, B. S.**, (2016). A numerical solution for depth averaged velocity distribution in an open channel flow, *ISH Journal of Hydraulic Engineering, Taylor & Francis*, 22 (03), pp: 262-271, DOI: 10.1080/09715010.2016.1184104, ISSN: 0971-5010 (P), 2164-3040 (E).
11. **Devi, K., Khatua, K. K. & Khuntia, J. R.**, (2016). Discharge Assessment in an Asymmetric Compound Channel by Zero Shear Interface Method, *ISH Journal of Hydraulic Engineering, Taylor & Francis*, 23 (02), pp: 126-134, DOI: 10.1080/09715010.2016.1250231, ISSN: 0971-5010 (P), 2164-3040 (E).
12. **Devi, K., Khatua, K. K., Das, B. S. & Khuntia, J. R.**, (2016). Evaluation of interacting length in prediction of over bank flow, *ISH Journal of Hydraulic Engineering, Taylor & Francis*, 23 (02), pp: 187-194, DOI: 10.1080/09715010.2016.1275828, ISSN: 0971-5010 (P), 2164-3040 (E).
13. **Shekhar, D., Das, B. S., Devi, K., Khuntia, J. R., & Karmaker, T.** (Oct 2023). Discharge estimation in a compound channel with converging and diverging floodplains using ANN–PSO and MARS. *Journal of Hydroinformatics, IWA Publishing*, jh2023145, 25 (6), pp: 2479–2499, DOI: 10.2166/hydro.2023.145.
14. **Sahoo, S., Khuntia, J. R., Devi, K., Sai Prasad, B. S., & Kumar Khatua, K.** (Aug 2023). Turbulence modelling for depth-averaged velocity and boundary shear stress of a dense rigid grass bed open channel. *AQUA-Water Infrastructure, Ecosystems and Society, IWA Publishing*, 72(9), 1748-1769, DOI: 10.2166/aqua.2023.093.
15. **Choudhary, A., Das, B. S., Devi, K., & Khuntia, J. R.** (May 2023). ANFIS-and GEP-based model for prediction of scour depth around bridge pier in clear-water scouring and live-bed scouring conditions. *Journal of Hydroinformatics, IWA Publishing*, 25(3), pp: 1004-1028, DOI: 10.2166/hydro.2023.212.
16. **Kumar, S., Khuntia, J. R., Devi, K., Das, B.S. & Khatua, K. K.** (2022). Closure to "Discussion on "Prediction of Flow Resistance in an Open Channel over Movable Beds Using Artificial Neural Network", *Journal of Hydrologic Engineering, ASCE*, 28 (2), DOI: 10.1061/(ASCE)HE.1943-5584.0002085, ISSN: 1084-0699 (P), 1943-5584 (E).
17. **Das, B. S., Devi, K., Khuntia, J. R. & Khatua, K. K.**, (2020). Discharge estimation in converging and diverging compound open channels by using adaptive neuro-fuzzy inference system, *Canadian Journal Civil Engineering, NRC Research Press*, 47 (12), pp: 1-15, DOI: 10.1139/cjce-2018-0038, ISSN: 0315-1468, 1208-6029.
18. **Khuntia, J. R., Devi, K. & Khatua, K. K.**, (2019). Turbulence characteristics in a rough open channel under unsteady flow conditions, *ISH Journal of Hydraulic Engineering, Taylor & Francis*, 27(sup1), pp: 1-12, DOI: 10.1080/09715010.2019.1658549, ISSN: 0971-5010 (P), 2164-3040 (E).
19. **Khuntia, J. R., Devi, K. & Khatua, K. K.**, (2019). Flow distribution in a compound channel using an artificial neural network, *Sustainable Water Resources Management, Springer*, 5, pp: 1847-1858, DOI: 10.1007/s40899-019-00341-2, ISSN: 2363-5037, 2363-5045.
20. **Das, B. S., Devi, K. & Khatua, K. K.**, (2019). Prediction of discharge in converging and diverging compound channel by using gene expression programming, *ISH Journal of Hydraulic Engineering, Taylor & Francis*, 27 (4), pp: 1-16, DOI: 10.1080/09715010.2018.1558116, ISSN: 0971-5010 (P), 2164-3040 (E).
21. **Khuntia, J. R., Devi, K. & Khatua, K. K.**, (2018). Boundary shear stress distribution in straight compound channel flow using artificial neural network, *Journal of Hydrologic Engineering, ASCE*, 23 (5), 04018014, DOI: 10.1080/09715010.2018.1558116, ISSN: 1084-0699, 1943-5584
22. **Khuntia, J. R., Devi, K. & Khatua, K. K.**, (2018). Prediction of depth-averaged velocity in an open channel flow, *Applied Water Science, Springer*, 8, pp: 1-14, DOI: 10.1007/s13201-018-0812-9, ISSN: 2190-5495.

23. Das, B. S., **Devi, K.** & Khatua, K. K. (2017), Numerical solution of depth averaged velocity and boundary shear stress distribution in converging compound channels, *Arabian Journal of Science and Engineering*, Springer, 42 (3), pp: 1305–1319, DOI: 10.1007/s13369-016-2382-1, ISSN: 2191-4281.
24. Khuntia, J. R., **Devi, K.** & Khatua, K. K., (2016). Variation of local friction factor in an open channel flow, *Indian Journal of Science & Technology*, 9 (46), pp: 1-6, DOI: 10.17485/ijst/2016/v9i46/105256, ISSN: 0974-6846, 0974-5645.

International Conferences:

25. Devi, K., Das, B. S., Khuntia, J. R., Reddy, G. R., and Prasad, A. L. (2021). Interlinking Prospect of Godavari River with Krishna River. 25th International Conference on Hydraulics, Water Resources and Coastal Engineering (Hydro 2020), NIT Rourkela, India, 26th-28th March, 2021, ISBN : 978-93-90631-56-8, Vol. 1, pp: 1377-1387.
26. Devi, K., Das, B. S., Khuntia, J. R., and Khatua, K. K (2020). Apparent shear in compound channels with non-uniform flow, *Tenth International conference on fluvial hydraulics, River Flow 2020 (IAHR)* CRC Press, Taylor & Francis Group, London, ISBN 978-0-367-62773-7, pp: 95-104.
27. Devi, K., Das, B. S., Khuntia, J. R., and Khatua, K. K (2019). Discharge estimation in compound channels having narrowing and enlarging floodplains. 24th International Conference on Hydraulics, Water Resources and Coastal Engineering (Hydro 2019), Osmania University, Hyderabad, 18th-20th December, 2019, pp.: 1309-1320, ISBN: 978-93-8935-484-3.
28. Devi K., Khatua K. K., Das B. S. and Khuntia J. R. (2018) Boundary shear stress distributions in compound channels having narrowing and enlarging floodplains, 23rd International Conference on Hydraulics, Water Resources and Coastal Engineering (Hydro 2018), 19th-21st December, NIT Patna.
29. Devi K., Das B. S., Khuntia J. R. and Khatua K. K. (2018), An analytical solution for non-uniform flow in compound channels, Ninth International conference on fluvial hydraulics, *River Flow 2018 (IAHR)*, E3S Web of Conferences 40, 06041 (2018), DOI: 10.1051/e3sconf/20184006041.
30. Devi K., Khatua K. K. and Khuntia J. R. (2017) Improved Analytical Method for Overbank Flow Modelling. 22nd International Conference on Hydraulics, Water Resources and Coastal Engineering (Hydro 2017), 21st-23rd December.
31. Devi, K., Khatua, K. K., and Khuntia, J. R. (2017) Flow Computation in Symmetric and Asymmetric Compound Channels Using Conveyance Estimation System. In *Proceedings of NCCS*, Springer, Singapore, Chapter 35, 403, DOI: 10.1007/978-981-10-2999-8_35, pp. 409-415.
32. Devi K., Khatua K. K. and Khuntia J. R. (2016) Application of Shiono and Knight Method in Asymmetric Compound Channel Flow. 21st Proceedings of International Conference on Hydraulics, Water Resources and Coastal Engineering (Hydro 2016), CWPRS Pune, India, 8th–10th December, pp.:1416-1426.
33. Devi K., Khatua K. K. and Das B. S. (2016) Apparent Shear Stress in an Unsymmetrical Compound Channel Flow. Proceedings of International Conference on Hydraulics, Water Resources and Coastal Engineering (Hydro 2016), CWPRS Pune, India. 8th–10th December, pp.: 1427-1437.
34. Devi, K., Khatua, K.K. and Khuntia, J. R. (2016) Prediction of mixing layer in symmetric and asymmetric compound channels. In *proceedings of River Flow 2016 (IAHR)*, CRC Press, ISBN: 978-1-138-02913-2, pp. 39-47.
35. Devi, K., Khatua, K.K. and Das, B. S. (2016) Apparent shear in an asymmetric compound channel. In *proceedings of River Flow 2016 (IAHR)*, CRC Press, ISBN: 978-1-138-02913-2, pp. 48-56.
36. Devi, K., Khatua, K.K. and Khuntia, J.R. (2015) Prediction of interacting length for evaluation of discharge in a compound channel. International Conference on Hydraulics, Water Resources and River Engineering (HYDRO 2015), IIT, Roorkee, pp.: 1-13.
37. Devi, K., Khatua, K.K. and Sial, S. (2015) Apparent shear stress in an asymmetric compound channel. *International Conference on Hydraulics, Water Resources and River Engineering (HYDRO 2015)*, IIT, Roorkee, pp.: 1-13.
38. Devi, K., Khatua, K.K. and Samal R.N.S.D. (2015) Evaluation of zero shear interface methods in an asymmetric compound channel. *International Conference on Hydraulics, Water Resources and River Engineering (HYDRO 2015)*, IIT, Roorkee, pp.: 1-14.
39. Devi, K., Khatua, K.K. and Das, B.S. (2015) Flow computation in symmetric and asymmetric compound channels by Separate channel methods, *IJRITCC*, Vol-3, Issue-2, ISSN: 23218169, pp.024-027.
40. Devi, K., Khuntia, J. R., and Khatua, K. K. (2018) Depth-Averaged Velocity Distribution for Symmetric and Asymmetric Compound Channels, In *proceedings of MCCS*, Springer, Singapore, Chapter 25, DOI: 10.1007/978-981-10-5565-2_25 pp. 281-292.
41. Devi, K., Das, B.S., and Khatua, K.K. (2014) Effect of Roughness Coefficient on Solution of Saint-Venant Equations in River Management. *Civil Engineering Systems and Sustainable Innovations*, ISBN: 978-93-8308378-7, pp.130-138.
42. Khuntia J. R., Devi K., Sahoo, S., Das B.S., Khatua K.K. (2023) CFD Simulation of Non-Prismatic Compound Channels using k- ϵ and k- ω Turbulence Models, In 28th International Conference on

Hydraulics, Water Resources and Coastal Engineering (HYDRO 2023 International) at NIT Warangal, India, during December 21-23, 2023.

43. A Uma Maheshwari, Margaret Wesley, Vikesh P., Rahul K., **Devi K.** (2022) Study of flash floods and flow prediction by AI techniques. 27th International Conference on Hydraulics, Water Resources, Environmental and Coastal Engineering (HYDRO 2022 International) at Punjab Engineering College Chandigarh, India during December 22 -24, 2022.
44. Khuntia J. R., **Devi K.**, Sahoo, S., Das B.S., Khatua K.K. (2022) Numerical Modelling of Flood Routing in Laboratory and Natural Open Channels, 27th International Conference on Hydraulics, Water Resources and Coastal Engineering (HYDRO 2022 International) at PEC Chandigarh, India, during December 22-24, 2022.
45. Sahoo, S., **Devi K.**, Khuntia J. R., Khatua K.K. (2022). Numerical modelling of bed shear stress for an asymmetric compound open channel, 27th International Conference on Hydraulics, Water Resources, Environmental and Coastal Engineering (HYDRO 2022 International) at Punjab Engineering College Chandigarh, India during December 22 -24, 2022.
46. Shekhar D., Das B. S., Khuntia, J. R., **Devi K.** (2022) Prediction of Discharge in Converging and Diverging Floodplain by ANN-PSO and MARS, 27th International Conference on Hydraulics, Water Resources, Environmental and Coastal Engineering (HYDRO 2022 International) at Punjab Engineering College Chandigarh, India during December 22 -24, 2022.
47. Khuntia J. R., **Devi K.**, Das B.S., Khatua K.K. and Jena, S. (2021) Effect of Emergent Rigid Vegetation on Flow Properties in an Open Channel, 26th International Conference on Hydraulics, Water Resources and Coastal Engineering (HYDRO 2021 INTERNATIONAL) at SVNIT Surat, Gujarat, India, during December 23-25, 2021.
48. Rohitha, Sudheera, Renuka, Manisha and **Devi, K.** (2021) Interlinking of Rivers (Godavari-Krishna-Pennar-Cauvery), 26th International Conference on Hydraulics, Water Resources and Coastal Engineering (HYDRO 2021 INTERNATIONAL) at SVNIT Surat, Gujarat, India, during December 23-25, 2021.
49. Khuntia, J.R., **Devi, K.**, Das, B.S., Khatua, K.K. and Patra, P.S.K. (2021) Effect of Secondary Flow in Discharge Prediction for Smooth and Rough Open Channels, 4th International Conference on the Status and Future of the World's Large Rivers, Moscow, Russia, 3-6 August 2021.
50. Sahoo, S., **Devi, K.** & Khatua, K.K. (2021) Simulation of Flow Structure in an Asymmetric Compound Channel, 4th International Conference on the Status and Future of the World's Large Rivers, Moscow, Russia, 3-6 August 2021.
51. Khuntia, J. R., **Devi, K.**, Das, B. S. and Khatua, K. K. (2021). Turbulent structures under unsteady flow conditions through emergent rigid vegetation, 25th International Conference on Hydraulics, Water Resources and Coastal Engineering (Hydro 2020), 26th-28th March, 2021, NIT Rourkela, India. ISBN : 978-93-90631-56-8, Vol. 2, pp: 42-51.
52. Das B. S., **Devi K.**, Khuntia, J. R. and Khatua, K. K. (2021). Prediction of discharge in non-prismatic compound channel using Extended ISM, 25th International Conference on Hydraulics, Water Resources and Coastal Engineering (Hydro 2020), 26th-28th March, 2021, NIT Rourkela, India. ISBN: 978-93-90631-56-8, Vol. 2, pp: 347-354.
53. Sahoo, S., **Devi K.**, Khuntia, J. R. and Khatua, K. K. (2021). Study of unsteady flow parameters and hysteresis effect in a simple channel under unsteady flow condition, 25th International Conference on Hydraulics, Water Resources and Coastal Engineering (Hydro 2020), 26th-28th March, 2021, NIT Rourkela, India. ISBN : 978-93-90631-56-8, Vol. 1, pp: 581-589.
54. Das B. S., **Devi K.**, Khuntia, J. R. and Khatua, K. K. (2020) Experimental investigation of flow in a diverging compound channel. *Tenth International conference on fluvial hydraulics, River Flow 2020 (IAHR) CRC Press, Taylor & Francis Group, London, ISBN 978-0-367-62773-7*, pp: 1899-1907.
55. Khuntia, J. R., **Devi K.**, Khatua, K. K and Jena, S. (2019). Velocity and turbulence distribution in unsteady open channel flows through an emergent rigid stems. 24th International Conference on Hydraulics, Water Resources and Coastal Engineering (Hydro 2019), Osmania University, Hyderabad, 18th-20th December, 2019, pp.: 1321-1330, ISBN: 978-93-8935-484-3.
56. Das B. S., **Devi K.**, Khuntia, J. R. and Khatua, K. K (2019). Velocity distribution in compound channel with diversing floodplains. 24th International Conference on Hydraulics, Water Resources and Coastal Engineering (Hydro 2019), Osmania University, Hyderabad, 18th-20th December, 2019, pp.: 1331-1342, ISBN: 978-93-8935-484-3.
57. Khuntia J. R., **Devi K.**, Proust Sébastien and Khatua K. K. (2018), Depth-averaged velocity and bed shear stress in unsteady open channel flow over rough bed, *Ninth International conference on fluvial hydraulics, River Flow 2018 (IAHR)*, E3S Web of Conferences 40, 05071 (2018), DOI: 10.1051/e3sconf/20184005071
58. Das B. S., **Devi K.**, Proust Sébastien and Khatua K. K. (2018), Flow distribution in diverging compound channels using improved independent subsection method, *Ninth International conference on fluvial*

- hydraulics, *River Flow 2018 (IAHR)*, E3S Web of Conferences 40, 05068 (2018), DOI: 10.1051/e3sconf/20184005068.
59. Khuntia J. R., **Devi K.**, Das, B. S. and Khatua K. K. (2018), Turbulence characteristics in a vegetated open channel under unsteady flow conditions, *International Conference on Hydraulics, Water Resources and Coastal Engineering* (Hydro 2018), 19th-21st December, NIT Patna, India.
 60. Das, B. S., **Devi K.**, Khuntia J. R. and Khatua K. K. (2018), Effect of eddy viscosity and secondary flow circulation in compound channel having non prismatic flood plains, *International Conference on Hydraulics, Water Resources and Coastal Engineering* (Hydro 2018), 19th-21st December, NIT Patna, India.
 61. Sahoo S., **Devi K.**, Khuntia, J. R. and Khatua K. K., (2018) Energy and Momentum Correction Coefficients in Compound Open Channel Flow. *International Conference on Hydraulics, Water Resources and Coastal Engineering* (Hydro 2018), 19th-21st December, NIT Patna, India.
 62. Das B. S., Khatua K. K. and **Devi K.** (2018) Application of Lateral Distribution Method and Modified Lateral Distribution Method to the Compound Channel Having Converging Floodplains, In proceedings of MCCI, Springer, Singapore, Chapter 25, DOI: 10.1007/978-981-10-5565-2_26, pp. 293-303.
 63. Khuntia J. R., **Devi K.** and Khatua K. K., (2017) Flow Resistance in Open Channel with Emergent Rigid Vegetation. *International Conference on Hydraulics, Water Resources and Coastal Engineering* (Hydro 2017). 21st-23rd December, LDCE Gujarat, India.
 64. Das, B.S., Khatua, K.K. and **Devi, K.** (2017) Prediction of Depth-Averaged Velocity and Boundary Shear Stress Distribution in a Single-Stage Channel by Lateral Distribution Method. In Proceedings of NCCI, Springer, Singapore, Chapter 34, 403, DOI: 10.1007/978-981-10-2999-8_34, pp. 397-407.
 65. Sahoo S., **Devi K.** and Khatua K. K., (2017) Flow Prediction in Compound Channels by Using Modified WDCM. *International Conference on Hydraulics, Water Resources and Coastal Engineering* (Hydro 2017), 21st-23rd December, LDCE Gujarat, India.
 66. Panigrahi A., Devi K. and Nandi K. K. (2017) Experimental Study on Turbulence Exchange in Compound Open Channel Flow, *International Conference on Hydraulics, Water Resources and Coastal Engineering* (Hydro 2017), 21st-23rd December, LDCE Gujarat, India.
 67. Behera S., **Devi K.** and Nandi K. K. (2017) Evaluation of Kinetic Energy and Momentum Coefficient for Asymmetric And Symmetric Compound Channel, *International Conference on Hydraulics, Water Resources and Coastal Engineering* (Hydro 2017). 21-23 December, LDCE Gujarat, India.
 68. Khuntia J. R., **Devi K.** and Khatua K.K. (2016) Calibrating Coefficients for Prediction of Depth Averaged Velocity Distribution. In *Proceedings of International Conference on Hydraulics, Water Resources and Coastal Engineering (Hydro2016)*, CWPRS Pune, India. 8th-10th December, pp.: 1446-1456.
 69. Sahoo S., **Devi K.** and Khatua K.K. (2016) Flow Structure in an Asymmetric Compound Channel Flow. In *Proceedings of International Conference on Hydraulics, Water Resources and Coastal Engineering (Hydro 2016)*, CWPRS Pune, India. 8th-10th December, pp.: 1457-1464.
 70. Das B. S., Khatua K. K. and **Devi K.** (2016) Critical Appraisal of Various Approaches to Predict Flow in Compound Channel Having Converging and Diverging Floodplains. In *Proceedings of International Conference on Hydraulics, Water Resources and Coastal Engineering (Hydro2016)*, CWPRS Pune, India. 8th-10th December, pp.: 1588-1600.
 71. Das, B.S., Khatua, K.K. and **Devi, K.** (2016) Prediction of energy loss in compound channels having enlarging floodplains. In *proceedings of River Flow 2016 (IAHR)*, CRC Press, ISBN: 978-1-138-02913-2, pp.:65-72.
 72. Sial, S., **Devi, K.** and Khatua, K.K. (2016) Experimental Study on Velocity Profiles in Smooth and Rough Channels. *IRAJ*, IDLN-28022016-4159, pp.: 27-31.
 73. Samal, R.N.S.D., **Devi, K.** and Khatua, K.K. (2016) Boundary Shear Distribution in Smooth and Rough Open Channels. *IRAJ*, IDLN-28022016-4158, pp.: 22-26.
 74. Das, B.S., Khatua, K.K. and **Devi, K.** (2015) Effect of Eddy Viscosity and Secondary Flow Circulation in Compound Channel Having Non Prismatic Flood Plains. *HYDRO 2015 International conference*, IIT, Roorkee.
 75. Das, B.S., Khatua, K.K. and **Devi, K.** (2015) Evaluation of Depth Averaged Velocity and Boundary Shear Stress Distribution in Compound Channels by Lateral Distribution Method. *HYDRO 2015 International conference*, IIT, Roorkee.
 76. Das, B.S., Khatua, K.K. and **Devi, K.** (2015) Analysis of flow in skewed and converging compound channel. *IJRITCC*, Vol-3, Issue-2, ISSN: 23218169, pp.:136-140.

National Conferences

77. Das, B.S., **Devi, K.** and Khatua, K.K. (2014) Regulation of Unsteady Flow in Open Channel by using Inverse Explicit Method and Comparison with HECRAS. *Civil Engineering Systems and Sustainable Innovations*, ISBN: 978-93-83083-78-7, pp.: 76-82.

Invited Guest/ Lectures/ Session chairs/ Advisory Committee

1. National Advisory Committee member at 2nd International Conference on "Revolutionary Technology in Civil Engineering"

organized by Department of Civil Engineering, SMEC, Secunderabad.

2. Session Chair in ICACE 2022 during 20-22 December 2022.
3. Participated in the Innovation and New Knowledge in Water, Sanitation, and Hygiene (INK@WASH 3.0) summit on 5th and 6th May 2022, Hyderabad.
4. National Advisory Committee member at Online International Conference on "Revolutionary Technology in Civil Engineering" (ICRTCE-22) Organized by Department of Civil Engineering, St. Martin's Engineering College, Secunderabad during 10th & 11th March, 2022.
5. Session Chair in International conference HYDRO-2020 organized by NIT, Rourkela in association with ISH, Pune during 26 -28 March, 2021.
- Visited School of Civil Engineering **University of Leeds, U.K.** for discussion regarding Collaborative research work of UKIERI project with Prof. Nigel Wright, Dean of Research University of Leeds, U.K. and Prof. Andrew Sleight, School of Civil Engineering University of Leeds, U.K., June 2016.

- Visited **Saint Louis University**, Missouri, USA to attend River Flow 2016: Eighth International Conference on Fluvial Hydraulics, from July 11-14, 2016 and discussed regarding future research on compound channel with prominent researchers named Prof. D. Bousmar, Prof. S. Proust and Prof. X. Tang etc.

- Laboratory visit to **Utah State University**, Logan, Utah, USA and **University of Utah**, Salt Lake city, USA on July 18, 2017.

- Visited Hydraulic and Hydro-morphology laboratory of **Irstea, Lyon-Villurbanne, France on during River flow 2018** to discuss potential research opportunities and to disseminate knowledge about the laboratory set up and experimental works with Dr. Sébastien Proust.

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Google Scholar Citations: RnRdml8AAAAJ

Google Scholar Citations : 222

Scopus Citations : 129

h-index : 09

Foreign Universities Visit Related to the Research Work

Research Profiles

Research Citations / Indices

Referee in International / National Journals / Conferences

1. Journal of Fluid mechanics, Cambridge Press
2. ISH Journal of Hydraulic Engineering, Taylor & Francis
3. Journal of River Basin Management, Taylor & Francis
4. Journal of Environmental Management, Elsevier
5. Method X, Elsevier
6. Water Resources Management, Springer
7. Applied Water Science, Springer
8. River Research and Applications, Wiley
9. Journal of the Royal Society of New Zealand, Taylor & Francis
10. Journal of Hydro-environment Research, Elsevier
11. Environmental Modelling and Software, Elsevier
12. International Journal of Sediment Research, Elsevier
13. KSCE Journal of Civil Engineering, Springer
14. 7th International Conference on Water Resource and Environment (WRE 2021) Xi'an, China International, Xi'an, China.
15. 25th International Conference on Hydraulics, Water Resources and Coastal Engineering (Hydro 2020), 26 -28 March, 2021 at NIT Rourkela.