

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	4.8 Years
Research	8 years
Industry	--
Others	--
Area of Specialization	<ol style="list-style-type: none"> <li>1. Open channel flow hydraulics</li> <li>2. Surface water hydrology and hydraulics</li> <li>3. Experimental and numerical hydro dynamic modeling for compound river channels</li> <li>4. Computational fluid dynamics</li> <li>5. Unsteady flow analysis</li> </ol>
Professional Memberships	<ol style="list-style-type: none"> <li>1. Indian Society for Hydraulics (ISH), LM – 1277, Life Membership</li> <li>2. The Institution of Engineers, India (IEI), AM1914718, Associate Member</li> </ol>
Responsibilities held at Institution Level	--
Responsibilities held at Department Level	--
Research Guidance	2 Projects in M.Tech. level and 8 projects at B. Tech. Level
Awards Received	<ol style="list-style-type: none"> <li>1. Received "Gold Medal" for the Best Ph.D. Thesis of 2017-18" in 16<sup>th</sup> Convocation at NIT Rourkela.</li> <li>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</li> <li>3. Received 'Er. Govinda Chandra Sahu award' for the research paper from the Institution of Engineer (India) Odisha State Centre, Bhubaneswar during 60<sup>th</sup> Annual technical session held on 30<sup>th</sup> March 2019.</li> <li>4. Received Elite+Gold certificate from NPTEL (Top 1 % of Certified Candidates) for the course Hydraulic Engineering in 2021.</li> <li>5. Received Elite+Gold certificate from NPTEL (Top 5 % of Certified Candidates) for the course Water Supply Engineering in 2020.</li> <li>6. Received ISH G.M. Nawathe Puraskar (Best Paper in Hydro-2020 International) for the year 2021 at 26<sup>th</sup> International Conference on Hydraulics, Water Resources and Coastal Engineering (Hydro 2021), SVNIT Surat, India, 23<sup>rd</sup>-25<sup>th</sup> December, 2021.</li> <li>7. Received Best Paper Award in one parallel session at 25<sup>th</sup> International Conference on Hydraulics, Water Resources and Coastal Engineering (Hydro 2020), NIT Rourkela, India, 26<sup>th</sup>-28<sup>th</sup> March, 2021.</li> </ol>

8. Received Best Paper Award in one parallel session at 26<sup>th</sup> International Conference on Hydraulics, Water Resources and Coastal Engineering (Hydro 2021), SVNIT Surat, India, 26<sup>th</sup>-28<sup>th</sup> 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 – 21  
National Conference – 01 International Conference – 52

Projects Carried out ---

**Title of invention:** IBAM-Mineral Water Quality Testing System: IoT-Based Automatic Mineral Water Quality Testing and Management System  
**Status:** Granted  
**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.  
**Filed Patent No. and Date:** 2020103845, 30 Nov. 2020, Innovation Patent Australia  
**Published and Granted Date:** 2 Dec 2020 and 27 Jan 2021  
**Term of Patent:** Eight years from 2 December 2020

**An expert lecture delivered in:**  
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 01<sup>st</sup>-06<sup>th</sup> 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.

**1. 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**  
2. 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.  
3. 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

No. of Books/Chapter Published with details

Library, vol 110, pp: 143-155. Springer, Cham. DOI: 10.1007/978-3-030-81768-8\_12.

4. 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.
5. 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.
6. 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.
1. Attended training program on "MIKE-FLOOD and MIKE-BASIN"organised at Civil Engineering Department, NIT Rourkela, during 21<sup>st</sup> -24<sup>th</sup> January 2014.
2. Attended "Flow measurements and modelling in Water resources Engineering"organised by Civil Engineering Department, NIT Rourkela, during 23<sup>rd</sup> -28<sup>th</sup> September 2014.
3. Attended "International Symposium on River Flow 2016"organised by Civil Engineering Department, NIT Rourkela, on 25<sup>th</sup> February 2016.
4. 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.
5. Participated in Online International Conference on "Computing for Sustainable Development in Civil Engineering" (ICCSDC-2021) during 24<sup>th</sup> – 25<sup>th</sup> June, 2021.
6. Actively participated in the International Three - Day Workshop on "Intellectual Property Rights and Innovations in Civil Engineering" held during 08-10 June, 2021.
7. Participated in the Training Program through Distance Learning on "Land Use Land Cover Mapping using Remote Sensing" Conducted by National Water Academy, Pune during 15<sup>th</sup> to 17<sup>th</sup> March 2022.
8. Participated in the Training Program through Distance Learning on "Big Data Applications in Water Resources and Hydro Informatics" Conducted by National Water Academy, Pune during 17<sup>th</sup> to 21<sup>st</sup> January 2022.
9. Participated in the Training Program through Distance Learning on "Introduction to Python Programming & Its Applications in Water Resources Sector" Conducted by National Water Academy, Pune during 13<sup>th</sup> to 24<sup>th</sup> December 2021.
10. Participated Technical Talk on "Geotechnical Investigation in Difficult Ground Conditions" Organized by Department of Civil Engineering - IGS Student Chapter, Vidya Jyothi Institute of Technology(A) in association with IGS Hyderabad Local Chapter on May 15 2021.
11. Participated in Three Day Faculty Development Program on "Advances in Finite Element Methods" Organized by Departments of Civil & Mechanical Engineering, Vidya Jyothi Institute of Technology(A) Hyderabad under TEQIP – III, JNTUH from 18<sup>th</sup> to 20<sup>th</sup> February 2021
12. Successful participated and presented a research paper in the online "10<sup>th</sup> International conference on Fluvial Hydraulics River Flow 2020" organized by IHE, The Delft, Netherlands from 6<sup>th</sup> - 17<sup>th</sup>, July 2020.
13. Successfully completed "Mechanics of Materials I: Fundamentals of Stress & Strain and Axial Loading" an online non-credit five

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



weeks course authorized by Georgia Institute of Technology and offered through Coursera on 21<sup>st</sup> June, 2020.  
 14. 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. 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).
14. 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.
15. 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).
16. 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.
17. 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).

18. 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
19. 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.
20. 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.
21. 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:**

1. Devi, K., Das, B. S., Khuntia, J. R., Reddy, G. R., and Prasad, A. L. (2021). Interlinking Prospect of Godavari River with Krishna River. 25<sup>th</sup> International Conference on Hydraulics, Water Resources and Coastal Engineering (Hydro 2020), NIT Rourkela, India, 26<sup>th</sup>-28<sup>th</sup> March, 2021, ISBN : 978-93-90631-56-8, Vol. 1, pp: 1377-1387.
2. 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.
3. Devi, K., Das, B. S., Khuntia, J. R., and Khatua, K. K (2019). Discharge estimation in compound channels having narrowing and enlarging floodplains. 24<sup>th</sup> International Conference on Hydraulics, Water Resources and Coastal Engineering (Hydro 2019), Osmania University, Hyderabad, 18<sup>th</sup>-20<sup>th</sup> December, 2019, pp.: 1309-1320, ISBN: 978-93-8935-484-3.
4. 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, 23<sup>rd</sup> International Conference on Hydraulics, Water Resources and Coastal Engineering (Hydro 2018), 19<sup>th</sup>-21<sup>st</sup> December, NIT Patna.
5. 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.
6. Devi K., Khatua K. K. and Khuntia J. R. (2017) Improved Analytical Method for Overbank Flow Modelling. 22<sup>nd</sup> International Conference on Hydraulics, Water Resources and Coastal Engineering (Hydro 2017), 21<sup>st</sup>-23<sup>rd</sup> December.
7. 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.
8. Devi K., Khatua K. K. and Khuntia J. R. (2016) Application of Shiono and Knight Method in Asymmetric Compound Channel Flow. 21<sup>st</sup> Proceedings of International Conference on Hydraulics, Water Resources and Coastal Engineering (Hydro 2016), CWPRS Pune, India, 8<sup>th</sup>–10<sup>th</sup> December, pp.:1416-1426.
9. 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. 8<sup>th</sup>–10<sup>th</sup> December, pp.: 1427-1437.
10. 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.
11. 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.
12. 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.
13. 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.
14. 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.
15. 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.
16. Devi, K., Khuntia, J. R., and Khatua, K. K. (2018) Depth-Averaged Velocity Distribution for Symmetric and Asymmetric Compound Channels, In *proceedings of MCCC*, Springer, Singapore, Chapter 25, DOI: 10.1007/978-981-10-5565-2\_25 pp. 281-292.

17. 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.
18. A Uma Maheshwari, Margaret Wesley, Vikesh P., Rahul K., Devi K. (2022) Study of flash floods and flow prediction by AI techniques. 27<sup>th</sup> International Conference on Hydraulics, Water Resources, Environmental and Coastal Engineering (HYDRO 2022 International) at Punjab Engineering College Chandigarh, India during December 22 -24, 2022.
19. 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, 27<sup>th</sup> International Conference on Hydraulics, Water Resources and Coastal Engineering (HYDRO 2022 International) at PEC Chandigarh, India, during December 22-24, 2022.
20. Sahoo, S., Devi K., Khuntia J. R., Khatua K.K. (2022). Numerical modelling of bed shear stress for an asymmetric compound open channel, 27<sup>th</sup> International Conference on Hydraulics, Water Resources, Environmental and Coastal Engineering (HYDRO 2022 International) at Punjab Engineering College Chandigarh, India during December 22 -24, 2022.
21. Shekhar D., Das B. S., Khuntia, J. R., Devi K. (2022) Prediction of Discharge in Converging and Diverging Floodplain by ANN-PSO and MARS, 27<sup>th</sup> International Conference on Hydraulics, Water Resources, Environmental and Coastal Engineering (HYDRO 2022 International) at Punjab Engineering College Chandigarh, India during December 22 -24, 2022.
22. 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, 26<sup>th</sup> International Conference on Hydraulics, Water Resources and Coastal Engineering (HYDRO 2021 INTERNATIONAL) at SVNIT Surat, Gujarat, India, during December 23-25, 2021.
23. Rohitha, Sudheera, Renuka, Manisha and Devi, K. (2021) Interlinking of Rivers (Godavari-Krishna-Pennar-Cauvery), 26<sup>th</sup> International Conference on Hydraulics, Water Resources and Coastal Engineering (HYDRO 2021 INTERNATIONAL) at SVNIT Surat, Gujarat, India, during December 23-25, 2021.
24. 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, 4<sup>th</sup> International Conference on the Status and Future of the World's Large Rivers, Moscow, Russia, 3-6 August 2021.
25. Sahoo, S., Devi, K. & Khatua, K.K. (2021) Simulation of Flow Structure in an Asymmetric Compound Channel, 4<sup>th</sup> International Conference on the Status and Future of the World's Large Rivers, Moscow, Russia, 3-6 August 2021.
26. Khuntia, J. R., Devi, K., Das, B. S. and Khatua, K. K. (2021). Turbulent structures under unsteady flow conditions through emergent rigid vegetation, 25<sup>th</sup> International Conference on Hydraulics, Water Resources and Coastal Engineering (Hydro 2020), 26<sup>th</sup>-28<sup>th</sup> March, 2021, NIT Rourkela, India. ISBN : 978-93-90631-56-8, Vol. 2, pp: 42-51.
27. Das B. S., Devi K., Khuntia, J. R. and Khatua, K. K. (2021). Prediction of discharge in non-prismatic compound channel using Extended ISM, 25<sup>th</sup> International Conference on Hydraulics, Water Resources and Coastal Engineering (Hydro 2020), 26<sup>th</sup>-28<sup>th</sup> March, 2021, NIT Rourkela, India. ISBN: 978-93-90631-56-8, Vol. 2, pp: 347-354.
28. 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, 25<sup>th</sup> International Conference on Hydraulics, Water Resources and Coastal Engineering (Hydro 2020), 26<sup>th</sup>-28<sup>th</sup> March, 2021, NIT Rourkela, India. ISBN : 978-93-90631-56-8, Vol. 1, pp: 581-589.
29. 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.
30. 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. 24<sup>th</sup> International Conference on Hydraulics, Water Resources and Coastal Engineering (Hydro 2019), Osmania University, Hyderabad, 18<sup>th</sup>-20<sup>th</sup> December, 2019, pp.: 1321-1330, ISBN: 978-93-8935-484-3.
31. Das B. S., Devi K., Khuntia, J. R. and Khatua, K. K (2019). Velocity distribution in compound channel with diversing floodplains. 24<sup>th</sup> International Conference on Hydraulics, Water Resources and Coastal Engineering (Hydro 2019), Osmania University, Hyderabad, 18<sup>th</sup>-20<sup>th</sup> December, 2019, pp.: 1331-1342, ISBN: 978-93-8935-484-3.
32. 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
33. 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.



34. 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), 19<sup>th</sup>-21<sup>st</sup> December, NIT Patna, India.
35. 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), 19<sup>th</sup>-21<sup>st</sup> December, NIT Patna, India.
36. 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), 19<sup>th</sup>-21<sup>st</sup> December, NIT Patna, India.
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41. 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), 21<sup>st</sup>-23<sup>rd</sup> December, LDCE Gujarat, India.
42. 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.
43. 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. 8<sup>th</sup>-10<sup>th</sup> December, pp.: 1446-1456.
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45. 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. 8<sup>th</sup>-10<sup>th</sup> December, pp.: 1588-1600.
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47. 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.
48. 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.
49. 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.
50. 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.
51. 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**

52. 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 2<sup>nd</sup> 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.

	<ol style="list-style-type: none"> <li>Participated in the Innovation and New Knowledge in Water, Sanitation, and Hygiene (INK@WASH 3.0) summit on 5th and 6th May 2022, Hyderabad.</li> <li>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 &amp; 11th March, 2022.</li> <li>Session Chair in International conference HYDRO-2020 organized by NIT, Rourkela in association with ISH, Pune during 26 -28 March, 2021.</li> </ol>
Foreign Universities Visit Related to the Research Work	<ul style="list-style-type: none"> <li>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 Sleigh, School of Civil Engineering University of Leeds, U.K., June 2016.</li> <li>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.</li> <li>Laboratory visit to Utah State University, Logan, Utah, USA and University of Utah, Salt Lake city, USA on July 18, 2017.</li> <li>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.</li> </ul>
Research Profiles	<p>ORCID: 0000-0002-5916-3256  Researcher ID: I-1253-2017  Scopus Author ID: 57189994361  Google Scholar Citations: RnRdml8AAAAJ</p>
Research Citations / Indices	<p>Google Scholar Citations : 222  Scopus Citations : 129  h-index : 09</p>
Referee in International / National Journals / Conferences	<ol style="list-style-type: none"> <li>Journal of Fluid mechanics, Cambridge Press</li> <li>ISH Journal of Hydraulic Engineering, Taylor &amp; Francis</li> <li>Journal of River Basin Management, Taylor &amp; Francis</li> <li>Journal of Environmental Management, Elsevier</li> <li>Method X, Elsevier</li> <li>Water Resources Management, Springer</li> <li>Applied Water Science, Springer</li> <li>River Research and Applications, Wiley</li> <li>Journal of the Royal Society of New Zealand, Taylor &amp; Francis</li> <li>Journal of Hydro-environment Research, Elsevier</li> <li>Environmental Modelling and Software, Elsevier</li> <li>International Journal of Sediment Research, Elsevier</li> <li>KSCE Journal of Civil Engineering, Springer</li> <li>7<sup>th</sup> International Conference on Water Resource and Environment (WRE 2021) Xi'an, China International, Xi'an, China.</li> <li>25<sup>th</sup> International Conference on Hydraulics, Water Resources and Coastal Engineering (Hydro 2020), 26 -28 March, 2021 at NIT Rourkela.</li> </ol>