

C V OF DR. SUNIL KUMAR SINGAL



1. Name : **SUNIL KUMAR SINGAL**
2. Father's Name : Shri Sadhu Ram
3. Date of Birth : Oct. 16, 1961
4. Address : Department of Hydro and Renewable Energy (Formerly Alternate Hydro Energy Centre), Indian Institute of Technology, Roorkee-247667, (Uttarakhand) India,
Tel : 91-1332-285167 (O), 91-9897063273 (R)
Fax : 91-1332-273517, 273560
5. Educational Qualifications : BE (Civil-1983), IIT Roorkee); ME (Earthquake), IIT Roorkee, Ph.D., IIT Roorkee
6. Employment : Professor, Department of Hydro and Renewable Energy, IIT Roorkee (December 2019 – Continue),
Associate Professor (Nov. 2015 – Dec. 2019)
Scientist A/ B/ SSO (Sept. 1984 – Nov. 2015)
7. Teaching and Research Experience :
 - 40 years.
 - Teaching / Taught B. Tech/M. Tech subjects on small hydro power (planning and design), bridge course, Project formulation and implementation, Planning and management of environmental facility, Energy resources and conservation, Construction planning and management
 - Research project for online silt monitoring sponsored by NHPC
 - Research project on development of hydro kinetic installation sponsored by UJVNL
 - Working on Jalmitra Skill Development Programme for Small Hydropower Sponsored by MNRE
 - Working on RuTag project sponsored by PSA, Govt of India
8. Research Area :
 - Hydropower – Resource assessment, Investigations, Planning, Designs, Economic and Financial Analysis, Cost optimisation, tariff analysis
 - Integrated Renewable Energy Systems and Management of Water Resources
9. Research Guidance :
 - Ph.D. Thesis – 12 (Awarded), 06 (In-progress)
 - M.Tech Thesis – 91 (Awarded), 02 (In-Progress)*(Details at Annexure-I)*
10. Publications in Journals and Conferences :
 - Research Papers in National and International Journals – 116
 - Research Papers in Workshop / Conference / Seminars –151
 - Book on Small Hydropower: Design and Analysis (316 pages)
 - Book chapters and papers in Special Publications – 19
 - Standards / guidelines on different aspects of SHP – 6*(Details at Annexure-II)*
11. Supervised B.Tech/M.Tech Projects/ Trainings :
 - B.Sc./Diploma Projects-4
 - M.Sc./B.Tech Projects/Vocational trainings-25
 - M. Tech Projects and Thesis -141

12. Coordinated / Delivered : • Co-ordinated/ Organised Short Term Courses/Conferences: 80
Lectures / Participation in • Delivered lectures/ participated in Short Term Courses : 238
National and International • Participated in Conferences /Workshops/ Seminars : 113
Short Term Training Course • Delivered Invited Lectures/talks: 38
and Conferences
13. Consultancy and Sponsored : • Research, development and consultancy work for Resource
Research Projects assessment, Investigation, planning, design, preparation of
DPRs, Technical specifications, Techno-economic
evaluation reports, costing and financial aspects of SHP
projects
• Coordination of preparation of master plan of SHP potential
and other SHP related projects in Punjab, Chhattisgarh, MP,
West Bengal, Sikkim, UP and Uttarakhand states.
14. International Projects : • UNDP-GEF Hilly Hydro project, R&M DPR with CIDA,
Canada,
• CIDA, Canada – SHP Technology Transfer,
• European Union- Ecological assessment of river
• SHP Project Planning and Design in Uganda
• Capacity Building for SHP – Cambodia, Srilanka, Zambia
15. Honours and Awards : • Member, Editorial Advisory Board, The Open Renewable
Energy Journal (International Journal)
• Distinguished Scientist award- VIFRA 2015 (in the category
of Engineering / Hydropower) by centre for Advanced
Research and design of Venus International Foundation,
Chennai
• Third prize on research paper in Indian Altair Technology
Conference (IATC2015), July 14-15, 2015, Bangalore
• Member (SHP) National renewable energy committee for
development of solar and SHP project in boarder areas for
defense establishments- 1994
• Best Citizens of India Award – 2016 by International
Publishing House, New Delhi, August 2016.
• The Institution of Engineers (India), Roorkee Local Chapter
Excellence Award 2018.
• Research Peace Award 2019-20 – “Best Researcher in
Hydro and Renewable Energy” by World Research Council
and United Medical Council, Trichy, Tamilnadu-Aug.
2019.
• Best paper award in theme –I (Hydro Environment) at
Hydro-2019, ISH Hyderabad.
• Member of BIS COMMITTEE WRD-13-Canals and cross
drainage works from Feb. 2021.
• Member of BIS COMMITTEE WRD-13-Canals and cross
drainage works from Feb. 2021.
• Member of BIS COMMITTEE WRD-29- from Feb. 2024
• Member of ISO/TC 339 from Feb. 2024
• Best Paper Award for the paper; M. Sood and S. K. Singal,
“Investigation of two phase numerical modeling
considering free surface effect for operating hydrokinetic
turbine in an open channel,” in *2nd International*

Conference on Advances in Mechanical and Systems Engineering, July 17-19, 2021

- For best paper (first position) on the Theme “Hydraulic Structure and Hydropower Project” in 28th International Conference on Hydraulics, Water Resource, River and Coastal Engineering (Hydro-2023) organized by Department of Civil Engineering, NIT Warangal during Dec. 21 – 23, 2023
 - Patent no. 499007 dated Jan. 13, 2024 on an invention “An Improved Roller For Felt Making”
 - Patent no. 527442 dated March 15, 2024 on an invention “VARIABLE SPEED SOLAR POWERED WOOL SPINNING DEVICE
 - **Filed**
 - Eminent Engineers Award 2023 by The Institution of Engineers (India) Uttarakhand State Centre, Dehradun
16. Institute and Department :
Level Responsibilities
- HEAD, Department of Hydro and Renewable Energy (Feb 2018 – Jan. 2022)
 - Member SRIC board (2002- 2008)
 - Warden, Rajendra Bhawan Students Hostel (1998- 2001),
 - Chief Warden, Cautley Bhawan (Boys Students Hostel) (2009 – 2013),
 - Staff Advisor, Gardening Section in Hobbies Club (2010-12),
 - Dy Chief Advisor Hobbies Club (2012-2013),
 - Member Advisory Committee – Centre for Continuing Education (2010- 2015), (2021- continue)
 - Member Institute Research committee (IRC) (2015-2018) and (2024 – continue)
 - Member Institute Academic Programme Committee (2019- 2024)
 - Member SRIC Committee (2015- 2018)
 - President, ABN School Society from July 2024
- Department Level Responsibilities
- Faculty –in-charge Drawing section (upto 2018)
 - Faculty -in-charge GIS lab (upto 2018)
 - Faculty Advisor for M. Tech. students (upto 2018)
 - Faculty advisor for Cognizance (2012-2018),
 - Faculty-in-charge, Administration (2022 – continue)
17. Membership of Professional Bodies :
- Life Fellow of Institution of Engineers (India) (F-0183395)
 - Life Fellow of Indian Society of Earthquake Technology (LF 50)
 - Senior Member of IEEE (93705780)
 - Life member of Central Board of Irrigation and Power (ILM 63)
 - Life Member of International Association for Small Hydro (LM 30)
 - Life Member of Indian Society for Technical Education (LM 4126)
 - Life Member of Indian Water Resource Society (LM-87-1649)
 - Life Member of Indian Association of Hydrologists (LM 161)

- Life member of Solar Energy Society of India (1193/LM/2005)
 - Life member of Indian Society for Hydraulics (LM 644)
 - Life Member of Alumni Association, IIT Roorkee (4213)
18. International Visits : China (1986), USA (1997, 2014, 2022 & 2024), Canada (1997, 2004 & 2014), Norway (2001), Nepal (2003 and 2017), Uganda (2005), Germany (2006), Sri Lanka (2007 & 2010), Cambodia (2010), Singapore (2012), Zambia (2013), UAE (2017) and Thailand (2018).
19. National Visits Various SHP sites and offices in the states of Arunachal Pradesh, WB, Orissa, Bihar, Assam, Sikkim, Chhattisgarh, Gujarat, Karnataka, A.P., Telangana, Tamil Nadu, J&K, HP, UP, Uttarakhand, Jharkhand, Punjab, Haryana, Kerala, MP, Tamilnadu and Rajasthan
20. Others
- Member National level committees of Ministry of Non-conventional Energy Sources for evaluation of old power stations for Renovation and Modernization.
 - Prepared Standards/Manuals/Guidelines for costing and financial analysis and other aspects for SHP projects.
 - Reviewed Research Papers received from Reputed National and International Journals
 - Prepared Costing Bench marks for Small Hydro Power Projects for IREDA
 - UNIDO consultant for planning and design of micro Hydel scheme at Bwindi, Uganda, 2005

(SUNIL KUMAR SINGAL)

ANNEXURE-I

Details of Thesis Supervised/Being Supervised

A. Ph. D.

S. No	Title of Thesis/ Area	Year Awarded	Name of Student
1.	Cost Analysis of High Head Small Hydropower Projects	Awarded, 2013	Mr Sachin Mishra
2.	Scheduling of Wind – PSP Generation Under Day-Ahead Market	Awarded, 2015	Mr Javed Dhillan
3.	Cost Optimization of Power Transmission Lines in Hilly Areas	Awarded, 2016	Mr Srinivasa Kishore T
4.	Hydrological Investigations and Analysis for Small Hydro Power Projects	Awarded, 2016	Ms. Ila Dashora
5.	Development of Mathematical Model for Condition Based Maintenance of Small Hydropower Plants	Awarded, 2018	Mr Ravi Kumar
6.	Modeling of Integrated Renewable Energy Based Power System	Awarded, 2019	Mr Alpesh Kumar Mangaldas Patel
7.	Optimal Operation of Run of River Small Hydro Power Plant	Awarded 2019-20	Mr Vineet Kumar Singh

8.	Development of water Quality index for Management of river	Awarded 2019-20	Ms Mansi Tripathi
9.	Development of Model for Potential Assessment of Hydrokinetic Energy	Awarded 2021-22	Mr Manoj Sood
10.	Integrated Renewable Energy System for remote rural area	Awarded 2024	Mr Vishal Saini
11	Assessment of Sediment abrasive potential in Himalayan Rivers	Awarded 2024	Mr Naman Arora
12	Performance Investigation of Corrugated double pass solar air heater integrated with PCM based Thermal Energy Storage	Awarded 2024	Mr Ankush Jageshwar Hedau
13	Development of Integrated Renewable Energy System for a rural area	In Progress	Mr Harshadkumar D Patel
14	Techno-economic analysis of hydrokinetic technology	In Progress	Mr Upendra Bajpai
15	Heat Transfer and fluid flow investigation of solar air heater with jet impingement using corrugated absorber plate	In Progress	Ms Jyoti Pal
16	Investigation on Life Cycle Assessment of Hydropower Projects	In Progress	Mr Himanshu Nautiyal
17	Investigation on combined effect of cavitation and silt erosion on the performacne of francis turbine	In Progress	Mr Prashant Kumar
18	Hydropower	In Progress	Mr Arun Kumar

B. M.Tech

S. No	Title of Thesis	Year Awarded	Name of Student
1.	Strategies for Development of Mini/Micro Hydro Power in Nagaland	2002	Mr. S. Odyuo
2.	Computer-Aided Design of Civil Structures of Small Hydro Power Project	2002	Mr. Amol Verma
3.	Cost Effective Design of Low Head SHP Stations	2003	Mr. N. Rehman
4	Variable Speed Constant Frequency Generator	2003	Mr. Rakesh Soni
5	Techno-Economic Analysis of Micro Hydropower Equipment	2004	Mr. Arun Tiwari
6	Optimal Installation of Hydro-Mechanical Equipment for Low Head SHP	2004	Mr. Gaurav Sinha
7	An Intelligent Controller Using Fuzzy Logic and Artificial Neural Network in SHP	2005	Ms. Antra Saxena
8.	Potential assessment for SHP development in Uttaranchal using IMP software	2005	Mr. Mange Amar Vilas Rao
9.	Conservation of Deeporbeel Wetland in Assam.	2006	Mr. Bhaskar Jyoti Das
10.	Energy Planning for Island	2006	Mr. Ravindra Pal Singh

S. No	Title of Thesis	Year Awarded	Name of Student
11.	Efficiency improvement of micro hydel turbine through manufacturing techniques	2006	Mr. Rahul Jadhav
12.	Selection and Design of Appropriate STP Technology for a Town in Tamil Nadu	2007	Mr. S. Kannan
13.	Automation of Small Hydropower Station	2007	Mr. Raju Gupta
14.	Analysis of Erosion in Hydro Turbines	2008	Mr. Ratendra Singh
15.	Optimum Design of Low Head Small Hydropower Plant	2008	Ms. P. Satya Naga Harshada
16.	Optimum Design of Small Hydropower Plants using Bulb Turbine	2008	Mr. Anurag Kumar
17.	CFD Based Performance Evaluation of Pump as Turbine	2008	Mr. Anurag Shukla
18.	Pollution Profile of River for a Particular Stretch of Damodar River	2008	Mr. Sujoy Patra
19.	Performance Evaluation of Bioremediation Technology used in Conservation for Forest Lakes	2008	Mr. Ritu Raj Singh
20.	Conservation Plan for River Mahanadi at Rajim	2009	Mr. Karan Singh Karasolia
21.	Cost Effective Planning and Optimised Layout of Run of River Hydropower Schemes	2009	Mr. Nilesh Raghunath Bhosale
22.	Evaluation and Sensitivity Analysis of Small Hydro Policy of Different States	2009	Mr. Devesh Goyal
23.	Cost Effective Hydropower Generation	2009	Mr. Suresh Kumar Vengali
24.	Cost Effective Design of the Low Head Small Hydro Project	2010	Ms. Aher Sarika Arun
25.	Modification in Cross Flow Turbine for Efficiency Improvement	2010	Mr. Imran Khan
26.	Performance Evaluation of Pelton Turbine using CFD	2010	Mr. Ravindra Kumar Singh
27.	Conservation Plan for Godavari River	2010	Mr. Pote Sachin Eknath
28.	Study of Cavitation Effect on Hydro Turbine Materials	2011	Mr Madhav Reddy P.
29.	Optimal SHP Development on Canal Falls	2011	Mr. Rahul Bhatt
30.	Analysis of Grid Interconnection Problems of SHP Plants	2011	Mr Ravi Kumar
31.	Optimal Selection of Hydro Turbine for a SHP Plant	2011	Mr Saurabh Prasad
32.	Cost Effective Design of SHP Project	2012	Mr Ishwar Chandra
33.	Cost Optimization of Medium Head SHP Project	2012	Mr Mohit Jain
34.	Conservation Plan of a River Stretch	2012	Mr Manish Kumar
35.	Environment Management of a River in Myanmar	2012	Mr Kyaw Naing Oo
36.	Solid Waste Management of Raipur City	2013	Mr Lal Mahendra Pratap Singh
37.	Conservation of River Gomti Stretch Flowing through Lucknow	2013	Ms Mansi Tripathi
38.	Conservation plan of Pushkar lake, Ajmer	2013	Mr Tushar Mathur

S. No	Title of Thesis	Year Awarded	Name of Student
39.	Comprehensive Study of Community Managed Mini Grid: A Case Study of Baglung Mini Grid, Nepal	2013	Mr Sanjeev Pokhrel
40.	Techno Economic Study for Maintenance of Silt Erosion Affected Hydro turbines	2013	Mr Himanshu Kumar Patel
41.	Field Survey on Silt Erosion in Run of River Plants	2013	Mr Ram Sevak Kushwaha
42.	Operation and Maintenance of Small Hydropower Plants	2014	Mr Ashish Gupta
43.	Optimum Design of Integrated Renewable Energy System for Villages	2014	Mr Rahul Meena
44.	Cost Effective Installation of Medium Head Small Hydropower Plants	2014	Mr Yangpal Kashyap
45.	Performance Evaluation of Conservation Programmes in Lakes of Nainital Region	2014	Mr Hitesh Dalakoti
46.	Impact of Landfill Leachate on Surface Water Body	2014	Ms Shweta Rawat
47.	Control of Small Hydropower Plant	2015	Ms. Disha Saxena
48.	Integration of Renewable Energy Sources using Artificial Intelligent system	2015	Mr Harsh
49.	Performance Evaluation of solar Photovoltaic System Installed in IIT Roorkee Campus	2015	Mr K. Sangram Singh Pundir
50.	SHP Development on Waste Water Treatment Plant	2015	Mr Manish Kumar
51.	Integrated Renewable Energy System in Remote Area	2015	Mr PVV Pawan Kumar
52.	Performance Evaluation of conservation Measures for Rankala Lake	2015	Mr Abhijeet Suresh Ghone
53.	Solid Waste management in Gorakhpur city	2015	Ms Parul Barnwal
54.	Innovative design in civil works of a SHP project	2016	Mr Ajay Chandra Upreti
55.	Techno economic evaluation of SHP project	2016	Mr Saurabh Singh
56.	Planning and management of tunnel construction in hydropower project	2016	Mr Sein Win Tun
57.	Development of ultra low head turbine	2016	Mr Virendra Kumar Yadav
58.	Selection And Design of Appropriate STP technology	2016	Mr Adesh Kumar
59.	Waste Water Treatment Using Aquatic Plants	2016	Mr Ong Tshering Lepcha
60.	Community Based Kitchen Waste Management	2016	Ms Pooja Sinha
61.	Strategic Environmental Impact Assessment of a City	2016	Mr Dhairya S Shah
62.	Performance Evaluation of Draft Tube Using CFD	2017	Mr Abhishek Yadav
63.	Performance Evaluation of Bulb Turbine	2017	Mr Akhil Vikram Yadav
64.	Cost Effective Settings of Reaction Turbine	2017	Mr Deepak Bansal

S. No	Title of Thesis	Year Awarded	Name of Student
65.	Performance Analysis of CST Based Thermal Plant	2017	Mr Gaurav Gangwar
66.	Cost Effective Design of Intake Structures for SHP Plant	2017	Ms Jyotsna Pandey
67.	Pollution Profile of a River Stretch	2017	Mr Arun Ghildiyal
68.	Impact of Urbanisation and Industrialisation on River	2017	Mr Gaurav Maurya
69.	Low Cost Sanitation Programme for Rural Area	2017	Mr Gurjant Singh
70.	Renovation and Modernisation of Small Hydro Plant	2018	Mr Anuj Verma
71.	Techno-economic Analysis of SHP Projects	2018	Mr Prince Mittal
72.	Feasibility of Tunnel Construction in Small Hydropower	2018	Mr Saurabh
73.	Performance Analysis of Trash Rack Cleaning Machine	2018	Mr Vishal Gupta
74.	Conservation of Lakes	2018	Mr Akash Singh
75.	Minimization of water consumption	2018	Mr Amit Prasad
76.	Impact on SHP due to other renewable energy	2019	Mr Ayush Jain
77.	Strategy for Field Testing of Hydrokinetic Turbine.	2019	Mr Neeraj Kumar
78.	Analysis of cost and time overrun of hydro power projects	2019	Mr Vinay Shankar
79.	Utilization of rice husk Ash to remove heavy metals from waste water	2019	Mr Anshul Tyagi
80.	Energy from wastewater	2019	Mr Himanshu Gupta
81.	City Sanitation Plan for Dehradun city	2019	Mr Yashveer Jayara
82.	Techno-economic analysis of hydrokinetic turbine.	2020	Mr Vinay Lodhi
83.	Impact of river front development and urban planning along the river course of Ujjain.	2020	Mr Dhruv Aditya Jain
84.	Impact of river bank filtration.	2020	Ms Shweta Rawat
85.	City Sanitation Plan – Deoria City.	2021	Ramkhelavan Kanaujiya
86.	Study on Integration of Renewable Energy With Pumped Storage Hydropower (PSH).	2021	Prabhat Yadav
87.	City Sanitation Plan” – Deoria City	2021	Mr Ramkhelavan Kanaujiya
88.	Modeling and Simulation of River A case Study of River Ganga.	2022	Mr Shriom Sarwate
89.	Life Cycle Assessment of different Options for Solid Waste Management	2023	Ms Iram Naaz
90.	Evaluation of Revitalization Scheme of Garh Mukteshwar Ganga River Basin	2024	Ms Muskan Goel
91.	Prediction of Effluent Quality of STP by ML based models	2024	Mr Tejas Singh
92.	Conservation of River Narmada near Amarkantak	Continue	Ms Vatsala Mantri

S. No	Title of Thesis	Year Awarded	Name of Student
93	Assessment of hydrological impacts of land cover changes and climate variability in the Gibe River catchment, Ethiopia	Continue	Mr Desalegn Tamirat Mishiso

Research Publications**A. Publication in Journals**

1. Varun and Singal S.K., "Review of Augmentation of Energy Needs Using Renewable Energy Sources In India", Renewable & Sustainable Energy Reviews Int. Journal, 11(7), 1607-1615, (2007) <https://doi.org/10.1016/j.rser.2005.11.002> [SCIE; IF:16.3]
2. Mittal M. K., Varun, Saini R.P. and Singal S.K., "Effective efficiency of solar air heaters having different types of roughness elements on the absorber plate", ENERGY - The International Journal, 32 (2007), 739–745 <https://doi.org/10.1016/j.energy.2006.05.009> [SCIE; IF:9]
3. Singal S.K., Das B. J., Singh R., Sharma M.P., "Assessment of Surface Water Quality of Deeporbeel Wetland", Environmental Science: An Indian Journal, 2(1), (2007)44-52. [IF:0.45]
4. Kannan S., Singal S.K., Kazmi A.A., Kanaka B., "Decentralized Wastewater Management Systems", Journal of Environmental Sciences, Technologies and Engineering, VII (3), 11-20 (2007) [SCI; IF:2.860]
5. Chauhan R.D, Sharma M.P, Saini R.P, Singal S.K, "Biodiesel From Jatropha as Transport Fuel A Case Study of UP State", Journal of Scientific & Industrial Research, 66, 394-398 (2007) [SCIE; IF: 0.7]
6. Singal S.K., Saini R.P., "Cost Effective Technology for Low Head SHP Schemes", Journal of Environmental Sciences, Technologies and Engineering, VII (6), 4-10 (2007).
7. Singh S.P. and Singal S.K., "Modelling and Simulation of Hydro Power Plant," Indian Journal of Power and River Valley Development, 20- 26, Jan.-Feb. (2007)
8. Singal S. K., Kumar A., Agarwal D. K., Thapar O. D. and Arya M., "Implementation Of Dam Based Small Hydro Power Plant - A Case Study", IEEMA Journal, XXVII (9), 58-63 (2007)
9. Mange A.V. and Singal S.K., "Parameter Fixation for Flow Simulation in IMP Software", Hydrology Journal, 30 (1-2), 73- 85 (2007).
10. Singal S.K., Saini R.P. and Raghuvanshi C.S., "Estimation of Cost for Low Head Small Hydro Power Installations", Indian Journal of Power and River Valley Development, 179-183, July-Aug. (2007)
11. Varun, Saini R.P. and Singal S. K., "A Review on Roughness Geometry Used in Solar Air Heaters", Solar Energy, Int. Journal, 81 (2007), 1340- 1350. <https://doi.org/10.1016/j.solener.2007.01.017> [SCIE; IF: 6]
12. Singal S.K., Varun, Singh R.P., "Rural Electrification of a Remote Island by Renewable Energy Sources", Renewable Energy Int Journal 32 (2007), 2491- 2501. <https://doi.org/10.1016/j.renene.2006.12.013> [SCIE; IF: 9.0]
13. Singal S.K., Saini R.P., "Analysis For Cost Estimation of Low Head Run-of-River Small Hydropower Schemes", Journal of Environmental Sciences, Technologies and Engineering, VIII (3&4), 18-22 (2008).
14. Singal S.K., Das B.J., Singh R., Sharma M.P., "Impacts of Soil Erosion in an Ungauged Wetland Catchment", Environmental Science Journal, 3(2), (2008) 217-223.
15. Verma P., Varun and Singal S.K., "Review of Mathematical Modelling On Latent Heat Thermal Energy Storage Systems Using Phase Change Material", Renewable & Sustainable Energy Reviews Int. Journal, 12(4), 999-1031 (2008). <https://doi.org/10.1016/j.rser.2006.11.002> [SCIE; IF:16.3]
16. Varun, Saini R.P. and Singal S.K., "Investigation Of Thermal Performance of Solar Air Heater Having Roughness Elements As A Combination of Inclined and Transverse Ribs on the Absorber Plate", Renewable Energy Int Journal 33 (2008), 1398- 1405. <https://doi.org/10.1016/j.renene.2007.07.013> [SCIE; IF:9]

17. Singal S.K., Saini R.P. and Raghuvanshi C.S., "Analysis for Quick Estimation of Dam Toe Small Hydropower Schemes", Indian Journal of Power and River Valley Development, 48- 50, March- April (2008)
18. Sharma M.P., Singal S.K. and Patra S., "Water Quality Profile of Yamuna River", journal on water, energy, and environment, 3(2008), 27-32 (July)
19. Singal S.K. and Saini R.P., "COST Analysis of Low Head Dam Toe Small Hydropower Plants Based on Number of Generating Units", Energy for Sustainable Development, the Journal of the International Energy Initiative, XII (3), 55- 60, (2008). [https://doi.org/10.1016/S0973-0826\(08\)60439-1](https://doi.org/10.1016/S0973-0826(08)60439-1) [SCIE; IF: 4.4]
20. Singal S.K. and Saini R.P., "Analytical Approach for Development of Correlations for Cost of Canal Based SHP Schemes", Renewable Energy, 33 (2008), 2549-2558 <https://doi.org/10.1016/j.renene.2008.02.010> [SCIE; IF:9.0]
21. Singal S.K., Saini R.P., "Analysis for Quick Estimation of Canal Based Small Hydropower Schemes", IEEMA Journal, XXVIII (9), 76- 80 (2008)
22. Singal S.K., Saini R.P. and Raghuvanshi C.S., "Cost Optimisation Based on Electro-Mechanical Equipment of Canal Based Low Head Small Hydropower Scheme", The Open Renewable Energy Journal, Vol. 1, 26-35 (2008)
23. Jain S. and Singal S.K., "Planning of Canal Based Small Hydro Power Scheme", IEEMA Journal, XXVIII (11), 90- 96 (2008)
24. Das B.J., Singal S.K., Singh R., "Estimation of Erosion in an Ungauged Wetland Catchment", Hydrology Journal, Vol. 31, 1-2, 65-76 (2008).
25. Kannan S., Singal S.K., Kazmi A.A. and Sharma M.P., "Selection of Appropriate Sewage Treatment Technology for Kancheepuram City", Asian Journal of Water, Environment and Pollution, Vol.6, No.2, 107-111, 2009. [ESCI; IF:0.4]
26. Kumar A., Varun, Kumar P. and Singal S.K., "Performance Of A Venturi Scrubbers In Intermediate Drop Reynolds Number Regime For Small Particles At Different Throat Length And Throat Gas Velocity", Asian Journal of Water, Environment and Pollution, Vol.6, No.2, 7-13, 2009. [ESCI; IF:0.4]
27. Singal S.K., "Planning and Implementation of Small Hydropower Projects", Journal of water, energy and environment, Hydro Nepal, 5(2009), 21-25. <https://doi.org/10.3126/hn.v5i0.2480>
28. Varun, Patnaik A., Saini R.P., Singal S.K. and Siddhartha, "Performance Prediction of Solar Air Heater Having Roughened Duct Provided with Transverse and Inclined Ribs as Artificial Roughness", Renewable Energy, Vol. 34, Issue 12, (2009), 2914-2922 <https://doi.org/10.1016/j.renene.2009.04.030> [SCIE; IF:9]
29. Singal S.K., Kumar S. and Varun, "Energy Audit in Tea Industry: A Case Study For Makaibari Tea Estate", Journal of Institution of Engineers, India, Vol. 90, 2009, 7-12
30. Varun, Singal S.K., Gupta K., Chandel A., Nanda A. and Thakur S., "Environmental Problems and Remedial Measures Taken by International Bodies", Journal of Environmental Sciences, Technologies and Engineering, IX (4&5), 18-22 (2009)
31. Sharma M.P., Patra S. and Singal S.K., "Water Quality Management of Damodar River", Journal of Indian Water Resources Society, Vol. 29, No. 2(2009), 23-31
32. Singal S.K., Kumar A. and Saini R.P., "Installation of Bulb Turbines in Small Hydropower Plants: A Review", The IUP Journal of Mechanical Engineering, Vol. 3, No.2, 7-22, (2010).
33. Singal S.K., Saini R.P. and Raghuvanshi C.S., "Analysis for cost estimation of low head run-of-river small hydropower schemes", Energy for Sustainable Development, the Journal of the International Energy Initiative, 14 (2010), 117–126. <https://doi.org/10.1016/j.esd.2010.04.001> [SCIE; IF: 4.4]
34. Singal S.K., Saini R.P. and Raghuvanshi C.S., "Optimization of low-head, dam-toe, small hydropower projects", Journal of Renewable and Sustainable Energy , Vol. 2, Issue 4, 1-13, (2010). <https://doi.org/10.1063/1.3464755> [SCIE; IF: 1.9]

35. Aher S.A. and Singal S.K., "Methodology for Cost Evaluation of Low Head Small Hydropower Project", *Indian Journal of Power and River Valley Development*, 157-160, (2010)
36. Mishra S., Singal S.K. and Khatod D.K., "Effect of Penstock Length Variation on Hydraulic Transients", *Indian Journal of Power and River Valley Development*, 194-198, (2010)
37. Nautiyal H., Singal S.K., Varun and Sharma A., "Small Hydropower for Sustainable Energy Development in India", *Renewable and Sustainable Energy Reviews*, 15 (4) (2011), 2021–2027. <https://doi.org/10.1016/j.rser.2011.01.006> [SCIE; IF:16.3]
38. Singal S.K., Saini R.P. and Raghuvanshi C.S., "Effect of Soil Conditions on Cost of Low Head SHP Schemes" *Journal on water, energy and environment*, 8(2011), 24-28. <https://doi.org/10.3126/hn.v8i0.4904>
39. Mishra S., Singal S.K. and Khatod D.K., "Sustainable Energy Development by Small Hydropower with CDM Benefits in India", *International Journal of Ambient Energy*, 32(2), pp. 103-110, 2011. <https://doi.org/10.1080/01430750.2011.584471>
40. Mishra S., Singal S.K. and Khatod D.K., "Approach for Cost Determination of Electro-Mechanical Equipment in RoR SHP Projects", *Journal of Smart Grid and Renewable Energy*, 2(2), pp. 63-67, (2011). [10.4236/sgre.2011.22008](https://doi.org/10.4236/sgre.2011.22008) [IF:1.74]
41. Mishra S., Singal S.K. and Khatod D.K., "Optimal Installation of Small Hydropower Plant – A Review", *Journal of Renewable and Sustainable Energy Review*, 15(8), pp. 3862-3869, 2011. <https://doi.org/10.1016/j.rser.2011.07.008> [SCIE; IF:16.3]
42. Mishra S., Singal S.K. and Khatod D.K., "Design of desilting tank for small hydropower projects – A Review", *Water and Energy International Journal*, 68(4), pp. 32-36, 2011
43. Bhatt R. and Singal S.K., "Optimal Small Hydropower Development on Canal Falls". *Water and Energy International Journal*, 68(9), pp. 16-22, 2011
44. Eknath S.P., Singal S.K. and Srivastava D.K., "Assessment of Surface Water Quality of Godavari River at Aurangabad", *Asian Journal of Water, Environment and Pollution*, Vol.9, No.1, 117-122, 2012. [ESCI; IF:0.4]
45. Mishra S., Singal S.K. and Khatod D.K., "A Review on Electro-mechanical Equipment Applicable to Small Hydropower Plants", *International Journal of Energy Research*, 36, pp. 553-571 (2012). <https://doi.org/10.1002/er.1955> [SCIE; IF: 4.3]
46. Mishra S., Singal S.K. and Khatod D.K., "Design of desilting tank for small hydropower projects – A Review", *IASH Journal*, Vol. 1, No. 1, pp. 10-14, 2012
47. Mishra S., Singal S.K. and Khatod D.K., "Cost Analysis for Electromechanical Equipment in Small Hydropower Projects", *International Journal of Green Energy*, 10:8, 835-847, 2013. <https://doi.org/10.1080/15435075.2012.727367> [SCIE; IF: 3.1]
48. Sachin M., Singal S.K. and Khatod D.K., "Effect of Variation of Penstock Parameter Variation on Mechanical Power", *International Journal of Energy Science IJES*, Vol.2. Issue 3, 2012, PP.110-114.
49. Mishra S., Singal S.K. and Khatod D.K., "Costing of Small Hydropower Projects", *International Journal of Engineering and Technology (IACSIT)*, Vol. 4, No. 3, June 2012, 239-242.
50. Mishra S., Singal S.K. and Khatod D.K., "Sizing And Quantity Estimation For Desilting Tank Of Small Hydropower Projects – An Analytical Approach", *International Journal of Green Energy*, 10:6, 574-586, 2013. <https://doi.org/10.1080/15435075.2012.668864> [SCIE; IF: 3.1]
51. Naing O. K. and Singal S.K., "Environment Management of Chindwin River in Myanmar", *International Journal, The Environ Monitor*, Page 04-15, Vol. XII, Sept & 2012.
52. Dhillon J., Kumar A. and Singal S. K., Operation of Wind and Pumped Storage plant under Deregulated Environment, *Water and Energy International Journal*, Vol 69, No. 11, pp. 30-34, November 2012.

53. Pokhrel S., Singal S.K. and Singh S.N, “Comprehensive Study of Community Managed Mini Grid”, International Journal of Emerging Technology and Advanced Engineering Volume 3, Special Issue: ICERTSD 2013, Feb 2013, 514-520
54. Tripathi M. and Singal S.K., “Performance Evaluation of Sewage Treatment Plants in Lucknow City”, Journal of water, energy and environment, 12(2013), 80-86. <https://doi.org/10.3126/hn.v12i0.9039>
55. Patel H. N., Singal S. K., Saini R. P., “A New Approach for the Study of Silt Erosion of Hydro Turbine”, International journal of emerging technology and advanced engineering, Volume 3, Issue 5, May 2013, 599-602
56. Mathur T. and Singal S.K., Conservation Plan of Anasagar Lake, International Journal of Environmental Research and Development, Vol. 3 No. 4, pp 83-86, 2013
57. Kumar R. and Singal S.K., “Computer Based Control of Operation and Maintenance of SHP Plants”, International Journal of Engineering Research and Technology, Vol. 6, No. 5, pp. 651-658, 2013
58. Kumar R. and Singal S.K., “Eco friendly construction in hydro power plants” International Journal of Engineering Research and Technology (IJERT), vol. 6, no. 10 (2013), pp. 1-5
59. Dhillon J., Kumar A., Singal S.K. “Optimization methods applied for Wind-PSP operation and scheduling under deregulated market: A review”, Renewable and Sustainable Energy Reviews, International Journal, 30 (2014), pp. 682–700. <https://doi.org/10.1016/j.rser.2013.11.009> [SCIE; IF:16.3]
60. Dalakoti H., Singal S.K., “Performance Evaluation of Conservation Programmes for Lakes of the Nainital Region”, Munich, GRIN Publishing GmbH, <http://www.grin.com/en/e-book/275593/performance-evaluation-of-conservation-programmes-for-lakes-of-the-nainital>, 2014.
61. Dashora I., Singal S.K. and Srivastav D.K., “Regional Flow Duration Curve Methods for Hydropower Development: A Review”, Journal of Indian Water Resources Society, pp 7-15, Vol 34, No.3, 2014.
62. Kishore T.S., Singal S.K., Optimal economic planning of power transmission lines: A review, Renewable and Sustainable Energy Reviews, Volume 39, 2014, Pages 949-974. <https://doi.org/10.1016/j.rser.2014.07.125> [SCIE; IF:16.3]
63. Harsh and Singal S.K., "Integration of Renewable Energy Sources Using Artificial Intelligent System" International Journal of Innovative Research in Science, Engineering and Technology (IJIRSET), pp. 17291-17305, Vol. 3, Issue 11, 2014. <https://doi.org/10.15680/IJIRSET.2014.0311031>
64. Kishore T.S., Singal, S.K., "Costing of overhead power lines", International Journal of Engineering Sciences and Management, Pp 55-64, Volume 4, Issue 2, 2014
65. Kishore T.S., Singal, S.K., “Design Considerations and Performance Evaluation of EHV Transmission Lines in India”, Journal of Scientific & Industrial Research, pp. 117-122, Vol. 74, 2015. [SCIE; IF: 0.7]
66. Abhijeet S. Ghonel and Singal S.K., “Study On Pollution Sources, Water Quality And Conservation Of Rankala Lake, Kolhapur, India”, International Journal of Advanced Technology in Engineering and Science (IJATES), Vol. 2, Issue 11. February 2015. [IF: 5.8]
67. Dashora I., Singal S.K. and Srivastava DK, “Stream Flow Prediction for Estimation of Hydropower Potential” Water and Energy International Journal, Vol. 57, Issue 11, pp 54-60, 2015
68. Abhijeet S., Ghonel and Singal S.K., “Performance Evaluation of Deweeding Operations Implemented for Conservation of Rankala Lake, Kolhapur”, India, International Journal of European Academic Research, Vol. II, Issue 11, February 2015, pp 14310-14324. [IF: 3.4546]
69. Dashora I., Singal S.K. and Srivastava D.K., “Software Application for Data Driven Prediction Models for Intermittent Streamflow for Narmada River Basin”, International

- Journal of Computer Applications Vol. 113, No. 10, pp. 9-17, 2015.
<https://doi.org/10.5120/19860-1817>
70. Pundir Kunwar Sangram Singh, Singal S.K and Saini R.P. “Performance of Solar Photovoltaic Plant Installed in IIT Roorkee Campus: A Case Study”, International Journal of Advance Research In Science And Engineering (IJARSE), Vol. 4, pp 436-444, Special Issue (01), 2015
 71. Kishore T.S., and Singal S.K., "Economic Analysis of Power Transmission Lines using Interval Mathematics ", Journal of Electrical Engineering & Technology. 2015; 10(4): 1471-1479. <http://dx.doi.org/10.5370/JEET.2015.10.4.1471> [SCIE; IF:1.6]
 72. Barnwal P., Mishra S. and Singal S.K., “Risk assessment and analysis of water quality in Ramgarh Lake, India”, Journal of Integrated Science & Technology, 3(1), pp. 22-27, 2015.
 73. Barnwal P. and Singal S.K., “Anatomy of Urban Sewerage Scheme: A Case Study" International Journal of Technology Innovations and Research (IJTIR), Volume 14,1-10, 2015
 74. Kishore T.S., and Singal S.K., “Analysis of Investment Issues and Transmission Schemes for Grid Integration of Remote Renewable Energy Sources”, International Journal of Renewable Energy Research, Vol. 10, No. 2, 483- 490, 2015. [SCI; IF: 1.799] <https://doi.org/10.20508/ijrer.v5i2.2132.g6602> [ESCI; IF:10.32]
 75. Kumar R. and Singal S.K., “Penstock material selection in small hydropower plants using MADM methods”, Renewable and Sustainable Energy Reviews, Volume 52, December 2015, Pages 240-255 <https://doi.org/10.1016/j.rser.2015.07.018> [SCIE; IF:16.3]
 76. Kishore T.S., and Singal S.K., “Optimal costing of overhead power transmission lines using genetic algorithms", International Journal of Electrical Power and Energy Systems, Volume 83, December 2015, pp 298-308. <https://doi.org/10.1016/j.ijepes.2016.04.031> [SCIE; IF: 5.0]
 77. Dhillon J., Kumar A. and Singal S.K., “A Stochastic approach for the operation of a wind and pumped storage under Deregulated Environment”, International journal of Green Energy. Vol 13, NO.1,55–62, 2016 <https://doi.org/10.1080/15435075.2014.909358> [SCIE; IF: 3.1]
 78. Kumar R. and Singal S.K., “Analysis for Turbine Maintenance Cost Correlation in Mini Hydropower Project”, Journal of Basic and Applied Engineering Research, Vol. 3, Issue-9, pp. 773-775, 2016.
 79. Tun S.W. and Singal S.K., “Management of Hydropower Tunnels to Prevent Collapse and Remedial Measure”, Journal on water, energy and environment, Hydro Nepal, 19(2016), 31-37. <https://doi.org/10.3126/hn.v19i0.15349>
 80. Singh V.K. and Singal S.K., “Operation of hydro power plants-a review” Renewable and Sustainable Energy Reviews, Volume 69, 2017, Pages 610-619 <https://doi.org/10.1016/j.rser.2016.11.169> [SCIE; IF:16.3]
 81. Dalakoti, H., Mishra, S., Chaudhary, M., & Singal, S. K.. Appraisal of water quality in the Lakes of Nainital District through numerical indices and multivariate statistics, India. International Journal of River Basin Management, 16(2), 219–229 (2017). <https://doi.org/10.1080/15715124.2017.1394316>
 82. Kishore T.S., and Singal S.K. and Selvaraj M., “Methodology for cost estimation of overhead power transmission lines” Int. J. Power and Energy Conversion, Inderscience Enterprises Ltd. Vol. 8, No. 2, 2017. <https://doi.org/10.1504/IJPEC.2017.083192>
 83. Tripathi M. and Singal S.K., “*Eichhornia crassipes*- A Menace to Fresh Water Bodies and Its Sustainable Ethanol Extraction: Mini Review”, Recent Adv. Petrochem Sci. 2017; 2(3): 555586, 001-003. <https://doi.org/10.19080/RAPSCI.2017.02.555587>
 84. Tripathi M. and Singal S K, “Riverfront Restoration Plan Using Cipar Index: A Case Study of Gomti River, India”, Journal on water, energy and environment, Hydro Nepal, 21(2017), 25- 33. <https://doi.org/10.3126/hn.v21i0.17818>

85. Singh V.K. and Singal S.K. "Application of MADM for Assessment of Parameters for Optimum Operation of small Hydropower Plants", IASH Journal, International Association for Small Hydro, Vol. 6, No. 2, July 2017, pp. 03-10.
86. Yadav A.V., Singal S.K. and Sood M., "Performance Evaluation of Bulb Turbine: A Case Study" International Association for Small Hydro, Vol 7, No. (1), Jan 2018, pp 16-23.
87. Patel, A. M., & Singal, S. K. (2018). LCC analysis for economic feasibility of rural electrification by hybrid energy systems. *Materials Today: Proceedings*, 5(1), 1556-1562. <https://doi.org/10.1016/j.matpr.2017.11.246>
88. Sood M. and Singal S.K., "Hydro Kinetic Potential Assessment", International Association for Small Hydro, Vol 7, No. (1) Jan 2018, pp. 24-29.
89. Patel A.M., Singal S.K., "Economic Analysis of Integrated Renewable Energy System for Electrification of Remote Rural Area having Scattered Population", International Journal of Renewable Energy Research, Vol 8 (1), March 2018, pp 523-539. <https://doi.org/10.20508/ijrer.v8i1.6820.g7354> [ESCI; IF: 10.32]
90. Tripathi M. and Singal S.K., "Use of Principal Component Analysis for parameter selection for development of a novel Water Quality Index: A case study of river Ganga India" International Journal of Ecological Indicators, 96 (2019) pp 430-436. <https://doi.org/10.1016/j.ecolind.2018.09.025> [SCIE; IF: 7.0]
91. Sood M. and Singal S.K., "Development of hydrokinetic energy technology: A review", Int J Energy Res. 2019, 1–20. <https://doi.org/10.1002/er.4529> [SCIE; IF: 4.3]
92. Tripathi M. and Singal S K, "Allocation of weights using factor analysis for development of a novel water quality index" International journal of Ecotoxicology and Environmental Safety, 2019, pp 1-7. <https://doi.org/10.1016/j.ecoenv.2019.109510> [SCIE; IF: 6.2]
93. Singh V. K. and Singal S.K., "Analysis for operation cost of run of river SHP schemes", ISH Journal of Hydraulic Engineering, Taylor & Francis Group 2019, DOI: 10.1080/09715010.2019.1710272.
94. Patel A.M., Singal S.K., "Optimal component selection of integrated renewable energy system for power generation in stand-alone applications", Energy (Elsevier) 175 (2019), pp 481-504. <https://doi.org/10.1016/j.energy.2019.03.055> [SCIE; IF:9.0]
95. Kumar R., Abbas A., Dwivedi G. and Singal S.K., "Design and cost analysis of fish friendly Kaplan Turbine: A case study", International Journal (Elsevier) Materials today proceedings 46 (2021) 5384-5388. <https://doi.org/10.1016/j.matpr.2020.08.805>
96. Sood M. and Singal S.K., "A numerical analysis to determine wake recovery distance for the longitudinal arrangement of hydrokinetic turbine in the channel system", Energy sources, Part A: Recovery, Utilization and Environmental Effects. 2021, [10.1080/15567036.2021.1979695](https://doi.org/10.1080/15567036.2021.1979695) [SCIE; IF: 2.3]
97. Kumar R., Singal S.K., Dwivedi G. and Shukla A.K., "Development of maintenance cost correlation for high head run of river small hydro power plant" International Journal of ambient energy, Vol. 43, No. 1, pp 3124-3137, 2022. <https://doi.org/10.1080/01430750.2020.1804447>
98. Arora N., Kumar A., Singal S.K., "Technological advancement in measurements of suspended sediment and hydraulic turbine erosion", J. of Measurement, (Elsevier), 190, (2022), pp. 1-16, 110700 <https://doi.org/10.1016/j.measurement.2022.110700>.
99. Sood Manoj and Singal S.K., "Development of Statistical Relationship for the Potential Assessment of Hydrokinetic Energy", Ocean Engineering (Elsevier), pp 1 -20, 266 (2022) 112140. <https://doi.org/10.1016/j.oceaneng.2022.112140> [SCIE; IF: 4.6]
100. Singal, S. K., Gupta, V., & Sood, M.. A Numerical Study to Determine the Impact of Trash Rack Blockage on Head Loss. Water and Energy International, 65(7), 6-11 (2022).
101. Saini, G., Saini, R. P., & Singal, S. K.. Numerical investigations on performance improvement of cross flow hydro turbine having guide vane mechanism. Energy

- Sources, Part A: Recovery, Utilization, and Environmental Effects, 44(1), 771–795 (2022). <https://doi.org/10.1080/15567036.2022.2050963> [SCIE; IF: 2.3]
102. Bajpai Upendra and Singal S.K., “Techno-economic analysis of In-stream Technology: A review”, *International Journal of Green Energy*, pp. 1-31, 2023. <https://doi.org/10.1080/15435075.2023.2195930> [SCIE; IF: 3.1]
 103. Hedau Ankush and Singal S.K., “Development of Nusselt Number and Friction Correlations for Double-Pass Air Heater Duct”, *Applied Thermal Engineering* 234 (2023). doi: <https://doi.org/10.1016/j.applthermaleng.2023.121227> [SCIE; IF: 6.1]
 104. Hedau Ankush and Singal S.K., “Study on Thermal Performance of Double Pass Solar Air Heater with PCM-Based Thermal Energy Storage System, *Journal of Energy Storage*, 73 (2023). <https://doi.org/10.1016/j.est.2023.109018> [SCIE; IF: 8.9]
 105. Arora, N., Kumar, A. & Singal, S. K. (2023). Matrix flushing approach-based sediment mineralogical composition of Bhagirathi river basin in Indian Himalayas, *Journal of Environment, Development and Sustainability*, pg. 1-16, <https://doi.org/10.1007/s10668-023-04005-2>. [SCIE; IF: 4.7]
 106. Kamal Md. Mustafa, Singal S.K, Abbas Ali, “Numerical analysis on the torque characteristics of hybrid hydrokinetic turbine for different configurations and operating conditions”, *Ocean Engineering (Elsevier)* 288 (2023) 116061. <https://doi.org/10.1016/j.oceaneng.2023.116061> [SCIE; IF: 4.6]
 107. Kumar Prashant, Singal SK and Gohil Pankaj P., “A Technical Review on Combined effect of Cavitation and Silt Erosion on Francis Turbine”, *Renewable and Sustainable Energy Reviews*, 190 (2024) 114096. <https://doi.org/10.1016/j.rser.2023.114096>. [SCIE; IF:16.3]
 108. Saini V. and Singal S.K., "Optimal sizing of an integrated renewable energy system and effective utilization of surplus energy in electric vehicle charging", *Engineering Science and Technology, an International Journal* 48 (2023) 101564. <https://doi.org/10.1016/j.jestch.2023.101564>. [SCIE; IF:5.1]
 109. Arora, N., Kumar, A., & Singal, S. K. (2024). Spatial Variation in Hydrosedimentary Characteristics of the Alaknanda River Basin in the Indian Himalayas: A Field Study. *Journal of Irrigation and Drainage Engineering*, 150(3), 06024001 <https://doi.org/10.1061/JIDEDH.IRENG-10237>. [SCIE; IF:1.6]
 110. Hedau Ankush and Singal S.K., “Thermo-hydraulic performance investigation of double pass solar air heater integrated with PCM-based thermal energy storage”, *Journal of Energy Storage*, 79 (2024) 110202. <https://doi.org/10.1016/j.est.2023.110202> [SCIE; IF:8.9]
 111. Arora, N., Kumar, A. & Singal, S.K. Spatial variation of suspended sediment properties in the Sutlej river basin of Indian Himalayas. *Acta Geophys.* (2024). <https://doi.org/10.1007/s11600-024-01322-6>. [SCIE; IF:2.0]
 112. Saini, V., Singal, S. K. (2024), “Design and Optimization of an Off-grid Integrated Renewable Energy System for Remote Rural Electrification in India”, *Microsystem Technologies*, Springer Nature, 30 (March 2024), 1-15. <http://doi.org/10.1007/s00542-024-05625-y>. [SCIE; IF:1.6]
 113. Hedau Ankush and Singal S.K., “Performance Analysis and Optimization of Solar Air Heater with Double – Pass Configuration using Perforated Blocks and Semi-circular Tubes as Artificial Roughness”, *Journal of Thermal Science and Engineering Progress*, 53 (2024) 102705. <https://doi.org/10.1016/j.tsep.2024.102705> [SCIE; IF:5.1]
 114. Hedau Ankush and Singal S.K., “2024 “Heat transfer and fluid flow analysis of PCM-based thermal energy storage concept for double pass solar air heater duct”, *Journal of International Communications in Heat and Mass Transfer*, 157 (2024) 107813. <https://doi.org/10.1016/j.icheatmasstransfer.2024.107813> [SCIE; IF:6.4]
 115. Saini, V., Singal, S. K. (2024), “Techno-economic analysis and operational challenges of a standalone integrated renewable energy system”, *Microsystem Technologies*,

Springer Nature, 30 (August 2024), 1-14. <https://doi.org/10.1007/s00542-024-05745-5> [SCIE; IF:1.6]

116. Kamal, M.M., Singal, S.K. & Abbas, A. Development of correlation for the power coefficient of the hybrid hydrokinetic turbine rotor having straight-bladed Darrieus and helical-bladed Savonius rotors. J Braz. Soc. Mech. Sci. Eng. 46, 136 (2024). <https://doi.org/10.1007/s40430-024-04713-4>

B. Books

1. Singal S.K., Goel Varun, Nautiyal Himanshu and Papantonis Dimitrios E., “Small Hydropower Design and Analysis”, Elsevier Publication (316 pages) (2023).

C. Book Chapters

1. Naidu B.S.K, Kumar A., Singal S.K., Book Chapter on “Non Conventional Mini. Hydro at the Cooling Water Return Channel of BTPS,” Small Hydro, NPTI Publication, Faridabad, India, 241-255, 2005.
2. Singal S.K. and Varun, “Small Hydropower: A Promising Source of Electricity Generation”, Book Chapter No. 22, Energy Science and Technology vol. 11, Hydrogen and Other Technologies, Stadium Press LLC, USA, pp. 583-615, 2015.
3. Sachin M., Singal S.K. and Khatod D.K., “Cost Optimization of High Head Run of River Small Hydropower Projects”, Book Chapter No. 7, Application of Geographical Information Systems and Soft Computation Techniques in Water and Waste Water Based Renewable Energy Problems, Springer Nature Singapore Pte Ltd., 1st Edition, XIX, pp. 141-166, 2018. https://doi.org/10.1007/978-981-10-6205-6_7
4. Dhillon J., Kumar A. and Singal S.K., “An Approach for Wind-Pumped Storage Plant Scheduling Under Uncertainty”, Book Chapter No. 8, Application of Geographical Information Systems and Soft Computation Techniques in Water and Waste Water Based Renewable Energy Problems, Springer Nature Singapore Pte Ltd., 1st Edition, XIX, pp. 167-190, 2018. https://doi.org/10.1007/978-981-10-6205-6_8
5. Saini R.P., Singal S.K., Ali I. and Joshi R.C., “A Comprehensive Review on Projects Carried Out by RuTAG Centre IIT Roorkee .”, Book Chapter No. 5, Rural Technology Development and Delivery, RuTAG and Its Synergy with Other Initiatives, Springer Nature Singapore Pte Ltd., pp. 81-94, 2019. https://doi.org/10.1007/978-981-13-6435-8_5
6. Saini R.P., Singal S.K. and Ali I., “Development of Modified Pump Used as Turbine in Micro Hydro Plants .”, Book Chapter No. 22, Rural Technology Development and Delivery, RuTAG and Its Synergy with Other Initiatives, Springer Nature Singapore Pte Ltd., pp. 301-308, 2019. https://doi.org/10.1007/978-981-13-6435-8_22
7. Saini R.P., Singal S.K., Ali I., and Joshi R.C., “Development of Modified Bageshwari Wool Charkha”, Book Chapter No. 26, Rural Technology Development and Delivery, RuTAG and Its Synergy with Other Initiatives, Springer Nature Singapore Pte Ltd., pp. 347-357, 2019. https://doi.org/10.1007/978-981-13-6435-8_26
8. Patel A. M. and Singal, S. K., “Ch 3-Computing technologies for renewable energy sources integration” in “Image Processing for the Analysis of Renewable Energy Sources”, Bentham Science Publisher, pp 31-57, (2022). <https://doi.org/10.2174/9789815036992122010005>
9. Jain D. A., Singal S.K. and Arora, P., “Ch. 6-Image processing for estimating sustainability of riverfronts: A case-study of Sabarmati riverfront”, Bentham Science Publisher, pp 87-105, (2022). <https://doi.org/10.2174/9789815036992122010008>
10. Sood Manoj and Singal S.K., “Investigation of Two Phase Numerical Modeling Considering Free Surface Effect for Operating Hydrokinetic Turbine in an Open Channel”, Recent Advances in Mechanical Engineering, Lecture Notes in Mechanical

Engineering Book Series (LNME), Springer Publisher, pp. 465-476, (2022).
https://doi.org/10.1007/978-981-19-2188-9_43

11. Kumar Ravi and Singal SK, "An Analysis of Operational Life Cycle of SHP Plant Components: A Study in Himalayan Region", River and Coastal Engineering, pp. 287-298, Springer Publication, (2022). https://doi.org/10.1007/978-3-031-05057-2_25
12. Hedau A., and Singal S. K. "Numerical Study of Solar Air Heater with Semi-Cylindrical Tube Roughness." In Heat Transfer Enhancement Techniques: Thermal Performance, Optimization and Applications, John Wiley & Sons, USA, 2023; Chapter 10; pp. 01-17. DOI Awaited <https://onlinelibrary.wiley.com/>

D. Paper in Special Publications

1. Kumar A., Singal S. K., "Economic and Financial Analysis of Small Hydro Projects", Urja Bharti (Special Issue on SHP Development), Ministry of Non-Conventional Energy Sources, Govt. of India, Vol.3, No.2, 21-22, 1992.
2. Singal S.K., "Small Hydropower an Attractive Source of Renewable Energy," Electrical India, Vol. 49, No. 6, 96-101, 2009.
3. Singal S.K., "Sustainable Development of Small Hydropower Projects," Electrical India, Vol. 50, No. 11, 194-200, 2010.
4. Singal S.K., "Small and Large Hydro are complementary not Competitive", Power Watch, vol 4, Issue 8, pp. 48-49, 2013.
5. Singal S.K., "Innovative Technologies May Improve the Functionality of SHPs", Power Today, pp. 42-44, 2015.
6. Singal S.K. and Varun, "Small Hydropower for Sustainable Development- Promising Energy Potential for India", Energy Future, pp. 22-27, 2015.
7. Singal S.K. and Sood M., "A new approach of small hydro power: Hydrokinetic Technology, Energy Future, pp. 29-33, 2020.

E. Standards / Guidelines Prepared with Support from Ministry of New and Renewable Energy

1. 1.1-General: Small Hydropower Definitions and Glossary of Terms, List and Scope of Different Indian and International Standards / Guidelines / Manuals", standard / manual / guideline, Roorkee, September 2013.
2. 1.2 and 2.1 General/ Civil Works – Planning and Layouts", standard/manual/guideline with support from Ministry of New and Renewable Energy, Roorkee, June 2013.
3. 1.5 General – Project Cost Estimation", standard/manual/guideline, Roorkee, Nov. 2012.
4. 1.6 General – Economic & Financial Analysis and Tariff Determination", standard/manual/guideline, Roorkee, Nov 2012.
5. 1.12 – Site Investigations" standard/manual/guideline, Roorkee, August 2013.
6. 2.4 – Civil Works– Maintenance of Civil Works (Including Hydro-mechanical)", standard/manual/guideline, Roorkee, December 2012.

F Publication in Conferences

1. Kumar A., Singal S.K. and Saxena N.K., "Design aid on desilting tanks for micro hydro stations", National seminar on development of small and micro hydro energy systems in the Himalayan regions, AHEC, UOR, Roorkee, India, December 19-20, 1987.

2. Singal S.K., Singhal M.K. and. Saxena N.K., “Low cost civil design for mini and micro hydel projects”, National Solar Energy Convention, Solar Energy Society of India, Udaipur, India, Dec. 1990, 503- 507.
3. Kumar A., Singal S.K., “Civil Engineer as Manager of Hydro-electric Project”, 5th National Convention of Civil Engineers, The Institution of Engineers (India), Calcutta, 1990.
4. Kumar A., Singh S.N. and Singal S.K., “Sadani Mini Hydro Electric Project- A Case Study ”, Seminar on Renewable Sources of Energy, Potential, Prospects and Progress in retrospective, Ranchi, Bihar, India, March 11-12,1994.
5. Singal S.K., Thakkar S.K, Paul D.K. and Bose P.R., “Response of Single Storey Brick Masonry Building Under Shock Loading ”, Tenth Symposium on Earthquake Engineering, UOR, Roorkee, India, Nov 16-18,1994.
6. Sharma J.D., Kumar A. and Singal S.K., “Technology Selection Challenges for Small Hydro Power ”, International conference on small Hydro Power Systems, New Delhi, March 13-14, 1997.
7. Kumar A., Singal S.K. and Singh S.P., “Small Hydro Power Scenario in Uttar Pradesh”, All India Seminar on Development of Hydro Power Potential in India, Lucknow, U.P., India, April 22, 1997.
8. Kumar A., Singal S.K, “Selection of Sites and Low Head Turbines for Small Hydro Power Development”, Business Meet on SHP Projects, Hyderabad, Dec 14, 2000. (Invited)
9. Singal S.K, Varun, “Renovation, Modernisation and Uprating of SHP Stations”, All India Seminar on Current Trends in Hydro Projects and their Rehabilitation, The Institution of Engineers (India), Chandigarh, Jan 16-17, 2004, 50-54.
10. Singal S.K, “Small Hydropower Development in Uttaranchal”, Workshop on Energy for rural masses: An Entrepreneur approach, The Energy and Resource Institute, Dehradun, April 16, 2004. (Invited)
11. Varun, Agarwal V. and Singal S.K, “Micro Hydro Power Development for Remote areas”, National Conference on Safety, Environment and Energy Management, National Institute of Technology, Truchirapalli ,Tamilnadu, India, June 4-6 2004.
12. Singal S.K., Saini R.P., “Cost Effective approach for Low Head SHP Installations”, International Conference and Exhibition on Small Hydro Power, Falkenberg, Sweden, June 17-19, 2004.
13. Singal S.K., “Small hydropower technology and employment opportunities”, National workshop on Renewable energy and youth employment opportunities, UNIDO- IHC-MNES, India, New Delhi, 154-155, July 8-9, 2004. (Invited)
14. Singal S.K., “Small hydropower technology”, Regional workshop on Remote village electrification, The Energy and Resource Institute, Bangalore, India, July 9-11,2004. (Invited)
15. Singal S.K., Saini R.P., “Cost Effective Development of Canal Based Hydropower Scheme-A Case Study” First International Conference on Renewable Energy, Central Board of Irrigation and Power, New Delhi, Oct. 6-8, 2004 , PG 31-PG38.
16. Singal S.K., Saini R.P., “Small Hydro Power –A promising Source of Renewable Energy”, National Seminar on Renewable energy Technologies, Innovations and Market Penetration, Solar Energy Society of India, Kolkata Oct. 8-9, 2004.
17. Varun, Singal S.K., “Renewable Energy Technologies.” National Seminar on Renewable Energy and Energy Management, NERIWALM, Tezpur, India, Aug. 23-24, 2005.
18. Varun, Singal S.K., Mittal M.K., “Energy Demand and Management Techniques,” National Conference on Energy Management in Changing Business Scenario, BITS, Pilani, India, Oct. 8-9, 2005.

19. Chauhan R.D., Sharma M.P., Singal S.K., "Study on The Applicability of Mixture Rule For Biodiesel Blend," National Conference on Energy Management in Changing Business Scenario, BITS, Pilani, India, Oct. 8-9, 2005.
20. Singal S.K., Varun, "Development of Non-Conventional Energy Sources," 9th NCB International Seminar on Cement and Building Materials, New Delhi, Nov. 8-11, 2005.
21. Singal S.K., Varun, "Cost Effective Technology for SHP Development," All India Seminar on Energy Trends in Energy Conservation and Management, The Institution of Engineers (India), Roorkee, Nov. 11-12, 2005, 239-249.
22. Singal S.K., Saini R.P., "Cost Effective Development of Low Head Small Hydropower Stations," International Symposium on Recent Advance in Water Resource Development and Management, Roorkee, 851-858, Nov. 23-25, 2005.
23. Das B.J., Singal S.K. and Singh R., "Wetlands of Assam," Third International Conference on Plants & Environmental Pollution, Lucknow, Nov.28- Dec. 2, 2005.
24. Sharma M.P., Singal S.K. Chauhan and R.D., "Comparative Study of Viscosity for Biodiesel Blend of Pongamia Oil," Third International Conference on Plants & Environmental Pollution, Lucknow, Nov.28- Dec. 2, 2005.
25. Sharma M.P., Saini R.P., Singal S.K. and Chauhan R.D., "Jatropha-a hope for biodiesel in Uttar Pradesh," Third International Conference on Plants & Environmental Pollution, Lucknow, Nov.28- Dec. 2, 2005.
26. Singh S.P., Singal S.K., "Modelling and Simulation of Hydro Power Plant," International Conference on Electricity the Energy Carrier for the Present and the Future", Indian Journal of Power and River Valley Development, Kolkata, February 3-5, 2006.
27. Singal S.K., Varun, "Cost Effective Technology for SHP Development," All India Seminar on Alternative Sources of Energy and Quality Power Vision- 2000, The Institution of Engineers (India), Jaipur, February 24-25, 2006.
28. Singh R.P. and Singal S.K., "Utilization Pattern of Energy Resources at Remote Island", National Conference on Energy Alternatives for Rural Sector, International Development Centre Foundation, New Delhi, April 27-28, 2006, 131-135
29. Singh R.P., Singal S.K. and Varun, "Energy Inefficiency: A Case Study For Neil Island", International Conference On "Challenges and Strategies for Sustainable Energy, Efficiency and Environment", UP Technical University, Lucknow, June 10-11, 2006
30. Das B.J., Singal S.K. and Singh R., "Degeneration of Wetlands In Assam", International Conference On Management Wastewater and Environment: Challenges for the Developing Countries, Kathmandu, Nepal, Sept. 13-15, 2006
31. Singal S.K., and Singh R., "Impact of Silt on Hydro Turbines", International Himalayan Small Hydropower Summit, Dehradun, 218-225, Oct. 12-13, 2006
32. Varun, Singal S.K. and Verma P., "Small Hydro Power Development In Uttaranchal", National Conference on Recent Developments and Future Trends in Mechanical Engineering (RDFTME-2006), November 3 - 4, 2006, National Institute of Technology, Hamirpur (H P)
33. Singal S.K., Varun, "Small Hydro Power – A Sustainable Source Of Renewable Energy", National Conference on Energy and Environment, Jaipur Engineering College, November 25 - 26, 2006, Jaipur
34. Singh R.P., Singal S.K. and Varun, "Potential Assessment of Renewable Energy Resources at Neil Island", 6th International R&D Conference, CBIP, 13-16 February 2007, Lucknow, India
35. Kannan S., Singal S.K., Kazmi A.A. and Kanaka B., "Decentralized Wastewater Management Systems", International Conference on "Water & Flood Management, March 12 -14, 2007, 753-762, Dhaka, Bangladesh
36. Singal S.K., Saini R.P. and Sinha G., "Cost Estimation of Turbines For Low Head Small Hydro Power Schemes", 23rd National Convention of Chemical Engineers, IIT Roorkee, 212-219, October 5-7, 2007

37. Gupta R., Singh S.N. and Singal S.K., "Automation of Small Hydro Power Station," International Conference on Small Hydropower, Kandy, Sri Lanka, 41-50, October 22-24, 2007
38. Singal S.K., Saini R.P., "Analytical Approach for Cost Estimation of Low Head Small Hydropower Schemes," International Conference on Small Hydropower, Kandy, Sri Lanka, 513-518, October 22-24, 2007,
39. Gupta R., Singh S.N. and Singal S.K., "PLC based Monitoring & Automation of SHP Station," International Conference on Advances in Energy Research, IIT Bombay, Mumbai, India, 342-348, December 22-24, 2007
40. Kumar A., Saini R.P. and Singal S.K., "Design of Small Hydropower Plants With Bulb Turbines – A Review", National Conference on Trends in Mechanical Engineering, Chandigarh Engineering College, Chandigarh Feb. 08-09, 2008, 336-346
41. Kannan S., Kazmi A.A., Singal S.K. and Tyagi V.K., "Selection Of Appropriate Sewage Treatment Technology In India: A Case Study", International Conference on Waste Engineering and Management, Hong Kong, 114, May 28–30 2008
42. Jain S., Singal S.K., "Investigations and Development of Small Hydropower Project in Gujarat – A Case Study", International Conference on Advances in Mechanical Engineering, Surat, December 15-17, 2008
43. Singal S.K. and Varun, "Overview of Small Hydropower Development in India," National Conference on Advances in Mechanical Engineering (NCAME), Moradabad, 217-222, Feb 28 –March 01, 2009
44. Singal S.K. and Varun, "Small Hydropower Technology," Enviro Energy 2009: International Conference on Energy and Environment, Chandigarh, 548-551, March 19-21, 2009
45. Goyal D., Kumar A. and Singal S.K., "Small Hydropower Policy In Southern States Of India", National Conference on Energy Security for Rural Development, Gandhigram, Dindigul, Tamilnadu, India, March 26, 2009
46. Bhosale N.R. and Singal S.K., "Analysis of Different Types of Layouts of Run-off-river Hydropower Scheme," International Conference on Water Environment, Energy and Society, Agra, India, June 28-30, 2009
47. Goyal D., Kumar A. and Singal S.K., "Policy for Sustainable Small Hydropower Development in India," International Conference on Water Environment, Energy and Society, Agra, India, June 28-30, 2009
48. Bhosale N.R. and Singal S.K., "Cost Effective Planning And Optimized Layout Of Run-Of-River Hydropower Scheme", International Conference on Water Environment, Energy and Society, Agra, India, June 28-30, 2009
49. Jain S.V. and Singal S.K., "Design of Water Conductor System for Ultra Low Head Hydropower Project – A Case Study," International Conference on Advances in Mechanical Engineering-2009, SVNIT Surat, 381- 385, Aug 3-5, 2009.
50. Bhosale N.R. and Singal S.K., "Comparative Analysis of Different Types of Layouts of Run-off-river Hydropower Scheme," International Conference on Advances in Mechanical Engineering-2009, SVNIT Surat, 267- 271, Aug 3-5, 2009
51. Padhy M.K., Saini R.P., Singal S.K. and Singh R., "A Riview on Cavitation Erosion on Hydro Turbine," Hydropower 10- 6th International Hydropower Conference, Tromso, Norway, Feb 1-3, 2010.
52. Mishra S., Khatod D.K., Singal S.K., "Small Hydropower Development in India – A Review", National Conference on Advances on Materials and Devices for Renewable Energy Sources" (NCAMDRES-10), February 25-27, 2010, Jaipur
53. Khan I., Saini R.P. and Singal S.K., "Development of Cross Flow Turbine For Small Hydro Power", National Conference on Renewable Energy for development of the under developed areas with particular reference to North-East India, Tezpur, March 23-25, 2010

54. Singh R.K., Saini R.P. and Singal S.K., "Performance Evaluation of Pelton Turbine Using CFD", National Seminar on Renewable Energy & Environment, April 10-11, 2010, Jaipur.
55. Dwivedi G., Kumar R., Dutt N. and Singal S.K., "Hydropower Development and its Recent Trends in India", National Seminar on Renewable Energy & Environment, April 10-11, 2010, Jaipur
56. Mishra S., Khatod D.K., Singal S.K., "Small Hydropower Schemes as an Important Renewable Energy Source", All India seminar on development of green fuel for power sector, April 24-25, 2010, pp. 77-81, The Institution of Engineers (India), Kota, Rajasthan
57. Dwivedi G., Mishra S., Kumar R. and Singal S.K., "Hydrogen Energy and its Recent Trends in India", All India seminar on development of green fuel for power sector, April 24-25, 2010, pp. 69-72, The Institution of Engineers (India), Kota, Rajasthan
58. Mishra S., Khatod D.K., Singal S.K., "Alternative to Fossil Fuels: Small Hydro in India", International Conference on Advances in Renewable Energy (ICARE-2010), June 24-26, 2010, pp. 595-604, MNIT, Bhopal
59. Khan I., Saini R.P. and Singal S.K., "Development of Cross Flow Turbine for SHP", International Conference on Advances in Renewable Energy (ICARE-2010), June 24-26, 2010, pp. 753-756, MNIT, Bhopal
60. Pathakota M.R., Saini R.P. and Singal S.K., "Overview of Cavitation in HydroTurbine", National Conference on Futuristic Trend in Mechanical Engineering", (FTME 2010), Oct 29-30, 2010, Ludhiana, pp 341-349
61. Kumar R., Mishra S., Singal S.K. and Sharma M.P., "Environmental Friendly Hydro Turbine", National Conference on Futuristic Trends in Mechanical Engineering (FTME 2010), Oct 29-30, 2010, Ludhiana, pp 295-300
62. Mishra S., Khatod D.K., Singal S.K., "Development of Small Hydropower in India – A Review", National Conference on Futuristic Trends in Mechanical Engineering (FTME 2010), Oct 29-30, 2010, Ludhiana, pp 295-300.
63. Mishra S., Khatod D.K., Singal S.K., "Costing of a Small Hydropower Projects", International Conference on Product Development and Renewable Energy Resources (ICPDRE 2011), IEEE, Feb 19-20, 2011, Chennai, pp. 22-25.
64. Mishra S., Khatod D.K., Singal S.K., "Cost Determination of Electro-Mechanical Equipment of A Small Hydropower Plant" International Conference on Emerging Trends in Mechanical Engineering, Thapar University, Patiala (Punjab), India, Feb. 24-26, 2011, pp 522- 526.
65. Pathakota M.R., Saini R.P. and Singal S.K., "A Comparison of the Cavitation Erosion Resistance of AISI 304 Stainless Steel with 13/4 Martensitic Stainless Steel", International Conference on Advances in Robotic, Mechanical Engineering and Design, Bangalore, September 14-25, 2011.
66. Dashora I., Singal S.K. and Srivastava D.K., "Artificial Neural-Network and InflowForecasting in Hydropower Project: A Review", 6th International Multiconference on Intelligent Systems & Nanotechnology (IISN-2012), March 16-18, 2012, Institute of Science and Technology Klawad (Haryana), India.
67. Dhillon J., Kumar A. and Singal S.K., "Short Term Wind-PSP Scheduling Using MINLP Approach", 6th International Multiconference on Intelligent Systems & Nanotechnology (IISN-2012), March 16-18, 2012, pp. 71-75, Institute of Science and Technology Klawad (Haryana), India.
68. Mishra S., Khatod D.K., Singal S.K., Sachin Mishra, S.K. Singal, D.K. Khatod, "Cost Analysis for High Head SHP Projects," International Congress on Informatics, Environment, Energy and Applications-IEEA 2012, Singapore, March 17-18, 2012.
69. Mishra S., Khatod D.K., Singal S.K., "Clean Development Mechanism towards Sustainable SHP Development", XII International Symposium on Environmental

- Geotechnology, Energy and Global Sustainable Development, Los Angeles, CA, June 27-29, 2012
70. Dhillon J., Kumar A. and Singal S.K., "Scheduling of Wind and Pumped Storage plant under day ahead market", 17th international seminar on hydropower plant, Vienna, Austria, Nov, 21-23, 2012, 53-62.
 71. Pokhrel S., Singal S.K. and Singh S.N., "Comprehensive Study of Community Managed Mini Grid", International Conference on Energy Resources and Technologies for Sustainable Development, 07-09 February 2013, Howrah, India.
 72. Kumar R., Singal S.K., "Analysis for O&M Cost Estimation for the Turbines in SHP Schemes", *IEEE International Conference on Research and Development prospects on Engineering and Technology*, E.G.S Pillay Engineering college, Nagapattinam, Tamil Nadu, India, March 29-30, 2013.
 73. Mishra S., Khatod D.K., Singal S.K., "Small hydropower project policies and incentives in india a review", *IEEE International Conference on Research and Development prospects on Engineering and Technology*, E.G.S Pillay Engineering college, Nagapattinam, Tamil Nadu, India, March 29-30, 2013
 74. Dhillon J., Kumar A. and Singal S.K., Optimal Operation of Wind-PSP under Grid Connected Day ahead Market, *IEEE International Conference on Research and Development prospects on Engineering and Technology*, E.G.S Pillay Engineering college, Nagapattinam, Tamil Nadu, India, March 29-30, 2013.
 75. Kumar R. and Singal S.K., "A review- small hydropower development in India" DAV National Congress on Science & Technology, DAVIET, Jalandhar, India, May 30–31 (2013).
 76. Kumar R. and Singal S.K., "Development of small hydropower plants" National Conference on Recent Advances in Renewable Energy & Environment Sciences (NCRAREES), Shoolini University Solan (H.P.), June 8-9 (2013).
 77. Kumar R. and Singal S.K., "Automation of small hydro power plants" National Conference on Emerging Trends in Engineering & Sciences (ETES), Gurukul Kangri University, Haridwar, Nov. 9-10 (2013).
 78. Bhagat A., Roy R., Kumar A., Singal S.K., "Analysis for Financial Viability for Social Sector SHP Projects", 4th International Conference on Advances in Energy Research, IIT Bombay, Dec. 10-12, 2013.
 79. Kishore T.S., Singal S.K., "Design economics of EHV power lines", *IEEE International Conference on Advances in Electrical Engineering*, ICAEE 14, VIT University, Vellore, pp.1-4, Jan 9-11, 2014.
 80. Kumar R. and Singal S.K., Cost effective, reliable and accurate maintenance model for SHP plants using RCM", *IEEE, International Conference on Reliability Optimization & Information Technology (ICROIT)*, Faridabad, 21-24, Feb 06-08, 2014
 81. Meena R. and Singal S.K., "Integrated Renewable Energy System for Rural Electrification", National Conference on Technological Revolution in Electrical Engineering (TREE'14), 67- 73, May 22-23, 2014, GBPEC Ghurdauri, Uttarakhand.
 82. Tripathi M. and Singal S.K., "Restoration of a stressed urban river front- a step towards sustainability", International Conference "Urban Environmental Pollution 2014, Climate Change and Urban Environment", June 12 – 15, 2014, Sheraton Centre, Toronto, Canada
 83. Kumar R. and Singal S.K., "Selection of Penstock Material using Multiple Attribute Decision Making Methods in Small Hydropower", TechConnect World, National Innovation Summit and National Conference, Clean Energy, June 16-18, 2014, National Harbor, Mary land, USA.
 84. Dashora I., Singal S.K. and Srivastava D.K., "Comparative Study of ARIMA , Thomas Fiering and ANN models for streamflow generation of intermittent river for Narmada River basin", 3rd International Conference on Hydrology & Meteorology, Sept 15-16, 2014, Hyderabad International Convention Centre, India.

85. Kishore T.S., Singal S.K., "Investment in transmission sector and remote renewable energy integration: Issues and solutions", International Conference on Green Technologies for Environmental Pollution Control and Prevention", ICGTEPC-2014, Trichy, India, Sept. 27- 29, 2014
86. Tripathi M. and Singal S.K., "Anatomy of a Proposed Sewage Treatment Scheme in an Urban Setting: A Case Study", International Conference on Energy Technology Power Engineering & Environmental Sustainability, Jawahar Lal Nehru University, Gaya Bindu Publications New Delhi, pp. 44-47, Nov 01-02,2014.
87. Baranwal P., Tripathi M. and Singal S.K., "Water Quality Analysis of Lake – A Case Study", International Conference on Energy Technology Power Engineering & Environmental Sustainability, Jawahar Lal Nehru University, Gaya Bindu Publications New Delhi, pp. 76-81, Nov 01-02,2014.
88. Kishore T.S., Singal S.K., "Development of generic life cycle costing model for analysis of power transmission lines", IEEE-32331, International Conference on Science, Engineering and Management Research", ICSEMR-2014, Chennai, India, Nov. 27- 29, 2014. [10.1109/ICSEMR.2014.7043616](https://doi.org/10.1109/ICSEMR.2014.7043616)
89. Kishore T.S., Singal S.K., "Techno-Economic Analysis of 765 kV Transmission in India", IEEE-32331, International Conference on Science, Engineering and Management Research", ICSEMR-2014, Chennai, India, Nov. 27- 29, 2014. [10.1109/ICSEMR.2014.7043679](https://doi.org/10.1109/ICSEMR.2014.7043679)
90. Kumar R. and Singal S.K., "Selection of Best Operating Site of SHP Plant Based on Performance", XVIII Annual International Conference of the Society of Operations Management (SOM 2014), pp. 466-470, Department of Management Studies, IIT Roorkee, Dec 12-14, 2014, ScienceDirect Procedia - Social and Behavioral Sciences 189 (2015) 110 – 116. <https://doi.org/10.1016/j.sbspro.2015.03.205>
91. Kashyap M. and Singal S.K., "SHP Development on Waste Water Treatment Facilities" International Conference on Newest Drift in Mechanical Engineering" (ICNDME-14), M. M. University, Mullana, Ambala, pp 248- 254, December 20 - 21, 2014
92. Disha and Singal S.K., "Control of Small Hydro Power Plant" International Conference on Newest Drift in Mechanical Engineering" (ICNDME-14), M. M. University, Mullana, Ambala, pp 757- 761, December 20 - 21, 2014
93. Kumar R. and Singal S.K., "An Analysis of Energy Demand and Peak Deficit in India with the Contribution of Small Hydropower Plants", International Conference on Newest Drift in Mechanical Engineering" (ICNDME-14), M. M. University, Mullana, Ambala, pp243-247, December 20 - 21, 2014
94. Abhijeet S., Ghone and Singal S.K., "Lake Conservation, Kolhapur City of Maharashtra, India" 7TH International Congress of Environmental Research (ICER-14), Bangalore, India, December 26-28, 2014
95. Saini R.P. and Singal S.K., "Development of Cross Flow Turbine for Pico Hydro", International Conference on Hydropower for Sustainable Development, Dehradun, pp 259-267, Feb 05-07, 2015
96. Singal S.K., Kumar A., Singh V.K., Verma M.S. and Jain A., "Hydro Power Development in Arunachal Pradesh - Issues", International Conference on Hydropower for Sustainable Development, Dehradun, pp 454-462, Feb 05-07, 2015,
97. Kumar R. and Singal S.K., "Operation and Maintenance Problems in Hydro Turbine Material in Small Hydro Power Plant", 4th International Conference on Materials Processing & Characterization, March 14-15, 2015, ELSEVIER Materials Today: Proceedings 2 (2015) 2323 – 2331, Hyderabad. <https://doi.org/10.1016/j.matpr.2015.07.284>
98. Harsh and Singal S.K., "AOI Technique for Inspecting SMD in PCB Assembling and Generation of Control using Fuzzy Logic Controller" International Conference on Computing, Communication, Electrical, Electronics, Devices & Signal Processing, pp 1017-1024, March 28 – 30, 2015, Lankapalli, Krishan Distt., A.P., India.

99. Saini R.P. and Singal S.K., "CFD Simulation of Cross Flow Turbine Using Acusolve", Indian Altair Technology Conference (IATC2015), July 14-15, 2015, Bangalore.
100. Shah D. and Singal S.K., "A Review of Strategic Environmental Assessment Practices in Developing Countries", International conference on Technologies for Sustainability – Engineering, Information Technology, Management and Environment, November 28, 2015, Faridabad, Haryana, India.
101. Tripathi M. and Singal S.K., "Changes in Trend of Water Quality Indices for River Ganga – Spatially and Temporally", National Seminar on R&D Perspective for Rejuvenation of River Ganga, December 16-17, 2015, National Institute of Hydrology, Roorkee.
102. Sinha P. and Singal S.K., "Energy from Kitchen Waste", 2nd International conference on recent trends in Engineering and Management, Feb 20, 2016, International Conference Centre YMCA, New Delhi.
103. Yadav V. and Singal S.K., "Performance analysis of cross flow turbine: variation in shaft diameter", National Conference on Water Resources & Hydropower-2016, June 17-18, 2016, UPES, Dehradun. https://doi.org/10.1007/978-3-319-55125-8_42
104. Patel A.M. and Singal S.K., "stochas", International Conference on Processing of Materials, Minerals and Energy, July 29-30, 2016, Ongole, Andhra Pradesh, India (ELSEVIER) ScienceDirect Materials Today: Proceedings 5 (2018) 1556–1562.
105. Kumar R. and Singal S.K., "Analysis for Development of Maintenance Cost Correlation for Hydroelectric Generator in High Head SHP Plants" 2nd IEEE - International Conference on Innovative Applications of Computational Intelligence on Power, Energy and Controls with their Impact on Humanity (CIPECH-16), ISBN 978-93-86256-14-0, Nov. 18-19 (2016), pp. 125-129.
106. Patel A.M. and Singal S.K., "Design Approach of Integrated Renewable Energy System for Small Autonomous Power System", Power India International Conference (PIICON-2016), GEC, Bikaner, Nov 25- 26, 2016. IEEE Proceedings. [10.1109/POWERI.2016.8077266](https://doi.org/10.1109/POWERI.2016.8077266)
107. Patel A.M. and Singal S.K., "Off-grid Rural Electrification using Integrated Renewable Energy System", IEEE, Power India International Conference (PIICON-2016), GEC, Bikaner, Nov 25- 26, 2016. IEEE Proceedings. [10.1109/POWERI.2016.8077272](https://doi.org/10.1109/POWERI.2016.8077272)
108. Kumar A., Singal S.K., Shivamallu M. and Kumaraswamy N., "RMU of Hydro Power Stations in Karnataka", Workshop on Renovation, Modernization, Uprating & Life Extension of Hydro Power Plant – Diverse Issues and Handling Strategies, CEA, Dec 16, 2016, pp. 186-204 New Delhi
109. Kumar R. and Singal S.K., "Analysis for maintenance cost of small hydropower projects" International Conference on New and Renewable Energy Resources for Sustainable Future (ICONRER-2017), ISSN 1757-398X, Feb. 2-4, 2017, pp. 236
110. Shah D. and Singal S.K., "Strategic Environmental Impact Assessment- A Case Study" National Conference on Recent Trends in Chemical Sciences and Engineering (RTCSE - 2017), October 13-14, 2017, NIT Hamirpur.
111. Tripathi M. and Singal S.K., "Assessment of Water Quality Index: A Case Study of River Ganga at Kanpur" National Conference on Recent Trends in Chemical Sciences and Engineering (RTCSE - 2017), October 13-14, 2017, NIT Hamirpur.
112. Gupta V. and Singal S.K., "Trash Rack Cleaning System in Small Hydropower" National Conference on Recent Trends in Chemical Sciences and Engineering (RTCSE - 2017), October 13-14, 2017, NIT Hamirpur.
113. Yadav A. and Singal S.K., "Performance Evaluation of Draft Tube using CFD" National Conference on Recent Trends in Chemical Sciences and Engineering (RTCSE - 2017), October 13-14, 2017, NIT Hamirpur.
114. Patel A.M. and Singal S.K., "Modeling of integrated renewable energy based power generation scheme for electrification of remote area having scattered population",

- International Conference on The future of Energy and Emerging Technologies, Nov 18-20, 2017, Dubai.
115. Patel A.M. and Singal S.K., “Renewable Energy Source based Hybrid Power Generation Scheme for Off-grid Rural Electrification” INDICON-2017, 14th IEEE India Council International Conference, Dec. 15-17, 2017 IIT Roorkee. [10.1109/INDICON.2017.8487807](https://doi.org/10.1109/INDICON.2017.8487807)
 116. Patel A.M. and Singal S.K., “Implementation Methodology of Integrated Renewable Energy System Modeling for Off-grid Rural Electrification: A review” ICUE 2018 on Green Energy for Sustainable Development Thavorn Palm Beach Resort Karon, Phuket, Thailand. 24 – 26 October 2018. [10.23919/ICUE-GESD.2018.8635707](https://doi.org/10.23919/ICUE-GESD.2018.8635707)
 117. Singal S.K., “Small Hydro in Rural Development” 1st International Conference on Smart Villages and Rural Development (COSVARD 2018), Assam Engineering College and the University of Melbourne, Guwahati, Dec. 12-14, 2018.
 118. Kumar R. and Singal S.K., “An Analysis of Operational Life Cycle of SHP Plant Components: A Study in Himalayan Region” International Conference Hydro-2018 at NIT Patna, Dec. 19-21, 2018. https://doi.org/10.1007/978-3-031-05057-2_25
 119. Dashora I. and Singal S.K., “Regionalization of flow duration curve for Narmada River Basin” International Society for Ecological Modelling Global conference 1st – 5th October, 2019, Salzburg, Austria.
 120. Sood M. and Singal S.K., “Challenges in the Development of Hydrokinetic Technology”, International Conference, Osmania University, Hyderabad, India, 18-20, December 2019.
 121. Das V.M., Singhal M.K. and Singal S.K., “Performance of Trench Weir with Rack Bar Inclination: A study by CFD Tool” International Conference, Osmania University, Hyderabad, India, 18-20, December 2019.
 122. Singal S.K., “Integration of Pump Storage with Renewable Energy”, 2nd Pan India Research Network Meet -An Industry and Academic Amalgamation, Malviya National Institute of Technology, Jaipur, Jan. 06, 2020.
 123. Sood M. and Singal S.K., “A numerical study to analyze the lateral distance between hydrokinetic turbine in a canal: A case study,” in *Roorkee Water Conclave 2020*, February 26-28, 2020, Indian Institute of Technology Roorkee.
 124. Saini R.P., Singal S.K., Ali I. and Kumar Y., “Development of Cold Storage Powered by Pico Hydro Power” 2nd International Conference on Rural Technology Development & Delivery 2020, March 12-14, 2020, IIT Madras. https://doi.org/10.1007/978-981-19-2312-8_16
 125. Saini R.P., Singal S.K., Joshi R.C. and Kumar Y., “Technology Interventions taken by RuTAG Centre IIT Roorkee- A Review”, 2nd International Conference on Rural Technology Development & Delivery 2020, March 12-14, 2020, IIT Madras.
 126. Saini R.P., Singal S.K., Joshi R.C. and Kumar Y., “Modified Bageshwari Wool Charkha”, 2nd International Conference on Rural Technology Development & Delivery 2020, March 12-14, 2020, IIT Madras, Springer, Singapore, pp 347-357. doi: https://doi.org/10.1007/978-981-13-6435-8_26.
 127. Patel Harshadkumar, Singal S.K., Saini R.P. and Patel Alpeshkumar, “Integrated Renewable Energy System For Off-grid Remote Rural Area Using Homer” International Conference On Challenges and Applications in Clean Energy (ICCACE-2020), National Institute of Technology, Kurukshetra, Dec. 26, 2020
 128. Arora, N., Kumar, A., & Rai, A. K. (2021). Online Sediment Measurement Strategy for Hydro Power Plant. In, Book of Abstract: Measurements and Instrumentation in Hydraulic Engineering. 6th IAHR Europe Congress – Feb 15 – 18, 2021, Warsaw, Poland, (pg. 137-138). doi:10.24425/136660
 129. Sood M. and Singal S.K., “A Systematic Approach for The Potential Assessment of Hydrokinetic Energy in Channel System,” in *Technological Innovations in Mechanical*

- Engineering (TIME-2021)*, April 16-17, 2021. Sharda University, Greater Noida, Uttar Pradesh, India
130. Sood M. and Singal S.K., “A numerical study to analyse the influence of blockage ratio on the performance of hydrokinetic turbine”, Sixth International Conference on Fossil & Renewable Energy, Feb. 15-17, 2022, Houston, USA.
 131. Saini R.P., Singal S.K., Saini V., Ali I. and Kumar Y., “Study of small scale wool processing unit-Raw wool to Fabric” Third International Conference on Rural Technology Development and Delivery RTDD-2022, March 04-06, 2022, IIT Jodhpur, Rajasthan, Jodhpur, India,
 132. Saini R.P., Singal S.K., Upadhaya S.H., Saini V. and Ali I., “Development of Aloe-Vera processing machine for natural cosmetic products”, Third International Conference on Rural Technology Development and Delivery, RTDD-2022, March 04-06, 2022, IIT Jodhpur, Rajasthan, Jodhpur, India,
 133. Saini R.P., Singal S.K., Upadhaya S.H., Saini V. and Ali I., “Development of Pomegranate seed extraction machine” Third International Conference on Rural Technology Development and Delivery, RTDD-2022, March 04-06, 2022, IIT Jodhpur, Rajasthan, Jodhpur, India
 134. Arora Naman, Kumar Arun and Singal S.K., “Measurement of sediment particle size distribution and shape using dynamic imaging analysis” 31st Symposium on Hydraulic Machinery and Systems, IAHR 2022, Trondheim, June 26 – July 01, 2022, doi: [10.1088/1755-1315/1079/1/012063](https://doi.org/10.1088/1755-1315/1079/1/012063).
 135. Patel Harshadkumar, Singal S.K., Saini R.P. and Patel Alpeshkumar. “Modern Era of Sustainable Development for Remote Rural Area with Implementing Integrated Renewable Energy System”, International Conference on Multi-Disciplinary Engineering Conference (IMEC-2022), Sankalchand Patel University, Visnagar, Aug. 04-06, 2022.
 136. Arora, N., Kumar, A., Singal, S.K. (2024). Quantifying Sediment Size and Shape Using SEM and ImageJ-Based Approach for Sediment Management in Hydropower Plants. In: Hodge, BM., Prajapati, S.K. (eds) Proceedings from the International Conference on Hydro and Renewable Energy. ICHRE 2022. Lecture Notes in Civil Engineering, vol 391. Springer, Singapore. https://doi.org/10.1007/978-981-99-6616-5_30 (Scopus Indexed)
 137. Bajpai Upendra and Singal SK, “Hydrokinetic Power Generation: A case study of Sarda canal”, Hydro and Renewable Energy – Net Zero Carbon Energy Systems 2022, Oct. 17-18, 2022. https://doi.org/10.1007/978-981-99-6616-5_40
 138. Pal Jyoti, Singal SK and Saini RP, “Numerical Analysis for the Performance of a SAH Having Different Corrugated Shapes of Absorber Plates”, Hydro and Renewable Energy – Net Zero Carbon Energy Systems 2022, Oct. 17-18, 2022. https://doi.org/10.1007/978-981-99-6616-5_6
 139. Saini Vishal, Singal SK and Saini RP, “Techno-economic feasibility investigation of an integrated renewable energy system”, Hydro and Renewable Energy – Net Zero Carbon Energy Systems 2022, Oct. 17-18, 2022. https://doi.org/10.1007/978-981-99-6616-5_19
 140. Saini Vishal and Singal S.K., “Renewable Energy-Based System for Electrification of Remote Villages”, Proceedings of IEEE 2nd, International Conference on Green Energy, Computing and Sustainable Technology, GECOST, Oct. 26-28, Malaysia, 2022. [10.1109/GECOST55694.2022.10010609](https://doi.org/10.1109/GECOST55694.2022.10010609)
 141. Sood Manoj, Bajpai Upendra and Singal S.K., “Performance Investigation of Hydrokinetic Savonius Rotor Operating Different Alignment”, 9th International and 49th National Conference on Fluid Mechanics and Fluid Power (FMFP), Dec. 14-16, 2022, IIT Roorkee, India
 142. Harshad, Sunil Kumar Singal, "Optimum Sizing and Analytical Designing of Integrated Renewable Energy System for the remote isolated off-grid network",

- INTERNATIONAL CONFERENCE ON Emerging Technologies in Engineering and Science (ICETES), August 11-12, 2023, Kanchikacherla, Andhra Pradesh, India.
143. Pal Jyoti and Singal S.K., “Numerical Analysis of Influence of Angle of Attack on the Performance of Solar Air Heater Having Cylindrical Jet Impingement Plate”, 10th International Conference on Power and Energy Systems Engineering “Sustainable and Resilient Power and Energy Systems” (CPESE 2023), Sept 08 – 10, 2023, Nagoya, Japan, IEEE. [10.1109/CPESE59653.2023.10303058](https://doi.org/10.1109/CPESE59653.2023.10303058)
 144. Hedau Ankush and Singal S.K., “Thermohydraulic analysis of double pass solar air heater duct with perforated blocks and semicircular tubes as artificial roughness”, 10th International Conference on Power and Energy Systems Engineering “Sustainable and Resilient Power and Energy Systems” (CPESE 2023), Sept 08 – 10, 2023, Nagoya, Japan, IEEE. [10.1109/CPESE59653.2023.10303026](https://doi.org/10.1109/CPESE59653.2023.10303026)
 145. Hedau Ankush and Singal S.K., “Study on the Thermohydraulic Performance of Double Pass Solar Air Heater”, International Conference on ISES Solar World Congress 2023 (SWC 2023), Oct. 30 – Nov. 04, 2023. [10.18086/swc.2023.04.07](https://doi.org/10.18086/swc.2023.04.07)
 146. Bajpai Upendra, Sood Manoj and Singal S.K., “A Comprehensive Investigation of Wake Recovery Distance of Modified Savonius Turbine with Vertical and Horizontal Alignment”, Hydro 2023 International and 28th International Conference on Hydraulic Water Resources, River and Coastal Engineering, Dec. 21-23, 2023, NIT Warangal, India.
 147. Bajpai Upendra, Yadav Prabhat, Bhosale Amit C.* and Singal S K, “Techno-economic analysis of integrated solar and pumped storage hybrid system: A case study in India” Hydro 2023 International and 28th International Conference on Hydraulic Water Resources, River and Coastal Engineering, Dec. 21-23, 2023, NIT Warangal, India.
 148. Kumar Prashant, Singal S K and Gohil Pankaj P., “Computational Study of a Low head Francis Turbine with Varying Runner Blade Numbers”, Hydro 2023 International and 28th International Conference on Hydraulic Water Resources, River and Coastal Engineering, Dec. 21-23, 2023, NIT Warangal, India.
 149. Arora Naman, Kumar Arun and Singal S K, “Hydro Abrasive Erosion in Kaplan Turbine: A Case Study”, Hydro 2023 International and 28th International Conference on Hydraulic Water Resources, River and Coastal Engineering, Dec. 21-23, 2023, NIT Warangal, India
 150. Goel Muskan, Singal SK and Shree Venu, “Framework for Garh Mukteshwar Riverfront Development and Management”, 8th International R&D Conference on Global Trends in Water Resources, Power & RE Sectors, February 08 – 09, 2024, IIT Roorkee.
 151. Yadav, Siddhita and Singal, S.K., “Optimization of Geometrical Parameters of Solar Air Heater with Jet Impingement Technique”, 2nd International Conference on Fluid, Thermal and Energy Systems, June 06 – 08, 2024, NIT Calicut, Kerala.