

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), 273273 (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 :
 - 35 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
 - Working on research project for online silt monitoring sponsored by NHPC
 - Working on research project on development of hydro kinetic installation sponsored by UJVNL
8. Research Area :
 - Small 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 – 8 (Awarded), 5 (In-progress)
 - M.Tech Thesis – 81 (Awarded), 05 (In-Progress)*(Details at Annexure-I)*
10. Publications in Journals and Conferences :
 - Research Papers in National and International Journals – 92
 - Research Papers in Workshop / Conference / Seminars – 124
 - Book chapters and papers in Special Publications – 13
 - 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-23
 - M. Tech Projects-46
12. Coordinated / Delivered Lectures / Participation in Short Term Training Course and Conferences :
 - Co-ordinated/ Organised Short Term Courses/Conferences : 68
 - Delivered lectures/ participated in Short Term Courses : 211
 - Participated in Conferences /Workshops/ Seminars : 76
 - Delivered Invited Lectures/talks: 28

13. Consultancy and Sponsored Research Projects : • Research, development and consultancy work for Resource 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.
16. Institute and Department Level Responsibilities : • HEAD, Department of Hydro and Renewable Energy (Feb 2018 – Continue)
- 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),
- Member Institute Research committee (IRC) (2015-2018)
- Member SRIC Committee (2015- 2018)
- Centre Level Responsibilities : • Officer –in-charge Drawing section (upto 2018)
- Officer-in-charge GIS lab (upto 2018)
- Faculty Advisor for M. Tech. students (upto 2018)
- Faculty advisor for Congnizence (2012-2018),

17. Membership of Professional Bodies : • Life Fellow of Institution of Engineers (India) (F-0183395)
• Life Fellow of Indian Society of Earthquake Technology (LF 50)
• 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), 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., 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)

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	In Progress	Mr Manoj Sood
10.	Development of Integrated Renewable Energy System for a rural area	In Progress	Mr Harshadkumar D Patel
11.	Investigation on optimal design of diversion weir for small hydropower projects	In Progress	Mr Vaibhav Mohan Das
12.	Integrated Renewable Energy System for remote rural area	In Progress	Mr Vishal Saini
13.	Small Hydropower	In Progress	Mr Naman Arora

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	2004	Mr. Gaurav Sinha

S. No	Title of Thesis	Year Awarded	Name of Student
	Equipment for Low Head SHP		
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
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

S. No	Title of Thesis	Year Awarded	Name of Student
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
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	2016	Ms Pooja Sinha

S. No	Title of Thesis	Year Awarded	Name of Student
	Management		
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
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.	Analysis on impact of abrasive erosion on hydro turbines.	In progress	Mr Lalit Narayan Singh
83.	Techno economic analysis of a pump storage hydro power plant.	In progress	Mr Rahul Srivastava
84.	Techno-economic analysis of hydrokinetic turbine.	In progress	Mr Vinay Lodhi
85.	Impact of river front development and urban planning along the river course of Ujjain.	In progress	Mr Dhruv Aditya Jain
86.	Impact of river bank filtration.	In progress	Ms Shweta Rawat

Research Publications**A. Publication in Journals**

1. Varun and S. K. Singal, "Review of Augmentation of Energy Needs Using Renewable Energy Sources In India", *Renewable & Sustainable Energy Reviews Int. Journal*, 11(7), 1607-1615 (2007) (Sept)
2. M. K. Mittal, Varun, R. P. Saini and S. K. Singal, "Effective efficiency of solar air heaters having different types of roughness elements on the absorber plate", *ENERGY - The International Journal*, 32 (2007), 739-745 (May)
3. S.K. Singal, Bhaskar J. Das, Ranvir Singh, M.P. Sharma, "Assessment of Surface Water Quality of Deeporbeel Wetland", *Environmental Science Journal*, 2(1), (2007)44-52 (Jan)
4. Kannan S., S.K. Singal, A.A. Kazmi, B. Kanaka, "Decentralized Wastewater Management Systems", *Journal of Environmental Sciences, Technologies and Engineering*, VII (3), 11-20 (2007) (March)
5. R.D Chauhan, M.P Sharma, R.P Saini, S.K Singal, "Biodiesel From Jatropha as Transport Fuel A Case Study of UP State", *Journal of Scientific & Industrial Research*, 66, 394-398 (2007) (May).
6. S.K. Singal, R.P. Saini, "Cost Effective Technology for Low Head SHP Schemes", *Journal of Environmental Sciences, Technologies and Engineering*, VII (6), 4-10 (2007) (June)
7. S.P. Singh and S.K. Singal, "Modelling and Simulation of Hydro Power Plant," *Indian Journal of Power and River Valley Development*, 20- 26, Jan.-Feb. (2007)
8. S. K. Singal, Arun Kumar, D. K. Agarwal, O. D. Thapar, and Manoj Arya, "Implementation Of Dam Based Small Hydro Power Plant - A Case Study", *IEEMA Journal*, XXVII (9), 58- 63 (2007) (Sept)
9. Mange Amar V. and S. K. Singal, "Parameter Fixation for Flow Simulation in IMP Software", *Hydrology Journal*, 30 (1-2), 73- 85 (2007), March- June
10. S.K. Singal, R.P. Saini and C.S. Raghuvanshi, "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, R.P. Saini and S. K. Singal, "A Review on Roughness Geometry Used in Solar Air Heaters", *Solar Energy, Int. Journal*, 81 (2007), 1340- 1350 (Nov.)
12. S.K. Singal, Varun , R.P. Singh, "Rural Electrification of a Remote Island by Renewable Energy Sources", *Renewable Energy Int Journal* 32 (2007), 2491- 2501 (Dec.)
13. S.K. Singal, R.P. Saini, "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) (March- April)
14. S.K. Singal, Bhaskar J. Das, Ranvir Singh, M.P. Sharma, "Impacts of Soil Erosion in an Ungauged Wetland Catchment", *Environmental Science Journal*, 3(2), (2008) 217-223 (April)
15. Prashant Verma, Varun and S.K. Singal, "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) (May)
16. Varun, R.P. Saini and S.K. Singal, "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 (June)
17. S.K. Singal, R.P. Saini and C.S. Raghuvanshi, "Analysis for Quick Estimation of Dam Toe Small Hydropower Schemes", *Indian Journal of Power and River Valley Development*, 48- 50, March- April (2008)

18. M.P. Sharma, S.K. Singal and S. Patra, "Water Quality Profile of Yamuna River", journal on water, energy, and environment, 3(2008), 27-32 (July)
19. S.K. Singal and R.P. Saini, "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), (Sept)
20. S.K. Singal and R.P. Saini, "Analytical Approach for Development of Correlations for Cost of Canal Based SHP Schemes", Renewable Energy, 33 (2008), 2549-2558 (Dec.)
21. S.K. Singal, R.P. Saini, "Analysis for Quick Estimation of Canal Based Small Hydropower Schemes", IEEMA Journal, XXVIII (9), 76- 80 (2008) (Sept)
22. S.K. Singal, R.P. Saini and C.S. Raghuvanshi, "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) Dec.
23. Sanjay Jain and S.K. Singal, "Planning of Canal Based Small Hydro Power Scheme", IEEMA Journal, XXVIII (11), 90- 96 (2008) (Nov.)
24. Bhaskar J. Das, S.K. Singal, Ranvir Singh, "Estimation of Erosion in an Ungauged Wetland Catchment", Hydrology Journal, Vol. 31, 1-2, 65-76 (2008) (June)
25. S.Kannan, S.K.Singal, A.A. Kazmi and M.P. Sharma, "Selection of Appropriate Sewage Treatment Technology for Kancheepuram City", Asian Journal of Water, Environment and Pollution, Asian Journal of Water, Environment and Pollution, Vol.6, No.2, 107-111, 2009 (April)
26. Anoop Kumar, Varun, Prashant Kumar and S.K. Singal, "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 (April)
27. S.K. Singal, "Planning and Implementation of Small Hydropower Projects", Journal on water, energy and environment, Hydro Nepal, 5(2009), 21-25 (July)
28. Varun, Amar Patnaik, RP Saini, SK Singal 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 (Dec.)
29. S.K. Singal, Sharad Kumar and Varun, "Energy Audit in Tea Industry: A Case Study For Makaibari Tea Estate", Journal of Institution of Engineers, India, Vol. 90, Nov. 2009, 7-12
30. Varun, S.K. Singal, Kushal Gupta, Aman Chandel, Abhishek Nanda and Sumit Thakur, "Environmental Problems and Remedial Measures Taken by International Bodies", Journal of Environmental Sciences, Technologies and Engineering, IX (4&5), 18-22 (2009) (April- May)
31. M.P. Sharma, S. Patra and S.K. Singal, "Water Quality Management of Damodar River", Journal of Indian Water Resources Society, Vol. 29, Number 2(2009), 23-31 (April)
32. SK Singal, Anurag Kumar and RP Saini, "Review on Installation of Bulb Turbine in Small Hydropower Plants With Bulb Turbines", The IUP Journal of Mechanical Engineering, Vol. 3, No.2, 7-22, May 2010
33. S.K. Singal, R.P. Saini and C.S. Raghuvanshi, "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, June
34. S.K. Singal, R.P. Saini and C.S. Raghuvanshi, "Optimization of low-head dam-toe small hydropower projects", Journal of Renewable and Sustainable Energy , Vol. 2, Issue 4, 1-13, 2010 (Aug.)

35. Aher Sarika Arun and S. K. Singal, "Methodology for Cost Evaluation of Low Head Small Hydropower Project", *Indian Journal of Power and River Valley Development*, 157- 160, Sept. - Oct. (2010)
36. Sachin Mishra, S.K. Singal and D.K. Khatod, "Effect of Penstock Length Variation on Hydraulic Transients", *Indian Journal of Power and River Valley Development*, 194-198, Nov. - Dec. (2010)
37. Himanshu Nautiyal, S.K. Singal, Varun and Aashish Sharma, "Small Hydropower for Sustainable Energy Development in India", *Renewable and Sustainable Energy Reviews*, 15 (4) (2011), 2021–2027 (May).
38. S.K. Singal, R.P. Saini and C.S. Raghuvanshi, "Effect of Soil Conditions on Cost of Low Head SHP Schemes" *Journal on water, energy and environment*, 8(2011), 24-28 (Jan.)
39. S. Mishra, S.K. Singal and D.K. Khatod, "Sustainable Energy Development by Small Hydropower with CDM Benefits in India", *International Journal of Ambient Energy*, 32(2), pp. 103-110, 2011(Aug.)
40. S. Mishra, S.K. Singal and D.K. Khatod, "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.(May)
41. S. Mishra, S.K. Singal and D.K. Khatod, "Optimal Installation of Small Hydropower Plant – A Review", *Journal of Renewable and Sustainable Energy Review*, 15(8), pp. 3862-3869, 2011(Jan.)
42. S. Mishra, S.K. Singal and D.K. Khatod, "Design of desilting tank for small hydropower projects – A Review", *Water and Energy International Journal*, 68(4), pp. 32-36, 2011.(April)
43. Rahul Bhatt and S.K. Singal, "Optimal Small Hydropower Development on Canal Falls". *Water and Energy International Journal*, 68(9), pp. 16-22, 2011.(Sept.)
44. Sachin Pote Eknath, S.K. Singal and D.K. Srivastava, "Assessment of Surface Water Quality of Godavari River at Aurangabad", *Asian Journal of Water, Environment and Pollution*, Vol.9, No.1, 117-122, 2012 (Jan)
45. Sachin Mishra, S.K. Singal and D.K. Khatod, "A Review on Electro-mechanical Equipment Applicable to Small Hydropower Plants", *International Journal of Energy Research*, 36, pp. 553-571 (2012).
46. Sachin Mishra, S.K. Singal and D.K. Khatod, "Design of desilting tank for small hydropower projects – A Review", *IASH Journal*, Vol. 1, No. 1, pp. 10-14, 2012 (Jan).
47. Sachin Mishra, S.K. Singal, D.K. Khatod, "Cost Correlation For Electro-Mechanical Equipment In Small Hydropower Projects", *International Journal of Green Energy*, 10:8, 835-847, 2013 (May)
48. Sachin Mishra, S.K. Singal and D.K. Khatod, "Effect of Penstock Parameter Variation on Mechanical Power", *International Journal of Energy Science IJES*, Vol.2. Issue 3, 2012, PP.110-114.
49. Sachin Mishra, S. K. Singal, and D. K. Khatod, "Costing of Small Hydropower Projects", *International Journal of Engineering and Technology (IACSIT)*, Vol. 4, No. 3, June 2012, 239-242.
50. Sachin Mishra, S.K. Singal and D.K. Khatod, "Sizing And Quantity Estimation For Desilting Tank Of Small Hydropower Projects – An Analytical Approach", *International Journal of Green Energy*, 10:6, 574-586, 2013.
51. Kyaw Naing Oo and S.K. Singal, "Environment Management of Chindwin River in Myanmar", *International Journal, The Environ Monitor*, Page 04-15, Vol. XII, Sept & Oct 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. Sanjeev Pokhrel, S.K.Singal and S.N Singh, “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. Mansi Tripathi and S K Singal, “Performance Evaluation of Sewage Treatment Plants in Lucknow City”, Journal of water, energy and environment, 12(2013), 80-86 (Jan.)
55. H. N. Patel, S. K. Singal, R. P. Saini, “ 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. Tushar Mathur and SK Singal, Conservation Plan of Anasagar Lake, International Journal of Environmental Research and Development, Vol. 3 No. 4, pp 83-86, 2013
57. Ravi Kumar and SK Singal, “Computer Based of Operation and Maintenance of SHP Plants”, International Journal of Engineering Research and Technology, Vol. 6, No. 5, pp. 651-658, 2013 (September).
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