

## **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 : 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 : B.E. (Civil- 1983), UOR (Now IIT) Roorkee; M.E. (Earthquake), UOR Roorkee (Now IIT), Ph.D., IIT Roorkee
6. Employment : Associate professor, Alternate Hydro Energy Centre, Indian Institute of Technology Roorkee (November 2015 – Continue), Principal Scientific Officer (April 2014 – Nov. 2015), Senior Scientific Officer (Sept. 2001 – April 2014), Scientist 'B'- (Oct 1985- Sept 2001), Scientist A'- (Sept 1984 - Oct 1985)
7. Teaching and Research Experience : 32 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
8. Research Area :
  - Small Hydropower - 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 – 4 (Awarded), 5 (In-progress)
  - M.Tech Thesis – 61 (Awarded), 8 (In-Progress)*(Details at Annexure-I)*
10. Publications in Journals and Conferences :
  - Research Papers in National and International Journals - 79
  - Research Papers in Workshop / Conference / Seminars –104
  - Book chapters and papers in Special Publications – 8*(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-45
12. Coordinated / Delivered Lectures / Participation in Short Term Training Course and Conferences :
  - Co-ordinated/ Organised Short Term Courses/Conferences : 53
  - Delivered lectures/ participated in Short Term Courses : 180
  - Participated in Conferences /Workshops/ Seminars : 61
  - Delivered Invited Lectures/talks: 24

13. Consultancy and Sponsored research Projects	:	<ul style="list-style-type: none"> <li>• Research, development and consultancy work for Investigation, planning, design, preparation of DPRs , Technical specifications, Techno-economic evaluation reports, costing and financial aspects of SHP projects</li> <li>• 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.</li> </ul>
14. International Projects	:	<ul style="list-style-type: none"> <li>• UNDP-GEF Hilly Hydro project, R&amp;M DPR with CIDA, Canada,</li> <li>• CIDA, Canada – SHP Technology Transfer,</li> <li>• European Union- Ecological assessment of river</li> <li>• SHP Project Planning and Design in Uganda</li> <li>• Capacity Building for SHP – Combodia, Srilanka, Zambia</li> </ul>
15. Honours and Awards	:	<ul style="list-style-type: none"> <li>• Member, Editorial Advisory Board, The Open Renewable Energy Journal (International Journal)</li> <li>• Distinguished Scientist award- VIFRA 2015 ( in the category of Engineering / Hydropower ) by centre for Advanced Research and design of Venus International Foundation, Chennai</li> <li>• Third prize on research paper in Indian Altair Technology Conference (IATC2015), July 14-15, 2015, Bangalore</li> <li>• Member (SHP) National renewable energy committee for development of solar and SHP project in boarder areas for defense establishments- 1994</li> </ul>
16. Institute and Department Level Responsibilities	:	<ul style="list-style-type: none"> <li>• Member SRIC board for AHEC (2002- 2008)</li> <li>• Warden, Rajendra Bhawan Students Hostel (1998-2001),</li> <li>• Chief Warden, Cautley Bhawan (Boys Students Hostel) (2009 - 2013),</li> <li>• Staff Advisor, Gardening Section in Hobbies Club (2010-12),</li> <li>• Dy Chief Advisor Hobbies Club (2012-2013),</li> <li>• Member Advisory Committee – Centre for Continuing Education (2010- 2015),</li> <li>• Member Institute Senate (2010)</li> <li>• Member Institute Research committee (IRC) (2015 onwards)</li> </ul>
Centre Responsibilities	Level	<ul style="list-style-type: none"> <li>• Officer –in-charge Drawing section</li> <li>• Officer-in-charge GIS lab</li> <li>• Officer-in-charge Finance</li> <li>• Faculty Advisor for M. Tech. students</li> <li>• Faculty advisor for Congnizence (2012-Continue),</li> </ul>
17. Membership of Professional Bodies	:	<ul style="list-style-type: none"> <li>• Indian Society for Technical Education,</li> <li>• Indian Water Resource Society,</li> </ul>

- Institution of Engineers (India),
  - Indian Society of Earthquake Technology,
  - International Association for Small Hydro,
  - Indian Association of Hydrologists,
  - Solar Energy Society of India,
  - Indian Society for Hydraulics,
18. International Visits : China (1986), USA (1997 & 2014), Canada (1997, 2004 & 2014), Norway (2001), Nepal (2003), Uganda (2005), Germany (2006), Sri Lanka (2007 & 2010), Cambodia (2010), Singapore (2012) and Zambia (2013)
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, MP and Rajasthan
20. Others
- Member National level committees of Ministry of Non- conventional Energy Sources for evaluation of old power stations for Renovation and Modernisation.
  - 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.**

<b>S. No</b>	<b>Title of Thesis/ Area</b>	<b>Year Awarded</b>	<b>Name of Student</b>
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	In Progress	Mr Ravi Kumar
6.	Development of water Quality index for Management of river	In Progress	Ms Mansi Tripathi
7.	Optimal Operation of Run of River Small Hydro Power Plant	In Progress	Mr Vineet Kumar Singh
8.	Modeling of Integrated Renewable Energy Based Power System	In Progress	Mr Alpesh Kumar Mangaldas Patel
9.	Small hydropower	In Progress	Mr Manoj Sood

**B. M.Tech**

<b>S. No</b>	<b>Title of Thesis</b>	<b>Year Awarded</b>	<b>Name of Student</b>
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

<b>S. No</b>	<b>Title of Thesis</b>	<b>Year Awarded</b>	<b>Name of Student</b>
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

<b>S. No</b>	<b>Title of Thesis</b>	<b>Year Awarded</b>	<b>Name of Student</b>
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 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	Continue	Mr Abhishek Yadav
63.	Performance Evaluation of Bulb Turbine	Continue	Mr Akhil Vikram Yadav

<b>S. No</b>	<b>Title of Thesis</b>	<b>Year Awarded</b>	<b>Name of Student</b>
64.	Cost Effective Settings of Reaction Turbine	Continue	Mr Deepak Bansal
65.	Performance Analysis of CST Based Thermal Plant	Continue	Mr Gaurav Gangwar
66.	Cost Effective Design of Intake Structures for SHP Plant	Continue	Ms Jyotsna Pandey
67.	Pollution Profile of a River Stretch	Continue	Mr Arun Ghildiyal
68.	Impact of Urbanisation and Industrialisation on River	Continue	Mr Gaurav Maurya
69.	Low Cost Sanitation Programme for Rural Area	Continue	Mr Gurjant Singh

**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
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)
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
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
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*, 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 of 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).
58. Javed Dhillon, Arun Kumar, S.K. Singal "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.
59. Hitesh dalakoti, SK Singal, "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.
60. Ila Dashora, S. K. Singal and D. K. Srivastav, "Regional Flow Duration Curve Methods for Hydropower Development: A Review", Journal of Indian Water Resources Society, pp 7-15, Vol 34, No.3, July, 2014.
61. T.S. Kishore, S.K. Singal, Optimal economic planning of power transmission lines: A review, Renewable and Sustainable Energy Reviews, Volume 39, November 2014, Pages 949-974.
62. Javed Dhillon, Arun Kumar and S.K. Singal, "Stochastic approach for providing the operation of Wind and pumped storage under Deregulated Environment", International journal of Green Energy. Vol 13, NO.1,55–62, 2016
63. Harsh and S K Singal, "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, November 2014.
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, December 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, February 2015.
66. Abhijeet S. Ghone1 and Sunil K. Singal, "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.
67. Ila Dashora, S.K. Singal and DK Srivastava, "Stream Flow Prediction for Estimation of Hydropower Potential" Water and Energy International Journal, Vol. 57, Issue 11, pp 54-60, February 2015
68. Abhijeet S. Ghone1 and Sunil K. Singal, "Performance Evaluation of Dewatering Operations Implemented for Conservation of Rankala Lake, Kolhapur", India, International Journal of European Academic Research, Vol. II, Issue 11, February 2015, pp 14310-14324
69. Ila Dashora, S. K. Singal and D. K. Srivastav, "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, March 2015.

70. Kunwar Sangram Singh Pundir, S.K Singal and R.P. Saini “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), March 2015
71. T S, Kishore and SK Singal, "Economic Analysis of Power Transmission Lines using Interval Mathematics ", Journal of Electrical Engineering &Technololy.2015; 10(4): 1472-1480.
72. Parul Barnwal, Saurabh Mishra and SK Singhal, “Risk assessment and analysis of water quality in Ramgarh Lake, India”, Journal of Integrated Science & Technology, 3(1), pp. 22-27, 2015.
73. Parul Barnwal and SK Singhal, “ Anatomy of Urban Sewerage Scheme: A Case Study" International Journal of Technology Innovations and Research (IJTIR), Volume 14,1-10, April 2015
74. T S Kishore, S K Singal, “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
75. Ravi Kumar and SK Singal, “Penstock material selection in small hydropower plants using MADM methods”, Renewable and Sustainable Energy Reviews, Volume 52, December 2015, Pages 240-255, ELSEVIER.
76. Kishore, T S; Singal, S K, “Optimal costing of overhead power transmission lines using genetic algorithms", International Journal of Electrical Power and Energy Systems (*In press*) ELSEVIER.
77. Javed Dhillon, Arun Kumar and S.K. Singal, “Stochastic approach for providing the operation of Wind and pumped storage under Deregulated Environment”, International journal of Green Energy. Vol 13, NO.1,55–62, 2016
78. Ravi Kumar and SK Singal, “Analysis for Turbine Maintenance Cost Correlation in Mini Hydropower Project”, Journal of Basic and Applied Engineering Research, Vol. 3, Issue-9, pp. 773-775, April-June, 2016.
79. Sein Win Tun and SK Singal, “Management of Hydropower Tunnels to Prevent Collapse and Remedial Measure”, Journal on water, energy and environment, Hydro Nepal, 19(2016), 31-37 (July)

**B. Paper in Special Publications/ Book Chapters**

1. Arun Kumar, S. K. Singal, “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, Aug.1992.
2. B.S.K Naidu, Arun Kumar, S.K. Singal, Book chapter on “Non Conventional Mini. Hydro at the Cooling Water Return Channel of BTPS,” Small Hydro, NPTI Publication, Faridabad, India, 241-255, 2005.
3. S.K. Singal, “Small Hydropower an Attractive Source of Renewable Energy,” Electrical India, Vol. 49, No. 6, 96-101, June 2009.
4. S.K. Singal, “Sustainable Development of Small Hydropower Projects,” Electrical India, Vol. 50, No. 11, 194-200, November 2010.
5. S.K. Singal, “Small and Large Hydro are complementary not Competitive”, Power Watch, vol 4, Issue 8, pp. 48-49, Oct 2013.
6. S.K. Singal, “Innovative Technologies May Improve the Functionality of SHPs”, Power Today, pp. 42-44, Oct 2015.
7. S.K. Singal and varun, “Small Hydropower for Sustainable Development- Promising Energy Potential for India”, Energy Future, pp. 22-27, Oct- Dec 2015.
8. SK Singal and Varun, Book chapter on “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.

### C. Publication in Conferences

1. Arun Kumar, S.K. Singal and N.K. Saxena , “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. S. K. Singal, M.K. Singhal and N.K. Saxena , “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. Arun Kumar, S. K. Singal “Civil Engineer as Manager of Hydro-electric Project”, 5<sup>th</sup> National Convention of Civil Engineers, The Institution of Engineers (India), Calcutta, 1990.
4. Arun Kumar, S.N. Singh and S.K. Singal, “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. S.K. Singal, S.K Thakkar, D.K.Paul and Mrs. P.R. Bose, “Response of Single Storey Brick Masonry Building Under Shock Loading ”, Tenth Symposium on Earthquake Engineering, UOR, Roorkee, India, Nov 16-18,1994.
6. J.D. Sharma, Arun Kumar and S.K. Singal, “Technology Selection Challenges for Small Hydro Power ”, International conference on small Hydro Power Systems, New Delhi, March 13-14, 1997.
7. Arun Kumar, S.K. Singal and S.P. Singh, “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. Arun Kumar, S.K. Singal, “Selection of Sites and Low Head Turbines for Small Hydro Power Development”, Business Meet on SHP Projects, Hyderabad, Dec 14, 2000. (Invited)
9. S.K. Singal, 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. S.K. Singal, “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, Vivek Agarwal and S.K. Singal, “ Micro Hydro Power Development for Remote areas”, National Conference on Safety, Environment and Energy Management, National Institute of Technology, Trichirapalli ,Tamilnadu, India, June 4-6 2004.
12. S.K. Singal, R.P. Saini, “Cost Effective approach for Low Head SHP Installations”, International Conference and Exhibition on Small Hydro Power, Falkenberg, Sweden, June 17-19, 2004.
13. S.K. Singal, “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. S.K. Singal, “Small hydropower technology”, Regional workshop on Remote village electrification, The Energy and Resource Institute, Bangalore, India, July 9-11,2004. (Invited)
15. S.K. Singal, R.P. Saini ,“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. S.K. Singal, R.P. Saini, “ 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, S.K. Singal, “Renewable Energy Technologies.” National Seminar on Renewable Energy and Energy Management, NERIWALM, Tezpur, India, Aug. 23-24, 2005.
18. Varun, S.K. Singal, M.K. Mittal, “Energy Demand and Management Techniques,” National Conference on Energy Management in Changing Business Scenario, BITS, Pilani, India, Oct. 8-9, 2005.

19. R.D. Chauhan, M.P. Sharma, S.K. Singal, "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. S.K. Singal, Varun, "Development of Non-Conventional Energy Sources," 9<sup>th</sup> NCB International Seminar on Cement and Building Materials, New Delhi, Nov. 8-11, 2005.
21. S.K. Singal, 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. S.K. Singal, R.P. Saini, "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. Bhaskar J. Das, S.K. Singal and Ranvir Singh "Wetlands of Assam," Third International Conference on Plants & Environmental Pollution, Lucknow, Nov.28- Dec. 2, 2005.
24. M. P. Sharma, S.K. Singal and R.D. Chauhan "Comparative Study of Viscosity for Biodiesel Blend of Pongamia Oil," Third International Conference on Plants & Environmental Pollution, Lucknow, Nov.28- Dec. 2, 2005.
25. M. P. Sharma, R.P.Saini S.K. Singal and R.D. Chauhan "Jatropha-a hope for biodiesel in Uttar Pradesh," Third International Conference on Plants & Environmental Pollution, Lucknow, Nov.28- Dec. 2, 2005.
26. S.P. Singh, S.K. Singal, "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. S.K. Singal, 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. R.P. Singh and S.K. Singal, "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. R.P. Singh, S.K. Singal 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. Bhaskar J. Das, S.K. Singal, Ranvir Singh, "Degeneration of Wetlands In Assam", International Conference On Management Wastewater and Environment: Challenges for the Developing Countries, Kathmandu, Nepal, Sept. 13-15, 2006
31. S. K. Singal and Ratnendra Singh, "Impact of Silt on Hydro Turbines", International Himalayan Small Hydropower Summit, Dehradun, 218-225, Oct. 12-13, 2006
32. Varun, S. K. Singal and Prashant Verma, "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. S. K. Singal, 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. R.P.Singh, S.K.Singal and Varun, "Potential Assessment of Renewable Energy Resources at Neil Island", 6<sup>th</sup> International R&D Conference, CBIP, 13-16 February 2007, Lucknow, India
35. S.Kannan, S.K. Singal, A.A.Kazmi and B.Kanaka, "Decentralized Wastewater Management Systems", International Conference on "Water & Flood Management, March 12 -14, 2007, 753-762, Dhaka, Bangladesh
36. S.K.Singal, R.P.Saini and Gaurav Sinha, "Cost Estimation of Turbines For Low Head Small Hydro Power Schemes", 23<sup>rd</sup> National Convention of Chemical Engineers, IIT Roorkee, 212-219, October 5-7, 2007
37. Raju Gupta, S.N. Singh and S.K. Singal, , "Automation of Small Hydro Power Station," International Conference on Small Hydropower, Kandy, Sri Lanka, 41-50, October 22-24, 2007

38. S.K. Singal, R.P. Saini, "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. Raju Gupta, S.N. Singh and S.K. Singal, , "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. Anurag Kumar, RP Saini and SK Singal, "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. S.Kannan, A.A.Kazmi, S.K.Singal and V.K.Tyagi, "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. Sanjay Jain, S. K. Singal, "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. S.K. Singal 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. S.K. Singal and Varun, "Small Hydropower Technology," Enviro Energy 2009: Intrnational Conference on Energy and Environment, Chandigarh, 548-551, March 19-21, 2009
45. Devesh Goyal, Arun Kumar and SK Singal, "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 Nilesh Raghunath and S.K. Singal, "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. Devesh Goyal, Arun Kumar and SK Singal, "Policy for Sustainable Small Hydropower Development in India," International Conference on Water Environment, Energy and Society, Agra, India, June 28-30, 2009
48. Bhosale Nilesh Raghunath and S.K. Singal, "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. S.V. Jain and S.K. Singal, "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 Nilesh Raghunath and S.K. Singal "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. M.K. Padhy, R.P. Saini, S.K. Singal and R. Singh, "A Riview on Cavitation Erosion on Hydro Turbine," Hydropower 10- 6<sup>th</sup> International Hydropower Conference, Tromso, Norway, Feb 1-3, 2010.
52. Sachin Mishra, D.K. Khatod, S.K. Singal, "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. Imran Khan, R.P.Saini and S.K.Singal, "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. Ravindra Kumar Singh, R.P.Saini and S.K.Singal, "Performance Evaluation of Pelton Turbine Using CFD", National Seminar on Renewable Energy & Environment, April 10-11, 2010, Jaipur.

55. Gaurav Dwivedi, Ravi Kumar, Nitesh Dutt and SK Singal, "Hydropower Development and its Recent Trends in India", National Seminar on Renewable Energy & Environment, April 10-11, 2010, Jaipur
56. Sachin Mishra, D.K. Khatod, S.K. Singal, "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. Gaurav Dwivedi, Sachin Mishra, Ravi Kumar and S.K. Singal, "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. Sachin Mishra, S.K. Singal and D.K. Khatod, "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. Imran Khan, R.P.Saini and S.K.Singal, "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. Madhava Reddy Pathakota, R. P. Saini and S. K. Singal "Overview of Cavitation in Hydro Turbine", National Conference on Futuristic Trend in Mechanical Engineering", (FTME 2010), Oct 29-30, 2010, Ludhiana, pp 341-349
61. Ravi Kumar, Sachin Mishra, S.K. Singal and M.P. Sharma, "Environmental Friendly Hydro Turbine", National Conference on Futuristic Trends in Mechanical Engineering (FTME 2010), Oct 29-30, 2010, Ludhiana, pp 295-300
62. Sachin Mishra, S.K. Singal and D.K Khatod, "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. Sachin Mishra, S.K. Singal and D.K. Khatod, "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. Sachin Mishra, S.K. Singal and D.K. Khatod, "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. Madhava Reddy Pathakota, R P Saini, S K singal, "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. Ila Dashora, S.K. Singal and D. K. Srivastava, "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. Javed Dhillon, Arun Kumar and S.K. Singal, "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. 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. Sachin Mishra, S.K. Singal, D.K. Khatod, "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. Javed Dhillon, Arun Kumar, S. K. Singal “Scheduling of Wind and Pumped Storage plant under day ahead market”, 17<sup>th</sup> international seminar on hydropower plant, Vienna, Austria, Nov, 21-23, 2012, 53-62.
71. Sanjeev Pokhrel, S.K.Singal and S.N Singh, “Comprehensive Study of Community Managed Mini Grid”, International Conference on Energy Resources and Technologies for Sustainable Development, 07-09 February 2013, Howrah, India.
72. Ravi Kumar, S K Singal, “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. Sachin Mishra, S.K. Singal, D.K. Khatod, “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. Aditi Bhagat, Rahul Roy, Arun Kumar, S. K. Singal, “Analysis for Financial Viability for Social Sector SHP Projects”, 4<sup>th</sup> International Conference on Advances in Energy Research, IIT Bombay, Dec. 10-12, 2013.
76. T S Kishore, S K Singal, "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.
77. Ravi Kumar and SK Singal, 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
78. Rahul Meena and SK Singal, “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.
79. Mansi Tripathi and SK Singal, “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
80. Ravi Kumar and SK Singal, “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, Maryland, USA.
81. Ila Dashora, S.K. Singal and D. K. Srivastava, “Comparative Study of ARIMA , Thomas Fiering and ANN models for streamflow generation of intermittent river for Narmada River basin”, 3<sup>rd</sup> International Conference on Hydrology & Meteorology, Sept 15-16, 2014, Hyderabad International Convention Centre, India.
82. 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
83. Mansi Tripathi and S K Singal, “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.

84. Parul Baranwal, Mansi Tripathi and S K Singal, "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.
85. 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.
86. 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.
87. Ravi Kumar and SK Singal, "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.
88. Manish Kashyap and S K Singal "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
89. Disha and S K Singal "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
90. Ravi Kumar and SK Singal, " 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
91. Abhijeet S. Ghone and Sunil K. Singal, "Lake Conservation, Kolhapur City of Maharashtra, India" 7<sup>TH</sup> International Congress of Environmental Research (ICER-14), Bangalore, India, December 26-28, 2014
92. RP Saini and SK Singal, "Development of Cross Flow Turbine for Pico Hydro", International Conference on Hydropower for Sustainable Development, Dehradun, pp 259-267, Feb 05-07, 2015
93. SK Singal, Arun Kumar, Vinit Kumar Singh, MS Verma and Abhilasha Jain, "Hydro Power Development in Arunachal Pradesh - Issues", International Conference on Hydropower for Sustainable Development, Dehradun, pp 454-462, Feb 05-07, 2015,
94. Ravi Kumar and SK Singal, "Operation and Maintenance Problems in Hydro Turbine Material in Small Hydro Power Plant", 4<sup>th</sup> International Conference on Materials Processing & Characterization, March 14-15, 2015, ELSEVIER Materials Today: Proceedings 2 (2015) 2323 – 2331, Hyderabad.
95. Harsh and SK Singal, "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.
96. R P Saini and SK Singal, "CFD Simulation of Cross Flow Turbine Using Acusolve", Indian Altair Technology Conference (IATC2015), July 14-15, 2015, Bangalore.
97. Dhairya Shah and SK Singal, "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.

98. Mansi Tripathi and SK Singal, "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.
99. Pooja Sinha and SK Singal, "Energy from Kitchen Waste", 2nd International conference on recent trends in Engineering and Management, Feb 20, 2016, International Conference Centre YMCA, New Delhi.
100. Dhairya Shah and SK Singal, "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. Mansi Tripathi and SK Singal, "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. Pooja Sinha and SK Singal, "Energy from Kitchen Waste", 2nd International conference on recent trends in Engineering and Management, Feb 20, 2016, International Conference Centre YMCA, New Delhi.
103. Virendra Yadav and SK Singal, "Performance analysis of cross flow turbine: variation in shaft diameter", National Conference on Water Resources & Hydropower-2016, June 17-18, 2016, UPES, Dehradun
104. Alpesh Patel and SK Singal, "LCC Analysis for Economic Feasibility of Rural Electrification by Hybrid Energy Systems", International Conference on Processing of Materials, Minerals and Energy, July 29-30, 2016 ELSEVIER Materials Today: Proceedings 2 (2015) 2323 – 2331, Hyderabad.