CV of Dr. Vinod Krishna Sethi

1. **Name:** Dr. VINOD KRISHNA SETHI

2. **Date of Birth: 21-07-1949**

3. **Designation & Affiliation: Vice Chancellor RKDF University , Ex. Director MOP/CEA, EX-Rector & Director, RGPV, Bhopal**

4. **Postal Address: 48, Dwarka Dham, Airport Road, Bhopal**

5. **Phone Numbers: 0755-2740304 (o)**

6. **E-mail ID: vksethi1949@gmail.com**

7. **Qualifications** *(starting from University Level)*

S.No.	Degree	Institution	Year
01	B. Sc	Agra University	1967
02	B.E. (Hons.)	IIT / Roorkee (Univ. of Roorkee)	1971
03	PG Course	Manchester, UK	1978
04	Ph. D.	IIT/ Delhi	1986

8. Employment Experience

S. No.	Position and Organization	Nature of Job	Period
01	Scientist 'C' Department of Atomic Energy, BARC, Bombay	R&D in "Nuclear Power Plant Technology	October, 1971 to October, 1975
02	Asst. Director, Deputy Director (Faculty) Ministry of Power National Power Training Institute, Delhi (Erstwhile PETS	Teaching in Power Plant Technology to the Graduate Engineers from Power Utilities	October,1975 to June, 1984
03	Deputy Director (Site), Director Ministry of Power, Central Electricity Authority	Design, Consultancy & Site Supervision (Headed the Consultancy Team (1986-1994)	June 1984 to Nov. 1999
03	Research Advisor / Professor	Osmania University, Hyderabad	Dec 1999 – July 2003
04	Professor& Director University Institute of Technology, Rector RGPV	Teaching, Research in Energy Technologies & Admin. functions of university	July 2003 – July 2014
05	VC RKDF University		Jan 2015 – Till date

9. Publications/ patents / projects executed by Dr. Vinod Krishna Sethi

TOTAL PUBLICATIONS:

Research Papers:

	Energy & Environ.		*Thermal*	
➢ **Monograph & Books:**	**08**	**+**	**04**	**= 12**
➢ **National Journal:**	**04**	**+**	**05**	**= 09**
➢ **International Conference:**	**27**	**+**	**05**	**= 32**
➢ **International Journal:**	**46**	**+**	**04**	**= 50**
➢ **National Conference:**	**15**	**+**	**05**	**= 24**

Total = 127

(List of Papers in Green Power is as per ENCLOSURE: 01 & Thermal Engineering are as per Enclosure: 02)

10.1 Patent & Books Published:

- **Patents filed/granted with details:** The design patent application is for:

  Pilot plant for CO_2 capture & sequestration (263722: 27 June 2014)

- **Books published**

i. **Green Power , IK Publishers , New Delhi 2014**

ii. **Power Generation Technology - Conventional thermal to Green Mega Power, Book Paradise Bhopal, 2013**

iii. **Thermal Power Technology – Conventional to Green Mega Power, Book Paradise Bhopal, 2012**

iv. **A Monograph entitled "Rationale for Adoption of IGCC technology for Indian coals' Published by Book links Corporation, Hyderabad, March 2001.**

v. **A Monograph entitled "Adoption of Supercritical technology for Power generation in India" Published by CET, Osmania University Hyderabad, September 2001.**

vi. **Monograph "Performance Monitoring & Testing of Thermal Part Plants" published by CET, Osmania University, Hyderabad, June 2003.**

vii. **Monograph on 'A Rationale on CDM', under print; RGTU, Bhopal, Dec.2005.**

viii. **Monograph on 'Renewable Energy Technologies – Captive and Cogeneration Power generation.'**

ix. **Monograph on 'Methane based Power Generation'.**

x. **Monograph on 'Small Hydro Power Generation'.**

xi. **Monograph on 'Energy Management - Conservation'.**

xii. **Performance Analysis of Steam Power Plant, released by Institute of Engineers (India) 1992**

xiii. **Fundamentals of Power Plant Operation in 3 Volumes.**
Volume-1 published by Rajbhasha Vibhag (Government of India), 1992

xiv. **'Energy Audit' released by Institute of Engineers (I), March 1993**

10.2 Sponsored Research Projects

S. No	Title	Sponsoring Agency	Period	Amount *(Rupees in Lakhs)*	Achievements
01	Power Productivity enhancement through optimization of hybrid system of Solar Wind & Biomass	AICTE, Delhi	2004-05	3.00	Completed
02	Simulation & optimization of surface roughness in Gas turbine cooling channel Computational Fluid Dynamics (CFD)	AICTE, Delhi	2005-07	19.50	Completed
03	Modeling & Simulation of Carbon Recycling Technology through Conversion of CO2 in flue Gas into Useful Multipurpose fuel	DST, Delhi	2008-2010	25.83	Completed
04	Design & Development of Nano Technology based Solar PV cells	MPCST, Bhopal	2011	8.00	Completed
05	60 kW Solar wind hybrid System at RGTU Hill	MNRE	2009-2013	100.3	Completed
06	Process Stabilization, Evaluation and Analysis of CO2, capture	DST Delhi	2010-	15.00	Completed

	and its conversion into fuel molecules CO, H2, CH4 using pilot plant of CO2 capture and sequestration at RGPV".		2013		
07	30 kW CL-CSP Solar Thermal Plant	MNRE	2014	9.76 Cr.	On-going

10.3 Consultancy Projects

S. No	Title	Sponsoring Agency	Period	Amount *(Rupees in Lakhs)*
01	**Transfer of technology of Integrated Gasification Combined Cycle (IGCC) Super critical (SC) Power Plant Plants**	**Marubeni Corporation, Japan**	1999-2002	**21.00**
02	**Hot Gas Clean-up for IGCC application**	**Ministry of Coal**	2001-2003	**67.00**
03	**IGCC Optimization**	**Ministry of Power Delhi**	**2002**	**6.80**
04	**Revamping of old polluting plants by the environmentally benign Circulating Fluidized Bed Combustion (CFBC) technology**	**CIDA, Canada**	1999-2003	**40.00**

Sponsored Research/Consultancy Projects submitted for approval

1.0 Post Combustion Carbon Capture & Sequestration (CCS) Demonstration Plant on a Thermal Power Plant having integration with concentrated Solar Power (CSP) for Stripping of CO_2 from the Solvent… Submitted to DST

2.0 Pilot project for technology incubation of electrical generator utilizing thermophotovoltaic (TPV) integrated with biomass gasification for off-grid, on- demand rural household lighting applications…Submitted to MNRE

ENCL: 01 - LIST OF PUBLICATIONS IN GREEN POWER

(Dr Vinod Krishna Sethi)

I. INTERNATIONAL JOURNALS

1. **Vinod Krishna Sethi and Sharma, P.B. "A Model for combustion Losses in a pulverized fuel fired power plant boiler"; Proc. I. Mech.E. (London), Vol. 202, No. A4' 85.**
2. **Vinod Krishna Sethi and Sharma, P.B. "A Study of transients in Turbine Heat Rate of Steam Power Plant", Energy Conversion & Management, Boston, Texas. , vol. No.2, PP 187-202, 1990, U.K.**
3. **Vinod Krishna Sethi and Sharma, P.B. "Computer Aided Optimization of Turbine Heat Rate of a Thermal Power Plant", Trans. ASME. "Jr. of Energy Resources, October 1984".**
4. **Sharma, P.B. and Vinod Krishna Sethi, "Improved Formulation for Turbine Heat Rate of a Thermal Power Plant". 'Energy' International Journal, Oct. 1995.**
5. **Reddy D.N., Sethi V.K. " Renovation and Refurbishment of old Polluting Power Plants using CFBC Boilers – Technology Status in India" paper published in the Journal of 8th European Roundtable on Cleaner Production, Cork, Ireland Oct 9-11, 2002.**
6. **Reddy D.N., Sethi V.K. "Green Power Technologies & CDM Opportunities – A Case Study", SESI Journal", 2006.**
7. **Sethi V. K., et. al. "Power Productivity Enhancement & Statistical analysis is using Hybrid System of Solar Wind & Biomass", Asian Journal of Experimental Sciences, March 2007.**
8. **Sethi V. K. et. al. "Production potential of Electricity from Biomass in Indian context" in Ultra Science Vol.-19(1), 1-10, 2007.**
9. **Sethi V.K., et. al. "Wind resource assessment and site analysis at RGPV, Bhopal" International conference on environmental research (ICER-08) Dec. 18-20 (2008), International Journal of Environmental Research &Development (JERAD).**
10. **VK Sethi et.al. "Osmotic Stress in the Cynobacterium Nostic Muscorum overcome by the accumulation of Proline" Canadian Jl. of applied scienceVol.3 No1 February 2009.**
11. **V K Sethi et.al. "Extrusion Process Design for Non-Circular Rods" International Journal of Applied Engineering Research ISSN 0973-4562, Vol.4 No10 (2009) pp.2063-2070.**
12. **V K Sethi et.al. "Process and die design for rod Extrusion of γ iron" International J. Matter form (2009/s12289-009-0403-2).**
13. **V K Sethi et.al. "Analysis of wind power potential on complex terrain by flow Modelling and times series characteristics" International Journal of Engineering Research and Industrial Applications (IJERIA) ISSN 0974-1518, vol.3, no. I (2010) pp 115-130.**
14. **VK Sethi, Bhupendra Gupta et.al. "Effect of Air velocity fuel rate and Moisture content on the performance of updraft Biomass Gasifier using fluent tool" International Journal of Modern Engineering Research (IJMER), Vol. 2, Issue 5, Sep-Oct. 2012 pp 3622-3627.**
15. **VK Sethi et.al. "Mathematical Simulation and Energy estimation of 10 kW horizontal axis wind turbine rotor at hilly site of RGPV, Bhopal (Case Study)" Journal of Current World Environment, Vol. 4(2), 255-262 (2009) August 17, 2009.**
16. **V K Sethi et al. "A Novel Approach for CO2 Sequestration and Conversion in To Useful Multipurpose Fuel" International Journal ICER, JERAD, 2010.**
17. **V K Sethi, Priti Shukla et. el. "CNT Enhances the efficiency of Solar PV Cell", Search & Research interdisciplinary journal, ISSN -0975-5713, Feb-May 2010- Vol.1 No.3, Page No.6-9.**
18. **V.K. Sethi et. al. "Performance analysis of Photovoltaic Generator and its voltage boost-up through DC/DC boost Converter" (Accepted in IETE).**

19. **V K Sethi, Priti Shukla et. el. "Silicon Nano-particle Enhance Performance of Solar PV Cell", Search & Research, Vol.2, No.1, 2010, Page No.91-93.**
20. **V K Sethi, Priti Shukla et. el. "Concepts of Efficiency Enhancement in Silicon Solar Cell" Journal of Sustainable Manufacturing and Renewable Energy, Vol.1, Issue1-2, 2011.**
21. **V K Sethi, Priti Shukla et. el. "Use of Nanotechnology in Solar PV Cell", International Journal of Chemical Engineering and Applications, Vol.2, No.2, Apr.2011.**
22. **V K Sethi, Priti Shukla et. el." Cost Boundary in Silicon Solar Panel" International Journal of Chemical Engineering and Applications, Vol. 2, No.5, pp 372-375, Oct.2011.**
23. **V K Sethi, Priti Shukla et. el." Thin Film Photo-voltaic Cell Compared to Mono Crystalline Photovoltaic Cell and Multi Crystalline Photo-voltaic Cell" International Journal of Advanced Renewable Energy Research, Vol.1, Issue 2, pp 26-35, April 2012.**
24. **V K Sethi, Mukesh Pandey and Bhupendra Gupta et. el." Parametric Study of Fixed Bed Biomass Gasifier: A review" International Journal of Current Engineering & Technology, Vol.2, No. 1, March 2012.**
25. **V K Sethi, Mukesh Pandey and Bhupendra Gupta et. el." Polymer Exchange Membrane (PEM) Fuel Cell: A Review" International Journal of Thermal Technology, Vol.2, No. 1, March 2012.**
26. **V K Sethi, Rajnish Kurchania and Javed M.Khan "Synthesis and Characterization of two dimensional grapheme lamellae based Pan Nano-composites" Elsevier Thin Solid Films 519 (2010), 1059-1065.**
27. **V K Sethi, Priti Shukla et. el." Concentrating Solar Power, Seawater Desalination, Parabolic Troughs, Fresnel Systems" International Journal of Advanced Renewable Energy Research, Vol.1, Issue 3, pp 25-31, May 2012.**
28. **V K Sethi, Priti Shukla et. el."Recent Trends in dye-sensitized solar cell technology" International Journal of Sustainable Manufacturing and Renewable Energy, Vol.1, Issue 3-4, May 2012.**
29. **V K Sethi, Priti Shukla et. el. "Development and performance, evaluation of a-Si thin-film PV cell", Nanomaterials and Energy, November 2012, Volume1, Issue 6, 338-344. (ICE Publisher, U.K.)**
30. **V K Sethi, Priti Shukla et. el. "Progress in Thin Film Silicon Based Solar Cell Technology", International Journal of Advanced Renewable Energy Research, July 2012, Volume 1, Issue 7, 429-433. (Iran).**
31. **V K Sethi, Pankaj Jain et. el. "Optimization of The Performance of the Wind Power Generation Unit by using Different Neural Networks", International Journal of Power System Operation and Energy Management ISSN (PRINT): 2231-4407, Volume -2, Issue-3,4.**
32. **V K Sethi, Vinay Thapar et. el., "Critical Analysis of Methods for Mathematical Modeling of Wind Turbines," Renewable Energy, vol. 36, no. 11, Nov.2011, pp. 3166-3177. (Publisher- Elsevier, ISSN 0960-14B1) Impact Factor 2.978, Five Years 3.2.**
33. **V K Sethi, Vinay Thapar, et. el. "Estimation of Hourly Temperature at a Site and its Impact on Energy Yield of a PV Module," International Journal of Green Energy, vol.9, no. 6, pp. 553-572. (Publisher- Taylor & Francis, ISSN 1543-5075 print/1543-5083 online)Impact factor 1.18**
34. **Dr. V.K.Sethi, et.al. "Silicon Nano particle Enhance Performance of Solar PV Cell", Search & Research, Vol.2, No.1,2010, Pz No.91-93.**
35. **Dr. V.K.Sethi, Dr. Mukesh Pandey, Dr. Pankaj Jain et.al, "Technology analysis of Concet4rated Solar Thermal Power" Innovative System Design Engineering IISTE, Vol.4, No. 6, PP 75-80, February 2013.**
36. **Dr. V.K.Sethi, et.al, "An Investigation of Wind Characteristics for optimum Wind Energy utilization at the campus of Rajiv Gandhi Technical University, Bhopal(India)" in International Journal of Engineering Sciences & Research Technology (IJESRT), ISSN: 2277-9655, November, 2013, - 3067-3072.**

37. **Dr. V.K.Sethi, et.al, "An Assessment of Wind Energy Potential for Design and Implementation of a Wind Power Project" in International Journal of Emerging Technology and advanced Engg. (IJETAE), ISSN: 2250-2459, August 2013 Vol.3 Issue-10.pp 569-574.**
38. **Dr. V.K.Sethi, et.al, "Design Optimization of Solar PV Power Plant for Improved Efficiency of Solar PV Plant by Maximum Power Point Tracking System" International Journal of Research in Engineering and Technology (IJERT) ISSN: 2278-0181 Volume: 03 Issue: 1, January 2014.**
39. **V K Sethi et.al. "Modeling of Thin Film a-Si Solar Energy System" Journal of Sustain Manufacturing and Renewable Energy, Vol.2, No.3-4, 2013**
40. **V K Sethi et.al. "Development and performance, evaluation of a-Si thin-film PV cell", Nano-materials and Energy, Volume 1 Issue NME6, Nov.2012, pp. 338-344**
41. **V K Sethi et.al. " Thin-Film Photovoltaic Cell Compared to Mono crystalline Photovoltaic Cell and Multi Crystalline Photovoltaic Cell" International Journal of Advanced Renewable Energy Research Vol. 1, Issue 2, Apr 2012, pp. 26-35**
42. **Sahay Amit, Sethi V K, Tiwari A C(2013) , A comparative study of attributes of Thin Film and crystalline Photovoltaic cells, *VSRD International Journal of Mechanical, Civil, Automobile & Production Engineering, Vol. 3, Issue 7 July 2013;* www.vsrdjournals.com**
43. **Sahay Amit, Sethi V K, Tiwari A C, (2013), Cost Performance of Thin Film and Crystalline Photovoltaic Cells- A Comparative Study, International Journal of Current Engineering and Technology, ISSN 2277-4106, Vol.3, No.3, August 2013, page nos. 1139-1142, http://inpressco.com/category/ijcet**
44. **Sahay Amit, Sethi V K, Tiwari A C(2013), Design, optimisation, and system integration of low cost Ground Coupled Central Panel Cooling System (GC-CPCS), International Journal of Current Engineering and Technology, ISSN 2277-4106, Vol.3, No.4, October 2013, page nos, 1473-1479 http://inpressco.com/category/ijcet**
45. **Sahay Amit, Sethi V K, Tiwari A C (2014), Fabrication scheme, instrumentation scheme and testing of Ground Coupled Central Panel Cooling System (GC-CPCS), International Journal of Current Engineering and Technology, ISSN 2277-4106, Vol4, No.2, April 2014, page nos, 631-638, http://inpressco.com/category/ijcet**
46. **V K Sethi et. al. A general design procedure for Ground Coupled Heat Exchanger (GCHEX) and its application to Ground Coupled Central Panel Cooling System (GC-CPCS), Renewable and Sustainable Energy Reviews, ISSN 1364-0321, Vol. 42, February 2015, page nos. 306-312**

II. NTERNATIONAL CONFERENCE PAPERS

1. **Reddy D. N. & Sethi V. K., "IGCC for Power generation – an Environmentally benign and Energy efficient Technology" ICERD 2, Kuwait, April 8-10, 2002.**
2. **Reddy D.N., Sethi V.K. "Fluidized bed technologies to High Ash Indian Coals – A Techno-economic Evaluation", 8th European Roundtable on Cleaner Production, Cork, Ireland Oct 9-11, 2002.**
3. **Reddy D.N., Basu K and Sethi V.K. "IGCC for Power Generation- A promising Technology for India". International Conference on Clean Coal Technologies for Our Future, Sardinia, Italy, 21-23 Oct. 2003.**
4. **Sethi V.K. et. al. "Technology & Resource Management of IGCC Power Plant in the Indian Context- A Case Study" -Twenty first Annual International Pittsburgh Coal Conference, Osaka Japan, Sept. 13-17, 2004.**

5. **Reddy D.N., Sethi V.K., Rajesh P. "Technology options for Indian Coals and Optimization of IGCC Cycle efficiency" -Twenty first Annual International Pittsburgh Coal Conference, Osaka Japan, Sept. 13-17, 2004.**
6. **Sethi V.K. "A Road map to Sustainable Power Development in India over Next Five Years, GLOGIFT-05, International Conference RGTU, Bhopal, Dec.2005".**
7. **Baredar Prashant, Sethi V.K., Pandey Mukesh, 'Wind resource assessment and site analysis power Generation through hybrid system of solar, wind & Biomass' 5thGlobal international con. on Flexible systems Management organized by GLOGIFT & RGPV**
8. **Sethi V.K., Shrivastava Sanjeev and Baredar P. "Green Power generation through Hybrid System of Solar, Wind & Biomass." GLOGIFT-05, International Conference, RGTU, Bhopal, Dec-2005.**
9. **Sethi V.K. et. al. "Solar – Wind Hybrid System: A viable option for Energy Security and source of Carbon Credits", International Conference on Wind Energy: Trends and Issues 5-7 January 2006, NITTR, Bhopal.**
10. **Sethi V.K. et. al. "CDM opportunities in Renewable Energy Projects with particular reference to Wind Power", International Conference on Wind Energy: Trends and Issues NITTR, Bhopal, 5-7 January 2006.**
11. **Reddy D.N., Sethi V. K. "Green Power Technologies for high Ash Indian Coals Evaluation of CO_2 mitigation options" 23rd International Pittsburgh Coal conference, Sept. 25-28, 2006, USA.**
12. **Reddy D.N., Sethi V. K. "Refurbishment of old PC Boilers confronted with Coal Quality Degradation by a CFBC boiler" 23rd International Pittsburgh Coal conference, Sept. 25-28, 2006 USA.**
13. **Sethi V. K. et. al. "Turbine Heat Rate under load transients of Al-zara Thermal Power Station, Syria" International Conference on Modeling and simulation, Coimbatore, 2007.**
14. **Sethi V. K. et. al. "Mathematical Modeling of Turbine Heat Rate under steady state conditions" International Conference on Modeling and simulation, Coimbatore, 2007.**
15. **Sethi V. K. et. al. "Effects of Load, Leak off Steam consumption and Main Steam properties on Turbine Heat Rate for Al-Zara Thermal Power Station, Syria" International Conference on Modeling and simulation, Coimbatore, 2007.**
16. **Baredar Prashant, Sethi V.K., Pandey Mukesh, 'Power Productivity Enhancement and Reliability Analysis Using Hybrid System of Solar, Wind and Biomass International conference on environmental research (ICER-07) 28-30 Dec. 2007 At Govt. Geetanjali Girls P.G.College Bhopal**
17. **Baredar Prashant, Sethi V.K., Pandey Mukesh 'Overview on worldwide developments in wind power Technology' 6thGlobal International conference on Flexible systems Management organized by GLOGIFT & UPTU 15-17 Nov. 2007 at Noida(U.P.)**
18. **Sethi V. K. et. al. "Situation and SWOT Analysis of Small Wind- Solar- Biomass Tribid Energy System Installed At University Institute of Technology, Bhopal M.P., (India)" Proceedings of GLOGIFT 08 June 14-16, 2008 at Stevens Institute of Technology Hoboken, NJ, USA pp. 1-9**
19. **Sharma P B & Sethi V. K. "Mitigating Climate Change through Green Energy Technologies" International seminar on New Horizons of Mechanical Engineering (ISME 2008), March 18-20, 2008 at Rajiv Gandhi Technological University, Bhopal, M.P.**
20. **Sethi V K et. Al. "Modeling & Simulation of Carbon Recycling Technology through Conversion of CO_2 into useful multipurpose fuel" International seminar on New Horizons of Mechanical Engineering (ISME 2008), March 18-20, 2008 at Rajiv Gandhi Technological University, Bhopal, M.P.**
21. **Sethi V.K., Pandey Mukesh, Priti Shukla "Use of Quantum Dots in Solar Panel" 15th ISME International Conference on Advances in Mechanical Engineering organized by**

Rajiv Gandhi Technical University on 18th - 20t March 2008

22. **Baredar P., Sethi V.K., Pandey Mukesh 'Statistical Analysis of Solar-Wind Hybrid System Using Systat Software', International online Energy Conference (ioec-08) 19 Dec 2008 at the University of Leeds, UK**

23 **Baredar Prashant, Sethi V.K., Pandey Mukesh Wind resource assessment and site Analysis at Rajeev Gandhi Technological University, Bhopal. International conference on Environmental Research (ICER-08) Dec. 18-20 (2008) At Goa.**

24. **V K Sethi et al. "Use of CNT & Solar PV Cell" Proceedings of International Conference in Advances & Renewable Energy, ICARE 2010**

25 **.Manju Khare, Yogendra Kumar, Ganga Agnihotri, V.K. Sethi "Modeling of Photovoltaic Module/Array Using MATLAB/SIMULINK". Proc. of Int. Conf. on "Trends & Advances in Computation & engineering" (TRACE), Feb 2010,pp.183-188.**

26. **Manju Khare, Yogendra Kumar, Ganga Agnihotri, V.K. Sethi "Energy Storage. Technologies for Integrated Renewable Energy Sources - A Technical Review" in Proc. of Int. Conf. on "Electrical power and Energy systems" (ICEPES – 2010), August 26-28, 2010**

27. **Sethi V.K., Pandey Mukesh, Priti Shukla "Concepts of High Efficiency Silicon Solar Cell" International Conference on concurrent Techno & Enviro search "Search And Research Youth Congress-2010, 4th-5th Dec.2010**

III. NATIONAL CONFERENCES/ JOURNALS

1. **Dr. V. K. Sethi et. el. , "CO2 Mitigation and CDM Through Green Power Technologies" National Conference on Clean development Mechanism, 10-11 Feb. 2005**
2. **Dr. V. K. Sethi et. el. "CDM Opportunities in Municipal Solid Waste to Energy Projects" National Conference on Clean development Mechanism, 10-11 Feb. 2005**
3. **Sethi V.K. et. el. , "Transfer of Technology of A Green Power Project From a Developed Economy to India", Conf. on Emerging Opportunities for Consulting Service Providers… January 12-13, 2005**
4. **Sethi V.K. et. el., Green Power Engineering for Sustainable Power development in India, Proc. of INMANTEC, Delhi**
5. **Sharma P B, Sethi V K, "Power Plant Performance Analysis & Optimization Through Mathematical Modeling", All India Technical Program n Performance Operational Analysis and Diagnosis and Optimization of Thermal Power Plant Equipments, 24-25 November 2006, Hyderabad.**
6. **Sethi V K, Sharma P B, Reddy D N, "A Transition from Conventional Thermal to Green Mega Power", All India Technical Program n Performance Operational Analysis and Diagnosis and Optimization of Thermal Power Plant Equipments, 24-25 November 2006, Hyderabad.**
7. **Sethi V K, et. al., "Commercialization of Biodiesel", National Seminar on Rural Technology, 2006, Bhopal.**
8. **Sharma P. B. & Sethi V. K. "Mathematical Modeling of Turbine Heat Rate under steady state conditions" CFD the New third dimension in flow analysis and thermal design, RGTU, Bhopal, 2007.**
9. **Sharma P.B. & Sethi V. K. "A Transition from Conventional Thermal to Green Mega Power", GE Seminar, DREAMS 2007.**
10. **Baredar Prashant, Sethi V.K., Pandey Mukesh "Feasibility Analysis 0f Pilot Hybrid System Installed at RGTU Bhopal", All India Young scientist conference Nov.23-25, 2007 at P.V.Naronha Administration Academy, Bhopal, M.P.**
11. **Sethi V.K., Pandey Mukesh, Priti Shukla "The use of Hydrogen Energy in Vehicles"**

National Seminar on Bhartiya Vigyan Sammelan 2007, Bhopal

12. **Sethi V.K., Pandey Mukesh, Priti Shukla "Silicon Nano-particles enhance performance of Solar cell" presented in National Seminar on Efficient Conversion of New and Renewable Energy for Electricity & Fuel on 22nd – 23rd Dec.2008.**
13. **Sethi VK et. el. " CNT Enhances the efficiency of solar PV cell" presented in National Seminar on 2nd Bhartiya Vigyan Sammelan 2009 organized by Vijnana Bharti, M.P.C.S.T., Govt. of M.P. on 1-3, Dec 2009**
14. **V K Sethi et. al. "Design and Modeling of Wind Farm and Predicting Annual Energy Production in a Hilly Terrain of RGPV, Bhopal, Madhya Pradesh" MNIT Conf. March 2010**
15. **Manju Khare ,Yogendra Kumar , "A Study of Maximum Power Point Tracking Controllers in Photovoltaic Application" in Proc. of National Conf. on "Advance Trends in Electrical Engg.,26-27 march2010, pp.53-59.**
16. **" Concepts Of High Efficiency Silicon Solar Cell" presented in International Conference on Concurrent Techno & Environ search "Search And Research Youth Congress-2010 "Organized by Search And Research Group& Search And Research Journal ,Bhopal on 4th-5th Dec.2010**
17. **"Use of CNT in Solar PV cell" presented in International Conference on "advances in Renewable Energy" (ICARE-2010) organized by MANIT, Bhopal on 24th -26th June2010.**
18. **" Flexibility in Service Sector" presented in Ninth Global Conference (GLOGIFT 09) On Flexible System Management organized by NITIE , Mumbai on 12th – 14th Nov.2009.**
19. **"Use of Quantum Dots in Solar Panel" presented in 15th ISME International Conference on Advances in Mechanical Engineering organized by R**

ENCL: 02-PUBLICATIONS IN THE AREA OF THERMAL ENGG.

I INTERNATIONAL JOURNALS

1. **Krishna, V. and Sharma, P.B. "A Model for combustion Losses in a pulverized fuel fired power plant boiler"; Proc. I. Mech.E. (London), Vol. 202, No. A4.**

2. **Krishna, V. and Sharma, P.B. "A Study of transients in Turbine Heat Rate of Steam Power Plant", Energy Conversion & Management, Boston, Texas. , vol. No.2, PP 187-202, 1990, U.K.**
3. **Krishna, V. and Sharma, P.B. "Computer Aided Optimization of Turbine Heat Rate of a Thermal Power Plant", Trans. ASME. "Jr. of Energy Resources, October 1984".**
4. **Sharma, P.B. and Krishna, Vinod "Improved Formulation for Turbine Heat Rate of a Thermal Power Plant". 'Energy' International Journal, Oct. 1995**

II. NATIONAL JOURNALS

1. **Sharma, P.B., Sethi, V.K. "A Technique for computerized Thermal Power Plant Performance Monitoring", Jr. Irrigation and Power, Min. of Energy, India, pp. 417-428, July 1984.**

2. **Sethi, V.K. Sharma, P.B. and Gupta, SK "Power Plant Performance Analysis through Mathematical modeling", Jr. CEA, pp. 22-31, April 1983.**

3. **Sethi, V.K., Sharma, P.B. and Gupta, SK "Control Volume Approach for performance Testing of Boilers & Turbines", Jr. CEA, pp. 353-358, March 1985.**

4. **Sethi, V.K., Sharma, P.B. and Gupta, SK "Effects of Condenser Performance on Turbine Heat Rate of a Thermal Power Plant", Jr. of Thermal Engg. Vol. 4, No.2, pp. 46, 1985.**

5. **Krishna, Vinod and Sharma, P.B. "Some studies in Economic Aspects of Power Plant Performance". CBIP, Jr. Min. of Energy (India). Vol. 47, No.4, Oct.1990.**

III INTERNATIONAL CONFERENCES

1. **Krishna, V. and Sharma, P.B. "Uncertainty in Turbine Heat Rate Computation in an on-line Performance Monitoring System", Proc. 108th ASME Winter Annual Meeting, Dec. 1987, Boston, USA.**

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