

DETAILED CURRICULUM VITAE



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Personal Details:

Birth date: 26 August 1980, Male, Married,

Academic Qualifications:

- ✓ Ph.D.Renewable Energy, Centre for Energy & Environmental Science and Technology, National Institute of Technology, Tiruchirapalli, TN, India (2013)
- ✓ M. Tech, Energy Management, School of Energy & Environmental Studies, Devi Ahilya University, Indore, MP, India (2006)
- ✓ B. E. Mechanical Engineering, Govt College of Engg, Salem, Madras University, TN, India (2001)

Academic Experience:

Current Position

- ✓ Senior Lecturer, Faculty of Mechanical Engineering, University of Malaysia, Pahang, Malaysia.
- ✓ Assistant Professor, Energy Centre, Maulana Azad National Institute of Technology, Bhopal, M.P, India.

Previous Positions

- ✓ Senior Research Fellow, Centre for Energy & Environmental Science and Technology (CEESAT), National Institute of Technology, Tiruchirapalli
- ✓ Assistant Professor & Head, Department of Mechanical Engineering, Annai Teresa College of Engineering, Thriunavalur, TN.
- ✓ Manager (Mechanical), Lakshmi Engineering Industries, Cuddalore, Tamilnadu.
- ✓ Officer-In-Charge, Renewable Energy Club, ATCE.

- ✓ Anna University representative, Central valuation Examiner, Anna University Theory Examination, Coordinator, Anna University Examinations

Awards/Fellowships:

- ✓ Young South Asian Researcher Award on Sustainable consumption and Production by TERI University in association with SSDN ,UNEP and the EU through the SWITCH-Asia Programme (Oct -2016)
- ✓ National Citizenship Gold Medal Award by GEPR, New Delhi (Jan -2015)
- ✓ Rashtriya Gaurav Award, India International Friendship Society, New Delhi (Apr -2015)
- ✓ Best Citizens of India Award, International Publishing House, New Delhi (June 2015)
- ✓ MPCST Young Scientist Award (2012)
- ✓ Empanelled Energy auditor with MPUVN (2011)
- ✓ British Council, Brightest Young Climate Leader award (2010)
- ✓ Best Paper Award (First Prize), Raja Balwant Singh College, Agra (2009)
- ✓ DST Senior Research Fellowship (2008)
- ✓ BEE Certified Energy Manager & Energy Auditor (2007)
- ✓ MHRD GATE Fellowship (2006)
- ✓ Annai Teresa College of Engineering (Under AICTE & Anna University) Best Faculty Award (2006)

Research Guidance & Publications

- ✓ Ph.D – 5 (ongoing) & 1 completed
- ✓ M.Tech & B.Tech – Supervision more than 75
- ✓ Research Papers – 103 (International/National Journals & Conferences)
- ✓ Books – 12
- ✓ Sponsored Consultancy & Research Projects - 6

Field of interest :

- ✓ Solar Thermal & PV Systems
- ✓ Wind Energy
- ✓ Biomass & Bio fuels
- ✓ Climate Change and Carbon Sequestration
- ✓ Energy Modelling and Exergy Analysis
- ✓ Energy Conservation & Auditing

- ✓ Nanotechnology and Biotechnology.
- ✓ Industrial Pollution Control & Waste water treatment.

Academic Visits abroad

- ✓ Srilanka, Mortuwa University, Colombo.
- ✓ Thailand, Asian Insitute of Technology, Bangkok.
- ✓ Indonesia, Indonesian Institute of Science

Association with professional bodies

- ✓ Life member , Society of Energy Managers & Energy Auditor(SEEM).
- ✓ Life member , Hong Kong Society of Mechanical Engineers (M 20151207001)
- ✓ Life member , Solar Energy Society of India (SESI).
- ✓ Life member , Fluid Mechanics and Fluid Power Society (FMFP)
- ✓ Life member, Indian Association of Hydrogen Energy and Advanced materials(IAHEAM)
- ✓ Life member , Institution of Engineers (MIE)
- ✓ Life member , Engineers without Borders,MANIT Chapter
- ✓ Life member , Indian Society of Technical Education (MISTE)
- ✓Life member of Indian Environment Network
- ✓Life member of GNEST
- ✓ Life member of RENET
- ✓ Life member of Alumni, DAVV, Indore.
- ✓ Life member of Alumni, NIT,Tiruchirapalli

Research and Consultancy activities

- ✓ Grant-in-Aid –Proposal to Ministry of New and Renewable Energy,Govt of India for Upgrading UG & PG Labs (50 Lakhs)
- ✓ Preparation of Detailed Project Report of 50 MW Floating Solar Power Plant at West Kallada, Kollam District Kerala by NHPC, Amount : 5.5 lakhs + Service Tax
- ✓Preparation of Detailed Project Report of 70 MW Solar Power Plant at Ghutari,Kolaras ,Shivpuri Dt,Madhya Pradesh by NHDC, Amount : 5 lakhs + Service Tax
- ✓Implementation of Visvesvaraya Ph.D Scheme for Electronics & IT by DeiTy,New Delhi Amount: 199.65 lakhs ,Year 2015-2020.
- ✓ Investment Grade Energy Audit of Rajgarh Collect orate, MPUVN (0.25 Lakhs)
- ✓ Photo-catalytic Degradation of Industrial Waste Water by MPCST Amount : 4.18 Lakhs Status: Completed in 2014
- ✓ Development of Bio-Energy Laboratory, MHRD, New Delhi. (23 Lakhs)

- ✓ Development of Bio-Sequestration laboratory, National Institute of Technology, Tiruchirapalli ,Sponsored by DST, New Delhi. (55 Lakhs)
- ✓ Institution of Renewable Energy Club, Tamil Nadu Energy Development Agency (TEDA) (0.25 Lakhs)
- ✓ Development of Simulation and Mechatronics laboratory, Annai Teresa College of Engineering (10 Lakhs)

Seminar Organized

- ✓ National Convention on Hydrogen Energy and Advanced Materials “HEAM Scientist, MANIT, Bhopal, Nov 28-29th , 2015
- ✓ 31st National Convention of Electrical Engineers and National Seminar on Renewable Energy and Green Technology for Sustainable Development “,IEI,MP State Centre Bhopal, October 17-18^h , 2015 sponsored by CPRI.
- ✓ One day Training Programme on " COMSOL for Academic Research & Teaching", 18th August 2015,MANIT, Bhopal..
- ✓ National Science Day “SCIENCIA , MANIT, March 10-15th 2015 sponsored by MPCST.
- ✓ National Seminar on Hydrogen and other Renewable Energy Sources “HEAM Scientist, University of Kerala, Trivandrum, Nov 17-18th , 2014.
- ✓ Short Term Training Program on “Energy Conversion Systems: Fundamentals and Applications, MANIT, May 26-30th , 2014.
- ✓ National Workshop on “Fuel Cell Technology, MANIT, Bhopal, March 24-25th , 2014.
- ✓ National Workshop on “Emerging Biomass Conversion Technologies , MANIT, September 21-22nd , 2012.
- ✓ National Seminar on “Energy, Environment and Sustainability, MANIT, March 1-2nd , 2012.
- ✓ National Workshop on ‘Green Technologies towards low carbon society, March 30th ,2011
- ✓ Energy Day, National Institute of Technology, Tiruchirapalli March 1st ,2009.
- ✓ Celebration of Akysaya Urja Diwas on “Renewable Energy Technology “August 20th , 2006, Annai Teresa College of Engineering, TN

Publications

Patent

- ✚ Saurabh Yadav, **K.Sudhakar** Indian Patent “Simple and Enhanced Double Slope Solar Distiller for Domestic Applications” Patent no. 2285/MUM/2014 Issue No. 35/2014 Page no. 27 Published on 29 Aug 2014.
- ✚ Sibum Sam John, Aditi Bhaswar, **K.Sudhakar** Indian Patent “Self-sustained smart greenhouse” (Patent no.2945/MUM/2015) Issue No. 35/2014 Page no. 27 Published on 04/09/2015, International classification: C12M1/00.

International Journals

❖ *Solar Thermal system*

- Saurabh Yadav, **K Sudhakar** (2015) Different domestic designs of solar stills: A review Renewable and Sustainable Energy Reviews 03/2015; 47:718-731. DOI:10.1016/j.rser.2015.03.064 .
- Jay prakash bijarniya, **K Sudhakar** , **Prashant Baredar** (2016) Concentrated solar power technology in India: A review Renewable and Sustainable Energy Reviews 06/2016; 63:593-603. .
- S.Dhanushkodi, Vincent H.Wilson, **K.Sudhakar**, 2014, Thermal Performance evaluation of Indirect forced cabinet solar dryer for cashew drying .American-Eurasian Journal of Agricultural and Environmental Science .14(11): 1248-1254.
- **K. Sudhakar**, Noopur Jain, Saurabh kumar gupta, Tarun jain, yash jain ,2014 A Comparative Study Of Pet Bottles And Batch Reactor For Solar Water Disinfection In Bhopal, M.P, India .Journal of Interdisciplinary and Multidisciplinary Research 11/2014; 2(10):428-437.
- Saurabh Mehrotra, Pratish Rawat, Mary Debbarma, **K Sudhakar** (2014)..Performance of a solar panel with water immersion cooling technique. International Journal of Science, Environment and Technology .3(3) ,1161-1172
- Pratish Rawat · **K. Sudhakar**. Performance analysis of partially covered photovoltaic thermal (PVT) water collector. 2016.International Journal of Research in Engineering and Technology .2016;5(1) : 15-20

❖ *Solar Photovoltaic*

- Sibum Sam John, Pankaj Kumar, **K. Sudhakar** and Arbind Kumar. Performance analysis of 75 W Transparent PV Panels. Journal of Energy Research and Environmental Technology.2(3); 2015; pp. 232-235
- Pankaj Kumar, Sibum Sam John, Akash K. Shukla, **K. Sudhakar** and Arbind K.Performance Analysis of 68 W Flexible Solar PV .Journal of Energy Research and Environmental Technology .2(3),2015; pp. 227-231
- Vipinraj Sugathan · Elsa John · **K Sudhakar**, Recent improvements in dye sensitized solar cells: A review. Renewable and Sustainable Energy Reviews 08/2015; 52. DOI:10.1016/j.rser.2015.07.076
- Vipinraj Sugathan · Elsa John · **K Sudhakar** (2015). Dye Sensitized Solar Cell: Novel Dyes from Natural organic sources, Extraction and study, International Journal of Applied Engineering Research, Vol 10 No.71;535-539
- Naveen Kumar Lodha, **K Sudhakar** Theoretical Design and Simulation Analysis of PV Based Pumping System for Domestic Applications in Bhopal, M.P, India International Journal of Science and Research (IJSR) 05/2015; 438(4)
- K N Shukla, Saroj Rangnekar, **K Sudhakar** (2015) Mathematical modelling of solar radiation incident on tilted surface for photovoltaic application at Bhopal, M.P., India.International Journal of Ambient Energy 04/2015; DOI:10.1080/01430750.2015.1023834
- K N Shukla, Saroj Rangnekar, **K Sudhakar** (2015) Comparative study of isotropic and anisotropic sky models to estimate solar radiation incident on tilted surface: A case study for Bhopal, India Energy Reports 03/2015; 1:96-103. DOI:10.1016/j.egy.2015.03.003
- **K. Sudhakar**, K.N.Shukla, Saroj Rangnekar A comparative study of exergetic performance of amorphous and polycrystalline solar PV modules .International Journal of Exergy 08/2015; 17(4):433-455. DOI:10.1504/IJEX.2015.071559 ·
- K N Shukla, **K Sudhakar**, S Rangnekar (2015) Estimation and Validation of Solar Radiation Incident on Horizontal and Tilted Surface at Bhopal, Madhya Pradesh, India American Eurasian Journal of Agriculture and Environmental science 15(1) : 129-139
- K.N.Shukla,**K. Sudhakar**,Saroj Rangnekar. behaviour and performance of 5w amorphous (a-si) and polycrystalline (p-si) PV modules in real time with solar

module analyzer .Cyber Times International Journal of Technology & Management.2014 7(2).107-116

- **Sudhakar, K.**, Tulika Srivastava (2013) Energy and Exergy analysis of 36 W Solar Photovoltaic module *Int. Journal of Ambient Energy* , 2(1), 31-34
- Shiva kumar, B., **Sudhakar, K.**, Performance evaluation of 10 MW grid connected solar photovoltaic power plant in India. *Energy Reports* (2015), <http://dx.doi.org/10.1016/j.egy.2015.10.001>
- Elsa John, Vipinraj Sugathan and **K. Sudhakar**, Dependence of Temperature and Wavelength on the Current-Voltage Characteristics of a Dye Sensitized Solar Cell. *Journal of Energy Research and Environmental Technology* .2015; 2(4); pp. 319-323
- Akash Kumar Shukla · **K. Sudhakar** · Prashant Baredar.Exergetic assessment of BIPV module using parametric and photonic energy methods: A review. *Energy and Buildings* .2016.119: 62-73.
- Akash Kumar Shukla · **K. Sudhakar** · Prashant Baredar.Simulation and performance analysis of 110 kWp grid-connected photovoltaic system for residential building in India: A comparative analysis of various PV technology. *Energy reports* .2016.2: 82-88.
- Alok sahu · Neha yadav · **K.Sudhakar**. Floating photo voltaic power plant:A review. Aug 2016 · *Renewable and Sustainable Energy Reviews*. 66:815-824. DOI: 10.1016/j.rser.2016.08.051
- Akash Kumar Shukla · **K Sudhakar** · Prashant Baredar. Design, simulation and economic analysis of standalone roof top solar PV system in India.Jul 2016 · *Solar Energy*. 136:437–449. DOI: 10.1016/j.solener.2016.07.009
- Akash Kumar Shukla · **K. Sudhakar** · Prashant Baredar. A comprehensive review on design of building integrated photovoltaic system. Jun 2016 · *Energy and Buildings*. DOI: 10.1016/j.enbuild.2016.06.077.
- Akash Kumar Shukla · **K. Sudhakar** · Prashant Baredar.Exergetic analysis of building integrated semitransparent photovoltaic module in clear sky condition at Bhopal India. *Case Studies in Thermal Engineering* 8 · June 2016.DOI: 10.1016/j.csite.2016.06.009

- Kaveri Markam **K. Sudhakar**. Estimation of optimal tilt angle for solar photovoltaic installations in India. *International Research Journal of Engineering and Technology*. Volume: 03 Issue: 05 | May-2016

❖ ***Bio Energy (Biomass, biogas & Bio fuel)***

- Suresh Bahadur, Parash Goyal, **K. Sudhakar**, Jay Prakash Bijarniya A comparative study of ultrasonic and conventional methods of biodiesel production from mahua oil. *Biofuels* 07/2015; 6(1). DOI:10.1080/17597269.2015.1057790
- S. Bahadur · P. Goyal. **K. Sudhakar** · Ultrasonic Assisted Transesterification of Neem Oil for Biodiesel Production. *Energy Sources, Part A: Recovery, Utilization and Environmental Effects* 09/2015; 37(17):1921-1927. DOI:10.1080/15567036.2014.911783
- S Dhanushkodi · Vincent H Wilson · **K. Sudhakar**. Simulation of solar biomass hybrid dryer for drying cashew kernel. *Advances in Applied Science Research* 09/2015; 2015(68):148-154.
- S Dhanushkodi · Vincent H Wilson · **K. Sudhakar**, Design and thermal performance of biomass dryer for cashewnut drying. *Advances in Applied Science Research* 04/2015; 2015(68):101-111
- Dhanushkodi Saravanan, Vincent H. Wilson, **Sudhakar Kumarasamy**, 2014, Design and thermal performance of the solar biomass hybrid dryer for cashew drying. *Facta Universitatis Series : Mechanical Engineering* 12(3): 277-288.
- **K. Sudhakar**, M. Rajesh & M. Premalatha (2012) Carbon Mitigation potential of Jatropha biodiesel in Indian Context, *Energy Procedia* 14:1421-1426
- **K. Sudhakar**, M. Rajesh & M. Premalatha (2012) A Mathematical Model to Assess the Potential of Algal Bio-fuels in India. *Energy Sources, Part A: Recovery, Utilization, and Environmental Effects*, 34(12):1-7
- **K. Sudhakar**, M. Rajesh & M. Premalatha (2012) Large-scale open pond algae biomass yield analysis in India: a case study, *International Journal of Sustainable Energy*, DOI:10.1080/14786451.2012.710617
- **Sudhakar K**, Premalatha M (2012) " Theoretical Assessment of Algal Biomass Potential for Carbon Mitigation and Biofuel Production" *Iranica Journal of Energy and Environment* 3 (3): 232-240, 2012 (ISSN 2079-2115)

- **K. Sudhakar** M. Premalatha “Micro-algal Technology for Sustainable Energy Production: State of the Art, *Journal of Sustainable Energy & Environment* 3 (2012) 59-62 (ISSN: 1906-4918)
- **K. Sudhakar**, R.Ananthakrishnan and Abhishek Goyal ,” Biogas Production from a mixture of WaterHyacinth, Water Chestnut and Cow Dung “*.International Journal of Science, Engineering and Technology Research (IJSETR)* ,2013; 2(1):35-37. (ISSN: 2278 – 7798)
- **K. Sudhakar**, R.Ananthakrishnan and Abhishek Goyal , (2013);” Comparative Analysis on Bioelectricity Production from Water Hyacinth, Cow Dung and Their Mixture Using a Multi-Chambered Biomass Battery,” “*.International Journal of Agriculture Innovations and Research (IJAIR)* , 1(4):102-106. (ISSN: 2319 – 1473)
- **Sudhakar, K.**, Ananthakrishnan, R., Goyal, A. & Darji, H.K. (2013) A Novel Design of Multi-Chambered Biomass Battery. *Int. Journal of Renewable Energy Development*, 2(1), 31-34
- **K. Sudhakar**, M. Premalatha (2015) Characterization of micro algal biomass through FTIR/TGA/CHN analysis: Application to Scenedesmus sp. *Energy Sources, Part A: Recovery, Utilization, and Environmental Effects* 10/2015; 37(18):1-8. DOI:10.1080/15567036.2013.825661
- **K.Sudhakar**, Trishna anand ,Tulika Srivastava, M.Premalatha (2013)..Assessment of carbon mitigation potential of various biofuels in Indian Context. *International Journal of Chemtech Research*.5(5), 2456-2461

❖ *Hydrogen & Fuel cell*

- Shahrukh Shamim · **K. Sudhakar** · Brajesh Choudhary · Jamil Anwer, A review on recent advances in proton exchange membrane fuel cells: Materials, technology and applications. *Advances in Applied Science Research* 10/2015; 6(9):89-100.
- Shruti Yadav, Mukund Kumar Singh, **K Sudhakar** Modelling of Solid Oxide Fuel Cell -A Review *International Journal of Scientific and Engineering Research* 05/2015; 6(4).

- **K. Sudhakar** Jeetendra Prasad “Electricity Generation from river water sediments using single chamber microbial fuel cell “,*Scientia Acta Xaveriana* ,2012:4 ;107-110
- Ruma Arora Soni,**K. Sudhakar**,R.S.Rana_Biophotovoltaics and Biohydrogen through artificial photosynthesis: an overview “,*Int. J. Environment and Sustainable Development, Vol. 15, No. 3, 2016*

❖ *Hybrid System*

- Hardik Pokhrel, Bikash Marasini, Binod G.C, R.Ananthkrishnan, Savita Dixit, **K.Sudhakar** (2014).Feasibility analysis of hybrid solar concentrator and biogas powered prototype steam engine .International Journal of Science, Engineering and Technology research , 3(5) :1291-1295
- Saravanan Dhanushkodi · Vincent H. Wilson · **Kumarasamy Sudhakar**. Life Cycle Cost of Solar Biomass Hybrid Dryer Systems for Cashew Drying of Nuts in India. Environmental and Climate Technologies .doi: 10.1515/rtuect-2015-0003

❖ *Climatic changes & Carbon Sequestration*

- Sudharshan .K **K.Sudhakar** (2015) Solar energy A valuable asset for Carbon sequestration in Indian subcontinent International Journal of current research 7(4) :1491-1500
- **Sudhakar K**, Suresh S, Premalatha M (2011) An Overview of CO₂ mitigation using algae cultivation technology. International Journal of Chemical Research, 0975–9131,: 3(3) :110-117
- **K.Sudhakar**, M.Premalatha (2012), Techno economic Analysis of Micro algal Carbon Sequestration and Oil Production. International Journal of ChemTech Research, 4(4):1746-1753
- Deepti Bansod , Akarsh Mittal , Priyanka Kamdar , **K.Sudhakar** (2013) Climate change- impacts and mitigation strategy in Indian sectors. Applied Engineering Research, 8(8), 44-47.
- **K.Sudhakar**, Deepti bansod, M.Premalatha (2013) Potential to replace petro diesel & reduce greenhouse gas emissions in India by integration of power

plants with algae cultivation International Journal of Environmental Science: Development and Monitoring, 4(2) :6-8

- **K. Sudhakar**, T. Srivastava, G.Satpathy & M.Premalatha (2013) Modelling and estimation of Photo synthetically active radiation in Indian Latitudes. International Journal of Energy and Environmental Engineering ,4:21
- Sudharshan K, **K. Sudhakar**, Modeling of Solar Irradiance, Energy requirement for Microalgae CO₂ Sequestration Using MATLAB-Simulink. International Journal of ChemTech Research. 2015 .8(11) : 237-249.

❖ *Other Energy technology/Energy Efficiency*

- Sibum Sam John, Aditi Bhawsar, Sameer K. Maurya, Shubhangshu Sardar, **K. Sudhakar**. Performance Analysis of Automated Greenhouse for Bhopal Region .International Journal for Scientific Research & Development. Vol. 3 Issue 05, 2015
- Noopur Jain, **K. Sudhakar** Yash Jain , Tarun Jain (2015) Experimental study on photo catalytic disinfection of moderate turbid water using granular activated carbon. International Journal of Environment and Natural Sciences.5:23-29
- Alok dixit, Gaurav pathak, **K. Sudhakar** (2015). Comparative study of life cycle cost of modern light sources used in domestic lighting International Journal of Science, Environment and Technology 4(2) : 364-370
- Alok Dixit and **K. Sudhakar** (2014) .Lighting Parameters Assessment and Energy Efficient Illumination Design for a Classroom. Adv. Sci. Lett. 20, 1658–1661 . <http://dx.doi.org/10.1166/asl.2014.5506>
- **K. Sudhakar**, Priyank Saxena, Sudhanshu Soni Jeetendra Prasad “Obstacle Detection Gadget for Visually Impaired Peoples“, International Journal of Emerging Technology and Advanced Engineering, 2(12) :409-413
- S Dhanushkodi · Vincent H Wilson · **K Sudhakar** “Energy Analysis of Cashew nut processing Agro Industries: A case study . Bulgarian Journal of Agricultural Science, Volume 22 Number 4 August 2016.

International Conferences

- ✚ **K.Sudhakar** and J.Krishnakumar, Active Teaching, Proceedings of International Conference on “Active Teaching & Learning in Higher Education”. Organised by ICFAI Trichy , 8th December, 2007
- ✚ **K.Sudhakar** and J.Krishnakumar, Innovative Teaching & Learning Strategy, Proceedings of the Third International ELTAI on “Learning to teach: A life long Journey”, Sathyabama University,8-10 February 2008.
- ✚ M.Premalatha, **K.Sudhakar** and K.K.Vasumathi, Greenhouse gas Mitigation with a Sustainable Micro algal Technology, Proceedings of International Conference on Green management in a warming World: Challenges & opportunities, SCMS Cochin, Kerala, P.66, March 20-21st 2009.
- ✚ K.K.Vasumathi, **K.Sudhakar**, M.Premalatha, Photo bioreactor for Algal growth through CO₂ Mitigation”, Proceedings of International Conference on Algal Biomass Resources and Utilisation,ICABRU-2009, Krishnamurthy Institute of Algology,Chennai, July 27-30th 2009.
- ✚ Gautham Srinivas, Harish Kumar Darji, **K.Sudhakar**, Design of Solar Thermal Biomass Hybrid Power Plant, Proceedings of International Conference on Environmental Challenges: A Global Concern, ICEC-2010, Kanya Maha Vidyalya, Jalandhar, October 15-16, 2010.
- ✚ **K.Sudhakar**, CO₂ Fixation using Photosynthesis, Proceedings of International Conference on Use of Renewable Energy Technologies for Sustainable living., Mount Lavina,Srilanka ,November 26-28, 2010.
- ✚ **K.Sudhakar**,M. Rajesh & M. Premalatha (2011) “Carbon Mitigation potential of Jatropha biodiesel in Indian Context “International Conference on advances in Energy Engineering,ICAEE 2011,27-28th December,2011,Bangkok,Thailand.
- ✚ **K.Sudhakar**, M.Premalatha (2012) “Energy & Exergy analysis of large Scale Algal Biomass Cultivation “2nd Korea-Indonesia Workshop and International symposium on Bioenergy from Biomass,KIWIS 2012,13-15th June,2012,Indonesia.
- ✚ **Anju Katiyar**, **K Sudhakar** (2013) .” **A review on the Tray Dryer System for Agricultural Products** “. International conference on Renewable and Sustainable energy, Karunya University,Coimbatore; Dec ,2013,India
- ✚ Pratish Rawat, Saurabh Mehrotra, Prakash Sahu, **K.Sudhakar** .”Performance Evaluation of Solar Photovoltaic/Thermal Hybrid Water Collector”International Conference on "Energy Technology, Power Engineering & Environmental

Sustainability" (ISBN: 978-93-83083-84-8), Jawaharlal Nehru University, New Delhi; 06/2014

- ✦ Mary Debbarma, Pratish Rawat, Sneha Lata, **K.Sudhakar** ." **Energy and exergy analysis of solar photovoltaic/thermal hybrid air collector system**.International Conference on "Energy Technology, Power Engineering & Environment Sustainability", (ISBN: 978-93-83083-84-8),JNU, New Delhi; 06/2014
- ✦ Noopur Jain, **K. Sudhakar** "Moringa oleifera seeds as a Biocoagulant for treatment of turbid water" International Conference on Green Technology for Environmental Pollution Prevention and control (ICGTEPC 2014) 27th-29th September 2014,NIT-Trichy,India.
- ✦ Sibum Sam John,Pravesh Malviya,Nitish Sharma,Vijay K Manjhi, **K.Sudhakar** .Nanotechnology for Solar and Wind Energy Applications-Recent Trends and Future Development. IEEE International conference on Green Computing and Internet of things,(ICGCIoT 2015) Greater Noida,Galgotia College of Engineering .8-10th October

National Conferences

- ❖ M.Premalatha, **K.Sudhakar** and K.K.Vasumathi "Growing Fuel from Algae " Proceedings of National conference on Anaerobic Digestion And Renewable Energy Through Microbes (ADREM 2009),BITS-PILANI,Goa Campus, P.94, January 13-15, 2009.
- ❖ M.Premalatha, **K.Sudhakar**, K.K.Vasumathi "Green house Gas Mitigation & Renewable Energy Production using Micro algal Technology", Proceedings of the National Conference on Energy Security for Rural Development (ESRD 2009),Rural energy Centre,Gandhigram Rural University,Dindigul,P.156,March 26th ,2009
- ❖ **K.Sudhakar**, M.Premalatha,K.K.Vasumathi "Development of Micro Algae Technology for Carbon dioxide Sequestration from Power Plant Flue Gas " , Proceedings of the National Conference on 'Recent Developments in Cultured Algae "Andhra University, Visakhapatnam, P.64, April 4-5,2009
- ❖ M.Premalatha, **K.Sudhakar**, K.K.Vasumathi "Preliminary study into the feasibility of CO₂ Sequestration using Microalgae: Challenges & Future Prospects," Proceedings of

the National Workshop on Emerging Horizons in Biofuel Research & Applications, NWEHBRA 2009, Raja Balwant Singh College, Agra.

- ❖ M.Premalatha, **K.Sudhakar**, Siva Reddy “ An Experimental Study of Solar Chimney,” Proceedings of the National Workshop on Triggering Transformation 2009,Vindhya Institute of Technology & Science,Jabalpur,March 27th-28th ,2009.
- ❖ **K.Sudhakar**,”Assessment of potential of algae as bio energy source for carbon mitigation and bio-fuel production”, 27Th M.P Young Scientist Congress, MPCOST, Bhopal, February 28-29, 2012
- ❖ **Sudhakar.K**,Shivani Bagga,Noopur Jain ,”Influence of Sunlight Wavelength on the performance of Solar Photovoltaic module”,AICTE Sponsored First National Conference on Computational Intelligence for Modeling and Optimization,CIMO-2012,11-12,April,2012,Cuddalore,TN.
- ❖ Ravi Prakash ,Shiv Shankar Kumar,**Sudhakar.K**,”Experimental and Analytical study on Effect of temperature on the performance of solar photovoltaic systems ”,AICTE Sponsored First National Conference on Computational Intelligence for Modeling and Optimization,CIMO-2012,11-12,April,2012,Cuddalore,TN
- ❖ **K.Sudhakar** ,Shakti Senago, Suresh.S,”Photo Catalytic Treatment of Industrial Waste Water using Tio₂ Nano Catalyst ”,Energy Day ,National Institute of technology ,April,2012,Tiruchirapalli,TN
- ❖ Anju Katiyar, **K.Sudhakar** “**Study on performance evaluation of biomass drier for Green chilli (Capsicum annum L.)**”. National Conference on Power electronics in sustainable energy development, Amrita University, Coimbatore; 05/2014
- ❖ Somnath Bharech · Shahrukh Shahmin · **K Sudhakar**.Advancements in fuel cell technology and its applications.31st National Convention of Electrical Engineers & National Seminar on Renewable Energy and Green Technology for Sustainable Development, Bhopal, India; 10/2015
- ❖ Tejas Kothari · **K Sudhakar**.Comparison of Electric and Diesel Locomotives: A Case Study of Indian Railway.31st National Convention of Electrical Engineers & National Seminar on Renewable Energy and Green Technology for Sustainable Development, Bhopal, India; 10/2015
- ❖ Sreenath Sukumaran · **K Sudhakar** .Techno – Economic Aspects Of Solar PV Technologies In Indian Context.31st National Convention of Electrical Engineers & National Seminar on Renewable Energy and Green Technology for Sustainable Development, Bhopal, India; 10/2015

- ❖ Sumit Kumar Mahato · Jay Prakash Bijarniya · **K Sudhakar**.A Pathway Towards Fully Renewable Indian Power Sector.31st National Convention of Electrical Engineers & National Seminar on Renewable Energy and Green Technology for Sustainable Development, Bhopal, India; 10/2015
- ❖ Madhuri Gupta · Kaveri Markam · Archana Soni · **K Sudhakar**.Energy Storage Technologies: A Review of Concepts and Applications.31st National Convention of Electrical Engineers & National Seminar on Renewable Energy and Green Technology for Sustainable Development, Bhopal, India; 10/2015
- ❖ K N Shukla · Saroj Rangnekar · **K Sudhakar**, Mathematical Modeling and Experimental Validation of Characteristics Of Amorphous (A-Si) And Polycrystalline (P-Si) Solar Pv Modules. 31st National Convention of Electrical Engineers & National Seminar on Renewable Energy and Green Technology for Sustainable Development, Bhopal, India; 10/2015

BOOKS

- ✓ **Energy, Environment, Ecology and Society**, 2010 Edition, Authored by Dr. Anil Kumar and K. Sudhakar, B S Publication (ISBN : 978-81-7800-257-6).
- ✓ **Basic Mechanical Engineering** ,2010 Edition, Authored by Dr. Anil Kumar, and K. Sudhakar, B S Publication (ISBN No:9789381075586).
- ✓ **International Conference on Global Scenario in Environment and Energy (ICGSEE 2013)** ,2013 Edition,Editors K.Sudhakar & S.Suresh ,BS Publication (ISBN No: ISBN:978-81-7800-286-6)
- ✓ **Matlab Modeling and Simulation of Solar PV Panel** K.Sudhakar,Tulika Srivastava,Kavali Janardhan Lambert Academic Publisher, Germany ,2013 (ISBN:978-3-659-41080-2)
- ✓ **Sustainable Energy Laboratory manual**, K.Sudhakar, Lambert Academic Publisher, Germany, 2013(ISBN: 978-3-659-39966-4)
- ✓ **Studies on Dust effect on the performance of photovoltaic panel** K.Sudhakar,Dayal Singh Rajput,Lambert Academic Publisher, Germany ,2013 (ISBN:978-3-659-43408-2)
- ✓ **Plant Microbial Fuel cell for green electricity generation** , K.Sudhakar,Jeetendra Prasad ,Lambert Academic Publisher, Germany ,2013 (ISBN:978-3-659-45035-8)

- ✓ **Environmental Science & Engineering**”, Authored by **K.Sudhakar** ,S.Elancheliyan, C.Prabhuramakrishnan, “ New Publications, August 2007, Cuddalore
- ✓ **“Principles of Management”**, Authored by **K.Sudhakar**, R.Ashok Gandhi, V.Jayaseelan, New Publications, Jan 2007, Cuddalore.
- ✓ **“Professional Ethics & Human Values”** Authored by K.Sudhakar, R.Ashok Gandhi, V.Jayaseelan, New Publications, Jan 2006, Cuddalore
- ✓ **Wind & Solar Power Engineering”** ,Authored by **K.Sudhakar** and M.Sivakumar, “New Publications,July 2005, Cuddalore
- ✓ **“Kinematics of Machinery”** ,Authored by **K.Sudhakar** and M.Sivakumar, “New Publications,Aug 2007, Cuddalore
- ✓ **“Advanced Internal Combustion Engines”** ,Authored by **K.Sudhakar** and Anil Kumar, “B.S Publications, 2014((ISBN:978-93-83635-06-1)
- ✓ **Lighting parameter assessment and efficient energy**, Alok Dixit and K.Sudhakar, Lambert Academic Publisher, Germany, 09/ 2014 (ISBN: 978-3-659-51347-3)
- ✓ **Solar Photovoltaic Thermal (PV/T) Hybrid Water Collector**. Pratish Rawat, K. Sudhakar 11/2014; Lambert Academic Publishing. ISBN: 978-3-659-62997-6
- ✓ **Renewable Energy and Green Technology for sustainable development"**.Editors K. Sudhakar · K.K.S.Gautam October 2015 Ist Edition 10/2015; BS Publications.,ISBN: 978-93-83635-95-5.
- ✓ **Fundamentals of Dye Sensitized Solar Cells "**. Vipinraj Sugathan,Elsa John, **Sudhakar Kumarasamy** , November 2015 Ist Edition 11/2015; Lambert Academic Publishing ,ISBN: 978-36-59794421.
- ✓ **Hydrogen Energy and Advanced Materials"**. Editors Dr.Ameenur Rehman Siddiqui & Dr. K. Sudhakar ·November 2015 Ist Edition 11/2015; BS Publications.,ISBN: 978-93-5230-085-3.

BOOK CHAPTER

- M. Premalatha, K.K. Vasumathi, **K. Sudhakar**, 2010 **C0₂ Sequestration and Biofuel Production Using Micro Algal Technology**, Syed Zahoor Qasim & Malti Goel, Delhi: Daya Publishing House (ISBN: 978-81-7035-660-8)
- **K.Sudhakar**, Anju Katiyar, Guddy Satpathy, Jyoti Mishra , **A review on Standalone Renewable Hybrid Power Generation system** International Conference on Global Scenario in Environment and Energy,BS Publications,Hyderabad,2013(ISBN:978-81-7800-286-6)

- G.Gautham Srinivas, Harish Kumar Darji, Aditya R. Gautam, Nikki Kushwaha, **K.Sudhakar** **Design and development of one stage Solar Vapour Absorption Refrigeration System**, International Conference on Global Scenario in Environment and Energy , BS Publications, Hyderabad, 2013 (ISBN: 978-81-7800-286-6)
- Alok Dixit, **K.Sudhakar** **2014 Performance and Energy Consumption Analysis of Artificial Lighting in a Classroom Using DIALux Simulation** , pages 43-49; , ISBN: 978-93-83083-84-8

References

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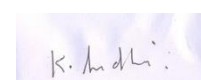
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Declaration

I hereby, do solemnly affirm that the details furnished above are true up to the best of my knowledge.

Place: Bhopal

Date : 5-1-2017



Dr. K.Sudhakar.