CURRICULUM VITAT-2019

Name : Dr KRISHNA DEO PRASAD SINGh

Fathers Name : Late KAPOORI PRASAD SINGH

Present Position : Associate Prof.

Mechanical Engg. Deptt.

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Date of Birth : 31ST December 1963

Present Address: Associate Prof., Mechanical Engg. Deptt.,

NIT Jamshedpur, Jharkhand-831014 (INDIA)

EDUCATIONAL QUALIFICATION:

S.No.	Degree	Board/University	Year of Passing	Class
1.	Ph.D.(Solar Energy)	Ranchi, University	2010	1st
2.	M.Tech.(Heat Power)	Bhagalpur University	2001	1st
3.	B.Sc.Engg. (Mechanical)	Bhagalpur University	1987	1st
4.	Intermediate in Science.	Bhagalpur University	1981	1st
5.	Metric	BSEB Patna	1979	1st

Ph.D. Thesis Topic : " Investigation on Double Flow Solar Air Heater With Expanded Metal Mesh Roughened Absorber Plate."

M.Tech. Thesis Topic : "Performance of Solar Grain Dryer"

Research Interests: Heat Transfer and Solar Energy

Ph.D. Supervised :

1. Ashwini Kumar-- " OPTIMAL THERMO HYDRAULIC PERFORMANCE IN THREE SIDES ARTIFICIALLY ROUGHENED SOLAR AIR HEATER"-Awarded
2. Saket Kumar –"Likely to be submitted-2017. "INVESTIGATION ON THE PERFORMANCE CHARACTERISTICS OF DOUBLE FLOW PACKED BED SOLAR AIR HEATER "Awarded
3. Atwari Rawan-- "COMPARATIVE ANALYSIS OF PARABOLIC TROUGH COLLECTOR WITH TWISTED TAPE INSERTS" Submitted
4. Rahul Agrawal ----Going on
5. Md. Ahasan ----- Going on

INTERNATIONAL JOURNAL PAPERS :

1. Singh, K.D.P. and Sharma, S.P., " Analytical Investigation on the Thermal Performance of Artificially Roughened Double Flow Solar Air Heater " Int.Jr..ARISER, Vol.5 No.1. (2009) 1-7.

2. Singh, K.D.P. and Sharma, S.P., " Enhancement in Thermal Performance of Cylindrical Parabolic Concentrating Solar Air Heater " Int.Jr..ARISER, Vol.5 No.1. (2009) 41-48

3. Singh, K.D.P. and Pathak AK.P. " Reduction of Losses in Oxygen Plant through Total Productive Maintenance" . Int. Jr..ARISER, Vol.5 No.2. (2009) 119-130.

4. Singh, K.D.P,Kumar, Aswini & Prasad, B.N " Optimization of Thermo-hydraulic Performance in three sides Artificially Roughened Solar Air Heater" Int.Jr..ELSEVIER (Solar Energy) 111(2015)313-319.

5. Kumar ,Nitesh,Singh, K.D.P. and Sharma, S.P.," A Review on Roughened Solar Air Heater for Heat Transfer and Thermal Efficiency" ' Int. Journal of Experimental &

AppliedMechanicISSN: 2230-9845(online), ISSN: 2321-516X(print) Volume 6, Issue 1 ,(2015) 49-56.

7. **Singh, K.D.P,Kumar, Aswini & Prasad, B.N ‘’Performance Charecteristics of Three Sides Glass Covered Smooth Solar Air Heaters’’ Int.Jr. Transylvanian Review: Vol XXIV, No. 11, 2016,** 3247-54

8. **Kumar, Aswini & Prasad, B.N &Singh, K.D.P, ‘Thermal and Thermo-Hydraulic Performance of Three sidesArtificially Roughened Solar Air Heater, Int.Research Jr. of Advance Engg.and Science, vol.2,Issue 2, pp-215-231,2017.**

9. **Kumar, Aswini & Prasad, B.N &Singh, K.D.P, ‘Heat Transfer and Fluid Flow Characteristics of Three sidesArtificially Roughened Solar Air Heater, Int.Research Jr. of Advance Engg.and Science, vol.2,Issue 3, pp-230-244,2017**

10. **Saket Kumar, R.K Prasad, K.D.P Singh. Experimental Investigation on Thermal Performance of Double Flow Packed Bed Solar Air Heater Kumar et al Transylvanian Review: Vol XXIV, No. 11, 2016 ,3172**

11. **Saket Kumar, R.K Prasad, K.D.P Singh” THERMAL PERFORMANCE AND ECONOMICS ANALYSIS OF DOUBLE FLOW PACKED BED SOLAR AIR HEATER” International Journal of Mechanical Engineering and Technology (IJMET)Volume 8, Issue 2, February 2017, pp. 176–182**

12. **Saket Kumar, R.K Prasad& K.D.P Singh.” A Review on Packed Bed Solar air Heating System.” International Journal of Latest Research in Engineering and Technology (IJLRET) ISSN: 2454-5031.Volume 02.**

13. **Rawani.A., Sharma.S.P. and Singh .K.D.P, Enhancement in Performance of Parabolic Trough Collector with Serrated twisted-tape Inserts . Int.jr.of Thermodynamicc (IJoT),vol.20,(n0.2),pp.111-119,2017**

14. **Rawani.A., Sharma.S.P. and Singh .K.D.P Enhancement in Thermal Performance of Parabolic Trough Collector with Alternate clockwise and counter-clockwise Twisted-tape Inserts, Transylvanian Review: Vol XXV, No. 13, 2017 ,3658-3670**

15. **Rawani.A., Sharma.S.P. and Singh .K.D.P , “Comparative analysis on performance of twisted tape inserts in the absorber tube of parabolic trough collector,” WULFENIA Journal Klagefurt AUSTRIA WULFENIA Journal Klagefurt AUSTRIA , vol-24,PP 96-118, 2017**

16. **Kumar, Aswini & Prasad, B.N &Singh, K.D.P, “Development of Co-relations of heat Transfer and Fluid flow Characteristics for Three sies Artificially Roughened Solar AIR Heaters, Int. Jr. JP journal of Heat and Mass Transfer, vol. 13,no.3 ,p-245-276, july 2017.**

17. **Kumar, Aswini & Prasad, B.N &Singh, K.D.P, "Development of Co-relations of heat Transfer and Fluid flow Characteristics for Three sides Artificially Roughened Solar AIR Heaters, Int. Jr. JP journal of Heat and Mass Transfer, vol. 13,no.3 ,p-245-276, 2017.**
18. **Saket Kumar, R.K Prasad& K.D.P Singh." Effect of Global Solar Radiation on the Heat Transfer and Pressure drop Characteristics of Double Flow Packed Bed Solar Air Heater , Int. Jr. MPERD, 2017**
19. **Kumar, Aswini & Prasad, B.N & Singh, K.D.P, "Heat transfer and fluid flow char acteristics of three sides artificially roughened and glass covered solar air heaters" Int. Research journal of advanced engineering and science" vol. 2, Issue 3, pp. 230-244,2017.**

20. **Kumar, Aswini & Prasad, B.N & Singh, K.D.P,"Analysis of collector performance parameters in three sides artificially roughened and glass covered solar air heaters" Int. Research journal of advanced engineering and science" vol. 2, Issue 3, pp. 224-229,2017.**

21. **Kumar, Aswini & Prasad, B.N & Singh, K.D.P " Thermal and thermo-hydraulic performance of three sides artificially roughened solar air heaters", Int. Research journal of advanced engineering and science" vol. 2, Issue 2, pp. 215-231, 2017**

22. **Rawani.A., Sharma.S.P., Singh .K.D.P & Kumari, N "Analytical modeling of parabolic linear collectors for solar power plant" Journal of mechanical science and Technology ,Springer,32(10) (2018)4993-5004**

National Conference Papers:

1. **Singh, K.D.P. and Sharma, S.P., Investigation on thermal performance of artificially roughened solar air heater, National Conference on Advances in Mechanical Engg., March, 18-19 (2006), Kota, Rajasthan.**
2. **Singh, K.D.P. and Sharma, S.P., The influence of collector aspects ration on the performance of double flow roughened air heaters. National Conference on Energy and Environment, Jaipur (Rajasthan), Nov. 25-26 (2006).**
3. **Singh, K.D.P. and Sharma, S.P., The improvement of thermal performance of artificially roughened absorber plate in double flow solar air heater. National Conference on Trends & advances in Mechanical Engg., Feridabad (Haryana), Dec. 9-10 (2006).**
4. **Singh, K.D.P. and Sharma, S.P., Thermal performance of double flow solar air heater with expanded metal mesh roughened absorber plate, National Seminar on Achieving Technological Excellence in the New Millennium opportunities and Challenges, Mech. Engg., B.I.T. Meshra, Ranchi, Jan. 23-24 (2007).**

5. **Singh, K.D.P. and Sharma, S.P., Optimization of screen geometries for artificially roughened double flow solar air heater, National Seminar on Recent Advances in Energy Systems & Combustion Process, Deptt. Of Space Eng. & Rocketry, B.I.T. Mesra, Feb. (2007).**

6. **Singh, K.D.P. and Sharma, S.P., Thermo-hydraulic performance of double flow solar air heater with expanded metal mesh roughened absorber plate, National Conference on State of the Art Technologies in Mechanical Engg., STEM 2007, G.B. Pant University of Agriculture & Technology, Pantnagar-263145, August, 2-4 (2007).**
7. **Singh, K.D.P. and Sharma, S.P.,"Thermal Performance Analysis of V-Shaped Roughened Solar Air Heater" Golden Jubliee National Conference on Modelling and Simulation in Heat Transfer and Fluid Flow, July-2010, Paper No. MSHTFF-32, NIT Jamshedpur.**
8. **Singh k.D.P., Sharma,R.V.& Gorai, Somenath " Numerical Simulation of Natural Convection in an Inclined Cylindrical Porous Cavity with InternalHeat Generation " 22nd National and 11th International ISHMT-ASME Heat and Mass Transfer Conference,Dec.28-31, 2013, IIT Kharagpur,India**
9. **Singh, K.D.P,Kumar, Aswini & Prasad, B.N ,Performance of Three SidesArtifically Roughened Solar Air Heater, PAPER ID: GCRE 2016- 314415.**
10. **Singh, K.D.P,Kumar, Aswini & Prasad, B.N Paper No. 81 ,ENHANCEMENT OF COLLECTOR PERFORMANCE PARAMETERS IN THREE SIDES ARTIFICIALLY ROUGHENED SOLAR AIR HEATER ,2nd International Conference on advances in Steel, Power and Construction Technology (ICASPCT-2016) ,17-19 March, 2016, Raigarh, India.**
11. **Saket Kumar, R.K Prasad, K.D.P Singh. Investigation on Thermal Performance of Double Flow Packed Bed Solar Air Heater, International Conference on Sustainable Energy and Environmental Challenges (SEEC-2017),26-28 Feb.**
12. **2017,Mohali (INDIA).**
13. **Saket Kumar, R.K Prasad, K.D.P Singh" Thermal PERFORMANCE AND ECONOMICS ANALYSIS OF DOUBLE FLOW PACKED BED SOLAR AIR HEATER" Conference on Mechanical Engineering & Technology,IIT Varanasi, 8th April 2017. (INDIA).**
14. **Rawani .A., Sharma. S.P. and Singh .K.D.P, Thermal Performanc of enhancement of parabolic trough collector with oblique delta-winglet twisted-tape inserts, Conference on Mechanical Engineering & Technology,IIT Varanasi, 8th April 2017. (INDIA).**
15. **Rawani .A., Sharma. S.P. and Singh .K.D.P, " Exergy analysis of parabolic trough collector using twisted pipe inserts" NCREEC—04, NIT JSR,Feb.-2018.**
16. **Hembrom, Nilam & Singh .K.D.P, " Design & Simulationof wireless power transmission using class E-amplifier from solar photovoltaic" NCREEC—26, NIT JSR,Feb.-2018.**

17. **Choudhary,S.K & Singh .K.D.P, Investigation on thermal performance of analysis of solar air heater having absorber plate with V-down discrete rib roughness.", NCREEC32, NIT JSR,Feb.-2018.**
18.

Under Processes

1. **Singh K.D.P. "A Review on Roughened Solar Air Heater for Heat Transfer and Thermal Efficiency"**
2. **Singh K.D.P. "Mathematical Model of Solar Air Heaters with and without Thermal Storage"**
3. **Singh K.D.P. "Experimental Investigation on the Performance of Natural Convection Solar Cabinet Dryer"**

19.

Experiences:

S.No.	Designation	Year of Joining	Duration	Organisations	Nature of Job.
1.	G.O.I.T. Training	1990	1990-1991	Rly. Workshop JMP (Munger)	Supervisor
2.	Part Time Lecturer	1993	1993-1998	BIT Sindri, Dhanbad	Teaching
3.	Assistant Prof.	1998	1998-2003	RIT Jamshedpur	Teaching
4.	Senior Scale	2003	2003-2008	NIT Jamshedpur	Teaching
5.	Associate Prof.	2008	2008----Till Date	NIT Jamshedpur	Teaching

Membership in Professional Bodies

Name of the Professional Body	Membership status (Life/ Annual)
IEE	LM-145408-5
ISHMT	ISHMT NO-967
ISTE	LM-102458

Any Other Information's :

1. **Faculty Advisor—B.Tech.Hons.**
2. **Faculty Advisor—M.Tech.(Energy Systems Engineering)**
3. **Lab. In-charge -- Heat and Mass Transfer, Thermodynamics Model Lab. & Applied Thermodynamics Lab.**
4. **Faculty Advisor – Revanta Team (Super Mileage)**
5. **Assist Warden,& Warden – Hostel B, E, H & Hostel 'G'**
6. **Prof. In-charge--- Wi-Fi (Mechanical Engg.)**
7. **Supervised : (i) 40 groups of Students for B.Tech.Projects**
   (ii) 24 Students of M.Tech. Projects

SUBJECTS TAUGHT:

UG---- Thermodynamics, Basic Mechanical Engineering, Thermal Engineering, Engineering Drawing, Machine Drawing, Kinematics of Machinery, Theory of Machine, Machine System Designs, Automobile Engineering,

PG---- Advanced Thermodynamics, Non-Conventional Energy Systems, Renewable Energy Systems, Solar Thermal Systems