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Name: Atul Sharma

Correspondence Address:

SOH-25, ITI Colony, Door Bhash Nagar,

Rae Bareli, U.P.

Phone No.: +91 -9457176933 (m),

E-mail: atul_sharma2@yahoo.com



Research Experience: Fourteen Years

- Presently, I am working as **Assistant Professor (3rd April 2010 – till now)** at Department of Mechanical Engineering, Rajiv Gandhi Institute of Petroleum Technology, Rae Bareli, U.P., India.
- Worked as a **Senior Research Associate (1st July 2009 – 2nd April, 2010)** at Department of Mechanical Engineering, Rajiv Gandhi Institute of Petroleum Technology, Rae Bareli, U.P., India.
- Worked as a **Visiting Professor (1st August 2005 -- 30th June 2009)** at Department of Mechanical Engineering, Kun Shan University, Tainan, Taiwan, R.O.C.
- Worked as a **Research Assistant (1st April 2004 – 31st May 2005)** at Solar Thermal Research Center, New & Renewable Energy Research Department at Korea Institute of Energy Research, Daejeon, South Korea.
- Worked as a **Scientific Officer (23rd June 2003 – 31st March 2004)** at Regional Testing Centre Cum Technical Backup Unit for Solar Thermal Devices, at School of Energy & Environmental Studies, Devi Ahilya University, Indore funded by Ministry of Non-Conventional Energy Sources, New Delhi, Govt. of India.
- Worked as a **Senior Research Fellow & Junior Research Fellow** in the National Renewable Energy Fellowship Programme (1st July 2001 – 22nd June 2003) & (1st July 2000 - 30th June 2001) respectively funded by Ministry of Non-Conventional Energy Sources, New Delhi, Govt. of India.
- Worked as a **Technical Assistant** in the project entitled ‘Peak Reduction of Air-Conditioning System Through Thermal Storage’ funded by Department of Atomic Energy (DAE), Mumbai, Govt. of India, India from 1st March 1999 – 30th June 2000.

Teaching Experience: Six Years

Courses Taught

Course Title	Level (UG/PG)	Number of Times
#Renewable Energy Resources	MS*	4
#Solar Energy: Fundamental Design, Modeling and Applications	MS*	3
#Alternative and Non-Conventional Energy Sources	MBA**	1
Heat & Mass Transfer	UG**	2
Mass and Energy Balance	UG	1

*For the Master of Science International students at Department of Mechanical Engineering, Kun Shan University, Tainan, Taiwan, R.O.C.

Courses developed by me. **Teaching in this semester at RGIPT.

Research Activities

Project Awarded

Project proposal entitled “**Utilization and Development of the Phase Change Materials for Building Applications** (DST Reference No. SR/S3/MERC/014/2010)” under the **SERC Scheme** has been awarded from **Department of Science & Technology (DST), New Delhi**.

Principal Investigator: Dr. Atul Sharma

Co- Principal Investigator: Dr. A. Shukla

Total Cost: Rs. 37,00,000/-

Project Submitted

Project proposal entitled “**Thermal Regulation of Photovoltaics (PV) Cells using Phase Change Materials (PCMs)**” under the **Under the scheme for Research, Design & Development (R&D) in Renewable Energy** has been submitted to **Ministry of New and Renewable Energy, New Delhi**.

Principal Investigator: Dr. Atul Sharma

Co- Principal Investigator: Dr. A. Shukla

Total Cost: Rs. 3755060/-

Project proposal entitled “**Promoting Energy Self Sufficiency for Socio-Economic Growth : Awareness & Education of Use of Solar Power in the District of Rae Bareli**” under the **Under the scheme for Research, Design & Development (R&D) in Renewable Energy** has been submitted to **Ministry of New and Renewable Energy, New Delhi**.

Principal Investigator: Dr. J. Srivastava

Co- Principal Investigator: Dr. Atul Sharma

Total Cost: Rs. 499175/-

Joint research project proposal entitled “**Development of the Phase Change Materials (PCMs) for Thermal Energy Storage (Heating/Cooling) Applications**” under the **Indo-Taiwan S&T cooperation programme scheme** between ‘**Rajiv Gandhi Institute of Petroleum Technology (RGIPT) Raebareli**’ & ‘**Department of Mechanical Engineering, Kun Shan University, Tainan, Taiwan, R.O.C.** has been submitted to **Global Innovation and Technology Alliance, C/o Confederation of Indian Industry, Technology & IPR Division, New Delhi.**

Principal Investigator: Dr. Atul Sharma

Co- Principal Investigator: Dr. A. Shukla

Total Cost: Rs. 2750400/-

Publication: 112 (List Enclosed)

a. Patents (valid only in R.O.C. Taiwan)	Forty Six
b. SCI/SCI-Extended Journals	Sixteen
c. Other Academic Journals	Five
d. Under Communication	Three
e. Key Note Speech Presented in the International Conferences	Six
f. Publications/Presentations in Proceedings of Conferences	Thirty Five
g. Book Publications	One

Students Guided

- **Master of Science (MS)** students guided for the Dissertation of MS project thesis entitled, “**Design, Development & Performance Evaluation of Solar Dryers**” and “**A Novel Design of Solar Dryer with Solar Tracking System**” at Department of Mechanical Engineering, Kun Shan University, Tainan, Taiwan, R.O.C. **June -2007** and **June-2008** respectively.
- **B. Tech.** student was guided for the summer training project entitled, “**Review of Clean Energy Industry in India**” at Rajiv Gandhi Institute of Petroleum Technology, Rae Bareli, U.P., India **July -2010.**
- **B. Tech.** student from NIT, Rourkela was guided for the summer training project entitled, “**Concentrated Solar Power Technology**” at Rajiv Gandhi Institute of Petroleum Technology, Rae Bareli, U.P., India **July -2010.**
- **Five projects** (Given Below) were also done by the various groups of the M.B.A. students (**December-2010**).
 - Technical & Financial Feasibility of Implementing Solar Devices in RGIPT MBA Hostel & Mess Area.
 - Biomass Energy: A Sustainable Option for Power Generation in Rural India
 - Phase Change Materials and Its Application in Telecom Shelters
 - Sustainability of Biodiesel From Algae As a Fuel for mass Transportation
 - Grid Interactive Roof Top Solar photovoltaic Power Plant at RGIPT, Rae Bareli

- **B. Tech.** students were guided for the summer training project entitled, “**Recent Developments in Phase Change Materials for Solar Thermal Energy Storage Applications**” at Rajiv Gandhi Institute of Petroleum Technology, Rae Bareli, U.P., India **June -2011**.

Conference Organized

- **Co-Secretary** of the International Conference on “**Clean Energy Technologies And Energy Efficiency For Sustainable Development**” from the 26-29, December, 2010 at Dehradun, Utrakhand, India organized by “Utrakhand Technical University, Dehradun” & “Harcourt Butler Technological Institute, Kanpur” & “Shivalik College of Engineering, Dehradun”.
- The given below **International Conferences** organized by the **Department of Mechanical Engineering, Kun Shan University, Tainan, Taiwan** and my role was a **Secretary** of those conference.
 - 3e-Green Building International Conference, 14th -16th October, 2008, Organized by Kun Shan University, Tainan, Taiwan, R.O.C.
 - 3e-Green Building International Conference, 15th -18th October, 2007, Organized by Kun Shan University, Tainan, Taiwan, R.O.C.
 - Clean Energy International Symposium -13th October, 2006, Organized by Kun Shan University, Tainan, Taiwan, R.O.C.

Present Work Accomplishment: Related to Latent Heat Thermal Energy Storage

- **Thermo-Physical Properties:** An in-expensing apparatus akin to DTA has been developed to measure the latent heat of fusion of phase change materials. Based on Newton’s law of cooling simple and inexpensive experiments have been conducted to measure the latent heat of phase change materials. The developed theory has also been validated by the experiments performed in the laboratory. Accelerated Thermal Cycle Tests of commercial grade latent heat storage materials were conducted to study the change in thermal behavior.
- **Transparent Insulation:** Transmittivity of selected phase change materials were measured and their applications for transparent insulation are being identified.
- **Green House with Storage:** Initial studies on green house with latent heat storage materials were been conducted for maintaining the constant temperature of the green houses.
- **Natural & Forced Flow Solar Dryers:** Studies on the natural & forced based solar dryers were been conducted for grapes & banana solar drying.
- **Solar Cooker with Storage:** Studies of solar cooker with storage were conducted and the experimental results demonstrate the feasibility of using a phase change materials as storage medium in solar cookers. During winter, two batches a day of cooking were made (1 morning and 1 evening).

- **Testing of Flat Plate Collector & Evacuated Tube Collector:** Overall thermal performance, overall heat loss coefficient, etc. were evaluated for the two types of collectors as per the Ministry of New & Renewable Energy (MNRE), New Delhi, India.

Current Research Activates

- Identification and development of latent heat storage materials for the temperature range of **10⁰C – 250⁰C** for Solar Thermal Systems (Solar Cooker, PCM Wall, Solar Water Heating System, Foot Warmer etc.) & Industrial Waste Heat Recovery Systems.
- Measurement of Thermophysical properties of latent heat storage materials.
- Accelerated Thermal Cycle Testing of Identified latent heat storage materials.
- Eutectics Development for different applications.
- Transmittivity measurement of latent heat storage materials for building applications.
- Design, Development of suitable solar thermal system and waste heat recovery heat exchanger with latent heat thermal energy storage for different applications.
- Thermal Performance Evaluation of Different Solar Thermal System and Waste Heat Recovery Systems

Educational Accomplishment:

- **Ph.D.** on the topic "**Effect on Thermophysical Properties of PCMs due to Thermal Cycles and Their Utilization for Solar Thermal Energy Storage Systems**" (awarded **June - 2003**) from School of Energy and Environment Studies, Devi Ahilya University, Khandwa Road Campus, Indore (M.P.).
- **M. Phil. (Energy & Environment)** from School of Energy and Environment Studies, Devi Ahilya University, Khandwa Road Campus, Indore (M.P.), August 1998 with 85.38 %.
- **M. Sc. (Physics)** from Ch. Charan Singh University, Meerut (U.P.) Year 1995 with 56.7 %.
- **B. Sc. (Physics, Chemistry, Math's)** from Meerut University, Meerut (U.P.) Year 1993 with 60%.
- **Intermediate from** U.P. Education Board, Allahabad with Physics, Chemistry & Math's as main subject in 1990 with 60.6 %.

Co-Circular Activities

Editor

- Journal of Alternate Energy Sources & Technologies (www.stmjournals.com)

Reviewer

Reviewer of the Various International Journals (details are given below).

- Applied Energy (Elsevier)
- Renewable Energy (Elsevier)
- International Journal of Hydrogen Energy (Elsevier)

- Materials Chemistry and Physics (Elsevier)
- Material Letters (Elsevier)
- Resources, Conservation & Recycling (Elsevier)
- International Journal of Energy Research (Wiley)
- International Journal of Sustainable Engineering (Taylor & Francis Group)
- Journal of Food Science and Technology (Springer)
- Natural Resources
- African Journal of Food Science
- African Journal of Biotechnology
- African Journal of Environmental Science and Technology
- African Journal of Agricultural Research
- Journal of Agricultural Science and Technology

International Exposure

- Member of the “**BIONATURE 2012 Committee**”, of ‘The Third International Conference on Bio-environment, Biodiversity and Renewable Energies’ BIONATURE 2012 is scheduled on March 25-29, 2012 - St. Maarten, Netherlands Antilles, under the Bio-Sciences World 2010 umbrella. (<http://www.iaaria.org/conferences2012/CombIONATURE12.html>).
- Member of the “**BIONATURE 2011 Committee**”, of ‘The Second International Conference on Bio-environment, Biodiversity and Renewable Energies’ BIONATURE 2011 is scheduled on May 22-27, 2011 - Venice, Italy, under the Bio-Sciences World 2010 umbrella. (<http://www.iaaria.org/conferences2011/BIONATURE11.html>).
- Member of the “**BIOGREEN 2010 Technical Program Committee**”, of ‘The First International Conference on Advances in Renewable and Sustainable Energies’. BIOGREEN 2010 is scheduled on March 7-13, 2010 - Cancun, Mexico, under the Bio-Sciences World 2010 umbrella (<http://www.iaaria.org/conferences2010/BIOGREEN10.html>).

Computer Skills

- | | |
|------------------------------|---|
| Programme Language | ● FORTRAN 77 |
| Technical Package | ● Thermal Analysis Software Thermal Energy Storage Devices |
| Sophisticated Equipment used | ● Differential Scanning Calorimeter (D.S.C.) with cryo unit |
| | ● Data Acquisition / Control Unit (HP3852) |
| | ● Thermal Conductivity Meter, |
| | ● Pyranometer etc. |

I declare that all information's provided with this document is true to the best of my knowledge and belief,

Date: 20th October 2011

Atul Sharma

Place: Rae Bareli, U.P., India

Dr. Atul Sharma

List of Patents*

S.No.	Patent Name	Certificate No.	Valid Date	Expire Date
1	Coating containing phase change energy storage material and application thereof	200946664	2009/11/16	
2	Cool storage type partition device	200940928	2009/10/01	
3	Warm air generation device utilizing solar energy	200940921	2009/10/01	
4	Structure of heat exchanger and application	200935004	2009/08/16	
5	Energy storing architecture material and manufacturing method	200934664	2009/08/16	
6	Thermal insulation structure for body clothes	200906326	2009/02/16	
7	Girdle for losing weight	200904349	2009/02/01	
8	Shoe pad capable of reserving heat to keep warm	200904354	2009/02/01	
9	Warm- and cold-keeping bag	200904390	2009/02/01	
10	Packaging method and apparatus for energy storage materials	200904958	2009/02/01	
11	Apparatus for ice-compress and fomentation	200843714	2008/11/16	
12	Heat-absorbing and storing pad	200843952	2008/11/16	
13	Automobile freezing device	200843974	2008/11/16	
14	Construction material capable of storing heat and regulating room temperature	200844308	2008/11/16	
15	Air condition device for equipment room	200844377	2008/11/16	
16	Thermal insulating method for transportation vehicle	200806503 [I302877]	2008/02/01	
17	Foot warming device	M344146	2008/11/11	2018/06/05
18	Foot soaking barrel with energy storage function	M344154	2008/11/11	2018/05/12
19	Structure of cold-keeping/warm-keeping pad	M342807	2008/10/21	2018/04/09
20	Cloth capable of absorbing and dissipating heat	M342939	2008/10/21	2018/01/31

21	Heat-dissipating water tank for working machine tool	M340880	2008/09/21	2018/02/03
22	Distillation device with forced convection	M335511	2008/07/01	2017/07/14
23	Forced counter-flow type distillation apparatus	M330988	2008/04/21	2017/10/14
24	Energy-stored cold/hot air blower	M331091	2008/04/21	2017/01/10
25	Thermal insulating method for transportation vehicle	I302877	2008/02/01	2026/07/17
26	Light collection and reflection apparatus	M325478	2008/01/11	2017/07/19
27	Solar energy lighting device	M316971	2007/08/11	2017/08/11
28	Unsophisticated solar stove	M316998	2007/08/11	2017/08/11
29	Method and a device using latent heat to perform dehydration	200726508	2007/07/16	2017/07/16
30	Method and device for drying with latent heat	I281874	2007/06/01	2026/10/08
31	Ceiling structure capable of heat-absorbing	M311709	2007/05/11	2017/09/17
32	Solar-energy cooking device	M311868	2007/05/11	2017/09/17
33	Heat-insulating board having heat-absorbing material	M306946	2007/03/01	2017/07/17
34	Heat-insulating device for container	M306949	2007/03/01	2017/07/17
35	Heat-insulating structure of vehicle	M306955	2007/03/01	2017/07/17
36	Heat-resistant device for building	M307028	2007/03/01	2017/07/17
37	Roof thermal insulation device for steel sheet house	M307034	2007/03/01	2017/07/23
38	Heat collection device for regulating indoor temperature	M307094	2007/03/01	2017/07/17
39	Temperature lowering device for external air of air conditioner	M307095	2007/03/01	2017/07/17
40	Structure of heat exchanger with cold or heat storage for recycling	M307096	2007/03/01	2017/07/23
41	Energy storage type heat pump water heater	M299278	2006/10/11	2016/03/27
42	Heat storage type dryer (I)	M299283	2006/10/11	2016/03/29
43	Heat storage type dryer (II)	M299284	2006/10/11	2016/03/29
44	Heat exchanger with thermal energy storage function	M299286	2006/10/11	2016/03/01
45	Heat storage type electric heater	M296354	2006/08/21	2016/03/01
46.	Latent heat storage chamber	M294026	2006/07/11	2016/01/08

*** All patents are valid only in R.O.C. Taiwan region.**

List of Publications in SCI/SCI-Extended

1. **Atul Sharma**
A Comprehensive Study of Solar Power in India and World, Renewable and Sustainable Energy Reviews Vol. 15 (4), 1767-1776 (2011).
2. **Atul Sharma, C.R.Chen, V.V.S. Murty and Anant Shukla**
Solar Cooker with Latent Heat Storage Systems: A Review, Renewable and Sustainable Energy Reviews, Vol. 13 (6/7), 1599-1605 (2009).
3. **Atul Sharma, C.R.Chen and Nguyen Vu Lan**
Solar Energy Drying System: A review, Renewable and Sustainable Energy Reviews, Vol. 13 (6/7), 1185-1210 (2009).
4. **Atul Sharma, V.V.Tyagi, C.R.Chen, and D.Buddhi**
Review on thermal energy storage with phase change materials and applications, Renewable and Sustainable Energy Reviews, Vol. 13 (2), 318-345 (2009).
5. **S. K. Tyagi, S. W. Wang, S. R. Park and Atul Sharma**
Economic Considerations and Cost Comparisons between the Heat Pumps and Solar Collectors for the Application of Plume Control from Wet Cooling Towers of Commercial Buildings, Renewable and Sustainable Energy Reviews, Vol. 12 (8), 2194-2210 (2008).
6. **C.R.Chen, Atul Sharma, S.K.Tyagi and D.Buddhi**
Numerical heat transfer studies of PCMs used in a box type solar cooker, Renewable Energy, Vol. 33 (5), 1121-1129 (2008).
7. **S. W. Wang, S. K. Tyagi, Atul Sharma and S. C. Kaushik**
Application of Solar Collectors to Control the Plume from Wet Cooling Towers in a Commercial Building: A Case Study, Applied Thermal Engineering, Vol. 27 (8-9), 1394-1404 (2007).
8. **Lee Dong Won & Atul Sharma**
Thermal Performances of the Active and Passive Water Heating Systems based on Annual Operation, Solar Energy, Vol. 81 (2), 207-215 (2007).
9. **Lee Dong Won & Atul Sharma**
Melting of Ice Slurry in a Tube-In-Tube Heat Exchanger, International Journal of Energy Research, Vol. 30 (12), 1013-1021 (2006).
10. **Lee Dong Won, E.S.Yoon, M.C.Joo & Atul Sharma (SCI-Extended)**
Heat Transfer Characteristics of the Ice Slurry at Melting Process in a Tube Flow, International Journal of Refrigeration, Vol. 29 (3), 451-455 (2006).
11. **Atul Sharma, S.D.Sharma, D.Buddhi & Lee Dong Won**
Effect of Thermo Physical Properties of Heat Exchanger Material on the Performance of Latent Heat Storage System Using An Enthalpy Method, International Journal of Energy Research, Vol. 30 (3),191-201 (2006).

12. **Atul Sharma**, Lee Dong Won, D.Buddhi & Jun Un Park
Numerical Heat Transfer Studies Of The Fatty Acids For Different Heat Exchanger Materials On The Performance Of A Latent Heat Storage System, *Renewable Energy*, Vol. 30 (14), 2179-2187 (2005).
13. D. Buddhi, S.D.Sharma & **Atul Sharma**
Thermal Performance Evaluation of a Latent Heat Storage Unit for Late Evening Cooking in a Solar Cooker having Three Reflectors, *Energy Conversion & Management*, Vol. 44 (6), 809-817 (2003).
14. **Atul Sharma**, S.D. Sharma and D. Buddhi
Accelerated Thermal Cycle Test of Acetamide, Stearic Acid and Paraffin Wax for Solar Thermal Latent Heat Storage Applications, *Energy Conversion and Management*, Vol. 43 (14), 1923-1930 (2002).
15. **Atul Sharma**, S. D. Sharma, D. Buddhi & R.L.Sawhney
Thermal Cycle Test of Urea for Latent Heat Storage Application, *International Journal of Energy Research*, Vol.25 (5), 465-468 (2001).
16. S.D.Sharma, D.Buddhi, R.L.Sawhney, **Atul Sharma**
Design, Development and Performance Evaluation of a Latent Heat Storage Unit for Evening Cooking in a Solar Cooker, *Energy Conversion and Management*, Vol. 41(14), 1497-1508 (2000).

List of Publications in other Academic Journals

1. **Atul Sharma** and C.R. Chen
Solar Water Heating System with Phase Change Materials, *International Review of Chemical Engineering*, Vol. 1(4), 297-307 (2009).
2. C.R. Chen, **Atul Sharma** and Nguyen Vu Lan
Applications of Phase Change Materials - Past and aFuture, *Journal of International Cooperation; ICDF Journal*, Vol. 4 (1), 16-50 (2009).
3. D. Buddhi, **Atul Sharma** & S.D.Sharma
Design, Development and Performance Evaluation of Latent Heat Storage Foot Warmers, *International Journal of Global Energy Issues (IJGEI)*, Vol. 28 (4), 430-444 (2007).
4. Chang-Ren Chen & **Atul Sharma**
Numerical investigation of melt fraction of PCMs in a latent heat storage system, *Journal of Engineering & Applied Sciences*, Vol. 1 (4), 437-444 (2006).
5. **Atul Sharma** & D.Buddhi
Effect of Thermo-physical Properties of the PCM and Heat Exchanger Material on the Performance of a Latent Heat Storage System, *International Journal of Sustainable Energy*, Vol. 24 (2), 99-105 (2005).

Under Communication

1. **Atul Sharma***, Jaya Srivastava, Sanjay Kumar Kar, Anil Kumar
Wind Energy Status in India a short Review, Renewable and Sustainable Energy Reviews (**Under revision**).
2. **Atul Sharma***, Jaya Srivastava, Anil Kumar
A Comprehensive Overview of Renewable Energy Status in India, Renewable and Sustainable Energy Reviews (**Under Review**).
3. **Atul Sharma***, Jaya Srivastava
Biomass Energy: A Sustainable Option for Power Generation in Rural India, Thermal Science International Scientific Journal (**Under Reveiw**).

Book Publications

1. **Atul Sharma** and C.R.Chen
Solar thermal energy storage through phase change materials for low temperature applications, Solar Energy: Research, Technology and Applications, Nova Science Publishers, Inc., Hauppauge, NY, USA. ISBN 978-1-60456-739-7 (pp. 1-58), 2008.

Key Note Speech

1. **Atul Sharma**
Alternate Sources of Energy, **Presented** in the Workshop on Cold Storage of Food Products with Emphasis on Energy Conservation-12th March, 2010 organized by MSME Development Institute Kanpur in Association with The Institute of Engineers.
2. **Atul Sharma & C.R.Chen**
PCM Application for Heating & Cooling in Building, **Presented** in 3e-Green Building International Conference, 15th -18th October, 2007, Organized by Kun Shan University, Tainan, Taiwan, R.O.C. (2007).
3. **Atul Sharma**
Renewable Energy Resources an Introduction, **Presented** in Clean Energy Symposium -14th June, 2007, Organized by Kun Shan University, Tainan, Taiwan, R.O.C. (2007).
4. **Atul Sharma**
The Development Vision of KSU's Solar Energy Laboratory, **Presented** in Clean Energy International Symposium -13th October, 2006, Organized by Kun Shan University, Tainan, Taiwan, R.O.C. (2006).
5. **Atul Sharma**
Renewable Energy an Introduction, **Presented** in Clean Energy Symposium -12th-13th September, 2006, Organized by Kun Shan University, Tainan, Taiwan, R.O.C. (2006).

6. Atul Sharma

Utilization of Phase Change Materials (PCMs) for Solar Thermal Energy Storage Systems, **Presented** in Clean Energy International Symposium -6th October, 2005, Organized by Kun Shan University, Tainan, Taiwan, R.O.C. (2005).

International/National Conferences

1. Atul Sharma, A. Shukla and C.R.Chen

Recent Developments in Phase Change Materials for Solar Thermal Energy Storage Applications, SOLARIS 2007, third international conference to be held in February 7-9, 2012 at IIT Delhi, New Delhi, India (**Under Process**).

2. Anil Kumar, Prashant Singh Chauhan & Atul Sharma

Drying Behavior Of Chilli Under Open Sun And Greenhouse Condition, SOLARIS 2007, third international conference to be held in February 7-9, 2012 at IIT Delhi, New Delhi, India (**Under Process**).

3. Atul Sharma & Suyush Mishra

Solar Thermal Power Generation: An Overview, ENERSTATE 2010- Clean Energy Technologies And Energy Efficiency For Sustainable Development, December 27-29, 2010, Dehradun, India organized by Utrakhand Technical University, Dehradun.

4. Ashish Mishra & Atul Sharma

Review Of Clean Energy Industry In India, ENERSTATE 2010- Clean Energy Technologies And Energy Efficiency For Sustainable Development, December 27-29, 2010, Dehradun, India organized by Utrakhand Technical University, Dehradun.

5. V.V.S. Murty, Vinay Deshore, & Atul Sharma

Development and characterization of Tio₂ nano films for photo catalysis applications, ENERSTATE 2010- Clean Energy Technologies And Energy Efficiency For Sustainable Development, December 27-29, 2010, Dehradun, India organized by Utrakhand Technical University, Dehradun.

6. Chang – Ren Chen, Huann-Ming Chou, Carlos Basagoitia, Atul Sharma

Ejector Nozzle Design by Numerical Simulation for the Ejector Type Air-Conditioner System, ENERSTATE 2010- Clean Energy Technologies And Energy Efficiency For Sustainable Development, December 27-29, 2010, Dehradun, India organized by Utrakhand Technical University, Dehradun.

7. Ashaq Ayesh Alsedran, Shu-Huang Sun, Chang–Ren Chen, Atul Sharma

Designing Foot Massage Container and Analyzing The Heat Energy Storage & Release By Using PCM, ENERSTATE 2010- Clean Energy Technologies And Energy Efficiency For Sustainable Development, December 27-29, 2010, Dehradun, India organized by Utrakhand Technical University, Dehradun.

8. **Atul Sharma**, D. Buddhi, Chang–Ren Chen & Ashok Saini
Phase Change Materials for Thermal Energy Storage Applications, ENERSTATE 2010- Clean Energy Technologies And Energy Efficiency For Sustainable Development, December 27-29, 2010, Dehradun, India organized by Uttrakhand Technical University, Dehradun.
9. Sanjay Kumar Kar, Sanidhya Narain & **Atul Sharma**
Future of Wind Energy in India, ENERSTATE 2010- Clean Energy Technologies And Energy Efficiency For Sustainable Development, December 27-29, 2010, Dehradun, India organized by Uttrakhand Technical University, Dehradun .
10. **Atul Sharma**, A. Shukla and Vipin Yadav
Numerical Heat Transfer Studies of a Latent Heat Storage System, Petrotech 2010 - 9th International Oil and Gas Conference and Exhibition, October 31- November 03, 2010 organized by Ministry of Petroleum and Natural Gas, Government of India held at New Delhi
11. C.R. Chen, Nguyen Vu Lan and **Atul Sharma**
A development of forced flow type solar dryers using automatic sensor-less solar tracking reflector, Republic of China society of burning of the twentieth Symposium Proceedings, March 20, 2010, Organized by Kun Shan University, Tainan, Taiwan, R.O.C.
12. V.V.S. Murty, **Atul Sharma**, and Anant shukla
Variation of Length of heat transfer fluid column on cooking time in an Inclined Heat Exchanger Unit Assisted SK-14 PSC for off place cooking, National Conference on Renewable Energy 2009, 7th – 9th November, 2009 Organized by Vyas Institute of Technology, Jodhpur, Rajasthan, India (pp. 478-482).
13. Nirdesh Pradhan and **Atul Sharma**
Reduction of Tropical Deforestation by Massive Use of Solar Cookers in Rural Area, National conference on Recent Drifts, Break in “Applied Sciences & its Technology for Innovation Management” (NCRDBAIM), 7th – 9th August, 2009 Organized by Technology Business Incubator & Department of Applied Sciences and Humanities, Krishna Institute of Technology, Ghaziabad, U.P., India.
14. C.R. Chen, **Atul Sharma**, HM Chou and Jheng Yun Du, Tsung Nan Wu
Experimental thermal performance evaluation of a latent heat storage unit for building applications in southern Taiwan, **Presented** in SOLARIS 2008, the fourth international conference to be held in December 4-5, 2008 at City University of Hong Kong, Hong Kong, PROC (pp. 264-272).
15. **C.R. Chen**, Nguyen Vu Lan and **Atul Sharma**
Experimental thermal performance studies of a novel design of solar dryer, SOLARIS 2008, the fourth international conference to be held in December 4-5, 2008 at City University of Hong Kong, Hong Kong, PROC (pp. 253-263).
16. V.V.S. Murty, Anant shukla, Neetu Mandloi and **Atul sharma**
Solar Kitchen cooking using Horizontal Heat Exchanger Unit for Parabolic Solar Cooker, Science Congress 26th -27th December 2007, Organized by Holkar Science College, Indore, M.P., India.

17. V.V.S. Murty, Anant shukla, Lokesh joshi, Simeen Khan and **Atul sharma**
Industrial waste heat recovery and storage through shell and tube Heat Exchanger, Science Congress 26th -27th December 2007, Organized by Holkar Science College, Indore, M.P., India.
18. V.V.S. Murty, **Atul Sharma** & Anant Shukla
Effect Of Variation Of Viscosity Of Htf In An Inclined Heat Exchanger Unit Assisted Sk-14 Parabolic Solar Cooker For Off-Place Cooking With And Without Phase Change Material, 3e-Green Building International Conference, 15th -18th October, 2007, Organized by Kun Shan University, Tainan, Taiwan, R.O.C., ISBN 978-986-6875-17-5 (pp. 267-270).
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