

Bio Data

Name : **Dr. SHAILENDRA SINHA**
Father's Name : Sri Ramesh Chandra Sinha
Date of Birth : 09-07-1969
Nationality : Indian
Address
Present : Shailendra Sinha,
Mechanical Engineering Department,
Institute of Engineering & Technology,
Sitapur Road, Lucknow
Permanent : M.M.- 1/580, Vishal Khand
Gomti Nagar, Lucknow

Professional Qualification:

Degree	Year	Subjects	Institute/Board	% Marks
Ph.D	2008	Mechanical Engg. (Thermal)	I.I.T., Kanpur	CPI 10 out of 10
M.E.	1992	Mechanical Engg. (Thermal)	University of Roorkee, Roorkee	70.9
B.Tech.	1989	Mechanical Engg.	KNIT, Sultanpur	76.4

Professional Experience:

Organization	Designation	Period	Nature of work
Department of Mechanical Engineering, I.E.T.- Lucknow	Associate Professor	31/05/2009- till date	Teaching, Lab development and Consultancy
	Assistant Professor (Grade pay 8000)	01/01/2006- 30/05/2009	
	Lecture, Sr. Scale	31/05/2001- 31/12/2005	
	Lecturer	31/05/1996- 30/05/2001	
Hindalco Industries Ltd., (Renusagar Power Div.)	Tr. Engr. (Design & Development.)	16/06/1995- 05/1996	Design and erection of high pressure steam pipelines.
K.S. Projects & Process Engineers (P) Ltd., Lucknow	Sr. Engr.(Design)	20/10/1993- 14/06/1995	Air conditioning and other

Ph.D. Dissertation:

I have been awarded Ph.D. in Mechanical Engineering from **Indian Institute of Technology Kanpur**, Kanpur in February 2008. The topic of my PhD dissertation is,

“Biodiesel Development, Performance, Emissions, Combustion and Wear Investigations on a Medium-Duty Transportation CIDI Engine”

M.E. Dissertation: (M.E. from University of Roorkee, Roorkee)

“Design of Intermittent Aqua-Ammonia Absorption Refrigeration System.”

Research Publications:

22 Nos. (Annexure ó A)

International Journal : 9 Nos.
International Conferences : 5 Nos.
National conferences : 8 Nos. + 5 Nos. as invited speaker

PhD Thesis : 04 in Progress

M.Tech Thesis Guided : **02 Awarded**
03 in Progress

- Naveen Kumar Gupta, Assistant Professor in G.L.A. University, Roll No.:6602940010
Topic: Biodiesel production through Transesterification using waste cooking oil and engine performance testing.
- Pramod Kumar, Assistant professor, Roll No.:6602940006
Topic: Production of Biodiesel from Karanja oil and evaluation of its performance and emissions characteristics in a diesel engine.

Consultancy Projects Carried:

1. Provided Consultancy to TATA HONEYWELL, Pune at the project site in SGPGI Lucknow, 2006.
2. Technical observer and Consultant to UP State Agro Industrial Corporation Ltd. Dec, 14- till now.

Period of teaching experience : **P.G. Classes (in years)** : 03
U.G. Classes (in years) : 19

Industry experience : 2 Years & 7 Months

Courses Taught:

UG

- I.C. Engine
- Refrigeration & Air-conditioning
- Applied thermodynamics
- Power Plant Engineering
- Thermodynamics
- Heat Ttransfer
- Thermal & Hydraulic Machines

PG

- IC Engine
- Combustion & Pollution

Published Papers in International Journals : Annexure-A

Seminar/Conference/Workshop attended: Annexure-B

Short Term Courses/ Faculty Development Program: (Attended/organized): Annexure-C

Other academics and administrative contribution:

- Member of Board of Studies, Mechanical Engineering, UPTU (presently APJ AKTU)
- Associate Dean T&P, UPTU (presently APJ AKTU)
- Assistant Coordinator UP State Entrance Examination for two years 2012 & 2013
- Member, Counselling Committee UP State Entrance Examination 2015
- Dy. Dean Academics, IET Lucknow
- Warden, B Block, IET Lucknow
- Dy. Controller, Examination, IET Lucknow
- I/c Workshop, IET Lucknow
- Faculty Adviser, Mechanical Engineering Forum, MED, IET, Lucknow
- Faculty Adviser, SAE INDIA Collegiate Club, IET Lucknow
- Centre Superintendent, End Semester examination, IET
- Coordinator, Evaluation End semester Answer books, IET
- Member for solar energy mission core group, New and renewable Energy Development Agency, Uttar Pradesh.
- Member of Advisory/Technical (Expert committee) under innovation cell, CST UP Setting and evaluation of examination papers for ISM, Dhanbad, UPTU and other universities.
- Incharge NCC, IET Lucknow.
- Incharge Training & Placement, IET Lucknow.
- Group leader, Flying Squad, UPTU End Semester Examination
- Lab development, procurement of equipments for departmental labs.
- Preparation of laboratory manuals, question banks.

Invited Lectures and Chairmanships at Conference / Seminar etc. :

Sr. No.	Title of the Lecture/ Academic session	Title of Conference/ Seminar etc With dates	Organized by
	Session Chair	All India Seminar on Sources of Planet Energy, Environment & Disaster Science: Challenges and	The Institution of Engineers (India) & SMS Lucknow

		strategies, SPEEDS-2014, 1 st -2 nd Nov , 2014	
	Key Note Address and Session Chair Energy and Environment : Challenges and Strategies; in context to Automobiles	All India Seminar on Sources of Planet Energy, Environment & Disaster Science: Challenges and strategies, SPEEDS-2013, 7-8 September, 2013	The Institution of Engineers (India) & SMS Lucknow
	Key Note Address Technological choices for reducing emission from I C Engines	Achieving Excellence for Industrial Competitiveness AEIC-2013, Matura, 19-20 January, 2013.	GLA University, Mathura and Indian Institution of Production Engineers, Banglore,
	Invited Lecture Biodiesel Development and Utilization as a Fuel for Diesel Engine	Uttar Pradesh mein bio edhan ó ethanol, , 10 August, 2003.	Centre for Bharatiya Marketing Development, Lucknow
	Invited Lecture Biodiesel Development and Utilization as a Fuel for Diesel Engine	Bio-Diesel as Bio-Fuel 20 August, 2004.	Centre for Bharatiya Marketing Development, Lucknow,

The above information given is true to the best of my knowledge.

(Dr. Shailendra Sinha)
Associate Professor
Department of Mechanical Engineering,
Institute of Engineering & Tecnology,
Sitapur Road, Lucknow

ANNEXURE - A

List of publications

International Journals:

1. **Shailendra Sinha**, "Energy and Environment : Challenges and Strategies; in context to Automobiles", *Samriddhi (Journal of Physical Sciences, Engineering & Technology)* Volume 5, 2014, pp 5-12, ISSN No. 2229-7111
2. **Shailendra Sinha**, Avinash Kumar Agarwal, "Experimental Investigation of the Effect of Biodiesel Utilization on Lubricating Oil Degradation and Wear of a Transportation CIDI Engine" **Journal of engineering for Gas Turbine and Power**, American Society of Mechanical Engineers (ASME), APRIL 2010, Vol. 132 , 042801-1-9.
3. **Shailendra Sinha**, Avinash Kumar Agarwal, "Experimental Investigations of the Tribological Properties of Lubricating Oil from Biodiesel Fuelled Medium Duty Transportation CIDI Engine", SAE Paper No.2008-01-1385, SAE Special Publication SP-2176, **SAE International Journal of Fuels and Lubricants**, April 2009 (1), pp 719-730. (ISSN: 1946-3952) [[link](#)].
4. **Shailendra Sinha**, Avinash Kumar Agarwal, "Ricebran Oil Biodiesel Performance, Emission and Endurance Test on a CIDI Transport Engine" **International Journal of Vehicle design**, Vol. 50, Nos. 1/2/3/4, 2009, pp 248-270. (ISSN # 0143-3369). [[link](#)]
5. **Shailendra Sinha**, A.K.Agarwal, S. Garg, Biodiesel Development from Rice bran oil: Transesterification Process Optimization and Characterization, **Energy Conversion and Management**, Volume 49, Issue 5, May 2008, Pages 1248-1257. (ISSN # 0196-8904). [[link](#)]
6. **Shailendra Sinha**, **Avinash Kumar Agarwal** , "Experimental Investigation of the Combustion Characteristics of Biodiesel (Rice Bran Oil Methyl Ester) Fuelled Direct Injection Transportation Diesel Engine", *Journal of Automobile Engineering, Proceedings of IMechE-Part D*, Vol. 221, Issue 8, August 2007, pp 921-932. (ISSN # 09544070). [[link](#)]
7. Deepak Agarwal, **Shailendra Sinha**, Avinash Kumar Agarwal, "Experimental Investigation of Control of NOx Emissions in Biodiesel Fuelled Compression Ignition Engine", **Renewable Energy**, Volume 31, Issue 14, November 2006, Pages 2356-2369. (ISSN # 0960-1481). [[link](#)]
8. **Shailendra Sinha**, A.K.Agarwal, Performance evaluation of a bio-diesel (Rice bran oil methyl ester) fuelled transport diesel engine, **SAE 2005-01-1730, SP-1978**, pp 159-166, 2005 (ISBN # 0-7680-1623-1). [[link](#)]
9. Avinash Kumar Agrawal, **Shailendra Sinha**, Mritunjay Kumar Shukla, Shrawan Singh "Effect of EGR on the Exhaust Gas Temperature and Exhaust Opacity in an Experimental Diesel Engine", **SADHANA (Indian Academy of Science proceedings in engineering sciences)**, Vol. 29, Part 3, June 2004, pp 275-284. (ISSN # 0256-2499). [[link](#)] [[pdf](#)]

International Conferences:

1. Rice bran Oil Biodiesel's Performance, Emission and Endurance Test on a CIDI Transport Engine, SAE Paper No. 2008-28-0066, pp 450-461, SAE INDIA International Mobility Conference, India Habitat Centre, New Delhi Jan 9-11, 2008
2. **Shailendra Sinha**, Avinash Kumar Agarwal, "Experimental Investigation of the Effect of Biodiesel Utilization on Lubricating Oil Degradation and Wear of a Transportation CIDI Engine" Paper No. ICEF2007-1721, **ASME Internal Combustion Engine Division Fall Technical Conference-2007**, October 14-17, 2007, Charleston, SC, USA. [\[link\]](#)
3. **Shailendra Sinha**, Avinash Kumar Agarwal, "Experimental investigation on the Performance and Emission characteristics of Direct Injection Medium Duty Transport Diesel Engine using Rice-bran Oil Biodiesel", Paper No. ICEF2007-1722, **ASME Internal Combustion Engine Division Fall Technical Conference-2007**, October 14-17, 2007, Charleston, SC, USA. [\[link\]](#)
4. **Shailendra Sinha**, A.K. Agarwal, Combustion characteristics of Rice bran oil derived biodiesel in a transportation diesel engine, **ICES 2006-1375**, Proceedings of ICES 2006, **ASME I.C. Engine Division 2006** spring technical conference, May 7-10, 2006, Aachen, Germany.
5. **Shailendra Sinha**, Avinash Kumar Agarwal, "Development and Characterization of Biodiesel from Non-edible Vegetable Oils of Indian Origin", SAE Paper No. 2004-28-0079, Presented in **SAE 2004 India Mobility Conference**, held in New Delhi, India and published in the "Proceedings of Third International Conference on Synergy of Fuel and Automotive Technology for a cleaner Environment" Allied Publishers, India, (Eds. S Singh, MKG Babu), pp 513-518, January 2004. (ISBN # 0-7680-1441-7).

National Conferences:

1. Aparna Singh, Shailendra Sinha, Biodiesel Production by Heterogeneous Catalyst and Performance and emission investigation on C.I. Engine - A Review, pp 402-406, ICAM-2015, December 28-29, 2015, Department of Mechanical Engineering, KNIT Sultanpur.
2. Aparna Singh, Shailendra Sinha, Biodiesel development, Engine performance and emission Analysis using biodiesel from various oil sources: A review, National conference on Innovations in Materials, Design & Manufacturing, March 27, 2015, HBTI Kanpur
3. Ajai Prasad Nigam, Shailendra Sinha, Stability, Performance and Emission Characteristics of Biodiesel: A Review, 30th National Convention of Mechanical Engineers, MMMUT Gorakhpur, Sept. 27-28, 2014, pp 219-226.
4. Naveen Kr. Gupta, Shailendra Sinha, "Optimization of biodiesel production using Taguchi Technique", National Conference on Achieving Excellence for Industrial Competitiveness AEIC-2013, Matura, organised by GLA University, Mathura and Indian Institution of Production Engineers, Bangalore, 19-20 January, 2013.
5. Pramod Kumar, Shailendra Sinha, Praveen, Production of Biodiesel from Karanja Oil (*Pongamia Pinnata*) and its Characterization, Presented in National Conference on Emerging trends in Mechanical Engineering, September 17-18, 2011.

6. **Shailendra Sinha**, Avinash Kumar Agarwal, Transesterification of vegetable oils and Utilization as a Fuel for Diesel Engine National conference on "Biodiesel for I.C. Engine- Technologies & Strategies for Rural applications", Presented and Published in the Proceedings of **National Conference on Biodiesel**, held at CIAE Bhopal, December 03-04, 2004.
7. Avinash Kumar Agarwal, Sanjeev Garg, Nitin Kaistha, **Shailendra Sinha**, "Transesterification of Vegetable Oils for Biodiesel Production: Engine Testing for Performance and Emissions", presented and published in the proceedings of **XVIII National Conference on I C Engines and Combustion** (Eds. P S Mehta, T Sundararajan), organized by Combustion Institute (India Section), PP 571-580, December 2003, Thiruvananthapuram, pp 571-580., December 2003.
8. **Shailendra Sinha**, Rajeev Kumar, Kuldeep Sahay, B.B. Singh, Effective maintenance Strategies for wind Energy Conversion System, National Conference on Wind Energy Commercialization, MACT, Bhopal, March 5-6, 1999.

(Dr. Shailendra Sinha)

ANNEXURE – B

Seminar/Conference/Workshop attended

Sl. No.	Seminar/Conference	Organising Institution	Period		Place
1	Quality Initiatives in Technical & Higher Educational Institutions	Engineering Staff Collage of India, Hyderabad	08 Oct, 2014	10 Oct, 2014	ESCI Hyderabad
2	Intrnational Workshop on Novel Combustion Concepts for Sustainable Energy development	IIT Kanpur	2 nd Jan 2014	4 th Jan 2014	IIT Kanpur
3	All India Seminar on Sources of Planet Energy, Environment & Disaster Science: Challenges and strategies, SPEEDS-2013	The Institution of Engineers (India) & SMS Lucknow	Sept 7, 2013	Sept 8, 2013	SMS, Lucknow
4	National Conference on Achieving Excellence for Industrial Competitiveness AEIC-2013	GLA University, Mathura and Indian Institution of Production Engineers, Banglore	Jan.19, 2013.	Jan 20, 2013	GLA, Mathura
5	5 th International Mobility Conference on Emerging automotive technologies Global & Indian Perspective	Society of Automotive Engineers (SAE India)	Jan 09, 2008	Jan 11, 2008	India Habitat Centre, New Delhi
6	International Mobility Engineering Congress -2005	Society of Automotive Engineers (SAE India)	Oct 24, 2005	Oct 25, 2005	Chennai Trade centre, Chennai
7	National Conference on Biodiesel for I.C. Engine- Technologies & strategies for rural application	Central Institute of Agriculture Engineering	Dec 03, 2004	Dec 04, 2004	Bhopal
8	SAE 2004 India Mobility Conference	Society of Automotive Engineers (SAE India)	Jan 16, 2004	Jan 19, 2004	New Delhi
9	5th International Petroleum Conference and	Oil and Natural Gas Corporation, Ministry of Petroleum &	Jan 9, 2003	Jan 12, 2003	New Delhi

	Exhibition, PETROTECH 6 2003	Natural Gas, Government of India.			
10	All India Seminar on Condition Monitoring and Diagnostics of Mechanical Systems, Lucknow	Institution of Engineers, Lucknow	Mar 06, 1998	Mar 07, 1998	Institution of Engineers, Lucknow

ANNEXURE – C

**Short Term Courses/ Faculty development Program :
(Attended/organized):**

Sr. No.	Programme	Duration with dates	Organised by
1	Advanced Engine Technologies for combustion & Emission Control	01 week May 1-5, 2013	Indian Institute of Technology, Kanpur
2	Essentials of Teaching Learning Process	01 week March 18-23, 2013	HBTI Kanpur
3	Advanced Engine Combustion and Diagnostics	01 week June 23-28, 2011	Indian Institute of Technology, Kanpur
4	Diesel Particulate & NOx Emissions: Formation & Control	01 week Sep 10-14, 2010	Indian Institute of Technology, Kanpur
5	Diesel Particulate & NOx Emissions	01 week Feb14-18, 2010	Indian Institute of Technology, Kanpur
6	Probability and Statistical Tools for Researchers	02 weeks March 30-13 April, 2009	IET Lucknow
7	Research Methodology	02 weeks April 14-28, 2009	IET Lucknow
8	Diesel Engine Management	01 week Mar 18-22, 2009	Indian Institute of Technology, Kanpur
9	Recent Applications of Thermal Engineering	02 weeks Aug 11-22, 2008	MANIT Bhopal
10	Advances in Materials & Fuel technologies for Automotive Application	01 week June 8-12, 2006	Indian Institute of Technology, Kanpur
11	Pedagogy and teaching skills	01 week Dec 17-22, 2004	Indian Institute of Technology Kanpur
12	Alternative Fuels and Emission control	01 week Nov 24-28, 2004	Indian Institute of Technology, Kanpur
13	Renewable energies and Alternative Fuels	01 week Dec 1-5, 2003	Indian Institute of Technology, Kanpur
14	Alternative fuels, Emissions and Latest advances in Internal combustion engines	01 week Dec 23-28, 2002	Indian Institute of Technology, Kanpur

(Dr. Shailendra Sinha)