# Professor Sagar Maji



Prof S. Maji is a graduate in Mechanical Engineering from Delhi College of Engineering (now known as Delhi Technological University) and M.Tech in Thermal Engineering from IIT, Delhi. He has obtained PhD Degree from Delhi University in the area of, "Use of Alternative Fuels in Spark Ignition Engines". He has worked as Scientist in Indian Institute of Petroleum, a research lab of CSIR and also as Professor of Delhi College of Engineering. His association with Delhi Institute of Tool Engineering (DITE), New Delhi began on 14<sup>th</sup> March, 2014 when he joined as Director-cum-Principal (Additional Charge).

# **Curriculum Vitae**

# **Present Assignments:**

Principal, GB Pant Engineering College
Govt. of NCT of Delhi, New Delhi

Pirector, Delhi Institute, of Tool Engineering (

**Director**, Delhi Institute of Tool Engineering (Additional Charge)

Govt. of NCT of Delhi, New Delhi

Previous Administrative	Dean (IRD), DTU From Oct 2010 to Dec 2013
Experiences	Professor I/C (Alumni Affairs), DTU From Jan 2011 to Feb 2014
	HOD (Mech), Delhi University From Oct 2006 to Oct 2009
	HOD (Mech, Prod & Indl Engineering) DTU From May 2005 to April
	2010
Education	Ph. D, Delhi University, (Mechanical Engineering), 2002
	M. Tech, IIT-Delhi, 1990
	B. Sc Engineering (Mechanical), Delhi University, 1981

# **Employment History**

**Scientist-B**, Indian Institute of Petroleum, Dehradun October-1981 to October 1987

**Scientist-C**, Indian Institute of Petroleum, Dehradun October-1987 to January1992

**Associate Professor**, Delhi College of Engineering January 1992 to December 2002

#### **Professor**

Delhi College of Engineering (Now DTU) December 2002 – March, 2014

# **Principal**

G. B. Pant Engineering College: 7.3.2014 - till date

**Director** (Additional Charge)

Delhi Institute of Tool Engineering: 7.3.2014 – till date

**Total experience**: <u>10 yrs</u> in research & <u>23 yrs</u> teaching, research &

administration

# Administrative Experience

**HOD** (Mechanical Engineering)

**Delhi University** 

From October 2006 to October 2009

HOD (Mechanical and Prod. & Industrial Engineering),

Delhi College of Engineering From May 2005 to June 2009

HOD (Mechanical Engineering) Delhi Technological University From July 2009 to April 2010

**HOD** (Production & Industrial Engineering)

Delhi Technological University From July 2009 to April 2010

HOD (Automobile Engineering) Delhi Technological University From July 2009 to April 2010

Professor I/C (Alumni Affairs)
Delhi Technological University
From Feb 2010 to Till date

Dean (IRD)
Delhi Technological University
From Sep 2010 to Till date

	HOD (Department of Biotechnology)			
	Delhi Technological University			
	From Sep 2010 to Till date			
	Principal			
	G. B. Pant Engineering College: 7.3.2014 - till date			
	Director (Additional Charge)			
	Delhi Institute of Tool Engineering : 14.3.2014 – till date			
	i) Member, Board of Management (BOM), DTU			
Other Important	ij iwember, Bourd oj iwanagement (BOIVI), DTO			
Administrative	ii) Chairman, Department Research Committee (DRC), of the			
Responsibilities	Departments of Mechanical Engineering, P&I Engineering,			
	Automobile Engineering and Bio-Tech, DTU			
	iii) Chairman, Board of Studies (BOS), of the Departments of			
	Mechanical Engineering, P&I Engineering, Automobile			
	Engineering and Bio-Tech, DTU			
	iv) Member Board of Research Studies (BRS), Faculty of			
	Technology, DU			
	v) Member Academic Council (AC), DU			
	V) Wiember Neudemie Council (NC), DO			
Awards and Research	Received 2001 Ralph R. Teetor Educational Award in			
Awards and Research Fellowships	"Recognition of Significant Contribution to Teaching, Research			
	"Recognition of Significant Contribution to Teaching, Research and Student Development in the area of Automotive			
	"Recognition of Significant Contribution to Teaching, Research			
	"Recognition of Significant Contribution to Teaching, Research and Student Development in the area of Automotive			
	"Recognition of Significant Contribution to Teaching, Research and Student Development in the area of Automotive Engineering". (Awarded by SAE International, USA).			
	<ul> <li>"Recognition of Significant Contribution to Teaching, Research and Student Development in the area of Automotive Engineering". (Awarded by SAE International, USA).</li> <li>2014 Guru Award conferred by SAEINDIA Foundation on 30<sup>th</sup> July, 2014 at New Delhi</li> </ul>			
	<ul> <li>"Recognition of Significant Contribution to Teaching, Research and Student Development in the area of Automotive Engineering". (Awarded by SAE International, USA).</li> <li>2014 Guru Award conferred by SAEINDIA Foundation on 30<sup>th</sup> July, 2014 at New Delhi</li> <li>Part of Ph D work under my guidance honored with National</li> </ul>			
	<ul> <li>"Recognition of Significant Contribution to Teaching, Research and Student Development in the area of Automotive Engineering". (Awarded by SAE International, USA).</li> <li>2014 Guru Award conferred by SAEINDIA Foundation on 30<sup>th</sup> July, 2014 at New Delhi</li> <li>Part of Ph D work under my guidance honored with National Award on 3/12/2009 by Govt. of India, Ministry of Social</li> </ul>			
	<ul> <li>"Recognition of Significant Contribution to Teaching, Research and Student Development in the area of Automotive Engineering". (Awarded by SAE International, USA).</li> <li>2014 Guru Award conferred by SAEINDIA Foundation on 30<sup>th</sup> July, 2014 at New Delhi</li> <li>Part of Ph D work under my guidance honored with National Award on 3/12/2009 by Govt. of India, Ministry of Social Justice and Empowerment in Public recognition for</li> </ul>			
	<ul> <li>"Recognition of Significant Contribution to Teaching, Research and Student Development in the area of Automotive Engineering". (Awarded by SAE International, USA).</li> <li>2014 Guru Award conferred by SAEINDIA Foundation on 30<sup>th</sup> July, 2014 at New Delhi</li> <li>Part of Ph D work under my guidance honored with National Award on 3/12/2009 by Govt. of India, Ministry of Social Justice and Empowerment in Public recognition for</li> </ul>			
	<ul> <li>"Recognition of Significant Contribution to Teaching, Research and Student Development in the area of Automotive Engineering". (Awarded by SAE International, USA).</li> <li>2014 Guru Award conferred by SAEINDIA Foundation on 30<sup>th</sup> July, 2014 at New Delhi</li> <li>Part of Ph D work under my guidance honored with National Award on 3/12/2009 by Govt. of India, Ministry of Social Justice and Empowerment in Public recognition for "Development of New Cost Effective Product for</li> </ul>			
	<ul> <li>"Recognition of Significant Contribution to Teaching, Research and Student Development in the area of Automotive Engineering". (Awarded by SAE International, USA).</li> <li>2014 Guru Award conferred by SAEINDIA Foundation on 30<sup>th</sup> July, 2014 at New Delhi</li> <li>Part of Ph D work under my guidance honored with National Award on 3/12/2009 by Govt. of India, Ministry of Social Justice and Empowerment in Public recognition for "Development of New Cost Effective Product for Manufacture "aimed at improving life for persons with disabilities.</li> </ul>			
	<ul> <li>"Recognition of Significant Contribution to Teaching, Research and Student Development in the area of Automotive Engineering". (Awarded by SAE International, USA).</li> <li>2014 Guru Award conferred by SAEINDIA Foundation on 30<sup>th</sup> July, 2014 at New Delhi</li> <li>Part of Ph D work under my guidance honored with National Award on 3/12/2009 by Govt. of India, Ministry of Social Justice and Empowerment in Public recognition for "Development of New Cost Effective Product for Manufacture "aimed at improving life for persons with disabilities.</li> <li>Invited by Michelin to deliver lecture to German Engineering</li> </ul>			
	<ul> <li>"Recognition of Significant Contribution to Teaching, Research and Student Development in the area of Automotive Engineering". (Awarded by SAE International, USA).</li> <li>2014 Guru Award conferred by SAEINDIA Foundation on 30<sup>th</sup> July, 2014 at New Delhi</li> <li>Part of Ph D work under my guidance honored with National Award on 3/12/2009 by Govt. of India, Ministry of Social Justice and Empowerment in Public recognition for "Development of New Cost Effective Product for Manufacture "aimed at improving life for persons with disabilities.</li> <li>Invited by Michelin to deliver lecture to German Engineering students in the event of Challenge Bibendum- 2011, Berlin,</li> </ul>			
	<ul> <li>"Recognition of Significant Contribution to Teaching, Research and Student Development in the area of Automotive Engineering". (Awarded by SAE International, USA).</li> <li>2014 Guru Award conferred by SAEINDIA Foundation on 30<sup>th</sup> July, 2014 at New Delhi</li> <li>Part of Ph D work under my guidance honored with National Award on 3/12/2009 by Govt. of India, Ministry of Social Justice and Empowerment in Public recognition for "Development of New Cost Effective Product for Manufacture "aimed at improving life for persons with disabilities.</li> <li>Invited by Michelin to deliver lecture to German Engineering</li> </ul>			
	<ul> <li>"Recognition of Significant Contribution to Teaching, Research and Student Development in the area of Automotive Engineering". (Awarded by SAE International, USA).</li> <li>2014 Guru Award conferred by SAEINDIA Foundation on 30<sup>th</sup> July, 2014 at New Delhi</li> <li>Part of Ph D work under my guidance honored with National Award on 3/12/2009 by Govt. of India, Ministry of Social Justice and Empowerment in Public recognition for "Development of New Cost Effective Product for Manufacture "aimed at improving life for persons with disabilities.</li> <li>Invited by Michelin to deliver lecture to German Engineering students in the event of Challenge Bibendum- 2011, Berlin,</li> </ul>			
	<ul> <li>"Recognition of Significant Contribution to Teaching, Research and Student Development in the area of Automotive Engineering". (Awarded by SAE International, USA).</li> <li>2014 Guru Award conferred by SAEINDIA Foundation on 30<sup>th</sup> July, 2014 at New Delhi</li> <li>Part of Ph D work under my guidance honored with National Award on 3/12/2009 by Govt. of India, Ministry of Social Justice and Empowerment in Public recognition for "Development of New Cost Effective Product for Manufacture "aimed at improving life for persons with disabilities.</li> <li>Invited by Michelin to deliver lecture to German Engineering students in the event of Challenge Bibendum- 2011, Berlin, Germany.</li> </ul> Research Fellowships			
	<ul> <li>"Recognition of Significant Contribution to Teaching, Research and Student Development in the area of Automotive Engineering". (Awarded by SAE International, USA).</li> <li>2014 Guru Award conferred by SAEINDIA Foundation on 30<sup>th</sup> July, 2014 at New Delhi</li> <li>Part of Ph D work under my guidance honored with National Award on 3/12/2009 by Govt. of India, Ministry of Social Justice and Empowerment in Public recognition for "Development of New Cost Effective Product for Manufacture "aimed at improving life for persons with disabilities.</li> <li>Invited by Michelin to deliver lecture to German Engineering students in the event of Challenge Bibendum- 2011, Berlin, Germany.</li> </ul>			

Membership in Professional Societies	<ul> <li>b) SERC Fellowships in the area of "Fuel injection Systems for Spark Ignition Engines" at IIT-Delhi</li> <li>1. Member Society of Automotive Engineers (SAE), Membership no. – 6104444061</li> <li>2. Member, Fire &amp; Security Association of India (FSAI)</li> </ul>		
Scholarships	West Bengal Government – MCM scholarship From 1976 – 1981		
Research Projects	i) Use of methanol as Alternate Fuel in 2-Stroke SI Engines. Under this research project a 2-stroke engine was modified to run on neat methanol. Performance and emission characteristics were studied extensively with methanol engine. Lubrication and other field performance of methanol scooters were also investigated. (Project was sponsored by UNDP) – Completed  ii) Study of Mechanism of Formation of Hydrocarbon Emissions in 2-Stroke SI Engines. Under this research project concentration of hydrocarbons at different crank angles during expansion period and during scavenging period were analyzed in 2-stroke engines. (Project was sponsored by UNDP) – Completed  iii) Improvement of Fuel Consumption and Exhaust Emissions in Small 2-Stroke SI Engines. Under this research project a dual intake system designed and tested for reduction of fuel consumptions and exhaust emissions in 2-stroke engines. (Project was sponsored by UNDP) – Completed  iv) Scavenging and Air Flow Analysis of 2-Stroke Engine Cylinder. Under this research project the flow velocity of air inside a 2-stroke engine cylinder during scavenging at different crank angles were studied to understand the scavenging. (Project was sponsored by SIL) – Completed  v) Performance and Emission Characteristics of Gasoline additives in 4-Stroke Spark Ignited Engines. Under this consultancy work gasoline additives were evaluated for power, fuel consumption, and exhaust emissions of CO, HC and NOx. This project was sponsored by NAVIR International, New Delhi. – Completed		

- vi) <u>Fuel Introduction System of 2-Stroke Engines.</u> Under this consultancy work a propane retrofit kit modified and tested for power output, fuel economy and exhaust emissions. This project was sponsored by G&T Resources Worldwide, New Delhi. Completed
- vii) <u>Evaluation and repair of air cooling system</u> of CBSE HQ. Building, Preet Vihar, Delhi-110092. **Completed**

# viii) <u>Development of small capacity new generation Bio-Diesel</u> Reactor for waste cooking Oil

Under this work, a reactor was developed using hydrodynamic cavitation technique. Performance evaluation is being carried out. The Project is sponsored by Forest and Environment Department, Govt. of NCT of Delhi – **On Going** 

## ix) Development of Hybrid Vehicle

Under this project a Maruti Vehicle with 1300 cc engine was downsized to 1000 cc engine and a 'plug-in-hybrid; was developed. Optimization is being carried out. The Project is sponsored by IOCL. – **On Going** 

#### Ph. D Guided

- 1. Thermo hydrodynamic Analysis of Lubricated Piston Rings of Internal Combustion Engine
- Design and Development of a new Generation Biodiesel Reactor and use of produced Biodiesel in a CI Engine Performance, Emission and Combustion Characteristics
- 3. Design & Development of Water Mist Nozzles and their Characterization for Fire Suppression Applications
- 4. Artificial Intelligence to an above Knee Prosthesis
- 5. Gasification of Municipal Solid Waste
- Studies of Performance and Emissions Characteristics of Direct Injection Compression Ignition Engine Dual Fueled with Diesel and CNG
- 7. Studies on Energy Efficiency in Industrial Clusters

#### Ph. D in Progress

- Investigations on Modeling Transportation Noise and Passive Control Measures and its Abatement
- Development of Nano material Based Non-invasive Biosensor for Oral Cancer Detection
- 3. Studies on Force Transducers for Improving their Accuracies

	4. Production of Biodiesel and its Utilization in Compression Ignition Engines		
Leadership Development	Position of responsibility in International Professional Bodies:  1. Member of SAE – India Publication Board 2. Member SAE-India, Engineering Education & Students Board 3. Vice-Chairman (Publications)-SAE-India, NIS 4. Member Technical Committee SAE India, NIS 5. Faculty Advisor – SAE Student Chapter – DCE 6. Member, SAE – India Foundation 7. Faculty Advisor – SAE International Students chapter		
PG & UG Guidance	No. of PG Guidance = 42 No. of UG Guidance = 55		
Organization of International Conference	<ol> <li>"SAE 2000 India Mobility Conference" - First International SAE Conference on Mobility, New Delhi (February, 2000).</li> <li>"SAE 2004 India Mobility Conference" - Third International SAE Conference on Mobility, New Delhi (January, 2004)</li> <li>"SAE 2008 India Mobility Conference" - Fifth International SAE Conference on Mobility, New Delhi (January, 2008)</li> <li>"SAE 2012 India Mobility Conference" - Seventh International SAE Conference on Mobility, New Delhi (January, 2012)</li> </ol>		
Institutional Development	<ol> <li>Member Secretary, Bio-Safety Committee</li> <li>Member Secretary, Ethical Committee</li> <li>Coordinator UGC Visit for 12-B recognition</li> <li>Coordinator, NBA Accreditation Visit</li> <li>Head, NTMICS (AICTE Project), Nodal Centre</li> <li>Professor In-charge, Global Alumni Conclave, 2012</li> <li>Chairman of large number of committees</li> <li>SAE International Colligate Chapter was founded by the undersigned first time in India</li> </ol>		

	X. XI. XII. XIII.	every year since 1995  Faculty Advisor of many International Competitive Projects  Modified and updated the course curriculum  of IC Engines and Thermal Engineering  Design of Curriculum of DTU
Academic & Professional activities outside	l.	Key Note Addresses in many conferences
University	II.	Session Chairman of National and International Conferences
	III.	Reviewers of Journal Papers
	IV.	Ph. D Examiner
	V.	Project Monitoring Committee Member of DST and CSIR
	VI.	Expert Lecture in National and International Conferences
	VII.	Member of the Expert Committee of NTPC, NATRIP, BIS, IP
		University, ISM, NIT-Kurukshetra, YMCA, MNES, IUAC etc.
		etc.
	VIII.	Expert Advisor for Recruitment for UPSC, CSIR and DRDO
	IX.	Designed Curriculum for IGNOU and BTE
	Х.	Design of study materials for IGNOU
Publications	Attached as Annexure	

Organized MACH (Industry Institute Interaction Program)

IX.

# **Annexure**

# **Publications (Research Papers)**

- 1. "Abnormal Combustion in a 2-Stroke Spark Ignited Methanol Engine", S. Maji, M. Abraham, B.P. Pundir & S. Radzimirski, SAE Transactions, Paper No. 880174, 1988.
- 2. "Analysis of Total and Individual Hydrocarbon Components in the Exhaust and Inside the Cylinder of a 2-Stroke Engine", **S. Maji,** M. Saxena, H. B. Mathur and S. D. Bhagat, SAE (SP-910) paper No. 920728, 1992.
- 3. "Some Experimental Studies of Lubricants in a 2-Stroke Methanol Engine", B.R. Chadda, M. Gupta, S. Maji and S. Singhal, Journal of Synthetic. Lubricantion, U.K.-1992.
- 4. "Vehicular Pollution in Delhi and its Control in Line with Euro-Norms", S. Maji, MAPAN-Journal of Metrology Society of India, Vol. XV, No. -1, January, 2000.
- 5. "A Single Cylinder Study of Power, Fuel Consumption and Exhaust Emissions with Ethanol", S. Maji, M.K.G. Babu, N. Gupta and P.B. Sharma, SAE Paper No. 2001-28-0029, 2001.
- 6. "Comparison of Emissions and Fuel Consumption from CNG and Gasoline Fueled Vehicles- Effect of Ignition timing", S. Maji, S. Ranjan and P. B. Sharma, SAE Paper No. 2001-01-1432, 2000.
- 7. "A Methanol Operated Small 2-Stroke SI Engine", S. Maji, B.P. Pundir, S. Radzimirski, VIII, International Symp. on Alcohol Fuels, Paris Oct. 19-23, 1986.
- 8. "The Effect of Methanol Fuelling in 2-Stroke Engine Lubrication" M. Gupta, S.Maji, P.C. Nautiyal and S. Singhal, VIII International; Symp on Alcohol Fuels, Paris, Oct. 19-23,1986.
- 9. "Field Performance of Two Stroke Engine Powered Scooters on Methanol Fuel", J. Sharma, S. Maji, M. Abraham and S. Singhal, IX proc. International Symp. on Alcohol Fuels, Tokyo, Nov. 24-27, 1988.
- 10. õA Comparative Study of Performance and Emission Characteristics of CNG and Gasoline on a Single Cylinder S. I. Engine", S. Maji, P. B. Sharma and M.K.G. Babu, January 16-18, 2004, New Delhi, India. SAE Paper no. 2004-28-0038
- "Vehicular Emission Control Strategies for the Capital City of Delhi", Amit Pal, S.
   Maji, O.P. Sharma and M.K.G. Babu, India, January 16-18, 2004, SAE Paper no 2004-28-0051

- "Methanol Fuelling of a Small 2-Stroke Spark Ignited Engine", S. Maji, B.P. Pundir & S. Radziriski, Proc. of the IX National Conference on IC Engines & Combustion, Dehradun (India) 19-22, Nov. 1985.
- 13. "Methanol as a Fuel in Two Stroke Engines, Mathew Abraham", S. K. Singhal, S. Maji and B.P. Pundir, Proc. national Workshop on Alternative Fuel for Spark Ignited Engines, Dehradun 19-20 Nov. 1984.
- õSome Experiences on the Operation of Scooter and Moped Engine using Methanol",
   S. Maji, Mathew Abraham & B. P. Pundir, Proc. of the X National Conference on IC Engines & Combustion, Rajkot (India) December 1987.
- 15. õ*Cleanliness and Wear of a Methanol 2-Stroke Engine"*, **S. Maji** and M. Gupta, Proceedings of the National Programme on Tribology: Industrial Problems & prospects, New Delhi, January 24-25, 1992.
- 16. "Field Trial of Neat Methanol Scooter", J. Sharma, **S.Maji**, ML Sharma & Mathew Abraham, Proc. of the X national Conference on IC Engines & Combustion, Rajkot (India) December 1987.
- 17. "Reduction in Emission Levels Using Compressed natural Gas in Spark Ignition Engines", S. Maji and P. B. Sharma, National Conference on Modernization of Automobile industry with its impact on Environment, New Delhi, 19-20, 1996.
- 18. "Compressed Natural Gas as Spark as Ignition Engine Fuel", S. Maji, P. B. Sharma, Proc. of Power India 1995, page 30, April 26-27, 1995, New Delhi.
- 19. "Performance and Emission Characteristics of Ethanol-Gasoline Blends in a Single Cylinder Spark ignition Engine", S. Maji, M.K.G.Babu and P.B.Sharma, XVIIth National Conf. on IC Engines & Combustion, Surat, Dec. 18-20, 2001.
- 20. "Fuel Injection of 2-Stroke SI Engines: An Approach to improve Fuel Consumption and Hydrocarbon Emissions", S. Maji, M.K.G. Babu and P. B. Sharma, X ISME Conference on Mechanical Engineering, New Delhi, Dec. 9-11, 1996.

# Publications after completion of Ph. D

- 21. "Education in Automobile Engineering and Requirements of Automobile Engineers in India", S. Maji & P. B. Sharma, proceedings of National Seminar on Technical Manpower Development and Utilization, Rourkela, April 15-16, 2004.
- 22. "Growth of Technical Education in Delhi and a Comparison of Present Facilities with Other Metros in India", S. Maji & P. B. Sharma, proceedings of National Seminar on Technical Manpower Development and Utilization, Rourkela, April 15-16, 2004.

- 23. "State-of –Art Report on Technical Education in the State of Haryana", S. Maji, proceedings of National Seminar on Technical Manpower Development and Utilization, Rourkela, April 15-16, 2004.
- 24. "Perspective Technical Education in NCT of Delhi in the Context of a Dynamic Globalized Environment", S. Maji & P. B. Sharma, proceedings of National Seminar on Technical Manpower Planning in India Issues and Concerns, September 5-7, 2004, Hyderabad
- 25. õ*Liquid Nitrogen Powered Prime mover*", S. A. Krishnan, **S. Maji**, R. S. Meena, S. Babu and T. S. Datta, Indian journal of Cryogencis, ISSN 0379-0479, vol. 2, Feb. 2005.
- "Finite Element analysis of Prime Components of an Internal Combustion Engine",
   S. Maji, Murgan Chandra Kumar P., proceedings of 14<sup>th</sup> ISME International Conference on Mechanical Engineering in Knowledge Age, Delhi College of Engineering, 12-14 December 2005.
- 27. "Studies on Suspension of Diffusion Flame with Fine Mist in Modified Cup Burner Apparatus", Suresh Lal, S. Maji, J.C. Kapoor, proceedings of 14<sup>th</sup> ISME International Conference on Mechanical Engineering in Knowledge Age, Delhi College of Engineering, 12-14 December 2005.
- 28. "Supermileage Vehicle Project", Team Endeavour, S. Maji, Dr. Samsher, proceedings of International Conference on Mechanical Engineering in Knowledge Age, Delhi College of Engineering, 12-14 December 2005.
- 29. "Measurement of rspm Bounded Phenanthrene Path in the Ambient Air at a sensitive site in Delhi", V.N. Mathur, S. Maji, proceedings of 14<sup>th</sup> ISME International Conference on Mechanical Engineering in Knowledge Age, Delhi College of Engineering, 12-14 December 2005.
- 30. "Biodiesel as an Alternative Fuel in CI Engines: Performance and Emission Studies on a Single Cylinder Engine", S. Maji, S. S. Kachhwaha, Jai Prakash, presented on March 8, 2006 at ISFL-2006.
- 31. "Performance and Emission Studies on a Single Cylinder Biodiesel Engine", S. Maji, S. S. Kachhwa, Jai Prakash, proceedings on National Conference on Environmental Pollution Control for Sustainable Development on 27<sup>th</sup>-28<sup>th</sup> March, 2006.
- 32. "Characterization of An Externally Mixed Air-Assisted Atomizer", Suresh Lal, A. Kushari, J. C. Kapoor, S. Maji, proceedings of ICLASS 2006, International Congress on Liquid Atomizer and Spraying System, Kyoto, Japan 27August to 1 September 2006.
- 33. "Incorporating Fuel Flexibility in C I Engines: an Innovative Approach to Improve the Economy And Environment", by Amit Pal, S.Maji, O.P. Sharma & M.K.G.Babu accepted for presentation and publication in Glogift-06\( \text{g} \). An International Conference\( \text{o} \) on Management of Innovation, Technology transfer & Flexibility at

- 34. "Optimization of the Aerodynamics Design of Super Mileage Vehicle", S. Maji and Himanshu Almadi, SAE Paper no. 6 2007-01-0901.
- 35. "Development of Aerodynamics of a Super Mileage Vehicle", **S. Maji** and Himanshu Almadi, SAE Paper no. óSAE Paper no. ó 2007-26-060, Proceedings of SIAT, Pune, India, 17-20 January, 2007.
- 36. "Performance of Internally Mixed Twin Fluid Mist Generator", Suresh Lal, Meenakshi Gupta, Kushari, J.C. Kapoor and S. Maji, submitted to International Journal of Atomization and Spray, October, 2008.
- 37. "Suppression of Diffusion Flames with Water Mist in Enclosed Spaces", Suresh Lal, Meenakshi Gupta, A. Kushari, J.C. Kapoor, S. Maji, submitted to International Journal õFire Safety Journalö July 2008.
- 38. "Modelling of Siphon Fed Externally Mixed Air Blast Atomizer", Suresh Lal, Meenakshi Gupta, A. Kushari, J.C. Kapoor, S. Maji, International Journal of Atomization and Spary.
- 39. "Impact of CNG on Delhi's Vehicular Pollution" presented by Amit pal, S. Maji, O.P.Sharma, National Seminar on :The Status of Vehicular Pollution in Delhi after the Courtés Directions ó An Assessmenté, organized at Delhi College of Engineering, Delhi, Feb 25, 2008.
- 40. "Advantages and Limitations of CNG as Transportation Fuel in Delhi' by Amit Pal, J.D. Sharma, S. Maji, O.P.Sharma, presented at SIAM -TECHNIX-08ö GLOBAL Automotive Conference held at IHC, Delhi, April 28-30, 2008.
- 41. "Optimizations of Vehicular Emissions in Delhi', by Amit Pal, S. Maji, O. P. Sharma, Glogift-08, International Conference, held at Stevens Institute of Technology, Hoboken, NJ, USA, pp. 889-897, June 14-16, 2008.
- 42. "Vehicular Emissions: Estimation, Future Prediction and Control Strategies for the City of Delhiö, Amit Pal, S. Maji, O.P. Sharma and M.K.G. Babu, International Journal of Applied Engineering Research Vol. 4, No.7,2009, pages 1391 ó 1411.
- 43. "Bio-Diesel Production Through Hydrodynamic Cavitation and Performance Testing in Compression Ignition Engines" Amit Pal, Ashish Verma, S.S. Kachhwaha and S. Maji, Journal of Renewable Energy, Volume 35, No.3, Pages 619 ó 624.
- 45. "A Cad Based Dynamic Analysis Approach to AK Prosthesis Design" Manoj Soni, S. Maji, Sneh Anand and U. Singh, International Journal of Vibroengineering, June 2010, Volume 12, Issue 2
- 46. "Modelling an Above Knee Prosthesis- A kinematics Approach" Manoj Soni, S. Maji and Sneh Anand, International Journal of Vibroengineering, June 2010, Volume 12, Issue 2
- 46. "Suppression of Diffusion Flames in Cup Burner Appartus", Suresh Lal, A. Kushari, J.C Kapoor, **S.Maji**, International Journals of Applied Engineering Research, ISSN, 0973-4562, Volume 4, Number 12 (2009), PP.2573-2586.

- 47. *'Performance of Internally Mixed Twin Fluid Mist Generator''*, Suresh Lal, Meenakshi Gupta, A. Kushari, J.C.Kapoor and **S.Maji**, International Journals of Experimental Thermal and Fluid Sciences-Elsevier publication, accepted 15 March 2010.
- 48. "Modelling of Siphon Fed Externally Mixed Air Blast Atomizer", Suresh Lal, A. Kushari, J.C.Kapoor and **S.Maji**, International Journals of Dynamics of Fluids, ISSN 0973-1784, Volume 6, Number 1 (2010), pp.25-40.
- 50. "A case Study of Using CNG as a Transportation Fuel in Delhi", Amit Pal, S. Maji, O.P.Sharma, International Journals of Applied Environmental Sciences (IJAEAS), ISSNO973-607.
- 51. ''Thumba (citrullus colocyntis) seed oil: A sustainable source of renewable energy for Biodiesel Production'', Amit Pal, S.S. Kachhawaha, **S.Maji** & M.K.G. Babu, Journal of Scientific and Industrial Research India, vol. 69, May 2010, pp. 384-389.
- 52. "An Experimental Investigation of Ethanol-Gasoline blends in a SI Engine", Amit Pal, Sulabh Dhingra, R.S. Mishra, S. Maji, & M. K. G. Babu, International Conference on Biofuels, Delhi Technological University, Delhi, Jan 18-19, 2010.
- 53. "Recent Developments in Biodiesel: Part I Biodiesel Production Technology", Amit Pal, S. S. Kachhwaha, S. Maji, P. B. Sharma, International Conference on Biofuels, Delhi Technological University, Delhi, Jan 18-19, 2010.
- 54. "Recent Developments in Biodiesel: Part II Biodiesel Engine Performance and Emissions Studies", Amit Pal, S. S. Kachhwaha, S. Maji, P. B. Sharma, International Conference on Biofuels, Delhi Technological University, Delhi, Jan 18-19, 2010.
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# Annexure - I

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