Curriculum Vitae

August 2022

S Dasappa

Professor, Centre for Sustainable Technologies
Chair, Interdisciplinary Centre for Energy Research
Indian Institute of Science
Bangalore 560012

S Dasappa, Ph. D

Professor, Centre for Sustainable Technologies
Indian Institute of Science

Residence

1062 5th Main D Block, 2 stage, Rajajinagar
Bangalore 560 010, India.

Phone +91 80 23329208
Email : s.dasappa@gmail.com

Office

Centre for Sustainable Technologies
Indian Institute of Science
Bangalore 560 012, India.

Fax : +91 80 2360 1692
Phone +91 80 23329208
Email : dasappa@.iisc.ac.in

Brief summary

Prof. S Dasappa is the Chair of the Interdisciplinary Centre for Energy Research and faculty at the Centre for Sustainable Technologies Indian Institute of Science. His major area of research is in the combustion of solid, liquid and gaseous fuels. With the emphasis on energy conversion processes, the R&D activities address both scientific and technological challenges. The research outputs have contributed towards the engineering domain by addressing – "Process to Product philosophy" including sustainability through the translational research. With over 200 publications in various international and national journals, conferences and edited books, and 25 patents, he has been involved in technology transfers across the globe. Prof Dasappa has been involved in several national and international projects and Green hydrogen in recent times. In the recent pandemic situation, Prof. Dasappa was instrumental in developing and deploying medical oxygen generator systems in hospitals.
He has won several awards in Biomass energy – national and international and Professor Dasappa has been

- Identified in the top 2 % of the Energy scientist in the world. Stanford University and published in the journal PLOS Biology **Dec 2019**.
- Top 2 % of the Energy scientist by Elsevier Updated science-wide author databases of standardized citation indicators, **August 2021** (Rank 2772 in Energy out of 2,29,150)

Education

B.E.,	Mechanical Engineering	Bangalore University, with distinction, 1984.
Master degree	Faculty of Engineering	Indian Institute of Science, Bangalore, India, 1995
Ph D	Faculty of Engineering	Indian Institute of Science, Bangalore, India, 1997.

Positions held

• Chair, Interdisciplinary Centre for Energy Research	November 2018 to present
• External Research Supervisor, RMIT, Melbourne, Australia	March 2019 to present
• Associate faculty, Interdisciplinary Centre for Energy Research	October 2017 to present
• Professor, Centre for Sustainable Technologies (CST)	June 2017 to present
• Associate Professor (CST)	March 2012 to June 2017
• Principal Research Scientist (CST)	August 2006 to August 2012
• Various research positions at IISc with tenure (CST)	August 1985 to August 2006
• Student trainee and Project Engineer (KSCST)	Sept 1984 to July 1985

Research areas

With the emphasis on energy conversion processes, the R and D activities address both scientific and technological challenges in the area of combustion of solid, liquid and gaseous fuels. A major part of the research has been in the form of contributions to combustion science, which has further provided impetus towards technology development as a part of sponsored research and industrial project outputs. Translational research has led to developing technology to meet a range of devices, from cooking devices with high efficiency to MW level power generation. Many of the programs are oriented towards meeting the national goals in the area of Energy with emphasis on sustainability. The current activities focus on Green Hydrogen using biomass to address the national needs, a unique approach. In the area of clean coal technology, Prof. Dasappa has developed a novel reactor geometry for gasifiation of high as Indian coal to generate syngas. A few specific areas of research are indicated below,

- Green hydrogen from biomass for PEM fuel cell, Ammonia and fertilizers
- Thermochemical conversion process
  - Oxy-steam gasification for producing hydrogen-rich syngas for fuel cell applications
  - Propagation rates in packed bed reactors
  - Evaluation of tars from gasifier
- Separation of gases from multi-species mixture
  - Hydrogen separation from syngas
  - Oxygen for medical application
- Catalyst development and FT process for liquid fuel
- SOFC using alternate fuel
- In-cylinder diagnostics for alternate fuel
  - Gas engines and dual fuel engines
- High ash coal to syngas – Novel reactor geometry for gasification
- Hydrolysis process during biological conversion
- Energy system modelling – circular economy
- Modeling of renewables systems
- Standards for gasifiers and stove evaluation

Specialization and expertise

Taking forward the research outcomes, through Translational research, engineering of the technology products developed has serviced both industrial needs as well as Indian Rural Sector. Uniquely, the research activity that had begun earlier in Prof. Dasappa's career, with further advancement in recent times has translated to technology packages that have been transferred to various countries like Africa (Zambia, Kenya, Benin, Nigeria), Latin America (Brazil, Cuba), Europe (Switzerland, Italy), Asia (Japan, Cambodia, Sri Lanka) and the United States of America which have unique combinations of high energy efficiencies on one side and reliability (low MTBF on the other) and achieving these without too much tradeoff between the two criteria. This work has led to **mainstreaming of bio-energy** in the renewable sectors and establishing **bio-refinery**.

Leading a 30-member team, Professor Dasappa has set up new R&D facilities (for producer-gas-SOFC; bio-derived H2, PEM fuel cell, gas → chemicals, modern research engine facility, etc.,), towards taking on the R&D challenges and technology development that provide opportunities to address the emerging biofuel centric future. In the last 10 years, the overall funding support was obtained from various sources (₹ 441M - comprising 65% sponsored research, 25% industry, and about 10% international collaborations). Global presence through partnership and technology transfer and policy influence bear testimony to the importance and relevance of the R&D as well as technology development efforts.

The current research in the area of hydrogen from biomass for PEM fuel cell application is a unique and novel process and is expected to make a big impact on the production of **Renewable Energy Hydrogen.** Further, this thermo-chemical process is a prerequisite for syngas generation for ethanol or methanol production from biomass and waste. As a part of a demonstration program Prof. Dasappa has a joint project with the Indian Oil Corporation to set up the first Green hydrogen from biomass for PEM fuel cell bus application. Further, based on the wide range of experience, Prof. Dasappa is a member of

several national-level project building and appraisal programs including the National Hydrogen Mission.

Honors and Awards

1. **Amulya and Vimala Reddy Lecture Award in the field of Sustainable Development**, Indian Institute of Science, Bangalore 2019.
2. **Prof. Satish Dhawan Young Engineers State Award** instituted by Government of Karnataka, for the year 2004, (honoured in 2006).
3. **Core member of the team, which was awarded "FICCI Annual Award for Outstanding Achievement in Research in Science and Technology" by the Prime Minister, during the Annual General Meeting of FICCI held in Delhi on 24 December 2005.**
4. **CII National Award** for the **"Innovative Energy Saving Product / Service" of the year Award** for producer gas generator set that was selected for its uniqueness, yet adaptability to a variety of applications, jointly between Cummins India Limited and ABETS, IISc, Sept 2007.
1. Core member of the team which was awarded **"Nina Saxena Excellence in Technology Award – 2011" IIT Kharagpur, August 18th 2011.**
2. **AREAS Foundation Day Awards for excellent performance in the field of renewable energy** - Awarded in recognition of performance in the area of biomass gasification technology for the year 2015 by the Minister of State, MNRE. Jointly by Prof. S Dasappa and Dr. NKS Rajan, August 27, 2015.
3. **Young Scientists Award**, For the best paper and presentation at the Fourth National meet on Recent Advances in Biomass Gasification Technology, sponsored by the Ministry of Non-Conventional Energy Sources, Government of India, Mysore,1993.
4. **Young Scientists Award**, For the best paper and presentation at the Third National meet on Recent Advances in Biomass Gasification Technology, sponsored by the Ministry of Non-Conventional Energy Sources, Government of India, Baroda,1991.
5. **Young Scientists Award**, For the best paper and presentation at the First National meet on Recent Advances in Biomass Gasification Technology, sponsored by the Ministry of Non-Conventional Energy Sources, Government of India, Bombay,1990.
6. **Invited talk**, Opportunities for biomass as a mainstream energy source – A pathway through bio-refinery, IIT Mumbai, 6th International Conference On Advances In Energy Research (ICAER), Dec 12, 2017.
7. **Keynote address** titled "Biomass gasification and by-products" at the μCHP 16 – micro cogeneration through biomass gasification, University of Bolzano, Italy Dec 2 and 3, 2016.
8. **Best paper and presentation award** at the World Bamboo Congress, New Delhi, 2004.
9. **Best paper award** at the 19th National Conference on IC Engines and Combustion, 2005.
10. **Best Visual Presentation Award** at the 17th European Biomass Conference and Exhibition, Hamburg, 29th June – 3rd July 2009.
11. **Best Visual Presentation Award** - Shivapuji, A. M., and Dasappa, S. Performance evaluation tool for simulating gas engine – a GUI package, Proceeding of - The International Bioenergy Conference and Exhibition, Shanghai, 2015.
12. **Plenary talk** titled "Small capacity producer gas engine adaption from natural gas for decentralized power generation application" at the International Bioenergy (Shanghai) Exhibition and Asian Bioenergy Conference, 2015.
13. **Plenary lecture at the** 24th European Biomass Conference & Exhibition – Amsterdam, Netherlands, June 6th – 9th 2016.
14. **Invited talk**, **Research to the product: A treatise on sustainable biomass energy** at Department of Management, Indian Institute of Science, 15 March 2013.
15. **Robert Bosch Lecture Series** at Robert Bosch Engineering and Business Solutions Limited, Bangalore, March 2009, delivered lecture Energy Series at the GE, John Welsh Centre, Bangalore to the Energy and water group focusing on Renewable Energy in India. 2007.

Major ongoing Sponsored/Consultancy

Prof. Dasappa is involved as a Principal Investigator in most of the sponsored research and industrial projects from 2010 onwards

Sl. No	Title	Funding Agency	Value Rs. Lakhs	Duration Years	Investigators
1.	10 kg/hr hydrogen production from biomass for PEM fuel cell application,	IOCL	1964	2019 - 2022	**PI: S.Dasappa** Co-PI's - Anand MS
2.	Use of bio-hydrogen for PEM fuel stacks – Research and Demonstration with BHEL as partner	DST	368.26	2019 - 2023	**PI: S.Dasappa** Co-PI's - L N Rao, Anand MS
3.	Generation and usage of Hydrogen in steel value chain – Hydrogen generation technologies with a workshop	Tata Steel	50.0	2019 6 months	**PI: SD**
4.	DST-NFTDC Centre for Materials and Energy storage Platforms – H2 : A multi-institutional program	DST IISc share	856 368	5	**PI** NFTDC, **Co-PI** IISc ,IITM, IIT Bhu, SCTCE **PI : S Dasappa** Co-PI's - L N Rao, Anand MS
5.	Coal gasification of high ash content Indian coal using cyclone Gasifiers	DST	234	2019-2021	**PI S Dasappa** Co-PI's - L N Rao, Charlie O
6.	National Centre for Clean Coal Research and Development (NCCCRD) • Sub-project: Syngas to gas turbine	DST	584	2018-2023 5	**PI : S Dasappa** Co-PI's - L N Rao, Charlie O, Anand MS, Pramod
7.	Strategic University Network to Revolutionize Indian - Solar Energy (SUNRISE)	(GCRF)	390	4	**PI :** Satish. Patil Co-PI's : **S.Dasappa** Ashok Shukla
8.	Hydrogen Generation using Biomass Gasification for Fuel Cell Application (HBGF)	MNRE	453.31	April 2016 – Mar 2022	PI : **S Dasappa** Co-PI: Ashok R
			4411.57		
			5.88 m USD		
	Completed projects 2011 to 2018, 2001 to 2011, 1997 to 2001*				
	Number of projects	14	**2343.94**	2011 to 2018	PI- 9 Co-PI, 5
	Number of projects	38	**996.03**	2001 to 2011	PI-10 Co-PI, 28
	Active Team member of projects	34	1130.83	1997 to 2001	

*details on pages 31 - 35

Summary of research output (papers, patents, technology development)

Item	Total
Journals	73
Books	3
Chapters in books	13
Working papers (UNIDO)	2
Patents granted	15
Patents filed	14
Conferences/seminars/Symposia	125
Reports/Monographs, etc	30
Journals, submitted	2
Total	**277**
Awards and recognition	19
Project funds generated, Million INR in the last 10 years	**556**
Technology transfers (India and overseas)	**21**

Google Scholar		
Citation indices	All	Since 2017
Citations	4449	2110
h-index	32	25
i10-index	63	43
Scopus		
h-index	27	

Students guidance

- **8** Ph.D. awarded
- **4** Master's theses awarded
- **10** Ph.D. theses are in progress

- Top 2 % of Energy scientists, Stanford database, Dec 2019
- Top 1 % of Energy Scientist, Elsevier database, Aug 2021

Summary of Academic Experience

Summary of Faculty experience

- **Graduate student mentoring**

Doctoral dissertations and master's Thesis: Eight Ph.D. thesis awarded, and ten ongoings in the area of combustion, solids, gas and liquids with a focus on experiments and modeling of processes. The thermochemical conversion process, Internal combustion engines, solid oxide fuel cell, hydrogen generation, FT process for liquid fuel and bioenergy. Hybrid energy, Coal gasification, Methanol and DME from syngas, Energy system modeling.

Ph.D. Awarded

1. Anand M Shivapuji, *In-cylinder experimental and modeling studies on producer as fueled operation of spark-ignited gas engines*, 2015.
2. Dario Prando Ph.D. at the Free University of Bolzano, Italy *Use of Biomass in South-Tyrol: Energy conversion and distribution to the final users*, 2015 (Jointly with Marco Baratieri and Andrea Gasparella)
3. Snehesh Shivananda Ail, Combustion *Synthesized Cobalt catalysts for liquid fuel generation via Fischer-Tropsch reaction*, 2016.
4. Sadhan Mahapatra, *Experimental and analysis on wood gasification in an open-top downdraft gasifier*, 2016.
5. Sandeep Kumar, Experiments *and Analysis on Wood Gasification in an Open Top Downdraft Gasifier*, 2016.
6. Rakesh N, *Experiments and Modeling of fueling a SOFC with producer gas*, 2020.
7. Suresh N, Modeling and Analysis of Hybrid Renewable Energy for Power Generation, 2021
8. Ravi Kumar, *Experiments and Modeling of Biochemical conversion of biomass*, 2021 (Jointly with HN Chanakya).

Ph.D. Ongoing

1. Arvind Gupta, *High purity hydrogen from biomass through thermo-chemical conversion*, 2015.
2. Arashdeep Singh, Thermo-*chemical conversion of biomass to Activated carbon and other by products*, 2017 (Jointly with LN Rao).
3. Shirish Kumar Sharma, *Clean coal*, 2017 (Jointly with Charlie Oomen and L N Rao)
4. Anam Adil, *Biofuels from biomass* 2017, (Jointly with L N Rao)
5. Reema Mohanty, *Advanced biofuels – Sustainability and techno-economic* 2016 (Jointly with P Balachandra)
6. Sagar Panda, Energy from turbo-machine – using renewable energy, 2017
7. Shravanth, Registered in Divecha Centre, Sustainability analysis of mobility through electric vehicles in India, (Jointly with Balachandra, DoM)
8. Asheruddin Experiments and modelling of solid fuels in vitiated environment, 2018
9. Gautham Biofuels and circular economy, 2020 (Jointly with P. Balachandra)

Ph D ongoing with other universities

1. Mojtaba Hedayati, Renewable Energy, 2018 (Jointly with Kalpit Shah, Jorge Paz-Ferreiro, Sazal Kundu, S Dasappa) at RMIT University, City Campus, Melbourne, Australia

MTech Research Awarded

1. Ravi Kumar Master thesis (M Sc) at the Indian Institute of Science: *Effect of Extractives and Crude proteins on the kinetics of hydrolysis in a solid-state bioreactor*, 2013. (Jointly with HN Chanakya)
2. Amit Kumar, Water-gas shift reaction, 2018 (Jointly with LN Rao).
3. Rohit Baruah, *Experimental investigations on the incineration of sanitary napkins with focus on emissions*, 2019 (Jointly with HN Chanakya).
4. Ganesh Subramaniam Integration BS, M.S Thesis, *Plasma activated water - preparation, characterization and applications*, 2019 (Jointly with LN Rao).

Master Thesis Advised

1. **20 master's theses** in the area of combustion, gasification, fuel cells and IC engines with students from other institutions.

- **Graduate-level teaching at IISc Bangalore (2002- present)**

Instrumental in developing an academic program at the centre by offering courses, which later led to gaining academic status with the intake of research students. Most of the courses are jointly offered due to the interdisciplinary nature of the subjects taught. Developed a compulsory 200-level course for CST students with another faculty - Sustainable energy and environment lab, 300-level course Mathematical Analysis of Experimental Data.

1. Bio-energy Systems (first time introduced by me at the Centre) 2002, 2003, 2005, 2007, 2008, 2010
2. Sustainable energy and environment lab - 2011, 2012, 2013,2014, 2015, 2016
3. Alternate fuels for reciprocating engines - 2011, 2012, 2016, 2018 (Alone)
4. Renewable Energy, Environment and Economics - 2003, 2007, 2010 2011
5. Energy systems and sustainability - 2004, 2012, 2013, 2014, 2015, 2017
6. Thermo-chemical and biological energy recovery from biomass - 2014, 2016
7. Renewable Energy Technologies - 2014, 2015, 2016,
8. Mathematical Analysis of Experimental Data - 2016, 2017, 2018, 2019
9. Energy and environment - 2019

- **Undergraduate level teaching at IISc Bangalore**

  - Design Principles in Environmental Engineering - 2016, 2017

- **Research support and collaboration**

  - Extramural Research support: Research grants and support from agencies like MNRE, DST, DBT, UNIDO, UNDP, RCUK, Italian MATT, SIDA, Cummins, EKZ – Switzerland, DRDO, Tata Motors, Tata Steel, IOCL

- **Global collaborations and Teamwork**

  - Collaborative research with KTH, EKZ, ETH, UNIDO, UNDP, RCUK, MATT, in various scientific programs, has resulted in publications and reports of archival value

- **Travel and presentations**

  - Have extensively traveled to and presented research outcomes including technology transfer in the USA, Mexico, Austria, Belgium, France, Germany, Italy, Netherlands, Spain, Sweden, Switzerland, United Kingdom, Cuba, Brazil, Chile, Uruguay, Benin, Ethiopia, Kenya, Nigeria, South Africa, Tanzania Uganda, Zambia, Swaziland, Cambodia, Fujairah, Malaysia, Nepal, China, Japan, Canada, Australia and Thailand as part of invited lectures, conference, meetings, workshops, program reviews and industrial collaboration.

Publications

- **Books**

1. Derek J Gardiner, Sukanta Roy, Momir Djurovic, Richard Corkish, Ajith de Alwis, Hiroshi Yoshino, Atul Raturi, M Ravindran, S Dasappa, Arun Kumar, Mohd Nordin Hasan, Science plan on sustainable energy, as a part of International Council for Science (ICSU), Regional office for Asia and the Pacific, June 2009.
2. Biomass to Energy: The Science and Technology of the IISc Bio-energy systems, S Dasappa, HS Mukunda, P J Paul, NKS Rajan and team CGPL, Dept of Aerospace Engg., Indian Institute of Science, 2003 (155 pages).

- **Chapters in Books**

1. S. Dasappa and Anand M. Shivapuji, Biomass gasification: Thermochemical route to energetic bio-chemicals, Advanced Biofuel Technologies, Present Status, Challenges and Future Prospects, Elsevier, 978-0-323-88427-3, Pages 305-332, 2022.
2. S. Dasappa, Thermochemical Conversion of Biomass, Transformation of Biomass: Theory to Practice, John Wiley & Sons, Ltd, 133-157, 2014.
3. S. Dasappa, Biomass gasification: Some of the experiences from India, Handbook Biomass gasification, Second Edition, BTG, Netherlands, 2012.
4. S. Dasappa, Status, potential and challenges of promoting biomass gasification technologies for industrial applications in Africa; An UNIDO publication, 2008.
5. S Dasappa, Biomass Gasification: for energy needs of the Tea Industry, Economic crisis in Tea Industries – Strategies for Scientific Management, Eds NK Jain, F Rahman and Peter Baker, Stadium Press LLC, 2008.
6. H. S. Mukunda and S. Dasappa, "Regional programme on Biomass energy – Gasification and Bio-fuels for productive uses in the LAC Region" An UNIDO publlication, 2006-07.
7. S Dasappa, "Overview of a few gasification technology packages in use overseas", Chapter in a book entitled "Biomass Based Decentralized Power Generation" published by SPRERI, 2005.
8. PJ Paul, S. Dasappa, G Sridhar, H V Sridhar, " Biomass Derived Energy Carriers as Fuels in Engines and Fuel cells, Chapter in a book entitled "Biomass Based Decentralized Power Generation" published by SPRERI, 2005.
9. H. S. Mukunda, S. Dasappa, P J Paul, N K S Rajan, G Sridhar, H V Sridhar and U Shrinivasa "Thermo-chemical conversion of biomass – a retrospective and a prospective", Chapter in book entitled " Rural Technology : a 25 years retrospective" Vol. 2. as part of Silver Jubilee celebration, ASTRA, 2004.
10. P J Paul, M Jayamurthy, S Dasappa, G Sridhar, H V Sridhar, H S Mukunda, NKS Rajan, C Brage, T Liliedahl and K Sjostrom, "Tar characterisation in new generation agro-residue gasifier-cyclone and downdraft open-top twin air entry systems", Published in Biomass Gasification and Pyrolysis: State of the Art and Future prospects, Eds: Kaltschmitt K and Bridgwater AV, CPL Press, UK, 1997.
11. H S Mukunda, S Dasappa, P J Paul, N K S Rajan, U Shrinivasa, G Sridhar and H V Sridhar, "Fixed bed gasification for electricity generation", Published in Biomass Gasification and Pyrolysis: State of the Art and Future Prospects, Eds: Kaltschmitt K and Bridgwater AV, CPL Press, UK, 1997.
12. H S Mukunda, S Dasappa and U Shrinivasa, ``Wood Gasification in open-top gasifiers -- Technology and Economics", published in a book entitled Renewable Energy - Sources for Fuels and Electricity, Island Press, Washington D C, 1993.
13. B.N. Baliga and S. Dasappa `` Economics of wood based Published in a book "Power generation through renewable sources of energy," Tata McGraw Hill, 1991.

- **Journal Papers**

1. Arashdeep Singh, Arvind Gupta, N Rakesh, Anand M Shivapuji, S Dasappa, Syngas generation for methanol synthesis: oxy-steam gasification route using agro-residue as fuel, Biomass Conversion and Biorefinery, 12 (5), 1803-1818, 2022.
2. Mohammed Asheruddin, Anand M. Shivapuji, and Srinivasaiah Dasappa, Thermochemical Conversion of Biomass Char under Carbon Dioxide Flux in a Thermally Supported Environment: Experimental and One-Dimensional Numerical Investigations, Energy & Fuels, 2022. DOI: 10.1021/acs.energy fuels.1c03550
3. Mojtaba Hedayati Marzbalia, Amir Saberi, PobitraHalder, JorgePaz-Ferreiroa, Srinivasaiah Dasappa, Kalpit Shah, Mechanistic and kinetic study of the hydrothermal treatment of paunch waste, Chemical Engineering Research and Design; Volume 177, Pages 541-553, January 2022.
4. AM Shivapuji, S Dasappa, L Rao, Assessment of planar laminar flame speed of Hythane generated in-situ from non-thermal plasma reforming of Methane: Flame tube-based experiments and thermo-chemical analysis, Thermal Science and Engineering Progress, 101179, 2022.
5. N. Mohammed Asheruddin, Anand M. Shivapuji and Dasappa Srinivasaiah, Influence of gas and solid phase thermo-physical and transport properties on the thermo-chemical conversion of char in reacting media: intra-particle, microscopic and temporal mass loss-based sensitivity analysis, Combustion Theory and modeling, 25 (4) (589–630), 2021.
6. Shivapuji, S Dasappa, Numerical assessment of methane number and a critical compression ratio of gaseous alternative fuels: CFR engine quasi dimensional simulation approach, Thermal Science and Engineering Progress 20, 100661, 2020.
7. Ravi Kumar, D., Chanakya, H.N., Bhatia, S., Dasappa, S., Predicting biogas production from a two-plot fit of extractables and recalcitrants from ligno-cellulosic biomass feedstocks, Bioresource Technology Reports, 2020, 10, 100411
8. Subramanian, P.S.G., Jain, A., Shivapuji, A.M., ...Dasappa, S., Rao, L., Plasma-activated water from a dielectric barrier discharge plasma source for the selective treatment of cancer cells, Plasma Processes and Polymers, 2020, 17(8), 1900260
9. Jaiswal, A.K., Ananthanarasimhan, J., Shivapuji, A.M., Dasappa, S., Rao, L, Experimental investigation of a non-catalytic cold plasma water-gas shift reaction, Journal of Physics D: Applied Physics, 2020, 53(46), 465205
10. Shivapuji, A.M., Dasappa, S,,Numerical assessment of methane number and a critical compression ratio of gaseous alternative fuels: CFR engine quasi dimensional simulation approach, Thermal Science and Engineering Progress, 2020, 20, 100661
11. R Borooah, HN Chanakya, S Dasappa, Investigations into the performance of single-chamber sanitary napkin incinerators with emphasis on CO and CO2 emissions, Waste Management, 102, 667-676, 2020.
12. J Ananthanarasimhan, Lakshminarayana Rao, Anand M Shivapuji and S Dasappa, Influence of gas dynamics on arc dynamics and discharge power of rotating gliding arc, Plasma Sources Sci. Technol, 28, 085012, 2019.
13. PS Ganesh Subramanian, Harsha R, Manju D. K., Hemanth M, Lakshminarayana R, Anand M S and Dasappa S, Characterization of Plasma Activated Water for Medical Applications, Advanced Materials Letter, 10(12), 919-923, 2019.
14. Punith N, Harsha R, Lakshminarayana R, Hemanth M, Anand M S and Dasappa S, Plasma activated water generation and its application in agriculture, Advanced Materials Letter, 10(10), 700-704, 2019.
15. NS Suresh, NC Thirumalai, S Dasappa, Modeling and Analysis of Solar Thermal and Biomass Hybrid Power Plants, Applied Thermal Engineering, 160 (2019) 1141212.
16. J Ananthanarasimhan, L Rao, AM Shivapuji, S Dasappa, Characterization and Applications of Non-Magnetic Rotating Gliding Arc Reactors-A Brief Review, Frontiers in Advanced Materials Research, 1(1), 31-38, 2019.

17. NS Suresh, NC Thirumalai, S Dasappa, Modeling of Solar and Biomass Hybrid Power Generation—a Techno-Economic Case Study, Process Integration and Optimization for Sustainability, 3 (1), 101-114, 2019.
18. DR Kumar, HN Chanakya, S Dasappa, Anaerobic Digestion Potential of Leaf Litter: Degradability and Gas Production Relationships, Waste Valorisation and Recycling, 553-556, 2019.
19. N Rakesh, S Dasappa, Analysis of tar obtained from hydrogen-rich syngas generated from a fixed bed downdraft biomass gasification system, Energy Conversion and Management 167, 134-146, 2018.
20. N Rakesh and S Dasappa, A critical assessment of tar generated during biomass gasification - Formation, evaluation, issues and mitigation strategies, Renewable and Sustainable Energy Reviews, 91, 1045-1064, 2018.
21. SS Ail, V Benedetti, M Baratieri, S Dasappa, Fuel-rich combustion synthesized Co/Al2O3 catalysts for wax and liquid fuel production via Fischer Tropsch reaction, Industrial and Engineering Chemistry Research. 57 (11), 3833-3843, 2018.
22. Deb Chatterjee, Balram Sankaran, Liudvika Leisyte and S Dasappa, University Research Commercialization in Emerging Economies: A glimpse into the "Black Box", Science and Public Policy, 45 (3), 361–372, 2018.
23. M Sharma, S Dasappa, Emission reduction potentials of improved cookstoves and their issues in adoption: An Indian outlook, Journal of environmental management, 204, 442-453, 2017.
24. Shivapuji, A. M., and Dasappa, S. Analysis of thermodynamic scope engine simulation model empirical coefficients: Suitability assessment and tuning of conventional hydrocarbon fuel coefficients for bio syngas, International Journal of Hydrogen Energy, 42 (26), 16834-16854 2017.
25. Shivapuji, A.M., and Dasappa, S, Quasi dimensional numerical investigation of syngas fuelled engine operation: MBT operation and parametric sensitivity analysis, Applied Thermal Engineering, 124, 911-928, 2017.
26. AS Snehesh, HS Mukunda, S Mahapatra, S Dasappa, Fischer-Tropsch route for the conversion of biomass to liquid fuels-Technical and economic analysis, Energy, 130, 182-191, 2017.
27. Sandeep K and S. Dasappa, Modeling and analysis of single particle conversion of biomass in a packed bed gasification system, Applied Thermal Engineering, 12, 1382-1395, 2017.
28. D Prando, S Shivananda Ail, D Chiaramonti, M Baratieri, S Dasappa, Characterisation of the producer gas from an open top gasifier: Assessment of different tar analysis approaches, Fuel, 181, 566–572, 2016.
29. Snehesh A Shivananda and S Dasappa. Investigations into enhanced wax production with combustion synthesized Fischer-Tropsch catalysts, Energy Conversion and Management, 116, 80–90, 2016.
30. Sadhan Mahapatra, K Sandeep, S Dasappa Gasification of wood particles in a co-current packed bed: experiment and model analysis, Fuel Processing Technology, 145, 76-89, 2016.
31. Monikankana Sharma, Rakesh N and S. Dasappa Solid oxide fuel cell operating with biomass derived producer gas: status and challenges, Renewable & Sustainable Energy Reviews, 60, 450-463, 2016.
32. Snehesh A Shivananda and S Dasappa, Biomass to liquid transportation fuel via Fischer-Tropsch synthesis - Technology review and current scenario, Renewable & Sustainable Energy Reviews, 58, 267-286, 2016.
33. AM Shivapuji, S Dasappa, Influence of fuel hydrogen fraction on syngas fuelled SI engine: Fuel thermo-physical property analysis and in-cylinder experimental investigations, International Journal of Hydrogen Energy, 40 (32), 10308-10328, 2015.
34. Monikankana Sharma, Suresh Attanoor and S. Dasappa, Investigation into co-gasifying Indian coal and biomass in a down draft gasifier-Experiments and analysis, Fuel Processing Technology, 138, 435-444, 2015.
35. K Sandeep, S Dasappa, First and second law thermodynamic analysis of air and oxy-steam biomass gasification, International Journal of Hydrogen Energy, 39 (34), 19474-19484, 2014.
36. AM Shivapuji and S Dasappa, In-cylinder investigations and analysis of a SI gas engine fuelled with H_2 and CO rich syngas fuel: Sensitivity analysis of combustion descriptors for engine

diagnostics and control, International Journal of Hydrogen Energy, 39 (28), 15786-15802, 2014.
37. Sadhan Mahapatra and S. Dasappa, Experiments and analysis of propagation front under gasification regimes in a packed bed, Fuel Processing Technology, 121, 83-90, 2014.
38. Sadhan Mahapatra and S. Dasappa, Influence of surface area to volume ratio of fuel particles on gasification process in a fixed bed, Energy for Sustainable Development, 19, 122-129, 2014.
39. Anand M Shivapuji, and S. Dasappa, Selection and thermodynamic analysis of a turbocharger for a producer gas-fuelled multi-cylinder engine, Journal of Power and Energy, 28(3), 340-356, 2014.
40. Sandeep K and Dasappa S, Oxy–steam gasification of biomass for hydrogen-rich syngas production using downdraft reactor configuration, International Journal Energy Research, 38, 174–188, 2014.
41. Anand M Shivapuji, and S. Dasappa, Experiments and Zero D modeling studies using specific Wiebe coefficients for producer gas as fuel in spark ignited engines - Proceedings of the Institution of Mechanical Engineers, Part C: Journal of Mechanical Engineering Science, 227(3), 504-519, 2013.
42. S Dasappa, Scientific and technological aspects of fixed bed biomass gasification, The American Chemical Society, 246, 2013.
43. S. Dasappa and H V Sridhar. Performance of diesel engine in a dual fuel mode using producer gas for electricity power generation, International Journal of Sustainable Energy, 32(3), 153–168, 2013.
44. S Dasappa, G Sridhar, and PJ Paul. Adaptation of small capacity natural gas engine for producer gas operation, - Proceedings of the Institution of Mechanical Engineers, Part C: Journal of Mechanical Engineering Science, 226 (6), 1568-1578, 2012.
45. S Dasappa, HV Sridhar and Indrajit Muzumdar, Experimental study and Thermodynamic analysis of a turbocharger with producer gas as fuel, Journal of Mechanical Engineering Science, 226(4) 1004-1015 , 2012.
46. Sadhan Mahapatra and S. Dasappa, An approach for off-grid biomass distributed generation in lieu of grid extension, Energy for Sustainable Development, 16, 146–154, 2012
47. PM Gnanendra, DK Ramesha, S Dasappa, Preliminary investigation on the use of biogas sludge for gasification, International Journal of Sustainable Energy, 31 (4), 251–267, 2012.
48. S Dasappa, Potential of biomass energy for electricity generation in Sub-Saharan Africa, Journal on Energy for Sustainable Development, 15, 203–213, 2011.
49. S Dasappa, DN Subbukrishna, KC Suresh, PJ Paul and GS Prabhu, Operational experience on a grid-connected 100 kWe biomass gasification power plant in Karnataka, Energy for Sustainable Development, 15, 231–239, 2011.
50. S. Dasappa, H. V. Sridhar, G. Sridhar, and P.J. Paul, Science and technology aspects of bio-residue gasification, Biomass conversion and biorefinery, 1, 121–131, 2011.
51. HS Mukunda, S Dasappa, PJ Paul, NKS Rajan, Mahesh Yagnaraman, D Ravi Kumar and Mukund Deogaonkar, Gasifier stoves – science, technology and field outreach; Current Science, 98 (5), 627-638, 2010.
52. S. Dasappa, Sustainable energy from Biomass – present and future for the Asia-Pacific region, Special issue : Sustainable Energy in Asia and the Pacific – Emerging Technologies and Research Priorities, Malaysian Academy of Sciences, 2010.
53. Sadhan Mahapatra, HN Chanakya and S Dasappa, Evaluation of various Energy devices for Domestic Lighting: Technology and Economics, Energy for Sustainable Development, 13, 271–279, 2009.
54. Ravindranath, NH, Balachandra, P, Dasappa, S and Usha Rao, K, Bioenergy Technologies for Carbon Abatement, Biomass and Bioenergy, 30 (10), 826 - 837, 2006.
55. G Sridhar, HV Sridhar, Basawaraj, MS Sudarshan HI Somsekhar, S Dasappa and PJ Paul, Case Studies on Small Scale Biomass Gasifier Based Decentralized Energy Generation Systems, MGRIRED Journal (Southern Region), 1(1) March 2007.
56. G Sridhar, HV Sridhar, S Dasappa, PJ. Paul, NKS Rajan and HS Mukunda, Development of Producer Gas Engines, Journal of Automobile Engineering, Part D, Proc. Institute of. Mechanical Engineers, 219, 423-438, 2005.

57. G Sridhar, S Dasappa, HV Sridhar, PJ Paul and NKS Rajan, Gaseous emissions using producer gas as fuel in reciprocating engines, SAE Technical Paper, 2005-01-1732, 2005.
58. S Dasappa, PJ Paul, HS Mukunda, NKS Rajan, G Sridhar and HV Sridhar, Biomass gasification technology – a route to meet energy needs, Current Science, 87(7), 908 – 916, 2004.
59. NH Ravindranath, HI Somashekar, S Dasappa, CN Jaysheela Reddy, Sustainable biomass power for rural India: Case study of biomass gasifier for village electrification, Current Science, 87(7), 932 – 941, 2004.
60. S Dasappa, Biomass gasification for energy needs of Tea Industry, International Journal of Tea Science, Special issue on Impact of Science on the Economics of Tea Industry, 3, 83-94, 2004.
61. S Dasappa, HV Sridhar, G Sridhar, PJ Paul, and HS Mukunda, Biomass Gasification – a substitute to fossil fuel for heat application, Biomass and Bioenergy, 23, 637-649, 2003.
62. S Dasappa and PJ Paul, Gasification of char particles in packed beds – analysis and results, International Journal of Energy Research, 25, 1053-1072, 2001.
63. HI Somashekar, S Dasappa and NH Ravindranath, Rural bioenergy centers based on biomass gasifiers for decentralized power generation: case study of two villages in southern India, The Journal of the International Energy Initiative, Energy for sustainable development, 4(3), Oct 2000.
64. G Sridhar, HV Sridhar, S Dasappa, PJ Paul, NKS Rajan, U Shrinivasa and HS Mukunda, Technology for gasifying pulverised bio-fuels including agricultural residues, Energy for Sustainable Development, The Journal of the International Energy Initiative, 3(2), 1996.
65. H S Mukunda, P J Paul, S Dasappa, U Shrinivasa, H Sharan, R Buehler, P Hasler and H Kaufmann, Results of an Indo-Swiss programme for qualification and testing of a 300 kW IISc-Dasag gasifier, Energy for Sustainable Development, The Journal of the International Energy Initiative, 1(4), 1994.
66. HS Mukunda, S Dasappa, PJ Paul, NKS Rajan and U Shrinivasa, Gasifiers and combustors for biomass - technology and field studies, Energy for Sustainable Development, The Journal of the International Energy Initiative, 1(4), 1994.
67. S Dasappa, PJ Paul, HS Mukunda and U Shrinivasa, The Gasification of Wood Char Spheres in CO_2 - N_2 mixtures - Analysis and Experiments, Chem. Engg. Sci., 49(2), 222-232,1994.
68. HS Mukunda, S Dasappa, B Swathi and U Shrinivasa, Studies on Stove For Powdery Biomass, International Journal on Energy Research, 17(2), 81-291 1993.
69. BN Baliga , S Dasappa, HS Mukunda and U Shrinivasa, Gasifier based power generation: Technology and Economics, Sadhana, Indian Academy of Sciences, 18 (1), 57–75, 1993.
70. SN Srinivas, NH Ravindranath, S Dasappa, U Shrinivasa and HS Mukunda, Wood Gasifier Based Rural Power Generation System:A case study, Pacific & Asian Journal of Energy 2, New series, 2 (2), 81-91, 1992.
71. S Dasappa, U Shrinivasa, BN Baliga, HS Mukunda, Five-kilowatt wood gasifier technology: Evolution and field experience, Sadhana, Indian Academy of Sciences, 14 (3), 1989.
72. HS Mukunda, U Shrinivasa and S Dasappa, Portable single-- pan wood stoves of high efficiency for domestic use, Sadhana, Indian Academy of Sciences, 13(4), 1988.
73. S Dasappa, Vikram Reddy, HS Mukunda and U Shrinivasa, Experience with gasifiers for 3.7 kW Engines, AMBIO - The Royal Swedish Academy of Sciences, 14, 1985.

- **Working papers**

1. S. Dasappa, Status, potential and challenges of promoting biomass gasification technologies for industrial applications in Africa, an UNIDO publication, 2007.
2. H. S. Mukunda and S. Dasappa, Regional programme on Biomass energy – Gasification and Bio-fuels for productive uses in the LAC Region, an UNIDO publication, 2006.

- **Patents**

Granted

1. S Dasappa and Sandeep Kumar, System and Method for producing hydrogen-rich syn-gas for hydrogen generation Indian Patent 390746, 2016.
2. S. Dasappa, P. J. Paul and N.K.S. Rajan, Producer gas carburetor, European Patent No. 2496818 granted, Dated - June 2015.
3. S. Dasappa, P. J. Paul and N.K.S. Rajan, Producer gas carburetor, US Patent No. 9181901 granted, Dated - November 2015.
4. HS Mukunda, S. Dasappa, P.J. Paul, N.K.S. Rajan, D.N. Subbukrishna, A novel process and apparatus for the manufacture of precipitated silica from rice husk ash, Vietnam Patent No. 11795 granted, Dated - 2013.
5. H.S. Mukunda, P.J. Paul, S. Dasappa, N.K.S. Rajan, G. Sridhar, H.V. Sridhar, An improved biomass gasifier, Japanese Patent No. 4805520 granted, Dated - 2011.
6. HS Mukunda, S. Dasappa, P.J. Paul, N.K.S. Rajan, D.N. Subbukrishna, A novel process and apparatus for the manufacture of precipitated silica from rice husk ash, Japan Patent No. 4537379 granted, Dated - 2010.
7. H.S. Mukunda, S. Dasappa, P.J. Paul, NKS Rajan, DN Subbukrishna, A novel process and apparatus for the manufacture of precipitated silica from rice husk ash, Indonesian Patent ID P 0024190 granted, Dated - 2009.
8. S. Dasappa, H.S. Mukunda, P.J. Paul, N.K.S. Rajan, G. Sridhar, HV Sridhar, A process and apparatus for cleaning tar and dust laden gas to highest level of purity using Cn Technology, Indian Patent No. 215917 granted, Dated - 2008.
9. H.S. Mukunda, S. Dasappa, P.J. Paul, NKS Rajan, D.N Subbukrishna, A novel process and apparatus for the manufacture of precipitated silica from rice husk ash, Chinese Patent No. ZL 200480005829.5 granted, Dated - 2008.
10. H.S. Mukunda, S. Dasappa, P.J. Paul, NKS Rajan, DN Subbukrishna, A novel process and apparatus for the manufacture of precipitated silica from rice husk ash, Indian Patent No. 216477 granted, Dated - 2008.
11. HS Mukunda, S. Dasappa, P.J. Paul, NKS Rajan, M. Jayamurthy, A process of removing hydrogen sulfide from a gaseous stream containing hydrogen sulphide, Indian Patent No. 193111 granted,
12. H.S. Mukunda, S. Dasappa, P.J. Paul, N.K.S. Rajan, G. Sridhar, H.V. Sridhar, Fuel-efficient biomass stove and a method of operating the stove, Indian Patent No. 229283 granted, Dated - 2009.
13. H.S. Mukunda, PJ Paul, S Dasappa, NKS Rajan, G Sridhar, HV Sridhar, An improved biomass gasifier, Indian Patent No. 217056 granted, Dated - 2008.
14. HS Mukunda, PJ Paul, S Dasappa, NKS Rajan, G Sridhar, HV Sridhar, Biomass Gasifier 9623(P-11) Switzerland 1840/99 Patent No. 693 929 granted, Dated - Oct 2000.
15. HS Mukunda, PJ Paul, S Dasappa, NKS Rajan, G Sridhar, HV Sridhar, Biomass Gasifier Indian Patent No. 217056 granted, Dated Oct 2008.

Patents Filed

1. S Dasappa and Anand M Shivapuji AN ONLINE FILTRATION SYSTEM AND METHOD FOR REMOVING CONTAMINANTS FROMGASEOUS MEDIA AT LOW PRESSURES, 202141004312 A, 01/02/2021.
2. S Dasappa, Shivapuji Anand. M., Arashdeep Singh, Gautham Srinivas G, Shirish Sharma, Arvind Gupta, Novel Agro Straw Bale Torrefaction System, Indian Patent Application No. 202141002008
3. LN Rao, Shivapuji Anand. M. and S Dasappa; Plasma Activated Water at Near Neutral pH Conditions, Indian Patent Application No. 202041016754
4. S Dasappa, Shivapuji Anand. M., Arashdeep Singh; Method and Process for Low Pressure (sub 4 bar-abs) Separation of Multi-Specie Gaseous Mixtures Adopting Swing Adsorption Process

Towards Generation of Pure Hydrogen, Indian Provisional Patent Application No. 202141004774

5. S Dasappa and Shivapuji Anand. M., Multi–Purpose Low-Pressure Gas Filtration System for Gas Filtration by Removal of Contaminants like Particulates, Tars, H2S in Gaseous Media like Producer Gas, Syngas, Biogas, etc. Indian Provisional Patent Application No. 202141004312
6. S Dasappa, Arvind Gupta, Shivapuji Anand. M., Improved Process and Design for Hydrogen from Biomass Invention disclosure filed with IISc-IPTeL (Ref MS-CGPL-2020-059)
7. Snehesh Shivananda Ail and S Dasappa, Metal catalysts and process for preparation, Indian Patent Application No. 6490/CHE/2015, Dated 03/12/2015.
8. HS Mukunda, S. Dasappa, P.J. Paul, N.K.S. Rajan, D.N. Subbukrishna, A novel process and apparatus for the manufacture of precipitated silica from rice husk ash, Thailand patent application No. 088822.
9. H. S. Mukunda, S. Dasappa, N.K.S. Rajan and P. J. Paul, Biomass stove apparatus and method for its use, H, Indian Patent application No: 1763/CHE/2008.
10. H. S. Mukunda, S. Dasappa, N.K.S. Rajan and P. J. Paul, IISc Ejector Induced Gasification Stove - n kg/hour Indian Patent application No: 3202/CHE/2008.
11. S. Dasappa, P. J. Paul and N.K.S. Rajan, Producer gas carburetor, Indian Patent Application No: 2659/CHE/2009.
12. S. Dasappa, H.S. Mukunda, P.J. Paul, N.K.S. Rajan, G. Sridhar, H.V. Sridhar, A process and apparatus for cleaning Tar and Dust laden gas to the highest level of purity using C^n Technology, PCT/IN2010/000713, Dated 1/12/2010.
13. H.S. Mukunda, S. Dasappa, P.J. Paul, N.K.S. Rajan, , G. Sridhar, H.V .Sridhar, Fuel-efficient biomass stove and a method of operating the stove, PCT, application No. 45524-50484.
14. S. Dasappa, D.N. Subbukrishna, P. J. Paul, N.K.S. Rajan, Charcoal from biomass using gasification, Indian Patent Application No. 2246/CHE/2011.

- **International/National Conferences Papers**

1. A. Singh, A. M. Shivapuji, S. Dasappa, Li-LSX for oxygen production: column breakthrough dynamics and cyclic regeneration. 14th Fundamentals of Adsorption Conference, Denver, USA (22-27 May 2022).
2. A. Singh, A. M. Shivapuji, S. Dasappa, Characterization and thermo-chemical conversion of agro-waste pellets for the generation of green fuels. Green Chemistry – Gordon Research Conference, Castelldefels, Spain (24-29 July 2022) – Accepted.
3. A. Singh, A. M. Shivapuji, S. Dasappa, Carbon capture for bio-methanol production: breakthrough characteristics and practical demonstration. 16th Greenhouse Gas Control Technologies Conference, Lyon, France (23-27 October 2022) – Accepted.
4. Mohamed Asheruddin, Anand M Shivapuji and S Dasappa A Methodology to Estimate Biomass Combustion Time from A Limited Set of Readily Measurable Parameters, 30th European Biomass Conference and Exhibition, May 2022, Marseille France.
5. Mohamed Asheruddin, Anand M Shivapuji and S Dasappa, A Comprehensive Numerical and Experimental Analysis of Biomass Char Thermochemical Conversion in O2, CO2, H2O and ,their mixtures, 30th European Biomass Conference and Exhibition, Marseille May 2022, Marseille, France.
6. Arashdeep Singh, Anand M Shivapuji and S Dasappa, Novel vacuum-pressure swing adsorption process for PEMFC compliant Bio-hydrogen production, 30th European Biomass Conference and Exhibition, May 2022, Marseille France.
7. Sagar Panda, Anand M Shivapuji and Sasappa, Adaptation of A.T.F. gas turbine combustor for bio-derived Syngas combustion, 30th European Biomass Conference and Exhibition, May 2022, France.
8. Arvind Gupta, Dasappa S, Hydrogen from Biomass by Oxy-Steam Gasification - A Quantitative Analysis of Cases, Proceedings of the 26th European Biomass Conference and Exhibition, 778 – 782, May 14 -17, Copenhagen, Denmark, 2018.

9. Rakesh N , Dasappa S, Biosyngas for Electricity Generation Using Fuel Cells - A Gas Quality Assessment, Proceedings of the 26th European Biomass Conference and Exhibition, 708 -713, May 14 -17, Copenhagen, Denmark, 2018.
10. Rohit Borooah, Chanakya H N, Dasappa S, Performance Evaluation of Commercial Sanitary Napkin Incinerator, Proceedings of the 26th European Biomass Conference and Exhibition, Poster Presentation, May 14 -17, Copenhagen, Denmark, 2018.
11. Ravi Dhavaleswarapu, Chanakya HN, Dasappa S, On the Effect of the Particle Size And its Relationship with Gas Production, Proceedings of the 26th European Biomass Conference and Exhibition, Poster Presentation, May 14 -17, Copenhagen, Denmark, 2018.
12. S Dasappa, Anand Shivapuji, LN Rao, Chanakya HN, Balachandra P, Liquid Fuels From Biomass: An Approach to Produce Methanol and DME for Meeting the Energy Needs, Proceedings of the IAFOR International Conference on Sustainability, Energy & the Environment, Jan 4 -6, Honolulu, Hawaii, 2018.
13. Suresh NS, Thirumalai NC, Dasappa S, Solar Photovoltaic and Biomass Hybrid Power Generation, Proceedings of the 6th International Conference on Advances in Energy Research (ICAER), Dec 12–14, IIT Bombay, India, 2017.
14. Priyanka Tripathi, Sadhan Mahapatra and S Dasappa, Estimation and characterization of tar from an open top downdraft gasifier, Proceedings of the 6th International Conference on Advances in Energy Research (ICAER), Dec 12–14, IIT Bombay, India, 2017.
15. Rumi Rajbongshi, Pranab Deb, Sadhan Mahapatra and S Dasappa , Biomass gasifier-based hybrid energy system optimization for energy access by using HOMER, Proceedings of the 24th European Biomass Conference and Exhibition, 1612-1618, Jun 6 -9, Amsterdam, the Netherlands, 2016.
16. S Dasappa, Anand M Shivapuji, Amit Kumar, Modeling of Solid oxide fuel cell for producer gas application, Proceedings of the 24th European Biomass Conference and Exhibition, 831-836, Jun 6 -9, Amsterdam, the Netherlands, 2016.
17. S Dasappa and Bharti, Well to wheel - a case study of usage of Beema Bamboo as a Sustainable energy source, Proceedings of the 24th European Biomass Conference and Exhibition, 837-841, Jun 6 -9, Amsterdam, the Netherlands, 2016.
18. S Dasappa, Is thermo-chemical conversion process of biomass – a route for fuel cell application? Proceedings of the 24th European Biomass Conference and Exhibition, 903-907, Jun 6 -9, Amsterdam, the Netherlands, 2016.
19. S Dasappa, Anand Shivapuji and Amit Kumar, Small capacity producer gas engine adaption from natural gas for decentralized power generation application, Proceedings of the International Bioenergy Conference and Exhibition, 29 - 40, Oct 21- 23, Shanghai, China, 2015.
20. Anand M Shivapuji, S Dasappa, Performance evaluation tool for simulating gas engine – a GUI package, Proceedings of the International Bioenergy Conference and Exhibition, 45-47, Oct 21- 23, Shanghai, China, 2015.
21. P. Balachandra, Sadhan Mahapatra, DC Baruah, HN Chanakya and S Dasappa, Eco-Enterprises, Policies and Institutional Setup for RHEES - North East, Proceedings of the International Bioenergy Conference and Exhibition, 154-160, Oct 21- 23, Shanghai, China, 2015.
22. H N Chanakya, S Dasappa and P. Balachandra, Meeting the energy needs of the village using biomass - a concept to implementation, Proceedings of the International Bioenergy Conference and Exhibition, Page No. Oct 21- 23, Shanghai, China, 2015.
23. Shivapuji, A. M., Kumar, A. and Dasappa, S. Combustion characterization of compressed natural gas and syngas fuelled engine operation under steady and transient conditions, Proceedings of the 10th Asia-Pacific Conference on Combustion (ASPACC 2015), Page No. July 20 -22, Beijing, China, 2015.
24. D. Prando, S. Shivananda, W. Tirler, D. Chiaramonti, S. Dasappa, M. Baratieri, Characterization of tar depositions of three commercial gasification systems, Proceedings of the 23rd European Biomass Conference and Exhibition, 867-870, Jun 1 – 4, Vienna, Austria, 2015.

25. Snehesh Shivananda Ail and S Dasappa, Characterization of SiO_2 supported Co catalysts synthesized by solution combustion, Proceedings of the 8th International Conference on Environmental Catalysis, Aug 24 -27, Ashville, USA, 2014.
26. S Dasappa, DN Subbu Krishna, Bikas Bose and Tauri H, Adaptation of MW level natural gas lean burn engine for producer gas operation – A grid connected power plant, Proceedings of the 22nd European Biomass Conference and Exhibition, 867-870, Jun 23 - 26, Hamburg, Germany, 2014.
27. S. Dasappa, K C Suresh and D N Subbukrishna, Experience of operating an open top biomass gasifier using a low density fuel – Coconut fronds, Proceedings of the 22nd European Biomass Conference and Exhibition, 614-617, Jun 23 - 26, Hamburg, Germany, 2014.
28. S. Dasappa, D N Subbukrishna and NKS Rajan, Sweetening of biogas in spray towers fro power generation, Proceedings of the 22nd European Biomass Conference and Exhibition, 554-557, Jun 23 - 26, Hamburg, Germany, 2014.
29. S. Dasappa, P. Prabhakar and D N Subbukrishna, Biomass gasification to substitute fossil fuel in food industry, Proceedings of the 22nd European Biomass Conference and Exhibition, 1579-1563, Jun 23 - 26, Hamburg, Germany, 2014.
30. Shivapuji, A. M., & Dasappa, S. Sensitivity analysis of mixture quality on combustion phasing and its impact on 0D simulation of a producer gas fuelled multi-cylinder engine, Proceedings of the 9th Asia-Pacific Conference on Combustion, 449 – 452, May 19 - 22, Gyeongju, South Korea, 2013. **This paper was awarded the Young Investigator Award 2013.**
31. Anand M Shivapuji, Amit Kumar, Prakash ES and Dasappa S, Experiments and CFD simulation of producer gas fuelled SI engine: Towards addressing high exhaust enthalpy and cooling loads, Proceedings of the 23rd National Conference on I. C. Engine and Combustion, Page No, Dec 13 – 16, Gujarat, India, 2013.
32. Anand M Shivapuji, S Dasappa, Knock and its prediction in producer gas fuelled SI engines Proceedings of the International Conference on Polygeneration Strategies, 227 – 236, Sept 3 - 5, Vienna, Austria, 2013.
33. S Dasappa, D N Subbukrishna, H V Gopinath, David Chiaramonti, Roberto Mussi, Andrea Maria Rizzo, Small scale fixed bed gasification system for power generation, Proceedings of the International Conference on Polygeneration Strategies, 286 – 291, Sept 3 -5, Vienna, Austria, 2013.
34. D. Chiaramonti, S. Dasappa, R. Mussi, A.M. Rizzo, R.Nistri, M.Buffi, M.Prussi, D N Subbukrishna, HV Gopinath, Small Scale gasification of Agricultural residues for power generation, Proceedings of the 21st European Biomass Conference & Exhibition, 480 – 485, June 3 – 7, Copenhagen, Denmark, 2013.
35. Anand M Shivapuji and S Dasappa, Experimental Studies on Multi-Cylinder Natural Gas Engine Fueled with Producer Gas, Proceedings of the 19th European Biomass Conference and Exhibition, 974 - 980, Jun 6 – 11, Hamburg, Germany, 2011.
36. Sandeep K, Snehesh S and S Dasappa, Carbon-dioxide sequestration through biomass gasification, Proceedings of the 19th European Biomass Conference and Exhibition, 1127 – 1133, Jun 6 – 11, Hamburg, Germany, 2011.
37. Sadhan Mahapatra and S. Dasappa, Off-grid biomass gasification based rural electrification in lieu of grid extension, Proceedings of the 19th European Biomass Conference and Exhibition, 2203 – 2208, Jun 6 – 11, Hamburg, Germany, 2011.
38. GS Sheshagiri, NKS Rajan, S Dasappa, PJ Paul, Agro residue mapping of India, Proceedings of the 17th European Biomass Conference and Exhibition, 375-382, Jun 29 – Jul 3, Hamburg, Germany, 2009.
39. DN Subbukrishna, S Dasappa, PJ Paul, NKS Rajan, KC Suresh, Treatment of Water used for Producer gas cooling and cleaning in IISc biomass gasification technology, Proceedings of the 17th European Biomass Conference and Exhibition, 661-664, Jun 29 – Jul 3, Hamburg, Germany, 2009.

40. DN Subbukrishna, S Dasappa, PJ Paul, NKS Rajan, Charcoal and power generation using biomass gasification, Proceedings of the 17th European Biomass Conference and Exhibition, 814-816, Jun 29 – Jul 3, Hamburg, Germany, 2009. **Best Visual Presentation Award**.
41. S. Dasappa, P J Paul, G. Amar Kumar, Biomass gasification to replace oil in rubber, Proceedings of the 17th European Biomass Conference and Exhibition, 2188-2191, Jun 29 – Jul 3, Hamburg, Germany, 2009.
42. S. Dasappa, PJ Paul, D.N. Subbukrishna, High temperature application using biomass gasification, Proceedings of the 17th European Biomass Conference and Exhibition, 1010-1012, Jun 29 – Jul 3, Hamburg, Germany, 2009.
43. S. Dasappa, P.J. Paul, Prabhakar, Metallurgical application using biomass gasification, Proceedings of the 17th European Biomass Conference and Exhibition, 2026-2029, Jun 29 – Jul 3, Hamburg, Germany, 2009.
44. S. Dasappa, P.J. Paul, V. Chinchankar, M. Kulkarni, Preliminary investigation into naturally aspirated and turbo charged producer gas engines, Proceedings of the 17th European Biomass Conference and Exhibition, 811-813, Jun 29 – Jul 3, Hamburg, Germany, 2009.
45. Sandeep K and S Dasappa, Hydrogen production through Biomass gasification, Proceedings of the World Hydrogen Technologies Convention (WHTC), 2009.
46. HV Sridhar G Sridhar, S Dasappa, PJ Paul and HS Mukunda, On the operation of high pressure biomass gasifier with gas turbine, Proceedings of the 15th European Biomass conference and Exhibition, 964-967, May 7 – 11, Berlin, Germany, 2007.
47. G Sridhar, DN Subbukrishna, HV Sridhar, S Dasappa, PJ Paul and HS Mukunda, Torrefaction of Bamboo, Proceedings of the 15th European Biomass Conference and Exhibition, 532-535, May 7 – 11, Berlin, Germany, 2007.
48. G Sridhar, S Dasappa, H V Sridhar PJ Paul and NKS Rajan, Green Electricity – A case study of a Grid linked Independent Power Producer, Proceedings of the 15th European Biomass conference and Exhibition, 2256-2260, May 7 – 11, Berlin, Germany, 2007.
49. DN Subbukrishna, KC Suresh PJ Paul, S Dasappa, and NKS Rajan, Precipitated silica from Rice husk ash by IPSIT process, Proceedings of the 15th European Biomass conference and Exhibition, 2091-2093, May 7 – 11, Berlin, Germany, 2007.
50. S Dasappa, G Sridhar, H V Sridhar, NKS Rajan, PJ Paul and A Upasani, Producer gas engines – proponent of clean energy technology, Proceedings of the 15th European Biomass conference and Exhibition, 976-980, May 7 – 11, Berlin, Germany, 2007.
51. S. Dasappa, Status, potential and challenges of promoting biomass gasification technologies for industrial applications in Africa. The First High-level Biofuels Seminar in Africa Proceedings of the International Institute for Sustainable Development (IISD), Vol. 9, No. 1, pp. 10, Jul 30 – Aug 1, Addis Ababa, Ethiopia, 2007.
52. HV Sridhar, G Sridhar, S Dasappa, NKS Rajan and PJ Paul, Experience of using various biomass briquettes in IBG (IISc Bioresidue Gasifier), Proceedings of the 14th European Biomass Conference & Exhibition Biomass for Energy, Industry and Climate Protection, 749-752, Oct 17 -21, Paris, France, 2005.
53. DN Subbukrishna, S Dasappa, P J Paul and NKS Rajan, Hydrogen Sulfide removal from biogas by ISET process, Proceedings of 14th European Biomass Conference & Exhibition Biomass for Energy, Industry and Climate Protection, 1596-1599, Oct 17 -21, Paris, France, 2005.
54. G Sridhar, HV Sridhar, S Dasappa, PJ Paul, D Subbukrishna and NKS Rajan, Green Electricity from Biomass Fuelled Producer Gas Engine, Proceedings of 14th European Biomass Conference & Exhibition Biomass for Energy, Industry and Climate Protection, 1489-1492, Oct 17 -21, Paris, France, 2005.
55. S. Dasappa, H. V. Sridhar, C. S. Bhaskar Dixit and H. S. Mukunda, Biomass combustion device for puffed rice conversion. Proceedings of 14th European Biomass Conference & Exhibition Biomass for Energy, Industry and Climate Protection, 1600-1602, Oct 17 -21, Paris, France, 2005.
56. HV Sridhar, G Sridhar, S Dasappa, PJ Paul, NKS Rajan and K Ramakrishnan, Adaptation and performance evaluation of stationary SI Engines for producer gas applications, Proceedings of the 19th National Conference on IC Engines and Combustion, 485-489, Annamalai University, Chidambaram, December, 2005. ***This won the best paper award.***

57. G Sridhar, S Dasappa, HV Sridhar, PJ Paul and NKS Rajan, Gaseous Emissions Using Producer Gas Fuel in Reciprocating Engines, Proceedings of SAE World Conference and Exhibition (SP-1978), Page No. April 11 -14, Detroit, USA, 2005.
58. PJ Paul, S. Dasappa, G Sridhar, H V Sridhar, Biomass Derived Energy Carriers as Fuels in Engines and Fuel cells, presented at the National Seminar on Biomass Based Decentralized Power Generation, Sponsored by MNES, DST and ONGC, Gujarat, 2005.
59. HV Sridhar, G Sridhar, S Dasappa, NKS Rajan, PJ Paul and HS Mukunda, Experience on use of biomass gasifiers in crumb rubber industries, Proceedings of the National conference on advances in mechanical engineering held at Shimoga, Karnataka, 12-14, February 2004.
60. S Dasappa, Power Generation from Wood, Proceeding of the Advances in Wood Science and Technology, a compulsory course for IFS officers, organized by Institute of Wood Science and Technology, Bangalore, January, 2004.
61. S Dasappa, G Sridhar, HV Sridhar, PJ Paul and HS Mukunda, On the advances in thermo chemical conversion technology, Proceedings of the 2nd world conference on biomass for energy, industry and climate change, Page No. May 10-14, Rome, Italy, 2004.
62. HV Sridhar, G Sridhar, S Dasappa., NKS Rajan, PJ Paul and HS Mukunda, Field experience of IISc gasification systems, Proceeding of the seminar on biomass gasifiers, Rubber Board, Kottayam, 2003.
63. S Dasappa, Biomass gasification fundamentals and technology, at the National workshop on Recent Advances in Renewable Energy Technologies organized by BNMIT and ASTRA, Page No., Jan, 2003.
64. S Dasappa, Gasification technologies and by products, presented at a special workshop, on Small Scale Biomass Energy Program, organized by Biomasss One-stop Clearing House, Energy and Environment Foundation, Thailand, 2003.
65. S Dasappa, On the estimation of power from a diesel engine converted for gas operation – a simple analysis, Proceedings of the 17th National Conference on I.C. Engines and Combustion, Page No. Dec. 18-20, Suratkal, 2001.
66. S Dasappa, PJ Paul, HS Mukunda and U Shrinivasa, Wood-char gasification: Experiments and analysis on single particles and packed beds, 27th International Symposium on Combustion, 27 (1), 1335-1342, Boulder, Denver, USA, 1998.
67. HN Sharan, HS Mukunda, S Dasappa, PJ Paul, NKS Rajan and U Shrinivasa, The technology and economics of biomass-based independent rural power producers using IISc- DASAG woody biomass gasifiers, Proceedings of the International conference on Developments in Thermochemical Biomass Conversion, 1058-1072, Banff, Canada, 1997.
68. HS Mukunda, S Dasappa, PJ Paul, NKS Rajan, G Sridhar and HV Sridhar, Recent progress in bioresidue gasification technologies, Proceedings of the International conference on Biomass Energy Systems, Page No. Feb 26 – 27, Tata Energy Research Institute, New Delhi, 1996.
69. HS Mukunda, U Shrinivasa, PJ Paul, S Dasappa and NKS Rajan, Stand alone small power level system, Proceedings of the 7th Annual conference of Indian Nuclear Society Seventh Annual Conference on India's Energy Needs and Options : Strategy and Planning, Page No. April 11 - 13, BARC, Mumbai, 1996.
70. P Nanjundappa, HI Somashekar, HN Chanakya, S Dasappa, U Shrinivasa and HS Mukunda, Biomass gasifiers : a boon to semi-arid agriculture, Proceedings of the International conference on Biomass Energy Systems, Page No., Feb 26 – 27, Tata Energy Research Institute, New Delhi, 1996.
71. S Dasappa, HV Sridhar, PJ Paul, HS Mukunda and U Shrinivasa, Wood-char sphere conversion with H_2O and its mixtures with CO_2, O_2 and N_2 - Experiments and Modelling, Poster presentation at the 26th International Symposium on Combustion, Jul 28 - Aug 2, Naples, Italy, 1996.
72. NM Patel, PJ Paul, HS Mukunda and S Dasappa, Combustion studies on concentrated distillery effluents, Proceedings of the 26th International Symposium on Combustion, 26 (2), 2479-2485, Jul 28 - Aug 2, Naples, Italy, 1996.
73. HS Mukunda, S Dasappa, PJ Paul, NKS Rajan and U Shrinivasa, Biomass Gasification: Technology and field studies, Proceedings of one day workshop on Rural Energy Programme - Prospects and Problems, KSCST, IISc, 1995.

74. P Nanjundappa, HI Somasekhar, HN Chanakya, S Dasappa, U Shrinivasa, and HS Mukunda., Applications of Biomass Gasifiers for irrigation - A field study, Paper presented at the Workshop on Watershed Development and Bioenergy, Feb. 1994.
75. S Dasappa, H V Sridhar, P J Paul, H S Mukunda and U Shrinivasa, On the combustion of wood-char spheres in O_2/N_2 mixtures - Experiments and Analysis, 25th International Symposium on Combustion, 25 (1), 569-576, Irvine, California, USA, 1994.
76. G Sridhar, GA Rakesh, J Srinivasan, S Dasappa, PJ Paul, and HS Mukunda, Experimental studies on the performance of Hamara ST-5 Stirling Engine and possibilities for performance improvement, Proceedings of the 4th National meet on Recent Advances in Biomass Gasification Technology, Mysore , 1993.
77. S Dasappa, PJ Paul and HS Mukunda, Fluid Dynamic studies on Ejectors for Thermal Applications of Gasifiers, Proceedings of the 4th National meet on Recent Advances in Biomass Gasification Technology, 147 – 162, Mysore, 1993.
78. S Dasappa, P J Paul, NKS Rajan, HS Mukunda and U Shrinivasa, Woody biomass gasification for thermal, mechanical and electrical applications, Proceedings of the 1st International workshop on Energy perspectives in plantation industry, Coonoor, 1993.
79. S Dasappa, PJ Paul, HS Mukunda and U Shrinivasa, Gasification of agro residues for engine application, Proceeding of the 4th International Conference Small Engines and their fuels, Thailand, 1993.
80. HV Sridhar, S Dasappa, PJ Paul, HS Mukunda and U Shrinivasa, On the combustion of wood-char spheres in vitiated air -- Analysis and Experiments, Proceedings of the 4th National meet on Recent Advances in Biomass Gasification Technology, Mysore , 1993. **Best paper award.**
81. HS Mukunda, U Shrinivasa, PJ Paul, S Dasappa and AE Krishnakanth, Development of powdery biomass gasifiers, Proceedings of the 3rd National meet on Recent Advances in Biomass Gasification Technology, Baroda, 1991.
82. PJ Paul, S. Dasappa, G Sridhar, H V Sridhar, " Biomass Derived Energy Carriers as Fuels in Engines and Fuel cells, presented at the National Seminar on Biomass Based Decentralized Power Generation, Sponsored by MNES, DST and ONGC, Gujarat, 2005.
83. S Dasappa, Invited talk on "Biomass gasification – a route for off grid power generation" the International Congress on Renewable Energy and Sustainable Development, ICORE 2005, Pune, 2005
84. S Dasappa, Invited talk on "Power generation using biomass gasification" proceedings of the International Congress on Renewable Energy and Sustainable Development, ICORE 2004, Bangalore, 2004.
85. S Dasappa, PJ Paul, Mukunda and U Shrinivasa, On the modelling of gasification of char spheres with CO_2, CO and N_2, Proceedings of the 3rd National meet on Recent Advances in Biomass Gasification Technology, Baroda, 1991.
86. S N Srinivas, N H Ravindranath, S Dasappa, U Shrinivasa and H S Mukunda, A Gasifier Based Rural Power Generation System : Performance and Problems, Proceedings of the 3rd National meet on Recent Advances in Biomass Gasification Technology, Baroda, 1991.
87. U. Shrinivasa, S. Dasappa, B.N. Baliga, V. Ramesh and H.S. Mukunda, Development of 100 kW gasifier for Electricity generation, 1st National meet on Recent Advances in Biomass gasification technology, IIT Bombay, 1989.
88. S. Dasappa, V. Ramesh and Vikram Krishnan, Improvements on 3.7 kW IISc Gasifier, 1st National meet on Recent Advances in Biomass gasification technology, IIT Bombay, 1989. **Best paper award.**
89. S. Dasappa, H.S. Mukunda, B.N. Baliga and U. Shrinivasa, Status of wood gasification at the IISc, Proceedings of the International conference on Energy from biomass and wastes XII, Page No., Feb 15 -19, New Orleans, Louisiana, 1988.
90. U Shrinvasa, H S Mukunda, S Dasappa and Svati Bhogle, Utilisation of powdered biomass, Idea paper submitted to Department of Non--Conventional Energy Sources, New Delhi, 1987.
91. S. Dasappa and HS Mukunda, Combustion of cylinders and vertical plates of wood, Proceedings of the 9th National Conference on IC Engines and Combustion, Nov 19 -22, Page No. Dehradun, 1985.

92. S. Dasappa, Vikram Reddy, H.S. Mukunda and U. Shrinivasa, Wood gasifiers, Proceedings of the 2nd USAID/GOI workshop on Alternative Energy Resources and Development, New Delhi, February 1985.
93. S. Dasappa, Vikram Reddy, H.S. Mukunda and U. Shrinivasa, Wood gasifiers for engines less than 7.5 kW, Proceedings of the 7th Miami International Conference on Alternate Energy Sources, Miami, December 1985, published in Alternative Energy Sources VII Vol.4 Bioconversion/Hydrogen, Hemisphere publishing Corporation, New York,1987.

National and International conferences/workshops

- **Guest Speaker – International**

1. S.Dasappa, Energy through biomass – July 2015, Purdue University,
2. S Dasappa, Biomass gasification - Virtual Seminar, July 2015, Princeton
3. Delivered series of lecture at Satake Corporation on Thermo-chemical conversion of biomass and gas engines, March 2015, Japan.
4. S. Dasappa Gas engine and producer gas – an IISc, July 2014, Cummins Inc, Columbus
5. S.Dasappa, Status of biomass energy in India, Asia-Europe event, 22nd European Biomass Conference and Exhibition, Hamburg, June, 2014.
6. S. Dasappa, Biomass as a source of low carbon energy source, presented at the 3rd Low Carbon Energy for Development Network Workshop held in London in June 2013, organsised by Imperial College, London.
7. S. Dasappa, Energy from biomass, Invited talk at the Regional-Global integration workshop on Sustainable Energy at the Mexican Academy of Sciences, April 2013, Mexico City.
8. S. Dasappa, Delivered a Plenary paper at a National technical meet, TECHNOURE, Havana, Cuba, Dec 2005.
9. S. Dasappa, presented a paper at the 5th GFSE workshop organized by the Austrian government, May 2005.
10. S Dasappa, "Biomass gasification at IISc - Technology Development, Scale-up and Technology Transfer" Invited talk at the special work shop organized by the International Energy Initiative, New York, held in Rome, Italy, 2004.
11. S Dasappa, Village Energy Security – biomass gasification, Invited talk at the International Workshop on Energy Technologies for Decentralised Rural Electricity Services provision, organized by Stockholm Environment Institute, at Studsvik, Sweden, 2004.
12. S Dasappa, Biomass gasification at Kaputa, Stake holder workshop Towards the UNIDO/GEF project on renewable energy-based mini-grids in Zambia, organized by Ministry of Power and UNIDO, at Lusaka, 2004.
13. S Dasappa, Status of Biomass gasification technology at IISc, Invited to talk at the special workshop organized by the International Energy Initiative, New York, held in Sevilla, Spain, 2002.

- **Guest Speaker - National**

1. Session on 'Mainstreaming Bio Gas & Waste to Energy in India' as a part of Bio-fuel day, at the "Energy Security for India- Creating a Biofuel Economy" organized by Ministry of Petroleum and Natural Gas, August 2016.
2. Session Energy for all and the need for technology innovation at the Tenth India Innovation Summit 2014 : "Innovation for Inclusive Growth" : August 2014, organised by CII.
3. S. Dasappa, Role of materials in Biomass energy – an insight, presented at the International Conference on Applications of Advanced Materials for Sustainable Development, 17-18th January 2014, Nagpur, in association with NEERI.

4. S.Dasappa, Biomass energy and by products, Presented at the Technical Workshop Series – 2014, Agro-based biomass: Availability, processibility and resultant chemicals/materials/energy, organized by NCL, Pune, 10-11 January 2014.
5. S. Dasappa, Invited to talk at the 10th India Innovation Summit Innovation for Inclusive Growth on Bioenergy, Bangalore, August, 2014, organized by IOCL, New Delhi.
6. Decentralized Renewable Energy Projects – Experiences and Insights Smart Power for environmentally-sound Economic Development SPEED : ESCO Engagement Workshop, organised by Rockefeller Foundation and CII, 25 May, 2012.
7. Micro-grid, at the IEEE PES Workshop on "Advances in Distributed Generation : Micro-Grid, Net-metering & Renewable Integration" held on on 24th - 25th , August, 2012 – at CPRI
8. Session " Energy for Rural Sector" at the INDO KOREA, Science Business Forum 2 Sept 2011.
9. Session on "Conversion Technologies of Bio-Energy Summit on Tuesday, 29 Nov 2011 at New Delhi organised by CII and MNRE.
10. S Dasappa, Invited talk on "Biomass gasification – a route for off-grid power generation" the International Congress on Renewable Energy and Sustainable Development, ICORE 2005, Pune, 2005.
11. S Dasappa, Use of bamboo wastes in the energy sector, invited talk at the World Bamboo Congress, New Delhi, 2004.
12. S Dasappa, "Overview of A few gasification technology packages in use overseas", invited talk at the National Seminar on Biomass-Based Decentralized Power Generation, Baroda, 2004.
13. S. Dasappa, Village Energy Security – a perspective, invited talk at workshops organized by MNES, in Delhi, Guwahati and Bangalore, 2004.
14. S Dasappa, Biomass gasification – an IPP, presented at the National meet on "Creating 100,000 Sustainable Electricity Utilities" Empowering *Panchayati Raj* Institutions, Independent Power Producers Association of India (IPPAI) October 12-13, 2004.
15. S Dasappa, On the thermo chemical conversion technology for meeting the energy needs of the tea industry, Plenary lecture at the 3rd International Conference on Global Advances in Tea Science, Kolkatta in Nov 2003.
16. S Dasappa, Water and biomass energy production technology, Workshop on Water and Farmer organized by Jalaspandana and Pragati, Bangalore, 2003.
17. S Dasappa, G Sridhar, H V Sridhar, Paul, PJ, NKS Rajan and H S Mukunda, Biomass gasification: Science and Technology, Roundtable on Biomass Gasifier Technology: Opportunities and Challenges, organized by UNIDO and IISc, Bangalore, 2003.
18. S. Dasappa, Biomass gasification a renewable source of energy, Invited talk at Power Systems Training Institute, GOI in a workshop on Renewable Energy Sources during Sept 2003.
19. S Dasappa, "Biomass gasification – a distributed energy source", National Workshop on Distributed Generation Technologies for Power Supply in Rural Areas, Organized by BHEL, MoP, and MNES, New Delhi, 2003.

- **<u>Lectures at national and international fora</u>**

1. S Dasappa, "Biomass as an energy source," AICTE-ISTE Short term training program on Biomass Power – current scenario and Future Projection, Mandya, 2004.
2. S Dasappa, "Bioenergy prospects", an Invited lecture at a National Workshop on Renewable Energy, East Point College, Bangalore, 2004.
3. S Dasappa, "Biomass gasification technology for power generation," Workshop organized by the Industry Institute Partnership Cell, The National Institute of Engineering, Mysore, 2004.
4. S Dasappa, " R & D at IISc on Biomass gasification", lecture at the University of Lusaka, Zambia 2004.
5. S Dasappa, "On the Advances in Thermo- Chemical Conversion Technology – an overview", International Training Programme on Renewable Energy Options For BIMSTEC & ASEAN Member Countries, Bangalore, Dec 2004
6. S Dasappa, "Recent trends and advances in Biomass-derived fuels," an Invited lecture at Bapuji Institute of Engineering and Technology, Davangere, 2003.

- **Technical Reports**

1. Interim report, RHESS - Work package fuel cell, Jan 2016, Ref: SD/CST/DST - 1.3/2016, 36 pages.
2. Report to Tata Motors on the Adaptation of natural gas engines for producer gas-fueled operation. Ref: SD/CST/SID -22/2015, 42 pages.
3. Progress report "Knock rating of non-regular fuels – Suitability assessment of Methane number for knock rating and estimation of Methane number for Producer gas". Ref :SD/CST/SID - 1/2015, 45 pages.
4. Progress report "Thermo-physical properties of Producer Gas: Assessment of the influence on engine adaptation and performance", Ref: SD/CST/SID -2/2015, 12 pages.
5. Computation Fluid Dynamics based numerical investigation of producer gas-fueled engine using Converge Solver platform Ref: SD/CST/SID -2/2015, 23 pages.
6. Final completion report on "Hydrogen and liquid fuels from biomass gasification" submitted to MNRE (Sanction Ref. No. 103/109/2007 – NT), September, 2014, 100 pages.
7. Final report, Advanced Biomass Research Centre (ABRC) MNRE Ref No.3/3/2008 – R & D. September 2014, 312 pages.
8. Final report Biomass Gasification Plant as a package of the system is addressed to suit the European condition emissions norms, after identifying the potential hazards and making a proper risk assessment. MNRE/MATT, 2014,
9. Final report, Investigations on Multi-fuel Gasification using Fixed bed Configuration (MGF), submitted to VRDE, Oct 2014, 26 pages.
10. S Dasappa, Technology Evaluation and Setting up technical standards for gasification program in Cambodia, UNIDO, July 2010.
11. Ramesh, S Dasappa, and P J Paul, Scientific investigations on the after cooler burning, Oct 2009.
12. S Dasappa, Potential for power generation in Nigeria and Benin for demonstration purposes, Nov 2009.
13. S Dasappa and Suresh K, Technical report on the performance of the 20 kW gasification for Zambia, June 2008.
14. S Dasappa and HV Sridhar, Joint Performance Report on the 50 kW dual fuel system to electrify an Island, Cuba July 2007.
15. Presented a paper "Gasification - a route to meet industrial energy needs" at the Experts group meeting on " Promoting renewable energy technologies for industrial applications" Sponsored by UNIDO, organized by TERI, Delhi,18 -19 Dec 2007.
16. Balachandra, P., Ravindranath, N. H., and Dasappa, S., "Ranking of Barriers and Identifying Important Measures for Bioenergy Technologies in India," Asian Regional Research Programme in Energy, Environment, and Climate – Phase III, Asian Institute of Technology, Bangkok, Thailand, March 2004, 45 Pages.
17. Ravindranath, N. H., Balachandra, P., and Dasappa, S., "Biomass Energy in Asia - Assessment and Strategy Formulation," Asian Regional Research Programme in Energy, Environment and Climate – Phase III, Asian Institute of Technology, Bangkok, Thailand, December 2004, 144 Pages.
18. HS Mukunda, PJ Paul, S Dasappa, NKS Rajan, G Sridhar, H V Sridhar, Report on the Advanced Biomass Gasification Project, MNES, 2004 (100 pages).
19. S Dasappa, G Sridhar, H V Sridhar, P J Paul and HS Mukunda, Testing of Cummins Gas Engine couple to IISc Biomass gasifier, report submitted to M/s Cummins, 2003.
20. HS Mukunda, PJ Paul, S Dasappa and NKS Rajan, Report on the Gasification Action Research Project, MNES, 2002 (50 pages).
21. Usha Rao, K., Dasappa, S., Balachandra, P., Somashekar, H. I. and Ravindranath, N. H., "Report on Techno-economic and Environmental Assessment of Bioenergy Technologies (BETs) in India", Asian Regional Research Programme in Energy, Environment and Climate – Phase-II, Asian Institute of Technology, Bangkok, Thailand, February 2002, 26 Pages.

22. Ravindranath, N. H., Usha Rao, K., Dasappa, S., Balachandra, P. and Sangeetha, G., “Report on Abatement Cost of Selected Bioenergy Technologies Substituting Fossil Fuel and Traditional Biomass Energy Systems in India”, Asian Regional Research Programme in Energy, Environment and Climate – Phase-II, Asian Institute of Technology, Bangkok, Thailand, February 2002, 13 Pages.
23. Balachandra, P., K. Usha Rao, Ravindranath, N. H., Dasappa, S. and Sangeetha, G. (2002) Report on Techno-Economic and Environmental Assessment of Fossil Fuel Technologies for India, Asian Regional Research Programme in Energy, Environment and Climate – Phase-II, Asian Institute of Technology, Bangkok, Sept 2002.
24. S Dasappa, H S Mukunda, P J Paul, G Sridhar, H V Sridhar, Ash extraction and control system for safe operation of gasifier, MNES report, 2001.
25. HS Mukunda, PJ Paul, S Dasappa, NKS Rajan, G Sridhar, H V Sridhar, Report on the Powdery biomass gasification, MNES, 2000 (162 pages).
26. S Dasappa, HS Mukunda, PJ Paul, G Sridhar, H V Sridhar Testing of high density saw dust briquette from Holland, submitted to Umhelt, Switzerland, 1999 (50 pages).
27. Giordano, P, Hasler,P and Dasappa S, Test report on different biomass in the IISc open top co-current gasifier, Swiss federal office of Energy, Switzerland (20 pages).Year
28. Invited lecture on "Power Generation from Renewables" in the MHRD/AICTE sponsored winter school at National Institute of Technology, Surathkal, Karnataka, 7 March 2009.
29. Invited talk "Conversion of Non-fermentable waste to energy" at the Workshop on "Strategies for urban solid waste management in the state of Karnataka" organised by KSCST, DST and Government of Karnataka, Bangalore, 29 Dec 2006.
30. Invited talk on “Potential of biomass energy" at the' Millennium Energy Summit - 2007', organised by Central Glass and Ceramic Research Institute and Millennium Institute of Energy Management, Kolkata, 27-29 Sept 2007.
31. S Dasappa, Invited talk on Biomass gasification – a route for off-grid power generation” the International Congress on Renewable Energy and Sustainable Development, ICORE 2005, Pune, 2005.
32. S.Dasappa, H N Chanakya and HI Somashekar, Invited talk at the Indo-French Workshop and conference on Science, Technology and Humanities - A Tryst with Sustainable Development held at IISc Bangalore January, 2010.

Association with other major projects/programs of the Institute

1. Team member – National Combustion Centre R and D (NCCRD), Indian Institute of Science, Bangalore, supported by the Department of Science and Technology.
2. Team member - Solar Energy Research Institute for India and the United States (SERIIUS)
    a. A joint research consortium for accelerating solar electricity development under the U.S.-India Joint Clean Energy Research and Development, with lead institutions being the Indian Institute of Science and National Renewable Energy Laboratory.
3. Core team member at CST on a proposal submitted to the Ministry of Human Resource Development, on Centre of Excellence in Energy and Environment Research.
4. Core team member for the development of the proposal on Biofuels and Clean Coal Technologies: Systems & Materials under the Tata Centre Initiative.

Consultancy projects

- Mangalore Refineries Pvt Ltd, Biomass assessment for 2G ethanol in Karnataka, 2016-17.
- SIDA and Asian Institute of Technology funding support - Assessment and Strategy Formulation for bioenergy systems.
- UNIDO – Renewable energy entrepreneurship development, July 2006- Sept 06.
- Technical support for developing procedures for the implementation of Narayani-Shanker Biomass Power Plant (600 kWe) in Nepal.
- Design of MW level gasification system for charcoal production to meet environmental conditions Oct 07 – 08.

Technology transfers

- **Biomass stoves**
    1. BP Energy India Pvt. Ltd., Bangalore (currently First Energy Pvt Ltd , Pune)
- **Producer gas engine**
    1. Cummins India Ltd., Pune
- **Gasification technology**
    1. Satake Corporation, Japan
    2. Bioresidue to Energy Technologies (BETEL), India
    3. Arrya Hi-Tech, India
    4. Sutechnics, Germany
    5. Hitemp Furnaces Limited, India
    6. Allgreen Energy Pvt Ltd., India
    7. OVN Bioenergy
    8. GE Energy Inc, USA
- **H_2S scrubbing technology**
    1. Anama Energies Pvt. Ltd. India
    2. Green power International ltd. India
- **Silica Technology**
    1. Biosilica, Japan.
    2. Usher Eco Power Ltd. India

Graduate Research Supervision

- **Master's Thesis Advised**

1. Arun Shivashimpi, Development of ECU based Carburetion system for Stationary Power Generating Producer gas engine, Siddaganga Institute of Technology, Tumkur, 2016.,
2. Nithin D, Numerical Assessment of influence of Engine geometry on the In-cylinder Turbulence and Turbulent Flame propagation in a Spark ignited Internal Combustion engine, JSSATE, Bangalore, 2016.
3. Naresh Kumar, Experimental investigations on production of activated carbon from downdraft gasifier, Vellore Institute of Technology University, 2016.
4. Punith, Numerical simulation of SOFC, JSSATE, Bangalore, 2016.
5. Vaibhav Gulakhe, Analysis of Premixed and Diffusion Syngas flames, Government college of Engineering, Amravati, 2015.
6. Manikanta, Numerical investigation of solid oxide fuel cell for Syngas application, SDM College of Engineering and Technology Dharwad, 2015.
7. Vishwanath Walikar, Numerical and experimental investigation of producer gas fueled burner, The Oxford college of Engineering , Bangalore, 2015.
8. Mallikarjun Bhure, Experimental and Numerical analysis of Producer gas fueled I.C Engine carburetor, B.V. Bhoomraddi College of Engineering and Technology Hubli, 2015.
9. Bharadwaj.B.S, Thermodynamic and Fluid-dynamic Investigation of Char Combustion, The Oxford college of Engineering, Bangalore, 2015.
10. Mahesh, Heat transfer analysis for fixed bed Fischer-Tropsch process, The Oxford college of Engineering , Bangalore, 2014.
11. Amit Kumar, CFD Simulation and Experimental Validation of Producer Gas Fuelled SI Engine, U.B.D.T College of Engineering Davangere, 2013.
12. Manjunath Basude, In-situ generation of activated carbon from biomass-using down draft reactor configuration, Visvesvaraya Technological University, Belgaum, 2013
13. Suresh Attanoor ,Combustion and Gasification of Coal- Biomass Mixture, Experiments and Analysis, SDM College of Engineering and Technology Dharwad, 2013.
14. Manjunath Basude, In suit generation of activated carbon from biomass using downdraft gasifier, B.V. Bhoomraddi College of Engineering and Technology Hubli, 2013.
15. Deepak, C Study of in-cylinder process in diesel engine on dual fuel mode, Master of Engineering Thesis (ME), UVCE, Bangalore University, Bangalore. 2011.
16. Dhruva Kumar. M, Experimental Investigation of Natural Gas Engine using Producer Gas Engine as a fuel and modeling of mixing chamber", Master of Engineering Thesis (ME), UVCE, Bangalore University, Bangalore, 2011.
17. Sushil kumar, Producer gas burners, Visvesvaraya Technological University, Belgaum, 2006.
18. Indrajit Mazumdar. Performance evaluation of a turbocharger for producer gas operation, M Tech Dissertation, Department of Energy, Tezpur University, 2005.
19. Swapna Singha Rabha, Particle Flow in Packed Bed Reactor, TEZPUR UNIVERSITY, 2005.
20. Shylesh Narti, Experimental investigation into combustion front propagation rate in packed bed, Visvesvaraya Technological University, Belgaum, 2004.

- **Undergraduate dissertation project**

1. Supervised 25 batches (100 students, from different engineering colleges) in their undergraduate dissertation project in the area of combustion and gasification.

Workshops and short-term courses organized (Jointly)

1. Sensitization workshop on Skill development training" on sub megawatt scale biomass power generation, 2013.
2. International Training Programme on Bio-energy MEA (8 days), Nov 2010, overseas participants in the energy sector.
3. International Training Programme on Bio-energy, June 2007, MNRE, overseas participants in the energy sector.
4. Development of Stoves AEROCOP (7 days), April 2007, overseas participants for cooking energy.
5. International Training Programme on Bio-energy (10 days) Mar 2006, MNRE.
6. Training program for the IISc licensees on biomass gasification technology (5 days) for implementation level and decision making level, April 2005. About 20 participants from various parts of the country participated.
7. International training program "Biomass utilization for Energy" (10 days) Sponsored by Ministry of Non Conventional Energy Sources, Oct 2002. Seventeen people from seven countries (Brazil – 4, Cuba – 3, Thailand – 3, Cambodia – 3, Nepal – 2, Sudan – 1, Austria – 1
8. International Training Program on "Modern Biomass Technologies" (12 days), Sponsored by Ministry of Non Conventional Energy Sources, April 2001. Nine participants from four countries (Costa Rica – 1, Brazil – 3, Uganda – 3, Thailand – 2).
9. National Training program on biomass utilization for energy generation (7 days), Sponsored by Ministry of Non Conventional Energy Sources, June 2000. Participated by Agencies involved in Energy programs at decision making level, 17 participants from various parts of country took part.
   In all the above courses, lecture sessions were mostly handled by the faculty from IISc involved in the bio energy technologies, lab visit and field visits. Some experts in the industries were also invited for special areas.
10. National Training program on biomass utilization for energy generation (7 days), Sponsored by Ministry of Non Conventional Energy Sources, June 2000. Participated by Agencies involved in Energy programs at decision making level, 17 participants from various parts of country took part.
11. International Training Program on "Modern Biomass Technologies" (12 days), Sponsored by Ministry of Non Conventional Energy Sources, April 2001. Nine participants from four countries (Costa Rica – 1, Brazil – 3, Uganda – 3, Thailand – 2).
12. International training program "Biomass utilization for Energy" (10 days) Sponsored by Ministry of Non Conventional Energy Sources, Oct 2002. Seventeen people from seven countries (Brazil – 4, Cuba – 3, Thailand – 3, Cambodia – 3, Nepal – 2, Sudan – 1, Austria – 1
13. Training program for the IISc licensees on biomass gasification technology (5 days) for implementation level and decision making level, April 2005. About 20 participants from various parts of the country participated.

Advanced Bioenergy Energy Technology Society, CGPL, IISc

September 2002 to date – Founder member of Advanced Bioenergy Energy Technology Society, CGPL Indian Institute of Science, Bangalore 560 012, India.

Program Executive (Courtesy)

- As a part of this activity, interactions with the industry have been both at R and D and commercializing the technology. Interactions have resulted in consultancy projects, technology transfers and the projects implemented using the technology packages developed.
- Further, both the scientific and technological superiority has resulted in technology transfer to developing and developed nations.
- These technological interventions in industries have resulted in saving over 1000 tons of oil annually, resulting in mitigating over 3000 tons of CO_2.

Professional Activities

- **Member of various committies and bodies**

2020 onwards

- Member, Experts Group - CSIR's Hydrogen Energy Mission Program, 2021
- Member, DST Committee on Building India's Hydrogen Economy – A Concept Note and to formulate Detailed Project Report (DPR) on Hydrogen Mission in India, 2021
- Governing Council member, CSIR-IIP Dehradun, 2020 onwards.
- Member Task Force, DST, Coal to methanol 2019 onwards
- Chair, sub-committee on Hydrogen production, MNRE for Hydrogen mission 2020
- Governing Council member - Sardar Swaran Singh National Institute of Bio-Energy (SSS-NIBE) continuing
- Member, member Expert Panel, DST for the IC-MAP Call - An Introduction to Materials Acceleration Platforms 2021

2019 onwards

- Governing Council member, Sardar Swaran Singh National Institute of Bio-Energy (SSS-NIBE)
- Member, Project Evaluation & Implementation Committee: Pradhan Mantri JI-VAN Yojana
- Member, Research & Innovation Committee: Pradhan Mantri JI-VAN Yojana
- Member of Expert group area of biofuels, Centre for High Technology, MoPNG
- Member, Project Advisory Committee (PAC) for evaluating and recommending proposals received in the Ministry for Waste to Energy Programme, MNRE, 2019-2021.

2016 to 2019

- Chairman, Monitoring Committee for a CSIR-NMITLI Project, 2017 - 2019.
- Member, Expert group Sub – Committee on Methanol and DME, DST 2017.
- Chairperson, Screening Committee for Scientists at National Institute of Bio-Energy, MNRE, Government of India, 2016.
- Nominated Member from IISc on the Empanelment of External Domain Experts, Petroleum Conservation Research Association (PCRA), 2016.
- Invited Member of Technical Committee for the assessment of Lignocellulosic biomass for 2nd Generation Ethanol Plant, HPCL, 2016.
- Member, Biomass power committee, Ministry of New and Renewable Energy, 2016.

- Member Bioenergy committee Ministry of New and Renewable Energy, 2016.
- Expert member on the National Lab Policy for Renewable Energy Sector (NLPRE), MNRE, 2016.
- Member, Scientific Committee, 24th European Biomass Conference and Exhibition, 2016
- Session chairman at the 24th European Biomass Conference and Exhibition, Berlin, 2016.
- Member, R and D policy, Ministry of New and Renewable Energy, 2016.

2011 to 2015

- Member, Task Force on Waste to Energy under the Chairmanship of Dr. K. Kasturirangan, Member, Planning Commission, 2015.
- Involved in evaluation of National Test facilities for Stove, Indian Institute of Technology (IIT), Delhi, Institute of Minerals and Materials Technology (IMMT- CSIR), Bhubaneswar, and College of Agricultural Technology, Maharana Pratap University of Agriculture and Technology (MPUAT), Udaipur as a part of National Biomass Cookstoves Initiative of the Ministry of New and Renewable Energy, Government of India, 2013-15.
- Involved as a part of a national team on developing test protocols and standards for stove testing, which has led to being BIS standard, 2014-15.
- Developed test protocols and standard for gasification systems for thermal and power generation application as a prerequisite for BIS, 2014-15
- Scientific Committee 35th Symposium on Combustion 2014.
- Member, National Sub-Committees of Steering Committee, on various aspects of hydrogen energy and fuel cells as a part of Hydrogen board, MNRE, 2014.
- Expert member at the Global Calculator's 2-day expert workshop on the Land Use, Bioenergy and Food sector (Land/Bio/Food), 23rd and 24th April 2014 at Imperial College London,.
- Member, stove protocols 2012 – 2014.
- Expert member, National Core support evaluation of SEED program 2012 – 2014.
- Member, National Expert Committee for SEED Programmes in the Department of Science and Technology, 2013 – 2014.
- Session chairman for "Biomass energy" at the International Renewable Energy Exhibition and Conference organized by Tamil Nadu Energy Development Agency (TEDA), 15 Jan 2011.
- Member, International Scientific Committee, 19th European Biomass Conference and Exhibition, 2011.
- Co-chairman, on the session Gas Cleaning at the 19th European Biomass Conference and Exhibition – Berlin, Germany, 2011.
- Member: Evaluation and Awarding of the best Visual Presentations at the 19th European Biomass Conference and Exhibition – Berlin, Germany, 2011.

2000 to 2010

- Member, Strategy and Action Plan for Initiating Biomass Mission, Ministry of New & Renewable Energy, 2010.
- Member working group: Development of standards, specifications, test procedures for biomass gasifiers. Ministry of New & Renewable Energy, (Biomass Division), 2010.
- Member, Working Group on various Biomass Sectors, Ministry of New & Renewable Energy, (Biomass Division), 2010.
- Member, Bureau of Indian Standards, (BIS) for Bio-energy systems & devices, improved chulhas, biomass plants and biomass gasifier systems Sub-Committee MED 04:2, since 2009.
- Member, Reviewing Environmental standards and guidelines for producer gas plants and biomass gasifier, MNRE, 2009.
- Member, Judges panel, The GE Edison Challenge, GE India Technology Centre, 2009.
- Member - ICSU-ROAP Science Planning Group, Malaysia, 2008 - 2009.
- Member, Science and Society Programme of Department of Science & Technology, Core Support programme, 2008.

- Member, GEF Operation program 6, for UNIDO for Zambia, 2006-2007. Renewable Energy Based Electricity Generation for Isolated Mini-Grids in Zambia.
- Member Programme Advisory Committee (PAC), Science and Technology Application for Rural Development (STARD) of DST, since 2007.
- Member, GEF Operation program 6, UNIDO for Cuba, 2005-2007. Production and Delivery of Modern Energy Services based on Renewable Energy in Cuba. Case Isla de la Juventud
- Member, Village Energy Security Program, Ministry of New and Renewable Energy, 2006.
- Team member of the group for developing a national document entitled; National mission on decentralized biomass energy for villages and Industries, MNRE, 2006.
- Resource person for the National Village Electrification Program of MNES (2004-2005).
- International Biomass Expert for the UNIDO-GEF Renewable energy based mini-grid program in Zambia, (2003-2005).
- Member of a committee for sanction of research project at MNES (2000-2003)
- Member of a national subcommittee on arriving at Test protocol for gasifier testing (1999-2000).

- **Editorial activities**

Reviewer

Journals

1. Biomass and Bioenergy – The International Journal, Elsevier Science Publications Ltd.
2. International Journal of Sustainable Energy, Taylor & Francis
3. Energy for Sustainable Development, Elsevier Science Publications Ltd.
4. Journal of Mechanical Engineering Science , Sage publications
5. Current Science, a Journal of Indian Academy of Sciences
6. Thermal energy, Elsevier Science Publications Ltd.
7. Journal of Thermal Science, Institute of Nuclear Sciences Vinca.
8. Sustainable Energy Technologies and Assessments
9. Journal of Renewable and Sustainable Energy
10. Proceedings of ICE - Energy journal
11. Bioresource Technology, Elsevier Science Publications Ltd.
12. Applied thermal Engineering, Elsevier Science Publications Ltd.
13. International Journal of Energy Elsevier Science Publications Ltd.
14. International Journal of Hydrogen Energy Elsevier Science Publications Ltd.

Conferences

1. Member, International Scientific committee : European Biomass Conference and Exhibition, 2011, 2012, 2013,2014,2015, 2016.
2. Member, International Scientific committee , 35th Symposium on Combustion.