CURRICULUM VITAE

Dr. SIRAJ SAYYED

Address: 3-10-370, Indiranagar, New Baijipura, Lane No. 9,

Aurangabad-431001, Maharashtra State, INDIA **Contact:** +91-9423448696, lucky.sartaj@gmail.com



PROFESSIONAL PROFILE

International researcher with over 10 years of teaching and research experience in the field of Mechanical Engineering. Conducted multi-layer research focused on the effects of alternative fuels on Characterization, Engine performance and emission characteristics. Research provided pivotal information in understanding the key roles of characterizations play in mediating alternate fuels throughout the engine characteristics evaluation.

QUALIFICATIONS

- Outstanding ability to analyze, gather, write, evaluate, and produce detailed reports on critical projects.
- Strong skills in conducting initial research, providing data analysis, evaluating, and then developing viable solutions for integration into the Projects.
- Expertise working with leading investigators in the field of Research.
- Interact effectively with scientists, Professors, and Research scholars. Ability to adapt to people and institutions at all levels.
- Key research expertise areas include: Alternate fuels, Biofuels, Ethanol, Hydrogen, Internal Combustion Engines, Energy, Exergy, and Optimizations.

EDUCATION

Indian Institute of Technology (Indian School of Mines), Dhanbad (JH),

Feb. 2023

Doctor of Philosophy (Ph.D.) in Mechanical Engineering

Thesis Title: "Performance and Emission Analysis of Diesel Engine with Multiple Biodiesel and Diesel Blends as Fuel"

Supervisor(s): Prof. Dr. Randip Kumar Das, Dr. Kishor Kulkarni

Successfully completed with 7.5 CGPA in Course work

Maharashtra Institute of Technology, Aurangabad (MH),

Dec. 2014

Master of Technology (M.Tech) in Mechanical Engineering (Heat Power)

Dissertation Title: "Characterization of Biodiesels"

Successfully post-graduated with 67.11%

Maharashtra Institute of Technology, Aurangabad (MH), Bachelor of Technology (B.Tech) in Mechanical Engineering

Aug. 2008

In-plant Training (IPT): "Grind Master Machines Pvt. Ltd., Aurangabad"

Successfully graduated with 72.25%

Government Polytechnic College, Aurangabad (MH), Diploma in Mechanical Engineering

Jun. 2005

Project: "Lathe Tool Dynamometer" Successfully completed with 73.10%

MEMBERSHIP OF PROFESSIONAL SOCIETIES

• ISTE (LM-95312)

• IEI (M-1564484)

• ISHMT (LM-947)

• IEI-CE (M-1564484)

WORK CREDENTIALS

MIT, AURANGABAD (MH)

2015-Present

Assistant Professor

Teaching Activity: Strength of Materials (Old/ Revised Course), Engineering Thermodynamics (Old/ Revised Course), Applied Thermodynamics (Old/ Revised Course), Alternative Energy Sources (Professional Elective-I), Fundamentals of Bioenergy (Open Elective-II), Advanced IC Engines, Lab-I, II and III, Lab-Development of Software Skills, etc.

Research Activity: Authored 10 research papers published in various SCI/SCIE indexed international journals such as Energy (Elsevier), CSITE (Elsevier), JERT (ASME), IEI Series-B (Springer Nature), EDP Sciences, etc. Presented 8 research papers in various international conferences held in India and abroad (South Korea). Authored of 6 book chapters published by reputed publishers such as Springer Nature, Tailor & Francis (Apple academic Press), etc. More than 30 research papers reviewed for reputed journals such as Biofuels, Energies, Fuels, Aerospace, Applied Sciences, Clean Technologies, Inorganics, Membranes, Processes, Sustainability, and IEI Series-C, etc.

Departmental Service: Member of Curriculum Committee, Class Teacher for UG/PG, Feedback coordinator, Admission committee member for UG/PG, Lab development committee member, Time-table coordinator, Committee member for NAAC, NBA, IQAC and NIRF, etc. Website coordinator, Guided inter-disciplinary and multi-disciplinary projects at UG/PG levels, Served on other committees of the department.

University Service: Served on the task force for university question paper setting and assessment, invigilation duties, etc.

FTC-COER, SOLAPUR (MH)

2013-2015

Lecturer

Teaching Activity: Strength of Materials, Engineering Mechanics, Thermal Engineering, CAD/CAM, Solid modeling, etc.

Research Activity: Authored of 4 research papers published in international journals.

Departmental Service: Member of Curriculum Committee, Class Teacher, Admission committee member, Lab development committee member, Time-table coordinator, Academic committee member, Guided interdisciplinary and multi-disciplinary projects at diploma levels.

University Service: Served on the task force for university question paper setting and assessment, invigilation duties, etc.

MIT, AURANGABAD (MH)

2011-2013

Research Scholar

Independent research was conducted during post-graduation under the guidance of research guide. **Significant Achievement:** Authored of 4 research papers published in international journals.

MIT, AURANGABAD (MH)

2008-2011

Lecturer

Teaching Activity: Strength of Materials, Engineering Mechanics, Thermal Engineering, CAD/CAM, Power Engineering, etc.

Departmental Service: Class Teacher, Admission committee member, Time-table coordinator, Academic committee member, Guided projects at diploma levels.

University Service: Served on the task force for university paper assessment, invigilation duties, etc.

HONORS AND AWARDS

- Successfully completed Ph.D. from IIT (ISM) in Feb. 2023.
- Best paper presentation certificate at ICRAMERD-2021, Bhubaneswar, India.
- Best research scholar award from Science Father (SHEN-2021).
- Best research paper certificate at NEVVE-2018, Seoul, South Korea.

RESEARCH PUBLICATIONS

Research Articles:

• **Siraj Sayyed**, Randip Kumar Das, Kishor Kulkarni, Tabish Alam, & Sayed M. Eldin (2023). Influence of additive mixed ethanol-biodiesel blends on diesel engine characteristics. *Alexandria Engineering Journal*, Elsevier. (https://doi.org/10.1016/j.aej.2023.03.091)

Indexing: SCIE Impact Factor: 6.626 Cite score: 8.3

• **Siraj Sayyed**, Randip Kumar Das, Kishor Kulkarni, Tabish Alam, & Sayed M. Eldin (2023). Computational and Experimental Investigation of Nitrogen Oxides in Stationary Diesel Engine Powered by Multiple Biodiesel Blends. *Alexandria Engineering Journal*, Elsevier (*Accepted for Publication*).

Indexing: SCIE Impact Factor: 6.626 Cite score: 8.3

• **Siraj Sayyed**, Randip Kumar Das, Kishor Kulkarni (2022). Experiment-Energy-Exergy (3E) Analysis of Multiple Biodiesel Blended Diesel Engine. *Journal of Energy Resources Technology*, Transactions of the ASME. (https://doi.org/10.1115/1.4054850)

Indexing: SCIE **Impact Factor:** 3.09

• **Siraj Sayyed**, Randip Kumar Das, Kishor Kulkarni (2022). Experimental investigation for evaluating the performance and emission characteristics of DICI engine fueled with dual biodiesel-diesel blends of Jatropha, Karanja, Mahua, and Neem. *Energy Journal*, Elsevier. (https://doi.org/10.1016/j.energy.2021.121787)

Info: Rank 3 out of 60 in Thermodynamics

Indexing: SCI Impact Factor: 8.857 Cite score: 13.4

• **Siraj Sayyed**, Randip Kumar Das, Kishor Kulkarni (2021). Performance assessment of Multiple Biodiesel Blended Diesel Engine and NOx modeling using ANN. *Case Studies in Thermal Engineering (CSITE) Journal*, Elsevier. (https://doi.org/10.1016/j.csite.2021.101509)

Info: Rank 7 out of 60 in Thermodynamics

Indexing: SCIE Impact Factor: 6.2 Cite score: 5.2

• Kishor Kulkarni, Antara Kulkarni, Naziya Sultana Shaikh, **Siraj Sayyed** (2021). Modeling of Total Cases due to COVID-19 and its Impact in India. *Journal of the Institution of Engineers: Series B*, Springer Nature, Singapore. (https://doi.org/10.1007/s40031-021-00558-w)

Indexing: Scopus Impact Factor: 0.88

• **Siraj Sayyed**, Randip Kumar Das, Kishor Kulkarni (2019). Experimental Investigation and Development of Correlation for Pongamia Pinnata Biodiesel. *EDP Sciences publication*, France. (https://doi.org/10.1051/matecconf/201927201009)

Indexing: Scopus **Impact Factor:** 0.432

• **Siraj Sayyed,** H. M. Dharmadhikari, Nilesh Gore (2018). Modelling of Roughness values from Tribological parameters in hard Turning of AISI 52100 steel. *Procedia Manufacturing*, Elsevier. (https://doi.org/10.1016/j.promfg.2018.02.050)

Indexing: Scopus Impact Factor: 1.79

- **Siraj Sayyed,** Renuka Kale, Swapnil Deshmukh (2017). Effects of Thermal, Physical and Chemical Properties of Biodiesel and Diesel Blends. *American Journal of Mechanical and Industrial Engineering (AJMIE)*, Science Publishing Group, China. (https://doi.org/10.11648/j.ajmie.20170201.14) **Indexing:** CrossRef
- **Siraj Sayyed,** H. M. Dharmadhikari, J. M. Kshirsagar (2016). Formulation Techniques in Regression Analysis to Estimate the Roughness Value from Tribological Parameters in Hard Turning of AISI 52100 Steels. *IOSR Journal of Mechanical and Civil Engineering (IOSR-JMCE)*. (https://doi.org/10.9790/1684-13112636).

Indexing: Peer-reviewed **Impact Factor:** 8.02 (AQCJ)

• **Siraj Sayyed,** S. D. Joshi, H. M. Dharmadhikari (2013). Effect of Individual Physio-chemical Properties of Karanja Oil Methyl Esters (KOME) and Its Statistical Correlation with Gross Calorific Value. *International Journal of Research in Engineering and Technology (IJRET)*. (https://doi.org/10.15623/ijret.2013.0212022)

Indexing: Peer-reviewed **Impact Factor:** 7.529 (SJIF)

• **Siraj Sayyed,** Leena Uttarwar, Sheetal Pagey, Rashmi Suryawanshi (2013). Effect of Acid and Iodine Value of Karanja Oil Methyl Esters and Its Statistical Correlation with Gross Calorific Value. *International Journal of Research in Engineering and Technology (IJRET)*. (https://doi.org/10.15623/ijret.2013.0211104)

Indexing: Peer-reviewed **Impact Factor:** 7.529 (SJIF)

• B. M. Gitte, **Siraj Sayyed**, H. M. Dharmadhikari (2013). Performance and Emission Characteristics of Diesel Engine Fuelled with Biodiesel and Its Blends: A Review. *International Journal of Engineering Research & Technology (IJERT)*. (https://doi.org/IJERTV2IS100953)

• **Siraj Sayyed,** B. M. Gitte, S. D. Joshi, H. M. Dharmadhikari (2013). Characterization of Biodiesels: A Review. *International Journal of Engineering Research & Technology (IJERT)*. (https://doi.org/IJERTV2IS100795)

Book Chapters:

• Shubham Pangavkar, **Siraj Sayyed**, Kishor Kulkarni (2023). Performance Analysis of DICI-VCR Engine Fuelled with Cottonseed Biodiesel and Diesel Blends. *Current Advances in Mechanical Engineering*. Springer Verlag, Singapore. (https://doi.org/10.1007/978-981-16-9057-0_69)

Indexing: Scopus **Impact Factor:** 0.55

• **Siraj Sayyed**, Randip Kumar Das, Kishor Kulkarni (2021). Experimental Evaluation of Physicochemical and Thermal Properties of Tetra Biodiesel-Diesel Blends of Jatropha, Karanja, Mahua, and Neem. *Current Advances in Mechanical Engineering*. Springer Verlag, Singapore. (https://doi.org/10.1007/978-981-33-4795-3_48).

Indexing: Scopus **Impact Factor:** 0.55

• **Siraj Sayyed** and H. M. Dharmadhikari (2019). An Experimental and Statistical Investigation of Density and Viscosity of Biodiesel and Diesel Blends. Mechanical Engineering for Sustainable Development (eSBIN: 9781351170161), *Apple Academic Press*, Tailor & Francis Group. (https://doi.org/10.1201/9781351170161)

Indexing: Scopus

• Pratik Khandelwal, **Siraj Sayyed**, Pravin Lad (2017). Experimental and Statistical Investigation of Roughness Value from Tribological Parameters in 60 HRC 100Cr6 Steel.

Indexing: Google Scholar

• Pravin Lad, **Siraj Sayyed**, Pratik Khandelwal (2017). Ways to Achieve Eco-friendly Machining in Manufacturing Operations.

Indexing: Google Scholar

Conference Attended:

- International Conference on Advances in Civil Engineering (ICACE-2022), *India from* 20th to 22nd Dec. 2022.
- 2nd International Conference on Recent Advances in Mechanical Engineering Research and Development (ICRAMERD-2021), *India from 24th and 25th Sept. 2021*.
- International Conference on Recent Advances in Mechanical Engineering Research and Development (ICRAMERD-2020), *India from 24th and 25th Jul. 2020*.
- 2nd International Conference on New Energy Vehicle and Vehicle Engineering (NEVVE-2018), *Seoul, South Korea from 26th to 28th Oct. 2018.*
- 24th National and 2nd International ISHMT-ASTFE Heat and Mass Transfer Conference (ISHMTC-2017), *India from 27th to 30th Dec. 2017*.
- 2nd International Conference on Materials, Manufacturing and Design Engineering (iCMMD-2017), *India from 11th and 12th Dec. 2017.*
- 1st International and 18th National ISME Conference on Mechanical Engineering: Enabling Sustainable Development (ISME-2018), *India from 23rd to 25th Feb. 2017*.
- 3rd Annual International Conference on Emerging Trends in Mechanical Engineering and Agricultural Engineering (Techtantra-2017), *India from 17th and 18th Feb. 2017*.

Research Article Reviewed

Several research papers are reviewed for the journals such as:

- Biofuel
- Energies
- Fuels
- Aerospace
- IEI Series-C
- Ambient Energy
- Smart Grid and Renewable Energy

- Clean Technologies
- Inorganics
- Processes
- Membranes
- Applied Sciences
- Environmental Protection
- Asian Food Science

SEMINAR/ WORKSHOP/ STTP/ FDP/ CEP/ CONFERENCE

Attended:

- One week FDP on *Recent advancement in Heat Exchanger Technologies: Experimentation & Simulations* from 13th to 17th Mar. 2023.
- Two days FDP on Adoption of NEP modules in academic curriculum from 30th to 1st Dec. 2022.
- One week PDP on *Recent Developments in Renewable Energy* from 20th to 24th Jun. 2022.
- One week STTP on *Emerging Optimization Techniques for Engineering Applications* from 27th Sept. to 1st Oct. 2021.
- One week STTP on *Emerging Trends in Thermal Engineering* from 14th to 19th Jun. 2021.
- One day webinar on *National Education Policy 2020* on 10th April 2021.
- One week FDP (TEQIP-III) on *Renewable Energy* from 14th to 18th Dec. 2020.
- One week FDP (TEQIP-III) on Applications of *Finite Element Analysis (FEA) and Computational Dynamics (CFD) using Ansys* from 13th to 17th Jun. 2020.
- One day *National Level Quiz on NAAC* on 7th Jun 2020.
- One day webinar for FDP on *Outcome Based Education Software* on 11th Jun 2020.
- One day *National Level Quiz on Electrical Safety* on 6th Jun 2020.
- One day webinar on *Transaction Analysis in Education* on 26th May 2020.
- One day quiz on *Optimization Techniques* on 22nd May 2020.
- Two days webinar on *Application of Statistical Tools and Energy Engineering* from 20th to 21th May 2020.
- One day webinar on *Outcome Based Education and NBA Accreditation* on 18th May 2020.
- One day FDP on NBA on 15th May 2020.
- One day COVID-19 Awareness Program.
- One week workshop on LabVIEW: Modern Tools and Techniques in Engineering Education from 6th to 11th Aug. 2018.
- Two days workshop on *Outcome Based Education* from 4th and 5th Dec. 2017.
- One week STTP on *Hot Rolling of Steels and Its Applications* from 11th to 16th Jan 2010.
- Three days state level workshop on *Entrepreneurship Development* from 5th to 7th April 2007.
- National level *CAD/CAM Competition* on 4th Feb. 2007.
- Three days workshop on *Entrepreneurship Awareness Programme* from 24th to 26th Feb 2005.

Organized:

• International Conference on Recent Trends in Mechanical Engineering (ICRTME-2021) from 22nd and 23rd Jan. 2021.

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- Experimental Investigation and Development of Correlation for Mixed Biodiesel and Diesel Blends published in Feb. 2022 (Reg. No: L-111870/2022).
- Prediction of Heating Value of Multiple Biodiesels from Density and Viscosity using ANN-Regression Approach in Dec. 2021 (Diary No.: 28850/2021-CO/L).

COMPUTER/ SOFTWARE PROFECIENCY

• MS-Office (Word, Excel, Power point)

• Minitab

• Matlab

• Sigma Plot

• Origin Plot

LATEX

Auto-CADD

Solid Edge

Pro/Engineering

Unigraphics NX

• CATIA

Ansys

RESEARCH PROFILES

• Google Scholar: Total Citations: 108, H-index: 6, and i10-index: 4 Link: https://scholar.google.com/citations?user=nWfg6nMAAAAJ&hl=en

Research Gate: Research Interest Score 107.1

Link: https://www.researchgate.net/profile/Siraj_Sayyed

• **VIDWAN:** ID: 219412, Vidwan Score: **7.7**

Link: https://vidwan.inflibnet.ac.in//profile/219412/MjE5NDEy

• Orcid ID: 0000-0001-8531-7258

Link: https://orcid.org/my-orcid?orcid=0000-0001-8531-7258

• **Publons:** Web of Science Researcher ID: F-9213-2018

Link: https://publons.com/researcher/1948477/siraj-sayyed/

• SCOPUS ID: Siraj, Sayyed

Link: https://www.scopus.com/authid/detail.uri?authorId=57197758761

PERSONAL INFORMATION

• **Father Name** : Sayyed Rafik

• **DOB** : 14th November 1986

• **Permanent Address** : 3-10-370, Indiranagar, New Baijipura, Lane No. 9, Aurangabad-

431001, Maharashtra State, INDIA

• Language Known : English, Hindi, and Marathi

I hereby declare that the above written information is true to the best of my knowledge.

Date: 10th April 2023 **Place:** Aurangabad

(Dr. SIRAJ SAYYED)