

CURRICULUM -VITÆ

Dr. SYED ABBAS ALI
(+91-9651511742)



Educational Qualifications

Ph. D. (Mechanical Engineering)	NIT-Allahabad, Prayagraj, UP
M.Tech (Machine Design)	BEC Bagalkot, VTU Belagavi
B.E. (Mechanical Engineering)	BEC Bagalkot, VTU Belagavi

Research Areas of Interest

- ❖ Internal Combustion(IC) Engine (Modelling, Identification and Control)
- ❖ Alternative fuels for IC engine.
- ❖ Performance of IC Engine using nonmaterial based biodiesel.
- ❖ Artificial Intelligence based Techniques in IC Engines.
- ❖ Synthesis of nanomaterials
- ❖ Synthesis of mechanisms

Interesting Subjects

- ❖ Internal Combustion Engines
- ❖ Machine Design-I
- ❖ Machine Design-II
- ❖ Control Engineering (ME & EEE)
- ❖ Neural Network & Fuzzy Logic

Subjects Taught

- ❖ Theory of Machines
- ❖ Machine Design (I&II)
- ❖ Mechanical Vibrations
- ❖ Control Engineering
- ❖ Dynamics of Mechanism Design (PG)
- ❖ Experimental Mechanics (PG)

Experience

Teaching

- ❖ Working as Associate Professor in Department of Mechanical Engineering, SECAB Institute of Engineering and Technology, Vijayapura from November 2015 to Till date.
- ❖ Worked as Assistant Professor in Department of Mechanical Engineering, SECAB Institute of Engineering and Technology, Vijayapura.

Publications

Journals (National and International)

- ❖ Syed Abbas Ali and Samir Saraswati, "A comparison of sliding mode and FRF based observers for cylinder pressure estimation of SI engine" Transactions of the Institute of Measurement and Control, SAGE Publications. Vol. 39, No. 2, pp. 163–172, 2017 (SCI Journal).
- ❖ Syed Abbas Ali and Samir Saraswati, "Cycle-by-Cycle estimation of IMEP and peak pressure using crankshaft speed measurements" Journal of Intelligent & Fuzzy Systems, IOS Publisher. Vol. 28, pp. 2761–2770, 2015 (SCI Journal).
- ❖ Syed Abbas Ali and Samir Saraswati, "Cycle-by-Cycle estimation of cylinder pressure and indicated torque waveform using crankshaft speed fluctuations" Transactions of the Institute of Measurement and Control, SAGE Publications. Vol. 37, No. 6, pp. 813–825, 2015 (SCI Journal).

- ❖ Syed Abbas Ali and Samir Saraswati, "Control Oriented Observer for Cylinder Pressure Estimation of SI Engine using Frequency Response Function" International Journal of Modelling, Identification and Control, Inderscience Publisher. 39 (2), 138-149 2021. (ESCI Journal)
- ❖ Syed Abbas Ali and Samir Saraswati, "Estimation of Gasoline Engine Emissions from Cylinder Pressure Parameters: Artificial Neural Network Approach" SAE Technical Paper, 2021-01-1014, 2021 (SAE Journal).
- ❖ B. R. Hosamani, Syed Abbas Ali and Vadiraj Katti, "Assessment of performance and exhaust emission quality of different compression ratio engine using two biodiesel mixture: Artificial neural network approach" Alexandria Engineering Journal, Vol. 60, pp. 837-844, 2021. (SCI Journal).
- ❖ Syed Sameer Hussain, Syed Abbas Ali, Altaf Hussain Bagwan, Dilawar Husain, Akbar Ahmad, "Prediction of CI Engine Emissions Fueled with Multi-walled Carbon Nanotube Doped Waste Cooking Oil Biodiesel Using Multilayer Neural Network" Journal of nanomaterials (SCI Journal).
- ❖ S. G. Sarganachari, V. B. Math and Syed Abbas Ali, "Synthesis of planar six-bar mechanism for function generation: A variable topology approach" International Journal of Applied Engineering Research (IJAER), Vol. 5 No. 3, pp. 471–476, 2010. ISSN 0973-4562
- ❖ S. G. Sarganachari, B. K. Belleri, V. B. Math and Syed Abbas Ali, "Optimal synthesis of crank-rocker mechanism for specified rocker amplitude and time ratio" International Journal of Applied Engineering Research (IJAER), Vol. 5, No. 12, pp. 2039–2048, 2010. ISSN 0973-4562.
- ❖ Syed Abbas Ali, Shirajahammad, Syed Sameer Hussain, Altaf Hussain Bagwan, The effect of nanoparticles dispersed in waste cooking oil (WCO) biodiesel on thermal performance characteristics of VCR engine, Materials Today: Proceedings, Elseveir Publisher, Vol. 43(2), pp. 888-891, 2021.
- ❖ Syed Abbas Ali, Shirajahammad, Syed Sameer Hussain, Altaf Hussain Bagwan, Neural Network Approach of Estimating CI Engine Performance and Emission Parameters from WCO based Biodiesel, Materials Today: Proceedings, Elseveir Publisher, Vol. 43(2), pp. 935-940, 2021.

- ❖ Mahendra Nana Vhatkar, Geetanjali V. Patil, Iresh G. Bhavi, Syed Abbas Ali, "Review and Preliminary Design of 3-D Printed ABS Polymer Torsion Element with parametric Internal Structures" Materials Today: Proceedings, Elseveir Publisher, 2022.
- ❖ Dilip Sutraway, Syed Abbas Ali, Altaf Hussain Bagwan and Shashikant Nimbalkar, "Effect of fuel injection timing on performance of CI engine using (SIMAROUBA) biodiesel as a fuel" Journal of Automotive Engineering & Technology.
- ❖ Dilip Sutraway, Shashikant Nimbalkar, Syed Abbas Ali, Altaf Hussain Bagwan and Manjunath Satpute, "To Investigate the Performance and Emission Characteristics of CI Engine Using Mustard Oil Biodiesel as Fuel" Journal of Emerging Technologies and Innovative Research, Vol. 4, No. 9, pp. 2039–2048, 2017. ISSN 2349-5162.
- ❖ Altaf Hussain Bagawan, Syed Abbas Ali, Dilip Sutraway, Mohammad Shakir M Attar, Syed Sameer Hussain "Performance Analysis of CI Engine using WCO as Biodiesel" International Journal of Current Engineering And Scientific Research (IJCESR), Vol. 1, No. 11, pp. 1-5, 2017. ISSN 2393-8374.
- ❖ Ajitnath P, Syed Abbas Ali, Altaf Hussain Bagawan, Mohammad Shakir M Attar, "Experimental investigation of tensile properties of bamboo reinforced epoxy composites" International Journal of Innovative Research in Science, Engineering and Technology (IJIRSET), Vol. 6, No. 15, 2017. pp. 179-188.
- ❖ Zyur Rahaman, Syed Abbas Ali, Asif Iqbal, Syed Sameer Hussain, Mahammadrafeeq Manvi, "Experimental Investigation of Bending Properties of Carbon Fiber Reinforced Epoxy Composites" International Journal of Mechanical And Production Engineering, ISSN: 2320-2092, Vol. 5, No. 11, 2017. pp. 1-5.
- ❖ Syed Sameer Hussain, Syed Abbas Ali, Sunil Thaned, Altaf Hussain Bagawan "Influence of Injection Pressure on The Performance of CI Engine Using Waste Cooking Oil as a Fuel" International Journal of Mechanical And Production Engineering, ISSN: 2320-2092, Vol. 5, No. 11, 2017. pp. 11-14.

Conferences (National and International)

- ❖ Matin A. Shaikh, Geetanjali V. Patil, Basavraj M. Angadi, Syed Abbas Ali, "A Review: Tribological Study of Advanced Coating on Cast Iron" National Online Conference on "Research and Developments in Material Processing, Modelling and Characterization 2020 (RDMPMC-2020)" 26-27, August 2020. Organized by

Department of Metallurgical and Materials Engineering National Institute of Technology
Jamshedpur

- ❖ Syed Abbas Ali and Samir Saraswati, "Reconstruction of cylinder pressure using crankshaft speed fluctuations" IEEE International Conference on Industrial Instrumentation and Control-2015(ICIC-2015), College of Engineering Pune, Maharashtra, India, May 28-30, 2015. DOI: 10.1109/IIC.2015.7150785
- ❖ Syed Abbas Ali and Samir Saraswati, "Identification of flame development and rapid burning angle for SI engine" 3rd IEEE student conference on engineering and systems (SCES-2014), Motilal Nehru National Institute of Technology Allahabad, Allahabad-211004, Uttar Pradesh, India. May 28-30, 2014. ISBN: 978-1-4799-4938-0, DOI: 10.1109/SCES.2014.6880105
- ❖ Syed Abbas Ali, V. B. Math, S. G. Sarganachari, "Synthesis of four bar double rocker mechanism for prescribed extreme position" National conference on Emerging Trends in a Engineering Technology and Applications (NCETETA-2009), Shirdi Sai Engineering College, Anekal, Bengaluru, Karnataka, INDIA, April 29-30 2009.
- ❖ Syed Abbas Ali, V. B. Math, S. G. Sarganachari and C. M. Veerendrakumar, "Synthesis of adjustable planar four bar mechanism for function generation" International Conference on Advances in Mechanical Engineering (ICAME-2009), Sardar Vallabhai National Institute of Technology (SVNIT), Surat, Gujarat, INDIA, August 3-5, 2009.
- ❖ Ajitnath P, Syed Abbas Ali, Altaf Hussain Bagawan, Mohammad Shakir M Attar, "Experimental investigation of tensile properties of bamboo reinforced epoxy composites" A Two Day National Conference on Recent Advancements in Mechanical Engineering and Allied Fields-2017(RAMAEF-2017), Sir M. Visvesvaraya Institute of Technology, Bengaluru-562157, KARNATAKA, India, November 2-3, 2017.
- ❖ International Symposium on "Emerging Technologies for Sustainable Development" organized by Department of Mechanical Engineering, Basaveshwar Engineering College, Bagalkot-587103, KARNATAKA, INDIA. February 27-28, 2017.

Grants received

- ❖ Principal Investigator of the Project "Development of Ultra Featured Nanomaterials dispersed in Waste Cooking Oil (WCO) Biodiesel and their influence on Diesel Engine Parameters" sanctioned by Visvesvaraya Technological University Belagavi, Karnataka under "Research Grant Scheme (RGS)" with funding of Rs. 10.00 lakhs. (Ongoing)
- ❖ Principal Investigator of the Project "Study on the effects of various nanoparticles dispersed in waste cooking oil (WCO) biodiesel on Emission parameters of diesel engine" sanctioned by Vision Group on Science and Technology (VGST), Govt. of Karnataka under "Research Grant for Scientists/Faculty (RGS/F)" with funding of Rs. 3.00 lakhs. (Ongoing)
- ❖ Principal Investigator of the Project "Emission Prediction of Diesel Engine Fuelled with Nanomaterial based Biodiesel using Artificial Neural Network" sanctioned by TEQIP 1.3 of VTU Belagavi under "Competitive Research Grant" with funding of Rs. 2.00 lakhs. (Completed)
- ❖ Coordinator for Organizing Program on "MATLAB based Artificial Intelligence techniques in Engineering Applications" Sanctioned by TEQIP 1.3 of VTU Belagavi, with funding of Rs. 1.00 lakh. (Completed)
- ❖ Grant of Rs. 1.20 lakh (Approx) received for students projects from Karnataka State Council for Science & Technology (KSCST), Bengaluru, Govt. of Karnataka, and Supported by Department of Science and Technology (DST), Govt. of India. (Completed)
- ❖ Coordinator for Organizing Program on "The present scenario and challenges of all electric vehicles in India" Sanctioned by Karnataka Science and Technology Academy (KSTA), Government of Karnataka. (Ongoing)

Reviewer of National & International Journals /Conference

- ❖ Reviewer, Transactions of the Institute of Measurement and Control, SAGE Publisher.
- ❖ Reviewer, Journal of Applied Physics, AIP Publisher.

- ❖ Reviewer, Journal of Systems and Control Engineering (Part-I), SAGE Publisher.
- ❖ Reviewer, International Journal of Nuclear Energy Science and Technology (IJNEST), Inderscience Publisher.
- ❖ Reviewer, Journal of Process Mechanical Engineering (Part-E), SAGE Publisher.
- ❖ Reviewer, International Journal of Energy Technology and Policy, Inderscience Publisher.
- ❖ Reviewer, IEEE North Karnataka Subsection Flagship International Conference by meta-reviewer (IEEE NKCon-2022).
- ❖ Reviewer, International Conference on Science, Technology and Sustainability (ICSTS-2022).
- ❖ Reviewer, Institute for Exploring Advances in Science & Engineering (IEAE).
- ❖ Reviewer, International Journal of Engineering Research & Technology (IJERT)

Professional Memberships

- ❖ Life Member, Indian Society for Technical Education (MISTE).
- ❖ Life Member, Institute of Engineers (MIE)
- ❖ Member, Society of Automotive Engineers.
- ❖ Member, Institute for Exploring Advances in Science & Engineering.
- ❖ Member, International Association of Engineers.

Short term course/Workshops/Training Program Organized

- ❖ Coordinator for VTU-TEQIP 1.3 Sponsored Program on “Artificial Intelligence based Techniques in Engineering Applications” organized by Department of Mechanical Engineering held at SECAB Institute of Engineering and Technology, Vijayapura, KARNATAKA, INDIA. October 05-06, 2019.
- ❖ Coordinator for Workshop on “Introduction to MATLAB and SIMULINK environment and its applications to Engineering” organized by Department of Mechanical Engineering held at SECAB Institute of Engineering and Technology, Vijayapura, KARNATAKA, INDIA. March 29-April 02, 2018.

- ❖ Coordinator for One Week National Level Workshop on “A LabVIEW- A hands on experience” conducted by Department of Civil, Mechanical, Electrical & Electronics and Electronics communication Engineering held at SECAB Institute of Engineering and Technology, Vijayapura, KARNATAKA, INDIA. January 16-20, 2017.
- ❖ Coordinator for “A National Level workshop on Quadrotor” conducted by Department of Mechanical Engineering, SECAB Institute of Engineering and Technology, Vijayapura, KARNATAKA, INDIA. April 12-13, 2016.

Short term course/Workshops/Training Program Attended:
25 (Approx)

Projects/Thesis (Guided/Guiding)

Supervision of Ph. D. Thesis: 03 (Ongoing)

Supervision of M. Tech. Thesis: 20 (Completed)

Supervision of B. E. Projects: 24 (20 Completed+04 Continuing)

Awards/Honors/Fellowships

- ❖ Senior Research Fellowship (SRF), Department of Science and Technology (DST) New Delhi, [Govt. of India](#)
- ❖ MA National Senior Research Fellowship (MANSRF), University Grants Commission (UGC) New Delhi, [Govt. of India](#).
- ❖ MA National Junior Research Fellowship (MANJRF), University Grants Commission (UGC) New Delhi, [Govt. of India](#).
- ❖ Advisor for the project entitled “Design and Fabrication of Adjustable Multiseasonal Harvesting Machine” which was selected for the “BEST PROJECT OF THE YEAR AWARD” during Karnataka State Council for Science & Technology (KSCST) 41st series Project exhibition. [Govt. of Karnataka](#).
- ❖ Advisor for the project entitled “Estimation of Exhaust Emission Parameters of 4 Stroke Diesel Engine Using Waste Cooking Oil Dispersed With Nanomaterial as a Fuel” which

was selected for the “BEST PROJECT OF THE YEAR AWARD” during Karnataka State Council for Science & Technology (KSCST) 42nd series Project exhibition. [Govt. of Karnataka](#).

- ❖ Recipient of “Distinguished Faculty Award” at SECAB Institute of Engineering and Technology, Vijayapur, KARNATAKA, India.

Referees

1. Dr. Samir Saraswati
Associate Professor
Mechanical Engineering Department
Motilal Nehru National Institute of Technology Allahabad
Allahabad-211004, UTTAR PRADESH, INDIA
2. Dr. Satish Chand
Professor & Dean (Academics) (Rtd.)
Mechanical Engineering Department
Motilal Nehru National Institute of Technology Allahabad
Allahabad-211004, UTTAR PRADESH, INDIA

Personal Information

Name : Dr. Syed Abbas Ali
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Declaration:

I Dr. SYED ABBAS ALI hereby declare that all the above particulars furnished by me are true to the best of my knowledge and belief.

Place:

Date:

Signature of Candidate

(Syed Abbas Ali)