

Name of Faculty
Designation
Nature of Job/Appointment
Date of Joining

Dr. Y. S. Kannan
Assistant Professor
Regular
20-09-2021



E-mail

yskannan_mech@cbit.ac.in

Education Qualifications

Ph. D

Name of the Degree
Doctor of Philosophy (Fluid Power Systems), IIT-Hyderabad

Class

Awarded

PG

M. Tech (Thermal Power Engineering) NIT-Tiruchirappalli

First with Distinction

UG

B. E (Mechanical Engineering) CBIT

First with Distinction

Work Experience

Teaching

01 years

Research

09 years

Industry

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Others

Area of Specialization

Experimental Fluid Dynamics, Heat Transfer

Professional Memberships

Responsibilities held at Institution Level

Responsibilities held at Department Level

Research Guidance

Awards Received

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Under Graduate

1. Metrology and Instrumentation.
2. Engineering Exploration.
3. Workshop and Manufacturing practice.
4. Power plant engineering.
5. Computer aided design and drafting lab.
6. Robotics and drones lab.
7. Metrology and instrumentation lab.
8. Thermal Engineering lab.

Courses Handled at Under Graduate / Post Graduate Level.

Post Graduate :

Introduction to Optimization Techniques.

No. of Papers Published

National Journals – 00

International Journals – 05

National Conference – 00

International Conference – 06

Projects Carried out

Patents

06

Technology Transfer

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Invited Speaker

No. of Books/Chapter Published with details

Details of Short-Term Training Programs/Faculty Development Programs/Seminars/Workshops.Other Trainings (**Attended and/or Organized**).

1. Dr. Y. S. Kannan has attended a One week **Faculty Development Programme** on 'Application of Artificial Intelligence and Machine Learning in Mechanical Engineering (AAIME-2021)' organized by department of Mechanical Engineering, Maturi Venkata Subba Rao (MVSR) Engineering College from 18-10-21 to 23-10-21.
2. Dr. Y. S. Kannan has attended a 5 day SERB online international **workshop** on 'Recent Advancements in Modelling Analysis of Porous Material' organized by department of Mechanical Engineering, NIT Suratkal from 28-2-22 to 4-3-22.
3. Dr. Y. S. Kannan attended a three day **FDP** on "Establishment and Management of Business Incubation" during 10-12 March, 2022 in association with NI-MSME, (National Institute of Micro, Small and Medium Enterprises) Ministry of MSME Govt. of India.
4. Attended 2 week online **faculty development programme** on "Recent Trends in Robotics" jointly

organized by Electronics and ICT academics at IIT Roorke, MNIT Jaipur, NIT Patna and PDPM IITDM Jabalpur during 04.07.2022 to 15.07.2022.

5. Participated in the AICTE Recognized **Faculty Development Programme** on Smart Materials Processing and Applications Conducted by NITTTR, Chandigarh from 25/07/2022 to 29/07/2022

Details of Journal Publications/ Conferences (**National and International**)

International Journal

- **Y. S. Kannan**, B. Karri, K. C. Sahu, "Entrapment and interaction of an air bubble with and oscillating cavitation bubble", Physics of Fluids vol. 30 (4), 041701, 2018, American Institute of Physics (AIP) publications.
- **Y. S. Kannan**, S. Balusamy, B. Karri, K. C. Sahu, "Effect of viscosity on the volumetric oscillations of a non-equilibrium bubble in free-field and near a free-surface", Experimental Thermal and Fluid Science. 116, 110113, 2020.
- Singh RJ, **Y. S. Kannan**, Nimmagadda R, Shukla B. Numerical Investigation on Regulation and Suppression of Heat and Mass Transfer by Varying Thermal and Solutal Buoyancy Force. Engineering Research Express. 2023 Mar 21.
- Murali Krishna, M.V.S., Ravidra Reddy, P.V.R., Narasimha Kumar, S., **Kannan, Y.S.** and Jagapathi Babu, D. Experimental investigations on exhaust emissions of insulated diesel engine fuelled with CNG and cottonseed biodiesel, Gradiva Review Journal, 8(8), 192-203. 2022
- 2. Murali Krishna, M.V.S., Ravidra Reddy, P.V.R., Narasimha Kumar, S., **Kannan, Y.S.** and Jagapathi Babu, D. Influence of injection timing and injection pressure on pollution levels of insulated diesel engine fuelled with CNG and cottonseed biodiesel, Ecology, Environment and Conservation, January Issue, 2023

International Conferences:

- **Y. S. Kannan**, S. Balusamy, B. Karri, "Laser diagnostics for characterization of sprays formed by a collapsing non-equilibrium bubble", 9th International symposium on Cavitation (CAV2015), Journal of Physics: Conference Series, IOP Publishing, December 6-10, 2015, EPFL, Switzerland (Scopus indexed).
- D. Vamshidhar Reddy, **Y. S. Kannan**, Badarinath Karri and K. C. Sahu, "Dynamics of water and glycerol drops sliding down an inclined plane", Proceedings of the 7th International and 45th National Conference on Fluid Mechanics and Fluid Power (FMFP), December 10-12, 2018, IIT-Bombay, Mumbai, India.
- R. Kamatchi, **Y. S. Kannan**, S. Venkatachalapathy, "Effect of Surface Modifications on the Enhancement of Critical Heat Flux in Saturated Pool Boiling" Proceedings of International Conference on Advances Research in Mechanical, Aeronautical and Civil, International Innovative Scientific Research and Organisation (IISRO)- 5th to 8th September, 2013, Thailand, pp 75-79.
- Ranjit J. Singh, **Y. S. Kannan**, Ravi Degala, "The numerical analysis of the sloshing tank with baffles at the high amplitude of vertical oscillation using OpenFOAM", Materials Today: Proceedings, 62 (6) (2022) 4094-4097.
- Ashwin Raut, Ranjit J. Singh, **Y. S. Kannan**, Rahul, "Insulation behavior of foam based geo-polymer as a thermally efficient sustainable blocks", Constructions Materials and Structures ICCMS-2022, NIT-Calicut, Virtual Mode, 2023.