RESUME

Dr. Suhas B.G

Assistant Professor-L12

Dept. of Mechanical Engineering

B.M.S College of Engineering

Bull Temple road, Bengaluru-560019

e-mail: suhasbg.mech@bmsce.ac.in

Education

Ph.D. – Thermal Engineering

Ph. D Dissertation Title: Investigation on Subcooled Flow Boiling Heat Transfer to Water-Ethanol Mixture in Conventional Channel.

National Institute of Technology-Karnataka, Surathkal, Mangalore, India-575025.

Passed out Year: February 2018.

M.Tech by Research – Thermal Engineering

M. Tech by Research Dissertation Title: Study the performance and emission characteristics of Hydrogen blend in SI Engine.

National Institute of Technology-Karnataka, Surathkal, Mangalore, India-575025.

Passed out Year: June 2013.

BE – Mechanical Engineering

PESIT, Banashankari III Stage, Bengaluru, Karnataka, India-560085.

Passed out Year: June 2010.

Work Experience

Working as Faculty since 27.09.2017 at the Department of Mechanical Engineering, B.M.S College of Engineering, Bengaluru-19.

Research Interest

Bio-Fluids and heat transfer, Boiling Heat Transfer, Combustion, Cryogenics, Electronic cooling, Gas dynamics, Green Buildings, Hydrogen Fuel cells, Refrigeration systems, Heating, Ventilation and air conditioning systems (HVAC), Solar Energy, Turbomachines and Wind Energy.

Courses handled

Department of Mechanical Engineering

Sl. No	Discipline	Sem	Name of the Course	Years	Course type
1	UG	I/II	Elements of Engineering Drawing /Computer aided engineering drawing	2017-Till Date	Department Core
2			Elements of Mechanical Engineering	2018-2022	
3			Innovation and Design Thinking	2023-Till Date	
4			Introduction to Mechanical Engineering	2023-Till Date	Institutional Elective
5		III	Foundry Welding Technology	2017 Only	Departmental Core
6			Basic Thermodynamics	2018-2020	
7			Fluid Mechanics	2019 Only	
8		V	Turbomachines	2020-2022	
9		VI	Turbomachines	2019-2020	
10			HVAC Industrial Application	2024-Till Date	Departmental Elective
11		VII	Fundamentals of Boiling Heat Transfer	2023-2025	
			Applied Thermal Engineering	2026-Till Date	
12			Applied Thermal Engineering	2025 only	Institutional Elective
13		VIII	Fundamentals of Cryogenic Engineering	2026 only	
14	PG (2019-2022)	I	Advanced Thermodynamics	2019-2022	Departmental Core
15		II	Phase change phenomena in Fluids	2019-2022	Departmental Elective

Department of Aerospace Engineering

Sl. No	Discipline	Semester	Name of the Course	Years	Course type
1	UG	V	Advanced Thermodynamics	2020 Only	Departmental Elective
2			Applied Thermal Engineering	2021 Only	
3		VII	Applied Thermal Engineering	2024 Only	Institutional Elective
4		VIII	Cryogenics for Aerospace Engineering	2023-2025	

Department of Electrical and Electronics Engineering

Sl. No	Discipline	Semester	Name of the Course	Years	Course type
1	UG	I/II	Renewable Energy Resources	2023 Only	Institutional Elective

Research Scholar URL

GOOGLE SCHOLAR ID	https://scholar.google.com/citations?user=A7j6mMsAAAAJ&hl=en
ORCID ID	0000-0002-5696-2706
SCOPUS ID	57191483498
WEB OF SCIENCE ID	AAS-3948-2020
VIDWAN ID	156712

Membership details

Life time member for Indian Society of Heat and Mass Transfer (ISHMT)

Project Fundings

Co-Principal Investigator for the project titled "Development of a novel, cost effective wind/PV micro grid for tribal community living" funded by Dassault La Foundations of worth INR 9.5 Lakhs (Ref: DSF Contract ID:52/2020).

Investigator for this project is Dr. Prema V (Department of Electrical and Electronics) and Co-Principal Investigator: Dr. Anil Chandra AR (Department of Mechanical Engineering).

Duration of this project was from 15.12.2020 to 15.06.2022.

Project guidance

- UG Project: 09 (Completed)
- PG Project: 01 (Completed)

Academic services and leadership

- Member of Board of Studies (BOS): September 2023-Till Date
- Member of Board of Examination (BOE): January 2026-Till date
- Member of Equivalence Committee (DEC): November 2023-Till Date
- AICTE Activity coordinator: 2020 March-Till Date
- Non-NEP Batch re-registration coordinator: November 2023-Till Date
- Non-NEP Supplementary Batch Evaluation Unit Coordinator during August 2024.
- Time-Table Officer: December 2024-Till Date

List of Journal Publications

1. **Suhas B.G**, Shivaprasad K.V and Kumar G.N (2012). "Experimental investigation of single cylinder 4S SI engine with hydrogen blends", *International Journal of Mechanical Engineering and Technology (IJMET)* 3: 84-95.
2. **Suhas B.G,** Shivaprasad K.V and Kumar G.N (2013). "Computational and Experimental Investigation of NOx Emission of Hydrogen Blend on a Constant Speed Gasoline Engine", *International Journal on Theoretical and Applied Research in Mechanical Engineering (IJTARME)* 2:121-125.
3. **Suhas B.G** and Sathyabhama.A (2016). Numerical Analyses of Single-Phase Pressure Drop and Forced Convective Heat Transfer Coefficient of Water–Ethanol Mixture: An Application in Cooling of HEV Battery Module, *Heat Transfer—Asian Research* 45 (7): 681-698. **(Web of Science-Q2)**.
4. **B.G Suhas** and Sathyabhama.A (2017). "Bubble dynamics of water-ethanol mixture during

subcooled flow boiling in a conventional channel", *Applied Thermal Engineering* 113: 1596–1609. **(Web of Science-Q1)**.

5. **B.G Suhas** and Sathyabhama.A (2017). "Experimental Investigation of Heat Transfer Coefficient and Correlation Development for Subcooled Flow Boiling of Water–Ethanol Mixture in Conventional Channel", *Journal of Thermal Science and Engineering application*, ASME 9 (4):041003-11. **(Web of Science-Q3)**.
6. **B.G Suhas** and Sathyabhama.A (2018) "Heat transfer and force balance approaches in bubble dynamic study during subcooled flow boiling of water–ethanol mixture", *Experimental Heat Transfer*, Taylor and Francis 31(1): 1-21. **(Web of Science-Q2)**.
7. **B.G Suhas** and Sathyabhama.A (2018) "Experimental study on forced convective and subcooled flow boiling heat transfer coefficient of water-ethanol mixtures: An application in cooling of heat dissipative devices", *Heat and Mass Transfer*, Springer 54: 277-290. **(Web of Science-Q3)**.
8. **B.G Suhas**, Sathyabhama.A, Kavadiki Veerabhadrappa, R. Suresh Kumar and Kiran Kumar U (2019) "Wall heat flux partitioning analysis for subcooled flow boiling of water- ethanol mixture in conventional channel", *Frontiers in Heat and Mass Transfer*, Global Digital Central, 13(16). **(Web of Science-Q4)**.
9. **Suhas B.G**, Kavadiki Veerabhadrappa and Kiran Kumar U (2019) "Theoretical investigation on transient heat transfer through building for PV powered solar summer air conditioning", *International Journal of Thermal Energy and Applications*, Journals pub 1(2):42-52.
10. **Suhas B.G** and Kavadiki Veerabhadrappa (2020) "Theoretical formulation of the Thermodynamic Properties of Ammonia-Water and Ammonia-Water-Lithium Bromide solutions", *International Journal of Recent Technology and Engineering (IJRTE)*, Blue Eyes Intelligence Engineering and Sciences Publication, 9(2)**:**683-687.
11. **Suhas B.G**, Sathyabhama.A and Ravi.L (2021) "Investigation of Forced convective and subcooled flow boiling heat transfer coefficients of water-ethanol mixture: Numerical study", *International Journal of Heat and Technology,* IIETA Publication 39 (2): 512-520. **(Web of Science-Q4)**.
12. Shivaprasad K.V, **Suhas B.G**, Kiran Kumar K.U, Chidanand Mangrulkar and Rajesh Ravi (2022), "Numerical investigation on heat transfer performance of louvered fin heat exchanger" *Journal of Engineering Science and Technology* (JESTEC), Taylors University- Malaysia 17 (3), 1867-1879. **(Web of Science-Q4)**.
13. Kavadiki Veerabhadrappa, **B.G. Suhas**, Chidanand K. Mangrulkar, R. Suresh Kumar, V.S.

Mudakappanavar, Narahari and K.N. Seetharamu (2022), Power Generation Using Ocean Waves: A Review, *Global Transitions Proceedings*, Elsevier B.V. on behalf of KeAi Communications Co. Ltd 3(2):359-370.

14. N. Mohan, Kavadiki Veerabhadrappa, J. Sharana Basavaraja, **B.G.Suhas** and R. Suresh Kumar (2022), "Thermal analysis on Ti-6AL-4V tool architecture using Johnson–Cook material model", *Global Transition Proceedings*, Elsevier B.V. on behalf of KeAi Communications Co.Ltd 3(2):432-437.
15. **Suhas B.G**, Chidanand Mangrulkar, Kiran Kumar K.U and Sathyabhama.A (2023), "Numerical Investigation of Forced convective and subcooled flow boiling heat transfer coefficients of water-ethanol mixture by CISCAM Technique", *Journal of Mechanical Science and Technology*, Korean Society of Mechanical Engineers, Springer, 37(4): 2055-2067 **(Web of Science-Q3)**.
16. **B.G Suhas**, Sreejith B. K**,** Anilchandra A.R, Shivashankara R Srivatsa and Prema V (2023) "Design of a low velocity wind turbine blades for power generation: part I-aerodynamic performance", *Sadhana-Indian academy of science*, Springer, 48:276 **(Web of Science-Q3)**.
17. **Suhas B.G**, Anilchandra A.R, Sreejith B. K**,** Abdul Buradi**,** Prema V and Kiran Kumar K.U (2025) "Effect of Boundary Layer Trips on low velocity wind turbine blade: A Computational study" *SSRG International Journal of Mechanical Engineering*, 12(3):28-35. **(Scopus)**.
18. Kiran Kumar K.U, **Suhas B.G**, Chidanand Mangrulkar and Umesh GL (2025) "A Study on Mechanical and Tribological characteristics of iB2 Reinforced Al-7075 Composites by Taguchi Technique", *Journal of Materials and Engineering Structures*, 12(1):139-154 **(Web of Science-Q4).**
19. Vinayaka H.L., Shivaraj Dharennavar, Abhishek H.A., **Suhas B.G**., Prashant Kakkamari, Hanamant Yaragudri, Bittagowdanahalli Manjegowda Ningegowda (2025) "Modeling and Analysis of Biodegradable Helmet Liner: A Comparative Study", International Journal of Environmental Sciences, 11(23), 4015-4021**.**
20. Kiran Kumar KU, **Suhas B.G**, Nagaraj, Pratibha, Sreenivasan, Babu (2026) " Study on Hot Forging and n-Redmud Reinforced Al6061: Mechanical, Corrosion Properties and Statistical Analysis of Wear Behavior by Taguchi Technique", *Canadian Metallurgical Quarterly, Taylor and Francis* **(Accepted) (Web of Science-Q4).**

List of Book Publication

1. Kavadiki Veerabhadrappa, **Suhas B.G** and K.N Seetharamu (2021), "Wave Energy Converter", *LAMBERT Academic Publishing*, ISBN: 978-620-3-47273-8.

List of Conference Proceedings/Symposium

1. Suhas B.G, Shivaprasad K.V, Kumar G.N (2012) "Performance and emission characteristics of a single cylinder four stroke spark ignition engine operating with Hydrogen Blends". Proceedings of National Conference on Innovations and Emerging Trends in Mechanical Engineering, Nagarajuna College of Engineering and Technology, Bangalore held on May 11, 2012.
2. **Suhas B.G** and Sathyabhama.A (2014) "Influence of operating parameters on the battery module cooling in hybrid electric vehicles", *Proceedings of the 5th International and 41st National conference on Fluid Mechanics and Fluid power*, IIT- Kanpur, Uttar Pradesh held on December 14-16, 2014.
3. **Suhas B.G** and Sathyabhama.A (2016) "Numerical investigation of forced convective heat transfer coefficient of water-ethanol mixture in a horizontal rectangular channel", *Proceedings of the 6th International and 43rd national conference on Fluid Mechanics and Fluid Power*, MNNITA, Allahabad, Uttar Pradesh held on December 15-17, 2016.
4. **Suhas B.G** and Sathyabhama.A (2017) "Investigation of heat transfer coefficient and Bubble dynamics of ethanol during subcooled flow boiling", *6th International Engineering Symposium,* Kumamoto University, Japan held on March 1-3, 2017.
5. Pushkar Kumar, **Suhas B.G** and Sathyabhama.A (2017) "Investigation on subcooled flow boiling heat transfer to water-ethanol mixture" *Proceedings of the 24th National and 2nd International ISHMT-ASTFE Heat and Mass Transfer Conference (IHMTC-2017)*, BITS Pilani, Hyderabad, India held on December 27-30, 2017.
6. Prema V, Anilchandra A.R, **Suhas B.G**, Manoj Kumar S and Deepak Sagar (2022)" Modelling and Simulation of Bifurcated Winding Induction generator using 3D EXPERIENCE", IEEE 4th Global Power, Energy and Communication Conference (IEE GPECOM 2022) Cappadocia/Turkey held on June 14-17, 2022.
7. Prema V, Anilchandra A.R and **Suhas B.G** (2024) **"**VR Enabled Solar/Wind Microgrid for Enhanced Learning" at 15th International IEEE Conference on Computing, Communication and Networking Technologies (ICCCNT) at IIT - Mandi, Himachal Pradesh, India held on June 24 - 28, 2024.

Online Courses Completed

- SWAYAM Course on "**Cardiovascular Fluid Dynamics**" course by National Programme on Technology Enhanced Learning (NPTEL) in December 2020.
- SWAYAM Course on "**Gas Dynamics: Fundamentals and Applications**" course by NPTEL in August 2021.
- SWAYAM Course on "**Renewable Energy: Solar, Wind and Bio mass**" course by NPTEL in April 2023.
- SWAYAM Course on "**IC Engines and Gas Turbines**" course by NPTEL in May 2025.

Total Number of Publications till date

Sl. No	Publications	Web of Science	Scopus	Non-Indexed
1	20 Journals	Q1-01 Q2-02 Q3-04 Q4-05 **Total: 12**	01	07
2	06 Conferences	-----	-----	-----
3	01 Symposium	-----	-----	----
4	01 Book	-----	-----	-----
Total	**28**			

Keynote Speaker

On the topic "Boiling heat transfer and its applications" in **one-week** Online Faculty development Programme based on "Recent advances in heat transfer and its applications "held at BMS College of Engineering, Bengaluru organized by Indian society for Technical Education **(ISTE)** on July 14th, 2020.

Thesis Reviewed

- M. Tech by Research Thesis from NITK Surathkal in September 2019
- M. Tech Thesis from New Horizon College of Engineering in August 2023

Doctoral Advisory committee

- PhD student thesis entitled "Design and Optimization of Solar Air Heaters with Bioinspired Fin Geometries for Enhanced Heat Transfer and Efficiency" in the Department of Mechanical Engineering, MAHE-MIT.

Manuscript Reviewed

- Energy Conversion and Management-Elsevier Publication in January 2018
- Engineering Science and Technology, an International Journal-Elsevier Publication in February 2019.
- Journal of Food science and Technology-Springer Publication in November 2019
- Journal of Scientific Research and Report in November 2021
- Three manuscripts from Materials Today Energy-Elsevier Publication in August 2021
- Experimental Thermal and Fluid Science-Elsevier Publication in May 2023.

Workshop/Conference Coordinated

- **One-week** Faculty development programme based on "*Outcome Based Education*" held on January 27-31, 2020 at BMS College of Engineering, Bengaluru organized by Total quality improvement programme-III **(TEQIP III).**
- **One-week** Online Faculty development programme based on "*Recent advances in heat transfer and* its *applications*" held at BMS College of Engineering organized by **ISTE** on July 13-17, 2020.

Faculty Development Programme participated

1. Participated in **one-week** Faculty development Programme on "*Contact and non-contact measurements*" organized by **ISTE-BMSCE** Chapter held on July 22-27, 2019 at BMS College of Engineering, Bengaluru.
2. Participated in **one-week** Faculty development Programme on "*Deep drive sessions on Industrial Automation Systems and Controls*" organized by **TEQIP III** held on 29 July-2 August 2019 at BMS College of Engineering, Bengaluru.
3. Participated in **two-week** online Faculty development programme based on "*Python programming*" held on June 22-July 4, 2020 organized by JSS Academy of Technical Education funded by National Mission of Education, Ministry of Human Resource development (**MHRD**).

4. Participated in **two-week** online Faculty development programme based on "*Experimental and Numerical Methods for Mechanical Engineers*" organized by **TEQIP-III** held on August 17th to 28th, 2020 by CB Pant Institute of Engineering and Technology, Pauri Gharwal.
5. Participated in **one-week** Faculty development programme on "*Experimental and Numerical approach to Two-Phase Heat Transfer*" (ENTPHT -2021) organized by Department of Mechanical Engineering of **NITK** from 27th to 31st December, 2021.
6. Participated in **one-week** Global Initiative of Academic network **(GIAN)** course on "Mo*deling and simulation on turbulence*" conducted from 29th April to 3rd May 2022 organized by departments of Mechanical and Mathematics, B.M.S College of Mechanical Engineering.
7. Participated in **one-week** AICTE Training and Learning Academy **(ATAL)** Faculty Development Program on "*Sustainable Manufacturing Practices and Environmental Impact Optimization Techniques*" from 9th to 14th December 2024 organized by Dayananda Sagar College of Engineering, Bengaluru.

Industry training programme

- Participated in **Twelve week** online industrial training programme from 4th October 2025 to 2nd January 2026 organised by Academy of skill development (ASD), India, A unit of Ardent Computech Pvt. Ltd., an MSME, ISO 9001:2015 (Recognized by Govt. of West Bengal).
- Participated in **Two week** industry training from 1st June 2026 to 15th June 2026 in the domain of heat exchangers organised by Central Manufacturing Technology Institute (CMTI), Bengaluru.

Other-Curricular Activities

- Participated in Spring Internship Programme held during March 4-6, 2017 at Kumamoto University, Japan.
- Discharged duties as Presiding officer during April 2019 Lok Sabha Elections and December 2019 Vidhana Sabha by elections.
- Participated in Student webinar series on Turbomachinery design and future trends organized **American Society of Mechanical Engineers**-International Gas Turbine Institute in the month of July 2020.
- Faculty lead for Technical event organized by **Solar Decathlon India** 2022-23. The theme of the event is designing net zero energy Building comprising of students of Engineering and Architecture.
- Team Mentor for a team with topics "Sustainable Products for human wellness " under the

AAKRUTI Global 2024 - Design Contest organized by **Dassault system**.

- Faculty lead for Technical event organized by **Solar Decathlon India** 2024-25. The theme of the event is designing efficient cooling system in commercial/residential buildings.

Personal Credential

Date of Birth: 04.05.1988

Languages known: English, Kannada, Tulu and Hindi

Marital Status: Married

Declaration

I hereby declare that the details furnished above are true and correct to the best of my knowledge

(Dr. Suhas B.G)