Brief Bio-Data

Name : **Dr. M.S.GOVINDE GOWDA,**
B.E., M.Tech.[IIT-B], Ph.D[IIT-B]
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Dr.M.S.Govinde Gowda, born on **20th June 1964** to a loving parent, **Sri. Sannappa Gowda and Smt. Ramamma**, hails from Mundur Village, Saligrama Hobli, K.R.Nagar Taluk, Mysore Dist. He completed his schooling from Govt. Primary, Higher primary and High schools at Mundur village and Saligrama respectively.

Academic Performance

Qualification	Board/University	Name of the Institution	Year of Passing	%/Class
B.E	Mysore University	PESCE, Mandya.	1986-87	70.9% First Class with Distinction.
M. Tech	Indian Institute of Technology, Bombay.	Bombay	1992-93	79.3% (7.93 CPI)
Ph. D	Indian Institute of Technology, Bombay.	Mumbai	2004-05	93.8% (9.38 SPI)

Professional (Teaching + Administration) Experience [~35 Years]

(i) Started teaching career as lecturer at **KVG, Sullia (DK)** in **7th Mar 1987** and served up to 10-12-1987 (nearly **10 months**).

(ii) Joined Adichunchanagiri Institute of Technology (**AIT**), Chikmagalur as a Lecturer on 11-12-1987 and served up to 31st July 2008, nearly **21** years, under various designations such as **Lecturer, Sr. Lecturer, Assistant Professor** and **Professor**.

(iii) Served as **Founder Principal** & **Professor** at **Alva's Institute of Engineering & Technology (AIET), Moodbidri**, from 1st August 2008 to 31st July 2012 **(4 years)**

(iv) Served as **Principal** & **Professor** at C Byregowda Institute of Technology (**CBIT**), Kolar from 1st August 2012 to 31st July 2014 **(2 Years)**

(v) Served as **Principal** & **Professor** at Sree Revana Siddeshwara Institute of Technology (**SRSIT**), Bangalore from **August 2014-July 2015.**

(vi) Served as '**Dean-Academic & Professor**" at Nagarjuna College of Engineering & Technology (**NCET**), Bangalore from **August 2015-June 2016.**

(vii) Served as "**Principal & Professor**" at Vivekananda College of Engg. & Technology (**VCET**), Puttur from **June-2016.**

(viii) Served as "**Dean(Academics) & Professor**" at ATME College of Engg. (**ATMECE**), Mysore from **17th August 2020 to 10-October 2024**.

Educational Qualification and Specialization:

(i) **B.E.- Mechanical Engineering**,
Project title:- '**Foot Operated Diaphram Pump'**

(ii) **M. Tech. – "Thermal and Fluids Engineering",**
Title of the thesis:- **'Laminar Flow Through Bends'**

(iii) **Ph. D - "Thermal and Fluids Engineering",**
Title of the thesis:- **Low Pressure Critical Heat Flux Measurements of Upward Flow of Water in Vertical Annuli in the Low and Medium Mass Flux Range'.**
Problem related to the Nuclear Reactor Safety.

Publications of Text Books

1."**A Text Book of Turbo Machines**", 1st Edn.-Revised, Interactive International Publishers (IIP), ISBN- 978-93-6252-884-1, 2024, (***Text Book for 5th Sem Mech, Mechatronics, Aeronautical Engg. in VTU, Belgaum and Reference Book in other Universities and Autonomous Colleges***).

2. "**Heat & Mass Transfer**", MM Publishers, Davanagere, 1st Edn. 2009.

Subjects Taught to UG

Basic Thermodynamic, Applied Thermodynamics, Fluid Mechanics, Fluid Mechanics and Machinery, Turbo Machines/Fluid Machinery, Heat and Mass Transfer, Refrigeration and Air Conditioning, Non-Conventional Energy, Mechanical Engineering Science, Mechanical Measurements and Instrumentation, Engineering Graphics / Computer Aided Engineering Drawing, Machine Drawing, I C Engines etc.

Note: In almost all the subjects, nearly 100% results are achieved

Subjects Taught to PG

Advanced Fluid Mechanics, Thermodynamics and Combustion, Advanced Heat Transfer, Conduction and Radiation Heat Transfer, Convective and Mass Transfer, Advanced Power Plant Cycles, Design of Heat Exchanger, Theory and Design of Steam and Gas Turbines etc.

Research Area of Interest

(i) Critical Heat Flux in Nuclear reactors,

(ii) Heat transfer enhancement for Free and Forced convection,

(iii) Heat and fluid flow problems,

(iv) FEM and CFD analysis,

(v) Numerical analysis in an enclosed cavities,

(vi) Non-Conventional energy utilization

(vii) Investigation on Eco-friendly refrigerators etc.

Technical Talk/Workshop/ Seminar/FDP Attended and/or Conducted

1. Attended more than **20** Workshop/Seminars.
2. FDP programs are also conducted especially for fresh teachers under "**Teachers Induction Training Programs"** to explore them on effective class room teaching.
3. "**Faculty Recharge Programes**" have been conducted to assure the quality of teaching by the faculty members in the Teaching-Learning Process.
4. Delivered lectures on "**Turbo Machines**" through **Live Telecast** of **VTU-Edusat programme-15** during 2011.
5. Participated as Resource Person for **"Carrier Counselling-2014"** organized by ***The Hindu Education Plus*** on **31-5-2014** at Dr.TTIT, KGF.
6. Delivered motivational talk on **"Towards excellence….."** for teachers at various Engineering colleges.
7. Invited talk on "**Turbo Machines**" at various colleges under FDP programs.
8. Training and motivating the faculty in making them excellent and confident in academic contents delivery under "**Faculty Recharge Program**".
9. Regular conduction of FDP for the faculty to encourage them in updating the advances in their subject/specialization area.
10. As resource person to deliver talk in FDP on **Turbomachinery and its Applications**, during 26-27th August, 2016 at VVCE, Mysore.
11. As resource person for Faculty Enrichment Program on **Teaching Techniques in Applied Thermodynamics**, organized by VTU during July 2018 at VTU Centre for PG studies, Muddenahally, Chickballapur
12. **An Overview of Teaching Techniques in Turbomachines**, Faculty Enrichment Program jointly organized by AICTE and VTU during 22nd-26th July 2019 at VTU Centre for PG studies, Muddenahally, Chickballapur

Projects Guided:

Several projects are guided to both UG and PG students under self-finance and KSCST sponsored projects. Associated with few DRDO and MHRD projects also. Some of the projects which gave me technically satisfaction and found challenging are listed below:

(i) Fabrication of Hand Operated Washing Machine,

(ii) Design and Fabrication of Paraboloidal Solar Concentrator (Point Focus),

(iii) Design of Control Tube for Light Weight Flight,

(iv) Redesign of a O-Ring in a Fuel Pump of a Flight,

(v) Design And Fabrication Of An Apparatus To Find Thermal Conductivity Of Liquids

(vi) Design, Fabrication & Performance Study Of Multipurpose Paraboloidal Solar Point Collector with μC based tracking

(vii) Self Starting Darrieus Wind Turbine

(viii) Electronic Fuel Injection Adopted In 2-Wheeler 4-Stroke Petrol Engine and many more.

Involvements in Administrative Activities at Various Capacities:

- **NBA coordinator during first accreditation of AIT**,
- Secretary for local ISTE chapter,
- Convener for preparing the course material for the students,
- Convener for preparing Lab Manuals for the labs such as Heat Transfer lab, Energy Conversion Engineering Lab, Fluid Mechanics and Fluid Power Lab etc,
- Served as a PG Coordinator for M.Tech course at AIT, Chikmaglur.
- Also served as a **Secretary** to the "**Kannada Sanga**" at IIT-Bombay during 2002-03.

Extracurricular Activities:

(i) Participated in state level "Bhavageetha" and "Film hits" competitions, and Won the prizes.

(ii) Other hobbies are: Singing, Dramas, Ball Badminton etc.

Publications:

National Conference:

(i) M.S. Govinde Gowda et al, "**Experimental Investigation of CHF in the Vertical Annuli under Low Pressure and Low Flow conditions"**, 17th National and 16th ISHMT/ ASME Heat and Mass Transfer Conference, Paper No. HMT-2004-C044, pp.206, Kalpakkam, Chennai, Jan. 2004.

(ii) M.S. Govinde Gowda et al, **"Study of Critical Heat Flux in Uniformly Heated Vertical Annuli for Upward Flow of Water under Low Flow conditions at near Atmospheric Pressure"**, Proc. of 30th National Conf. on FMFP, NITK, Surthkal (Karnatak),pp.111-118, Dec. 2004.

(iii) M.S. Govinde Gowda et al, **"Local Voltage Drop Measurement Technique in Detection of CHF in Vertical Annuli"**, Proc. of 30th National Conf. on FMFP, NITK, Surthkal (Karnatak), pp.155-161, Dec. 2004.

(iv) M.S. Govinde Gowda et al, **"Investigation of CHF in Vertical Annuli under LPLF conditions and Comparison with the Existing Correlations**", Proc. of National Seminar on Advances in Mechanical Engineering Sciences (NAME-2004), pp.176, JNNCE, Shimoga, Feb. 2004.

(v) M.S. Govinde Gowda et al, **"Experimental Investigation Of Energy Losses In Circular Pipe Bends Under Laminar Flow Conditions"**, Proc. of NCFMFP2006, 33rd National Conference on Fluid Mechanics and Fluid Power, IIT Bombay, India, 7th-9th Dec, 2006.

(vi) M.S. Govinde Gowda et al, **"A study on Thermo-Acoustic Refrigerator**", Proc. of National Conference on Emerging Trends In Mechanical Engineering [ETIMS 2007], pp.287-293, Banneri-Amman Institute of Technology, Tamil Nadu, 19th-20th Dec 2007.

(vii) M.S. Govinde Gowda et al, **"Eco-Friendly Refrigerators",** Proc. of National Conference on Emerging Trends In Mechanical Engineering [ETIMS 2008], Dept. of Mech. Engg., BMSCE, Bangalore, 28-29th August 2008.

(viii) M.S. Govinde Gowda et al, "**A Review of Literature on Thermo-acoustic Refrigerator**", Proc. of National Conference on Advances in Mechanical engineering-2011, Dept. of Mech Engg, MIT, Manipal, January 3rd -5th, 2011.

International Conference:

(i) M.S. Govinde Gowda et al, **"Experimental Investigation of CHF in the Vertical Annuli under Low Pressure and Low Flow conditions"**, Proc. of 16th ASME Heat and Mass Transfer Conference, Paper No. HMT-2004-C044, pp.206, Kalpakkam, Chennai, Jan. 2004.

(ii) M.S. Govinde Gowda et al, **"Experimental Investigation Of Energy Losses In Circular Pipe Bends Under Laminar Flow Conditions",** Proc. of NCFMFP2006, 3rd international Conference on Fluid Mechanics and Fluid Power, IIT Bombay, India, 7th-9th Dec, 2006.

(iii) M.S. Govinde Gowda et al, **"Optimization Of Size Of A Copper Disc For IR Drop Compensation With Heat Generation On An Electrical Heater**", Proc. of International Conference on Recent Developments in Mechanical Engineering (ICRDME-2008), SUS college of Engg. & Technology, Tangori, Mohali (Pb), India, pp.6-11, 23rd-25th Jan 2008.

(iv) M.S. Govinde Gowda et al, **"Standing and Travelling Wave Thermo-acoustic Devises**", Proc. of International Conference on Energy Engineering and Eco-balance (**ICEEE-2009**), MITR, Mulshi, Pune, Maharastra, 18-19th Feb, 2009.

International Journal:

1. M.S. Govinde Gowda et al, **"Investigation of Critical Heat Flux in Vertical Annuli for Upward Flow of Water Under Low Pressure and Low Flow Conditions"**, Int. J. of Mechanical & Automobile Engineering, Vol.4, No. 5, June-August, 2009.

2. M.S. Govinde Gowda et al, **"Effect of mean operating pressure on the performance of the stack based Thermo acoustic refrigerator",** Int. J for Thermal & Environmental Engg, Vol. 5, No. 1, pp-83-89, DOI: 10.5383/ijtee.05.01.2009.

3. M.S. Govinde Gowda et al, **"Theoretical Evaluation of Loudspeaker for a 10 Watts Cooling Power Thermo-acoustic Refrigerator",** Int. J of Air-Conditioning and Refrigeration (World Scientific), 21 (4) (2013) 1350027 (8 pages), DOI: 10.1142/S2010132513500272.

4. M.S. Govinde Gowda et al, **"Design and Optimization of a Loudspeaker Driven 10 Watts Cooling Power Thermo-acoustic Refrigerator",** Int. J of Air-Conditioning and Refrigeration (World Scientific), 22 (3) (2014) 1450015 (15 pages), DOI: 10.1142/S2010132514500151.

5. M.S. Govinde Gowda et al, **"Theoretical evaluation of 10 W cooling power thermo-acoustic refrigerator"**, Heat Transfer-Asian Research Journal, Published online on 3 Oct (2013), DOI: 10.1002/htj.21094.

6. M.S. Govinde Gowda et al, **"Design and analysis of thermo-acoustic refrigerator"**, Int. J. of Air-conditioning and Refrigeration, 21 (1) (2013) 1350001 (10 pages), DOI: 10.1142/S2010132513500016.

7. M.S. Govinde Gowda et al, **"Optimizing Design Of Inclined Heat Pipe By Natural Convection Analysis Of Flow Using CFD Simulation"**, International Journal of Advanced Technology in Engineering and Science, Volume No.03, Issue No. 04, PP-116-123, April 2015.

8. M.S. Govinde Gowda et al, **"Resonator optimization and studying the effect of drive ratio on the theoretical performance of a 10-W cooling power thermo-acoustic refrigerator"**, accepted for publication in Int. J. of Air-conditioning and Refrigeration on 01 June 2015.

9. M.S. Govinde Gowda et al, **Design and comparative analysis of thermoacoustic refrigerators**, Int. J. of Air-conditioning and Refrigeration, 24 (4) (2016) 1750002 (9 pages), DOI: 10.1142/S201013251750002X

10. M. S. Govinde Gowda et al, **Design and Comparative Analysis of Thermoacoustic Refrigerators**, International Journal of Air-Conditioning and Refrigeration, Vol. 25, No. 1 (2017), 1750002, © World Scientific Publishing Company.

11. M. S. Govinde Gowda et al, **Design Construction and Performance of 10W Thermoacoustic Refrigerators**, International Journal of Air-Conditioning and Refrigeration, Vol. 25, No.3 (2017), 1750023, © World Scientific Publishing Company.

12. M. S. Govinde Gowda et al, **Resonator Optimization and Studying the Effect of Drive Ratio on the Theoretical Performance of a 10-W Cooling Power Thermoacoustic Refrigerator**, International Journal of Air-Conditioning and Refrigeration, Vol. 25, No.3 (2017), 1750023, © World Scientific Publishing Company.

13. M. S. Govinde Gowda et al, **Design and analysis of acoustically-driven 50 W thermoacoustic refrigerators**, Sådhanå (2018), © Indian Academy of Sciences, https://doi.org/10.1007/s12046-018-0860-8

14. M. S. Govinde Gowda et al, **Development of Alternative Binary Mixtures to Replace HFC 134a in Domestic Refrigerator,** ***Chemical Engineering*** *Transactions, Vol. 71, pp:*1399-1404, ***2018,*** DOI:10.3303/CET1871234**, ISBN** 978-88-95608-68-6; **ISSN** 2283-9216.

15. M. S. Govinde Gowda et al**, CFD Analysis of Dual-Phase Flows Inside Helically Coiled Tubes in Vapour Compression Micro-Refrigerator**, Penerbit Akademia Baru, *CFD Letters*, Journal of Advanced Research in Fluid Mechanics and Thermal Sciences, Volume 11, Issue 2 (2019) 81-94, Journal homepage: www.akademiabaru.com/cfdl.html, ISSN: 2180-1363

16. M. S. Govinde Gowda et al, **Screening of HFCs and Fluor ethers as Alternatives to R134a Using SRK EoS**, J. Inst. Eng. India Ser. C, Springer, DOI 10.1007/s40032-019-00501-5, @ The Institution of Engineers (India), 2019.

17. M. S. Govinde Gowda et al, **Hydrocarbons as Alternate Refrigerants to Replace R134a in Domestic Refrigerators,** International information and Engineering Technology Association, **Revue des Composites et des Matériaux Avancés** Vol. 29, No. 2, April, 2019, pp. 95-99, https://doi.org/10.18280/rcma.290204,

18. M.S. Govinde Gowda et al, **An Experimental Examination into the Efficiency of a Shell-and-Tube Heat Exchanger for an EGR Cooler**, Tuijin Jishu/Journal of Propulsion Technology, ISSN: 1001-4055 Vol. 44 No. 5 (2023).

19. M.S. Govinde Gowda et al, **Optimization Design and Simulation Approach of an Axial Inward Flow Reaction Turbine Incorporating with Organic Rankine Cycle**, Tuijin Jishu/Journal of Propulsion Technology, ISSN: 1001-4055 Vol. 44 No. 5 (2023)

National Journal Publication:

(i) M.S. Govinde Gowda et al, **"Stack Optimization of Thermo-acoustic Refrigerator",** The journal of CPRI, Bangalore, Vol. 8, No. 1, pp.97-102, ISSN 0973-0338, March 2012.

Patent

Details of Patent Published

Application No.202341068558 A

Date of filing of Application :12/10/2023

Publication Date: 27/10/2023

Invention Title: "***Electricity Generating Floor Tiles and Method Thereof***"

NBA Trainee

- Trained for **NBA-Washington Accord Outcome based Accreditation process** held at VTU-Mysore regional centre conducted by VTU, Belgaum and NBA, NewDelhi, during 2013-14.
- Awareness program on **Outcome Based Education NBA workshop** held at BMSCE, Bangalore on 21-72015 in collaboration with VTU, Belgaum.
- As a **Dean (Academic)** played major role as NAAC coordinator in NCET, Bangalore, in getting the **NAAC accreditation** during 2015-16.
- Got **1st cycle NBA accreditation in VCET, Puttur** as a Principal and **2nd cycle NBA at ATME College of Engineering, Mysore** as an **NBA in-charge** of the institution.
- Worked as NAAC advisor at **ATMECE, Mysore** to get **NAAC A+** award during 2022.

Award:

- ISTE faculty chapter of VCET, Puttur is awarded with "***Best Faculty ISTE Chapter-2018***" from ISTE Karnataka Section for year 2017-18 by recognizing the number events conducted for the benefit of faculty. The state award was given in 21st ISTE state level Faculty convention held at Bheemanna Khandre Institute of Technology, Bhalki.

Involvement at University Exam Level:

(i) Paper setter & Examiner as Chief/Moderator/Valuator for UG program.

(ii) Paper setter and Examiner for PG program.

(iii) Paper setter and Examiner for Ph.D programs.

(iv) Examiner for Ph.D Comprehensive Viva/Thesis Evaluation/Final Viva-Voce.

(v) Involved in syllabus framing for UG/PG programs.

(vi) Delivered live lecture on "**Turbo machines**" through **VTU-Edusat programme-15.**

Involvement at University Administrative Level:

- Presently serving as "**Academic Senate Member**, VTU" and **"Chairman, BOS, Mechanical (Composite) Board, VTU"** for the period of 2022-2025.
- Currently serving as **"Academic Council Member"** as a representative of Hon'ble VC of VTU to BITM-Ballari for the period of 2021-2024 for autonomous system.
- Serving as **Chairman, BOE, Mechanical (Composite) Board,** VTU for the year 2021-22.
- Served as **Academic Senate Member**, VTU from June 2019 to June 2022
- **Chairman, Local Inquiry Committee (LIC)** of VTU.
- **Local Inquiry Committee (LIC) member** of VTU.

- Served as **BOE member** for Mechanical Engg. board of VTU for the year 2010-11
- Served as **BOS member** in Mechanical board for **Ph.D Registration Committee** for Ph.D /M.Sc(Engg.) by research of VTU.
- Served as '**Chairman, BOE, Aeronautical Engg. (Composite) Board'**, VTU during 2016-17.
- Served as '**Member, BOE, Mechanical Engg. (Composite) Board'**, VTU for AY 2017-18.
- **Governing Council Member**, VTU Nominee to Shashib Engg. College, Bangalore, for the period 2014-2016.
- **Governing Council Member**, VTU Nominee to SJMIT, Chitradurga for the period 2017-2019.
- **Governing Council Member**, VTU Nominee to Vidya Vikas Institute of Engg. Technology (VVIET), Mysore, for the period 2019-2021.

Involvement at National Level

- Serving as **Executive Council Member** as I have been elected as National Executive Council Member for Indian Society for Technical Education, New Delhi for the period 2020-2024.
- UPSC Advisor Board member, New Delhi

Institute Level Achievement

The following are milestone achievements at VCET, Puttur during my tenure:

- **"Best Faculty ISTE Chapter-2018"** by ISTE Karnataka State.
- **NBA** accreditation to **Mechanical Engg. and Civil Engg.** during the year 2019 for 3 Years
- Grant of **Rs 1.2 Crore** under **NAIN** for the establishment of Incubation centre from Ministry of IT, BT and ST, Govt. of Karnataka during 2018-19 for 3 years.
- Grant of **Rs 40 Lakhs** under KFIST-Level2 from VGST during 2018-19 for 2 years.
- Grant of **Rs 6 Lakhs** under Research grant from VGST for the year 2019-20.
- **National level Champions** in **Go-Kart Design** during year 2018.
- Systematic implementation and practice of **OBE** method in the Teaching-Learning process.
- Implementation of **Performance Based Appraisal System (PBAS)** for the faculty evaluation.
- Implementation of **Pedagogical method**s in teaching and many more such approaches.

Ph D Guidance

- No. of Ph.D guided – 0**2**
- No. of Research scholars pursuing Ph.D = **2 No's**.

Professional Bodies Membership

- Life Member, Indian Society for Technical Education, ISTE (**LM-2050**), New Delhi
- Fellow of Institution of Engineers (**FIE**)

Date: 9-9-2024

Place: Mysore

[**Dr. M.S.GOVINDE GOWDA**]