




# VIDYAVARDHAKA COLLEGE OF ENGINEERING

P.B. No.206, Gokulam, III - Stage, Mysuru - 570 002, Karnataka, INDIA.

DEPARTMENT OF INFORMATION SCIENCE AND ENGINEERING

Phone: +91 821 4276210 / 211

## FACULTY PROFILE

<b>Name of the Faculty</b>	<b>Dr. G. B. KRISHNAPPA</b>	
<b>Designation</b>	<b>Dean (R&amp;D)</b>	
<b>Contact Numbers</b>	<b>Office:</b> 08214276272 <b>Mobile:</b> 9243528200 <b>Fax:</b> 08212510677	
<b>Email ID</b>	<a href="mailto:deanrnd@vvce.ac.in">deanrnd@vvce.ac.in</a> , <a href="mailto:gbk@vvce.ac.in">gbk@vvce.ac.in</a>	

### Educational Qualification

Degree	Specialization	Year of Passing	University
PhD	Cryogenics	2012	VTU
M.E	Machine Design	1999	BU
B.E	Mechanical Engineering	1992	BU

### Work Experience

Teaching	Research	Industry
24	2	-

### Publications

National/ International Journals	National/ International Conferences
13	22

### Areas of Interest

Design	Thermal	Cryogenics	Energy Engineering		
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### Subjects Taught

Advanced Machine Design	Design of Machine Elements	Heat Transfer and Fluid Flow	Fracture Mechanics	Mechatronics	Strength of Materials
Kinematics of Machines	Mechanical Vibrations	Production Technology/ Manufacturing Processes	Heat and Mass Transfer	Fluid Mechanics	Computer Aided Engineering Drawing

MORE

Cryogenics	Finite Element Analysis	Basic Thermodynamics	Applied Thermodynamics	Fluid Power Systems	Elements of Mechanical Engineering
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## In-House Experience

Sl. No.	Designation	Period			
		From	To		
1	Assistant Professor	10-09-2004	31-08-2011		
2	Associate Professor	01-09-2011	31-10-2012		
3	Professor	01-11-2012	30-06-2016		
4	Dean (R&D)	01-07-2016 onwards			
Head of the Department from 28-05-2010 to 30-06-2016					

## Outside Experience

Sl. No.	Designation	Organization	Period	
			From	To
1.	Lecturer/HoD	Dr. AIT/PVP (P), Bengaluru	08-02-1993	18-12-1999
2.	Lecturer	SJCIT, Chickaballapura	20-12-1999	31-08-2004

## Membership in Professional Bodies/University Bodies/Organizations

- FIE, ISTE, ICC, ISHRAE, Academic Council Member, Yuvaraja's College, Mysuru

## Publications

### National/ International Journals:

- "Comparison of different numerical models for the analysis two stage pulse tube cryocooler", Indian Journal of Cryogenics(Vol. 37,1-4), 164-173,January 2012
- "CFD Analysis of two stage double inlet pulse-pulse tube cryocooler", International Journal of Thermal Science and Engineering (Vol. 2), 9-17, April 2012
- " CFD analysis of a single stage pulse tube cryocooler with two double inlet valves" International Journal of Emerging Technology and Advanced Engineering (Vol.2, Issue 9) 441-447, September 2012
- "CFD Analysis of a Single Stage Tapered Pulse Tube Cryocooler" International Journal of Mechanical Engineering and Materials Sciences (Volume 5, Number 2) , 129-135, December 2012
- "Aerodynamic Characteristics of G16 Grid Fin Configuration at Subsonic and Supersonic Speeds" International Journal of Engineering Research and General Science Volume 2, Issue 5. pp 129-135, August – September, 2014, ISSN 2091-2730

6. “ *Finite element and fracture analysis of compressor disc of an aero engine*” International Journal of Engineering Research and General Science Volume 3, Issue 4, pp 661-668, July-August, 2015, ISSN 2091-2730
7. “ *Sisal and Glass fiber hybrid composite- A comparative study on mechanical properties with and without cryogenic treatment*” International journal for scientific research and development, Vol.3 , issue 7, September – 2015, ISSN 2321-0613
8. “ *A experimental investigation on Adsorption refrigeration system using silica gel water*” International journal of current innovation research, October 2015
9. “ *Study of Mechanical and Physical Properties of Wood Plastic Composite, Polypropylene, Rose, Teak and Neem Wood*” International Journal for Scientific Research and Development (Vol.3, No. 10), pp 24-28, January, 1,2016
10. “*An experimental study for the investigation of thermal Conductivity for different natural insulating materials*” International Journal of Engineering Sciences & Management Research, Volume 2, Issue 3, February, 2016, ISSN 2349-6193
11. “ *An experimental investigation on adsorption refrigeration system using silica gel-water*” Journal of Mechanical Engineering and Biomechanics, Volume 1, issue 1, Page 56-63, July 2016
12. “ *Small scale helium liquefaction system using Gifford-McMahon cryocooler*” International Journal of Digital Publication Technology, Volume 01, Issue 01, January 2017
13. “ *An Experimental Investigation on Adsorption Refrigeration System Using Activated Carbon-Methanol*” International Journal of Mechanical Engineering and Automation. Volume 4, Number 1, 2017, pp. 1-8, Received: December 2, 2016; Published: March 25, 2017
14. “*A Study on Influence of Metal Powder on Mechanical Properties of Natural Fibre Reinforced Polymer Hybrid Composites*” Imperial Journal of Interdisciplinary Research (IJIR) Vol-3, Issue-7, 2017, ISSN : 2454-1362
15. “ *Design and Fabrication of Mudde Making Machine*” International Journal of Engineering Research and Technology, Volume 6, Issue 11, November 2017, ISSN: 2278-0181

## National/ International Conferences:

1. *“Flow modelling in water turbine draft tube to validate the experimental results using computational fluid dynamics”*, Proceedings of the National Conference on “ Computer Integrated Design and Manufacturing” Amrita Institute of Technology and science, Coimbatore, India, January 1999-2000, pp. 261-266
2. *“Solar water heater to supply hot water at constant temperature”*, Proceedings of the National Conference on “ Recent trends in energy engineering”, National Engineering College, Kovilpatti-628 503, India, 2003-2004, pp. 06-11
3. *“A simple system for production of distilled water”* Proceedings of the National Conference on “ Recent trends in energy engineering”, National Engineering College, Kovilpatti-628 503, India, 2003-2004, pp. 20-23
4. *“Study of thermodynamic non-symmetry effect to understand the production of cold effect”* Proceedings of National conference on Mechanical Engineering(NATCON.ME- 06, Siddaganga Institute of Technology, Tumakuru, May 26-27, 2006
5. *“Numerical Modeling of a pulse tube refrigerator”*, Proceedings of the National Conference on Advances in Mechanical Engineering 2009 (AME2009), Vidya Vikas Institute of Engineering and Technology, Mysore, October 5, 2009
6. *“Numerical Modeling of a two stage pulse tube refrigerator”*, Proceedings of the International conference on convergence of science and engineering in education and research, a global perspective in the new millennium ICSE-2010, Dayananda Sagar College of Engineering, Bengaluru, April 21-23, 2010
7. *“Comparison of different numerical models for the analysis two stage pulse tube refrigerator”*, Symposium on Cryogenics (NSC 23), NIT, Rourkela, October 29-30, 2010
8. *“Comparison of 1d and 2d flow numerical analysis applied to two stage pulse tube cryocooler”*, Cryogenic Engineering Conference and International Cryogenic Materials Conference (CEC-ICMC 2011) June 13-17, 2011, Spokane, WA (USA). ADVANCES IN CRYOGENIC ENGINEERING: Transactions of the Cryogenic Engineering Conference - CEC, Volume 57. AIP Conference Proceedings, Volume 1434, pp. 1157-1164
9. *“CFD analysis of single stage pulse tube refrigerator with one, two and three double inlet valves”*, International Conference, Dr. MGR University, Chennai, 19 to 20 April, 2012
10. *“CFD Analysis of two stage double inlet pulse-pulse tube cryocooler”*, International Conference, Dr. MGR University, Chennai, 19 to 20 April, 2012
11. *“CFD Analysis of Grid Fin in Comparison to Conventional Planar Fin”*, International conference on current trends in engineering and management- ICCTEM 2012, Vidyavardhaka college of engineering, Mysuru, July 12-14, 2012
12. *“ Numerical study on effect of nose eccentricity on penetrator performance”* International conference on current trends in engineering and management- ICCTEM 2012, Vidyavardhaka college of engineering, Mysuru, July 12-14, 2012

13. “*CFD analysis of a single stage tapered pulse tube cryocooler*” International conference on current trends in engineering and management- ICCTEM 2012, Vidyavardhaka college of engineering, Mysuru, July 12-14, 2012
14. “*CFD analysis of single stage double inlet pulse tube refrigerator with basic and orifice type of pulse tube refrigerator*” International conference on current trends in engineering and management- ICCTEM 2012, Vidyavardhaka college of engineering, Mysuru, July 12-14, 2012
15. “*CFD analysis of a single stage double inlet pulse tube refrigerator*” National Conference on Advances in engineering and technology – 2013 (NCAET), Ekalavya Institute of Technology, Ummathur, Chamarajanagara, Karnataka, India, November 7, 2013
16. “*Performances of Warm Expander Type Pulse Tube Cryocoolers*” 2nd International Conference on Current Trends in Engineering and Management (ICCTEM 2014), Vidyavardhaka College of Engineering, Mysuru, Karnataka, India, 17 to 19 July, 2014
17. “*Isothermal Model of Pulse Tube Cryocooler with Different Pressure Waveforms*” 2nd International Conference on Current Trends in Engineering and Management (ICCTEM 2014), Vidyavardhaka College of Engineering, Mysuru, Karnataka, India, 17 to 19 July, 2014
18. “*Study of Merits and Demerits of Existing Toilet Systems in Indian Trains and Proposal of a New Approach*” International Conference on Energy, Environment, Materials and Safety (ICEEMS’14) CUSAT, Kochi, India, December 10-12, 2014
19. “*Hybrid fiber composite- A comparative study on mechanical properties with and without cryogenic treatment*” National conference on Emerging trends in Mechanical Engineering, VVCE, Mysuru, September 23, 2015
20. “*Solutions to Problems Faced by Sugarcane Growers in the State of Karnataka – A Feasibility Study*” Proceedings of 30th Indian Engineering Congress, the 21st Century Engineering: The Make in India Pathway, December 2015, pp. 51-57, IE (I), Guwahati-9, Assam, India, December 17-20, 2015
21. “*Experimental Investigation on Hardness and Shear Behavior of Aluminum, Silicon Carbide, and Graphite Hybrid Composite With and without Cryogenic Treatment*” International Conference on Processing of Materials, Minerals and energy (PMME)-2016, PACE Institute of Technology & Sciences, Prakasam District, Andhra Pradesh, 29th & 30th , July 2016
22. “*Experimental Investigation on Tensile and Compression Behavior of Aluminum, Silicon Carbide, and Graphite Hybrid Composite With and without Cryogenic Treatment*” International Conference on Processing of Materials, Minerals and energy (PMME)-2016, PACE Institute of Technology & Sciences, Prakasam District, Andhra Pradesh, 29th & 30th , July 2016

1. Patent Certificate Course for Entrepreneurs, Scientists and Engineers, held on 30-31 January 2015, at Venture Center, Pune, India

### Faculty Development Programmes/Training Programmes Organized

1. FDP on Refrigeration and Air Conditioning, held between January 19 and 24, 2015, VVCE, Mysuru

### Workshops Attended

1. "Training of evaluators/resource persons on outcome based accreditation" held from July 18 to 20, 2013 at VVCE, Mysuru

### Workshops Organized

- 1.

### Invited Lectures

1. "Cryogenics and its applications" delivered on 19-08-2013, GCE, Ramanagara
- 2.

### College Level Committee

#### As a Coordinator

1. R&D Team

#### As a Member

1. VVCE NBA Core Committee
2. Anti-ragging Committee

### Department Level Committee

#### As a Coordinator

1. Course Coordinator for Design of Machine Elements

#### As a Member

- 1.

### Additional Responsibilities (if any)

- Incubation Center in- Charge

### Awards/Recognition/Achievements/Others

- Fetched a Research Grant of Rs.33 lakh from KCTU