## Dr. Gopalakrishna Keshava Narayana

42, NADASHREE, 3<sup>RD</sup> CROSS, ESWARA LAYOUT, 7<sup>TH</sup> PHASE, JP NAGAR, BENGALURU-560062

Email: kgopimn@gmail.com, kgopimn@rediffmail.com

Mobile:09448797660, 08026655974

#### **Personal Profile**



Fathers Name: Keshava Narayana

Mothers Name: B.V.Rathnamma

AGE: 57 Yrs

DOB: 30<sup>th</sup> October 1962

Blood Group: B+

Marital Status: Married, Children: 2

Nationality: Indian, Hindu

#### Career Objective/Summary

# To establish best practices and procedures and work hard for the development of the organization/institution

#### 1st Nov 2017-till date

Principal, Jyothy Institute of Technology

#### **Work Experience**

### 1st July2007- 31st October 2017

#### Associate Director, Centre for Emerging Technologies, Jain University

- Research and product development funded by National Agencies
- Coordinate centre activities
- Team Lead for consultancy

#### Associate Dean, School of Engineering and Technology, Jain University

- Timely Revision of curriculum to connect with the industry need
- Best practices & procedures for the smooth running of the institution
- Promote student and staff funded projects
- Effective and enthusiastic teaching

#### **April 2000 – June 2007**

#### Professor and Head, K.S. Institute of Technology, Bangalore

- Set high standards of ethics and morality among staff and students
- Dedicated service
- University Liaison

R&D lab of Mechanical Engineering Department

#### June 1986 - March 2000

#### Assistant Professor, SJC Institute of Technology, Bangalore University

- Coordinator, MODROBS
- Effective Teaching and emphasis on mini projects

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**April 2012 Doctorate NAL-VTU** 

Ph.D-Material Tribology

**May 1993** Masters **NIE, Mysore University** 

M Tech- PEST- Distinction

1985 Graduation **AIT, Mysore University** 

BE- Mechanical Engineering- Distinction

#### Achievements

#### **Publications:**

#### Moems Based Micro Accelerometers Sensor Sensing Structures

Sundar Subramanian, Thangadurai N, K Gopalakrishna International Journal of Recent Technology and Engineering (IJRTE), ISSN: 2277-3878, Volume-8, Issue 1, May 2019

Applications of natural fibers and its composites: An overview 73 2016 MR Sanjay, GR Arpitha, LL Naik, K Gopalakrishna, B Yogesha Natural Resources 7 (03), 108

71

2016

2009

Potential applications of cellulose and chitosan nanoparticles/composites in wastewater treatment: A review

S Olivera, HB Muralidhara, K Venkatesh, VK Guna, K Gopalakrishna, ... Carbohydrate polymers 153, 600-618

Plating on acrylonitrile—butadiene—styrene (ABS) plastic: a 33 2016 review

S Olivera, HB Muralidhara, K Venkatesh, K Gopalakrishna, CS Vivek Journal of materials science 51 (8), 3657-3674

Design and development of an advanced linear reciprocating 12 TNN C.B. Mohana, •, C. Divakarb, 1, K. Venkatesha, K. Gopalakrishnaa, K.S

2

wear 267, 1111-1116

Studies on Mechanical Properties of Banana/E-Glass Fabrics Reinforced Polyester Hybrid Composites Y Sanjay, Arpitha, Laxmana Naik, Gopalakrishna J. Mater. Environ. Sci. 7 (9), 3179-3192	7	2016
Performance Evaluation of an IC Engine using Oxyhydrogen as a fuel Supplement AR gopalakrishna K Journal of Scientific & Industrial Research, 74, 176-179	6 *	2015
A review on mechanical and tribological behaviors of nickel matrix composites BKA Kumar, MG Ananthaprasad, K GopalaKrishna Indian Journal of Science and Technology 9 (2)	5	2016
Review on Mechanical Properties of Sisal and Banana Reinforced Composites BY Laxmana Naik, K Gopalakrishna International Journal of Engineering Research and General Science 3 (5), 176-79	5 *	2015
Tribological studies of polymer based ceramic—metal composites processed at ambient temperature KSML K. Gopala Krishnaa, C. Divakarb,•, K. Venkatesha, C.B. Mohana wear 266, 878—883	4	2009
Experimental Investigation on Mechanical Properties of Hemp/E-Glass Fabric Reinforced Polyester Hybrid Composites MR Sanjay, GR Arpitha, LL Naik, K Gopalakrishna, B Yogesha Journal of Materials and Engineering Structures «JMES» 3 (3), 117-128	3	2016
Bulk temperature estimation during wear of a polymer composite pin KSML K. Gopala Krishnaa, C. Divakarb,•, K. Venkatesha, C.B. Mohana WEAR 268, 346—351	3	2010
Thermal performance of heat sink with fluid pockets with high power light emitting diode KMS Sangmesh, K. Gopalakrishna, Manjunath S H, Krishna Venkatesh International Journal of Automotive and Mechanical Engineering 14 (4), 4846-62	2 *	2017
Tribological studies on effect of mixture of fillers in polystyrene matrix	2	2014

composites G Keshavanarayana, C Divakar, K Venkatesh, CB Mohan, KGL Bhatta,		
Journal of Thermoplastic Composite Materials 27 (9), 1192-1208		
Experimental Investigation on HSFP using MWCNT based nanofluid for high power LED applications GCV sangmesh, gopalakrishna K, Manjunath SH, Kadirgama, kathyayini, M Samykano Journal of Mechanical Engineering and Sciences 12 (3), 3852-3865	1*	2018
Effect of Cryogenic Chill on Dendrite arm spacing, Ultimate tensile strength and Hardness of ASTM A 494 M Grade Nickel alloy Metal Matrix Composites BKA Kumar, MG Ananthaprasad, K GopalaKrishna Materials Today: Proceedings 4 (10), 10769-10778	1	2017
Tensile and flexural properties of Polypropylene Composites reinforced with raw bagasse NR Manikandan Elangovan, Vijayakumar Guna, Gopalakrishna Keshavanarayana Sugar Tech 20 (4), 454-463	1 *	2017
Tensile Property Evaluation of Sisal—Glass Fiber Reinforced Polymer Based Composites LL Naik, HM Kavya, K Gopalakrishna, B Yogesha International Journal of Composite Materials 7 (3), 77-81	1	2017
Design and development of a gauging system for constant velocity ball cage component of constant velocity joint assembly P Swaminathan, GK Narayana Proceedings of the Institution of Mechanical Engineers, Part B: Journal of	1	2016
Development of novel additives for slide way lubricants CB Mohan, K Venkatesh, C Divakar, K Gopalakrishna, L Murali, Industrial Lubrication and Tribology 67 (2), 110-118	1	2015
Performance Studies on cryogenic treated carbidecutting tool for AlS1304 steel GCV Nagraj Patil, Gopalakrishna K, Sangmesh, K Sudhakar Journal of Mechanical Engineering and Sciences 12 (3), 3927-3941		2018
Heat transfer enhancement in a high power LED using heat sink with liquid		2018

pockets VG Sangmesh B Gopalakrishna K Manjunath S H M Narendra Kumar JOURNAL OF SCIENTIFIC AND INDUSTRIALRESEARCH 4, 4

Heat Transfer Enhancement in a High Power LED Using Heat Sink with Liquid Pockets	2018
B Sangmesh, K Gopalakrishna, SH Manjunath, MN Kumar, GV Kumar NISCAIR-CSIR, India	
Experimental Studies on Vataharanaloha-an Ancient Aircraft Material A Padmashree, CB Mohan, K Gopalakrishna	2018
NISCAIR-CSIR, India	
Thermal performance of heat sink with fluid pockets for high power light emitting diode	2017
International Journal of Automotive and Mechanical Engineering 14 (4), 15	
Effect of Cryogenic Chill on Mechanical Properties of ASTM A 494 M Grade	2016
Nickel Based Alloy Metal Matrix Composites AKB Kenchanahalli, AM Gangadharaiah, G Keshavanarayana Materials Research 19 (6), 1304-1309	
Action of Cryogenic chill on Mechanical properties of Nickel alloy Metal Matrix	2016
Composites BKA Kumar, MG Ananthaprasad, K GopalaKrishna IOP Conference Series: Materials Science and Engineering 149 (1), 012116	
Physical and Water Absorption Behaviour of Sisal — Glass Fiber Reinforced Polymer based Composites	2016
PWABSGFRP Composites American Journal of Materials Science 6 (4), 91-94	
Effect of Cryogenic Chill on Mechanical Properties of ASTM A 494 M Grade	2016
Nickel based alloy Metal Matrix Composites AP Anil kumar, Gopalakrishna Materials Research	
Development of novel additives for slide way lubricants TNN C.B. Mohan, C.B, C. Divakar, K. Venkatesh, K. Gopalakrishna, K.S. Mahesh	2016

Industrial	lubrication	and tribol	logy 67	(2)
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Effect of heating	of test pin	above	ambient temperatures
on tribological			

2015

behavior of two-phase and three-phase polystyrene composites

V Krishna, G Keshavanarayana, MC Bhoganarasimhaiah, ... Journal of Thermoplastic Composite Materials 28 (11), 1482-1495

# Coolant lubricity and coolant-lube compatibility with regard to slideway

2008

behavior

CB Mohan, K Gopalakrishna, KS Mahesh Lohith, K Venkatesh, C Divakar, ...

Journal of the Brazilian Society of Mechanical Sciences and Engineering 30

# Coolant Lubricity and Coolant-Lube Compatibility with Regard to Slideway

2008

**Behavior** 

MCBGKMLKSK Venkatesh

Journal of Brazilian Society for Mechanical sciences and Engineering, 281-285

#### Membership of Professional Bodies:

- Fellow, Institution of Engineers-F117163-8
- Fellow, Indian Institute Production Engineers-SLF-5966
- Life Member, Indian Society of Technical Education-LM4816
- Member, Indian Society for Advanced Materials and Process Engineering-L613
- Life Member, Tribology Society of India-3753

#### **Member of the Governing Council**

A.J. Institute of Engineering and Technology, Mangalore- VTU Nominee **Journal Referee:** 

Journal of Thermoplastic Composite Materials since 20-8-2014 Journal of Industrial Textiles

Tribology in Industry

#### **Doctoral Guidance:**

Degree Awarded: Main Guide: 01

: Co-guide : 02

: Thesis Submitted:01

Currently Guiding 2 Doctoral Scholars, 1 MSc Engg by research

### **Funded Projects:**

- A software to generate nanoparticle phase diagram, funded by IEI,
   1.1 Lakhs, 3/01/2018
- Development of a coating facility for Nickel and Chromium for ABS Plastic through RP Route - GTRE, DRDO. Completed-Co-PI
- Design and Development of an Autonomous Amphibian Vehicle for Harbor Security Operations, No:DNRD/05/4003/NRB/286/12th FEB2013, Project No: NRB/286/MAR/12-13,Feb12th 2013, Rs 24.23 Lacs-Ongoing-PI
- Feasibility studies on development of surface integrity and strength characteristics of rapid prototyped components to enable their direct application in design and development activities of pay load for space craft, ISRO/RES/3/603/12-13,Feb12th 2013- Co-PI
- Development of Multiwall Carbon Nanotubes-Composites based Nanofluids (Thermal Grease) and their use in heat transfer applications-ISRO-Recommended

#### **Student Projects:**

Sponsored projects – KSCST - 2

AICTE (MODROBS)-1-6.36 Lacs-1998

Institutional Projects- 50- In-house

#### **Award winning Projects:**

- Nov 19-20<sup>th</sup> 2009, UMAG (Universal Machine for Agriculture), One in Top 20, Innovate India, National Technical Competition for Engg Students conducted by NRDC, at IISc.
- Nov 19-20<sup>th</sup> 2009, Super conductor based rail traction, 4<sup>th</sup> Place, Innovate India, National Technical Competition for Engg Students conducted by NRDC at IISc.

#### **Books/ Book Chapter:**

- 1.Coauthored a Monograph on Micro Aerial Vehicles released in the **Indian Technology Congress** held at Nimhans Convention Centre on 21<sup>st</sup> Aug 2014 organized by Institution of Engineers (Book)
- 2. Recycling of polyethylene terephthalate bottles, Elsevier publications, ISBN: 978-0-12-811361-5, William Andrew Publishers (Book Chapter)

#### **On selection Panel of Other Institutions:**

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#### **Consultancy:**

- Team Lead- Titan Jewellery Co, Leading a team of 16 scientists on consultancy projects
- Providing Consultancy in the area of Tribology for Industries/ colleges/Universities
- Assisted KAPTRON Technologies in the wind tunnel experimental techniques and measurements
- Consultant to AVNI Energy Solutions Pvt Ltd, Bangalore

#### **Patents:**

- Ultrasensitive array of accelerometer sensor based on optical Nano cavity for automotive applications Application no: 201841038029, Docket No: 72799,08/10/18
- Composite paste to buildup surfaces and the process of making paste No:4903/CHE/2012 Dated: 26<sup>th</sup> Nov 2012
- Design and development of low cost thermal paste Regn.No: HQ/IPR/FA/12057/2012
   4<sup>th</sup> Jan 2013
- Development of additive based lubricants for sliding surfaces Regn.No: HQ/IPR/FA/12059/2012 4<sup>th</sup> Jan 2013
- Circuitry for optimizing fuel consumption in an internal combustion engine" NRDC Ref No: IPR/FA/13030/2014,Patent Application No. 3798/CHE/2014 dated 02.08.2014
- Checking guage for a work piece, 2288/che/2014, 08/05/2014

#### **Personal Awards:**

Won second place in IDEA contest for patents conducted by **Jain University**, for 'Design and development of a leg operated laptop cooler'. held on 26<sup>th</sup> April 2013

#### **Overseas Visits:**

- Visited Kyoto, Japan to participate in World Tribology Congress 2009
- Led a team of Faculty to Cologne, Germany for tie-up with German Universities in the area of Energy

#### **Software packages known:**

- AUTOCAD
- ANSYS
- UGS-Solid edge

#### Details of guest lecture / invited talks delivered (Resource Person):

- Sahyadri College of Engineering-Composites
- MITS, Andhra Pradesh-Advanced Materials
- MSRIT- Faculty development programme
- MSRIT- Technical talk on MAVs and many more

#### **Academic Excellence:**

- Currently promoting R&D and consultancy in the research centre
- Induction of new University Syllabus, BOE, BOS as Dean
- Worked at various academic capacities-Lecturer, Asst Professor,
   Professor, Principal-in-Charge, Associate Dean and Associate Director
- Passionate to teach Thermal Engineering courses, Energy Engineering,
   Production Engineering Courses and Composite Tribology

#### **Projects**:[Select]:

- Design and Development of Mulberry Cutting Machine 1996,
   K.S.C.S.T-UG
- Design and Development of Battery Assisted Bicycle, 1997, K.S.C.S.T-UG
- Design and development of a Universal Machine for Agriculture, UMAG, Featured in Top 20 of Project Competition conducted by National Research and Development Corporation at IISc Bangalore, 2009-UG Project Competition
- Design and Development of "Development and Integration of Heat Pipes for Casted Led Street Light" Joint project with Avni Energy Solutions-Avasarala Automation Technologies- Centre for Emerging Technologies<sup>®</sup>, Jain University,2011-PG
- Design and Development of a Heat Sink for 9 Watt MR16 down Light-Joint project with Avni Energy Solutions-Centre for Emerging Technologies<sup>®</sup>, Jain University,2011-PG
- A Comparative Study of thermal behavior of A 9 Watt LED lighting system with CNT, Thermoelectric and Fin for Heat Transport- Joint project with Avni Energy Solutions- Centre for Emerging Technologies<sup>™</sup>, Jain University,2012-PG
- Formulation and Development of a thermal paste for heat transfer

through CNT route-PG

Heat transfer studies on thermal heat sink with capillary tubes-PG

#### **Co-curricular Activities:**

- Organized Training on Hydraulics and Pneumatics for 3 weeks at FESTO controls India, Bangalore.
- Training on Hydraulics at Bosch Rexroth for three days, Peenya, Bangalore
- Six –Sigma Course at the CET, Jain University

#### **Industrial Training:**

- CNC machines programming at CADEM Technologies
- Training on Hydraulics at Bosch-Rexroth, Peenya, Bangalore
- Training on Tribology conducted by VTU.
- Training on six sigma
- Training on IPR and related issues.
- Training on FEA at ANSYS corporation
- Training on Mechatronics at FESTO controls pvt. ltd, Bangalore
- Training on Solar PV Technologies, Power Plants, Economics and related topics at KPC, Bangalore Conducted by Orbutus Consulting Agency, New Delhi

#### Workshop/Conference/Symposia:

- Attended a talk on PV-Solar-Opportunities by Govindasamy Tamizmani on 13<sup>th</sup> May 2010 at Jain Global Campus
- One day workshop on White Space Finding at CMS, Near Atria Hotel, Bangalore on 30<sup>th</sup> April 2010.
- One day workshop on 'Conservation of energy and Management' at JSSATE Bangalore27th April2010 at Jain Campus J.C.Road, Bangalore.
- Attended a talk on PV by Dr.Joy Mukhopadhyay on 25<sup>th</sup> April 2010 at Jain Campus, J.C.Road, Bangalore.
- Attended a talk on PV by Dr.S.R.C.Satyanarayana on 24<sup>th</sup> April 2010.
- One day workshop on Awareness on TEQIP Ph-II at MSRIT, Bangalore on 15<sup>th</sup> April 2010.
- One day workshop on PV at TUV Rheinland ,Bangalore, on 25<sup>th</sup> March2010
- Training on Mechatronics at Festo Didactic Centre Bangalore (15

- Days)
- Workshop on CAED at MCE Hassan, conducted by VTU on 14<sup>th</sup> Sept 2006.
- Industrial Hydraulics Bosch Rexroth, during Feb 28th to Mar 4th '2006
- Micro & Smart systems during Jan 16<sup>th</sup> to Jan 21<sup>st</sup> '2006
- Three-day workshop on Hydraulics and Pneumatics at Mico-Bosch, Bangalore from 29<sup>th</sup> to 31 Aug 2005.
- 15 day workshop on Intellectual Property Rights at IGIT from 16<sup>th</sup> April to 5<sup>th</sup> May 2005.
- Reforms in Conduct of Examination Process, VTU during Apr 4<sup>th</sup> & 5<sup>th</sup> '2004.
- Short term training programme on FEM during Oct-Dec '2001
- NBA's Accreditation Awareness Workshop during Oct 5<sup>th</sup> 2001
- Introduction to Computer graphics during Sep'2001 (one month)
- Diploma in ACAD, Prajwal systems during Oct 2000 to Jan 2001
- Business Pro, Genesis Software solutions during Nov 3<sup>rd</sup> to Dec 20<sup>th</sup>,
   1999
- Workshop codes of practice in Engg drawing & M/C drawing at PESCE during Nov 13<sup>th</sup> & 14<sup>th</sup> '1999
- Modern computational Mathematical techniques to analysis random response data at SJCIT during Aug 16<sup>th</sup> to Aug 28<sup>th</sup> 1999
- Fourier Wavelets Analysis in Engg. & Technology at SJCIT during May 19<sup>th</sup> to May 21st 1999
- Seminar on I.C engine & related fields at BLDEA college of Engg & technology during Nov 22<sup>nd</sup> & Nov 23<sup>rd</sup> '97.
- Three day workshop on Agile Manufacturing from 14<sup>th</sup> to 16<sup>th</sup> June1996.
- Introduction to Futurology at UVCE, Bangalore during Apr 11<sup>th</sup> to Apr 12<sup>th</sup> '89
- Listening to Music, Singing Songs
- Table Tennis, Chess

#### **Hobbies and Interests**

#### Reference

#### 1. Dr. K. Venkatesh

Director, CIIRC, Jyothy Institute of Technology

Address:

#445/A, II Cross, Ideal Homes Township Rajarajeshwari Nagar,Bangalore-560095

Tel: 09845358417

Email: igit@rediffmail.com

2. Dr. C. Divakar

Scientist (Retired) ,NAL

**Bangalore** 

Mob:09900222463

All the information provided above is true to the best of my knowledge and belief.

### Dr. K. Gopalakrishna