||Jai Sri Gurudev|| Sri Adichunchanagiri Shikshana Trust (R.) BGS INSTITUTE OF TECHNOLOGY [A Constituent College of Adichunchanagiri University] BG Nagara – 571448, Nagamangala Taluk, Mandya District, Karnataka State



Vision: BGSIT is committed to cause of creating tomorrow's engineers by providing quality education inculcating ethical values.

Mission:

- > Imparting quality technical education by nurturing a conducive learning environment.
- > Offering professional training to meet industry requirements.
- ▶ Providing education with a moral cultural base and spiritual touch.

EDITORIAL TEAM:

- Dr. B. K. Narendra, Principal
- Prof. M. Raja Ram, HOD
- Dr. L. Ranganatha Swamy, Incharge
- Dr. Hemaraju

INSIDE...

- Messages
- Congratulations
- Faculty Achievements
- Beyond the Syllabus
- Student Toppers
- Vision, Mission, PEOs, PSOs & POs of the Department



PRINCIPAL's View:

It is my pleasure to congratulate the editorial board on this pleasant occasion of releasing the newsletter for the year 2018-19. It is great to find a considerable number of winners and participants in curricular, co-curricular and extra-curricular activities which certainly prove that our faculty and students are adequately equipped and possess necessary quality skill-sets to bring such laurels to the institution. I wish that this number may grow in the years to come. I am sure that publishing a newsletter of this sort containing the achievements of the MED-BGSIT family will be recognition to them. I wish them all the very best for future endeavors.



HOD Says...:

My heartily welcome to the maiden issue of our Department Newsletter – 'YANTRIK'. I am indeed very happy and proud in bringing this newsletter about the latest developments and programmes in the department. In future, Newsletter acts as an internal communication channel among the alumni, faculty, students and experts in Mechanical Engineering. We are very much grateful to the Management and Principal for their continuous encouragement, inspiration and support.

"Necessity is the mother of Invention". Initiations, Inspirations, Inventions, Innovations and Challenges are never-ending programmes of the universe. Every investigation big or small counts but always begins with a single step. 'Yantrik', the 'Evergreen' all rounder engineers have immense potential within them. This potential can be transformed into academic and research activities by waking up their minds.

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## CONGRATULATIONS

**Dr. Ranganatha Swamy L**, Associate Professor had authored a Textbook on Operations Research with **Dr. B.K.Narendra**, Principal, BGSIT as co-author published by Sunstar Publisher, Bengaluru during Feb 2019.



| BEST TEACHER AWARDS                |  |  |  |  |  |
|------------------------------------|--|--|--|--|--|
| 2018 - 19                          |  |  |  |  |  |
| Mr. B.L. Keerthi Mr. H.S. Mahendra |  |  |  |  |  |

# **PUBLICATIONS IN JOURNALS:**

| Sl.<br>No | Name of The<br>Faculty | Description /<br>Title of the<br>Paper                                                                                                                              | Name of<br>Journal                                        | ISBN/ISSN              | Date Of<br>Publication |
|-----------|------------------------|---------------------------------------------------------------------------------------------------------------------------------------------------------------------|-----------------------------------------------------------|------------------------|------------------------|
| 1.        | Dr. Manjunath S<br>H   | Numerical<br>evaluation of<br>thermo-<br>hydraulic<br>performance<br>index of a<br>double pipe<br>heat exchanger<br>using double<br>sided louvered<br>winglet tape  | Journal of<br>thermal<br>Engineering                      | JTENJAN202019          | Jan-2019               |
| 2.        |                        | Corrosion<br>effects of<br>chicken fat<br>Biodiesel in CI<br>Engine cylinder                                                                                        | International<br>journal of<br>scientific<br>research     | ISSN NO.:2279-<br>543X | Aug-2018               |
|           |                        | Heat transfer<br>Enhancement<br>in a High<br>powered LED<br>using Heat sink<br>with liquid<br>pockets                                                               | Journal of<br>scientific<br>and<br>industrial<br>Research | ISSN NO.:0975-<br>1084 | Oct-2018               |
|           |                        | Synthesis &<br>characterization<br>of AI<br>6061Reinforced<br>with2%<br>Graphite,2%<br>Boron Hybrid<br>Mmc's using<br>stir &<br>Centrifugal<br>Casting<br>Technique | Journal of<br>scientific<br>and<br>industrial<br>Research | ISSN NO.:0975-<br>1084 |                        |

# PAPER PRESENTED/CHAIRED IN NATIONAL / INTERNATIONAL CONFERENCES:

- 1. Dr. Ranganatha Swamy L, a Technical Committee Member at 9<sup>th</sup> State Level Technical paper Presentation PANCHAJANYA-2019 on 30<sup>th</sup> March 2019 at Ekalavya Institute of Technology, Ummathur, Chamarajanagar, Karnataka, India.
- 2. Dr. Ranganatha Swamy L, chaired a Technical Session at National Conference on Emerging Trends in Mechanical Engineering-2019 on 3<sup>rd</sup> May 2019 at Adichunchanagiri Institute of Technology, Chikmagaluru, Karnataka, India.
- 3. Dr Hemaraju, Impact Of Sized Abrader and Normal Load on Deformation Morphology of En 24 Steel Subjected Abrasion" ERCAM 2019 July 26 & 27, Nitte Meenakshi Institute of Technology, Bengaluru.
- 4. Dr Hemaraju, "Design and fabrication of coconut De- Schelling Machine, Recent trends & Innovations in Mechanical Engineering & Technology-RITMET-2019 May 3rd & 4th , Cambridge Institute of Technology, K R Puram Bengaluru.
- 5. Mr. Pradeep. H, "Production of Biodiesel using Waste Cooking Oil" in National Conference on material Processing and Characterization (NCMPC-2019)

# **INVITED TALKS:**

1. Prof. M. Raja Ram addressed the First Year Engineering Students on available library facilities and their usage 6<sup>th</sup> August to 14<sup>th</sup> August 2018.

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OrientationCourse in Aircraft and Aerospace Engineeringwasorganized for 5^{th} and 7^{th} SemesterBEMechanicalstudents from 20.08.2018 to 22.08.2018. Suresh G Rao, Chief Executive Officer, Centre of Excellence in Aerospace &Defense, VTU Regional Office, Bengaluru was the Resource person who addressed the students.



One day Awareness Program on Non-conventional Energy resources was organized by the Department of Mechanical Engineering on 30thAugust 2018.**Mr.** *Ramachandra Rao, Director Training, Pyra Window Power Academy*,*Bengaluru* addressed the students of Mechanical Engineering on the available renewable energy resources, their harnessing and contribution in the current scenario.



Board of Studies Members-Dr. S.H. Manjunath, Professor & HOD, Dept. of Mechanical Engineering, BGSIT, Dr. Ranganatha Swamy L, Associate Professor Dept. of Mech Engg, BGSIT, Dr. Hemaraju, Associate Professor Dept. of Mech Engg, BGSIT, Prof. B.K. Yuvaraja, HOD, Basic Science, BGSIT, Dr. Vasundhar.M.G,Associate Professor,Dept. of Mech Engg, MCE, Hassan, Dr. Bhaskar H.B, Associate Professor,Dept. of Mech Engg, SSIT, Tumakuru. Prof. Nagaraja. R, Principal, GGTC, Bengaluru were present for the preparation of Curriculum and Syllabus for UG Second Year (3rd 4th Semester) Adichunchanagiri University on 13th July 2019.



Technical Talk on Application of solar Energy-Concentrating solar power Technologies was organized by the Dept. of Mech Engg on 26th July 2019.Dr. Sendhil Kumar Natarajan Assistant Professor and Head of the Department of Mechanical Engineering, National Institute of Technology Puducherry and Dr. C. Siddaraju Assistant Professor, Ramaiah Institute of Technology, Bengaluru addressed the students.

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FACULTY DEVELOPMENT PROGRAMMES ATTENDED/NPTEL COMPLETED:

Mr.Krupesh K. S, Assistant Professor has attended Interactive Research Orientation Workshop at VVCE, Mysuru from 16th-20th Jan 2019.

Dr. Ranganatha Swamy. L, Associate Professor, completed NPTEL Course on Nonconventional Energy Resources during Jan-April 2019.

Mr. B.L. Keerthi, Assistant Professor, completed NPTEL Course on Non-conventional Energy Resources during Jan-April 2019.

Mr. H. S. Mahendra, Assistant Professor, completed NPTEL Course on Non-conventional Energy Resources during Jan-April 2019.

MEMORANDUM OF UNDERSTANDING:

BGSIT-TOYOTA KIRLOSKAR MOTORS PVT LTD signed for a MOU on 20th September 2018 at Bidadi Industrial Area, Bidadi, Karnataka. BGSIT-TOYOTA KIRLOSKAR MOTORS PVT LTD Center of Excellence was created in the New Mechanical Engineering Block where the engines, transmissions and such others used automobile parts donated by the TOYOTA Company are mounted.

Service Activity:



Voluntary Blood Donation Camp was organized in collaboration with Rashtrotthana Blood Bank, Bengaluruand Adichunchanagiri Hospitalon 23.04.2019 at campus. Around 70 NSS Volunteers and Faculty Members freely donated Blood in the camp. The camp was inaugurated by Dr. S Chandrashekar Shetty, Vice-Chancellor of ACU, Dr. M.G. Shivaramu, Principal of AIMS, Dr. B.K. Narendra Principal of BGSIT, HOD's, NSS Program Officer, Staffs & NSS Volunteers actively participated in the program.



VISION:

Producing Competent and Sustainable Mechanical Engineers through Excellence, Innovations and Ethics.

MISSION:

- Offering Quality Education by Competent Faculty.
- Providing Adequate Infrastructure and Learning Ambience.
- Developing Inclination towards Higher Education, Research, Entrepreneurship and Professional Ethics.
- Promoting Interaction with Industries.

PROGRAM EDUCATIONAL OBJECTIVES (PEOs)

- ✤ Graduate will be Pursuing Successful Career & Higher Education.
- Graduates will be able to Design, Analyze, Fabricate & Manage Applications of Mechanical Engineering.
- ✤ Graduates will display Professional Ethics to work in a team & lead the team by effectively Communicating the Ideas.
- Graduates will Practice Life-long Learning

PROGRAM SPECIFIC OUTCOMES (PSOs)

- Ability to acquire Competencies in Designing, Analyzing and Evaluating the Mechanical Components.
- ✤ Ability to work Professionally by applying Manufacturing and Management Practices.

PROGRAM OUTCOMES (POs)

- **1. Engineering Knowledge:** Apply the knowledge of mathematics, science, engineering fundamentals and an engineering specialization to the solution of Complex engineering problems.
- **2. Problem analysis:** Identify, formulate, review research literature, and analyze complex engineering problems reaching substantiated conclusions using first principles of mathematics, natural sciences, and engineeringsciences.
- **3. Design/development of solutions:** Design solutions for complex engineering problems and design system components or processes that meet the needs with appropriate consideration for the public health and safety, and the cultural, Societal and environmental considerations.
- **4. Conduct investigations on complex problems:** Use research-based knowledge and research methods including design of experiments, analysis and interpretation of data, and synthesis of the information to provide validconclusions.

- **5. Modern tool usage:** Create, select, and apply appropriate techniques, resources and modern engineering and IT tools including prediction and modeling to complex engineering activities with an understanding of thelimitations.
- **6.** The engineer and society: Apply reasoning informed by the contextual knowledge to assess societal, health, safety, legal and cultural issues and the consequent responsibilities relevant to the professional engineering practice.
- **7. Environment and Sustainability:** Understand the impact of the professional engineering solutions in societal and environmental contexts and demonstrate the knowledge of and need for sustainabledevelopment.
- **8. Ethics:** Apply ethical principles and commit to professional ethics and responsibilities and norms of the engineeringpractice.
- **9. Individual and team work:** Function effectively as an individual and as a member or leader in diverse teams and in multidisciplinarysettings.
- **10. Communication:** Communicate effectively on complex engineering activities with the engineering community and with society at large such as being able to comprehend andwrite effective reports and design documentation, make effective presentations and give and receive clear instructions.
- **11. Project Management and Finance:** Demonstrate knowledge and understanding of the engineering and management principles and apply these to one's own work, as a member and leader in a team, to manage projects and in multidisciplinaryenvironments.
- **12. Life-long learning**: Recognize the need for, and have the preparation and ability to engage in independent and life- long learning in the broadest context of technological change.



Poojya Sri Mahaswamiji, Principal, HOD and Faculty with the Outgoing Batch Students (2015-19)

QUOTES (At the end of each page)

- Opportunities don't happen. You create them.
- Love yourself. It is important to stay positive because beauty comes from the inside out.
- Good, Better & Best. Never let it rest. Till your good is better and your better is best.
- A good teacher can inspire hope, ignite the imagination and install a love of learning.
- If you do what you always did, you will get what you always got.
- To live a creative life, we must lose our fear of being wrong.
- Good things come to people who wait, but better things come to those who go out and get them.
- Try not to become a person of success, but rather try to become a person of value.
- All our dreams can come true if we have the courage to pursue them.