

MAGAZINE 2022-23

YANTHROHAM

We are the MACHINE!



DEPARTMENT OF MECHANICAL ENGINEERING
GLOBAL ACADEMY OF TECHNOLOGY



HOD'S MESSAGE

Dear reader,

I am thrilled to share with you that the department magazine 'YANTHROHAM' for the academic year 2022-23 is all set to be published. This magazine lives up to its name, as it showcases the variety and richness of imagination and creativity of our student and faculty members.

I congratulate editorial team for hard work and dedication they have demonstrated in accomplishing this goal through medium of magazine. This offers a complete platform to exhibit students talent and highlight their creativity at its best.

We aim to make every students from foundation to be a precious asset for nation and a virtuous human being for world across. We do special things like innovative teaching practices bridge gap between expectations industry academic inputs provided, by arranging add-on technical soft skill development programs. To go along with our innovative teaching practices, we have excellent faculty state art infrastructural facilities laboratories.

We hope to continue delivering excellent technical education future.

Dr T Krishna Rao

VISION OF THE MECHANICAL ENGINEERING DEPARTMENT

Become one of the leading providers of education in Mechanical Engineering with emphasis on research, development and innovation for the benefit of society

M1: Impart quality technical education in the field of Mechanical Engineering through excellent teaching-learning process, modern infrastructure and computing tools

M2: Prepare students for successful careers by providing placements and encouraging research, development and innovation through Industry-Institute Interaction

M3: Instil professional ethics and environmental consciousness amongst students through inclusive development programs

Graduates in Mechanical Engineering will be able to:

PEO1: Apply their engineering knowledge, critical thinking, creativity, and problem-solving skills with integrity and inclusivity in professional engineering practice

PEO2: Continue their intellectual development through graduate education, professional development courses, self-directed investigation, and/or on-the-job training and experience.

PEO3 : Engage in both leadership and collaborative roles over the course of their careers.

A stylized illustration of a stopwatch with a brown outer casing and a grey face. The stopwatch has two rectangular buttons at the top and a large, rounded, multi-lobed base at the bottom. The text "DEPARTMENT ACTIVITIES" is centered over the stopwatch face in a white, bold, sans-serif font. The background is solid black.

DEPARTMENT ACTIVITIES

3D PRINTING

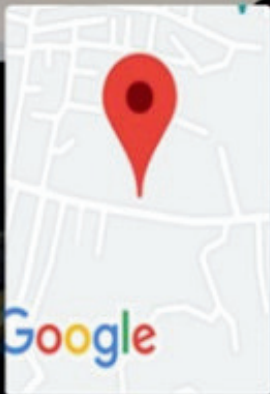
3D Printing is a manufacturing technology that is much faster than all conventional manufacturing technologies. 3D printing is becoming indispensable in R&D departments and design departments. The value-added program enlightened the students with 3D Modelling, Slicing, Post Processing of 3D Printed models, and 3D Printer machine maintenance.



FDP ON INTRODUCTION TO FUSION 360

The workshop on Fusion 360 provided faculties with hands-on practice sessions on creating sketches, developing solid modelling, Computer-aided engineering(CAE) , Computer-Aided Machining(CAM) and PLM .

FDP on Introduction to Fusion 360 Dept.ME, GAT



Bengaluru, Karnataka, India

12° 55' 45.6049" N 7° 31' 38.4672" E, Aditya Layout, RR

Nagar, Bengaluru, Karnataka 560098, India

Lat 12.929684°

Long 77.526033°

22/11/22 11:19 AM GMT +05:30

GPS Map Camera

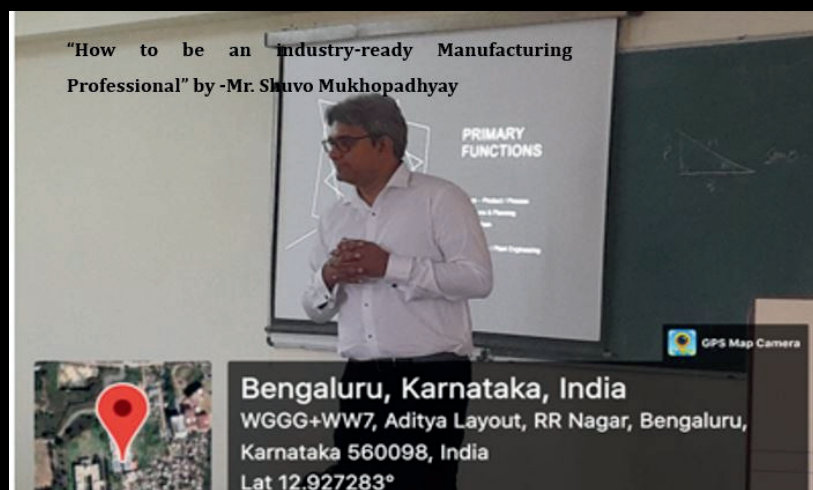
GUEST LECTURE ON ADDITIVE MANUFACTURING - SURAJ MANJANNA

The guest lecture enlightened the students to the advanced methods of additive manufacturing and the challenge to identify the part and assembly designs in the current manufacturing technology and to consider whether AM can improve performance.



GUEST LECTURE ON HOW TO BE AN INDUSTRY-READY MANUFACTURING PROFESSIONAL - SHUVO MUKHOPADHYAY

The Guest Lecture envisioned our students about opportunities in the field of manufacturing as well as the most recent state-of-the-art trends and advancements and skills needed to be a professional in manufacturing.



GUEST LECTURE ON CAREER OPPORTUNITIES IN 'HVAC' INDUSTRIES - MR MADHUKAR A

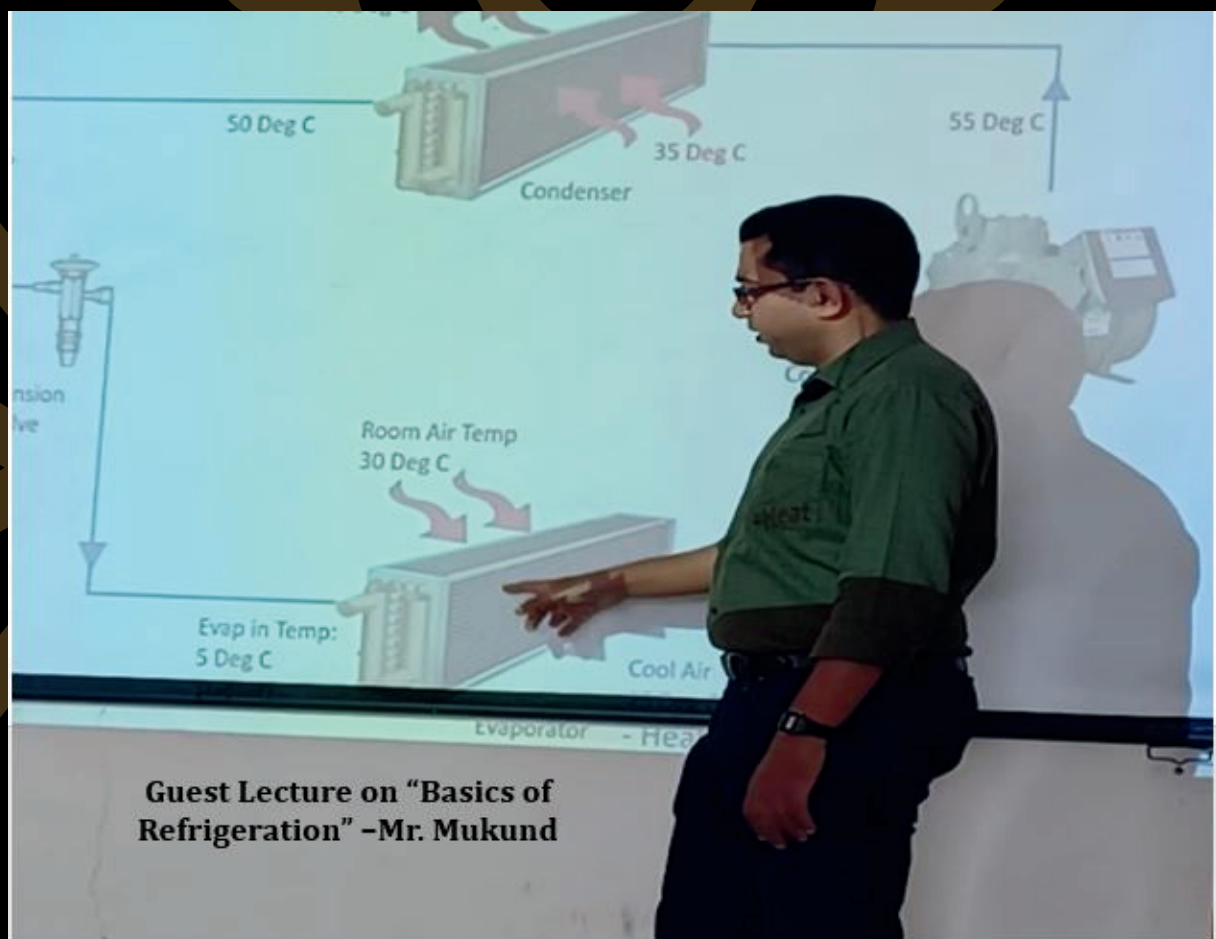
A guest lecture on "Career Opportunities in HVAC Industries" was presented by Mr. Madhukar A, National chair for student activities—ISHRAE & Director M/s Climatics on 13th Jan 2023. The Guest lecture was attended by 100 students which includes Student members of ISHRAE, 3rd Semester Mechanical Engineering and 5th Sem Electrical Engineering students. The contents covered were beneficial for the students to know the various opportunities available in Refrigeration industry.



GUEST LECTURE ON BASIC OF REFRIGERATION - MR MUKUND

A guest lecture on "Basics of Refrigeration" was successfully presented by Mr. Mukund, Students chair Bangalore ISHRAE Chapter & Director M S Enterprises, organized by the Department of Mechanical Engineering, on 10th Jan 2023.

The Guest lecture was attended by 40 students of 5th Sem Mechanical Engineering. The contents covered were beneficial for the students to know the refrigeration cycles, principle of working of refrigeration, Vapour Compression and Vapour Absorption Refrigeration systems, working of chillers, heat exchangers etc. and its utilization in Refrigeration industry.



GUEST LECTURE ON HVAC PUMP HEAD CALCULATION MR ASHWIN KUMAR

A guest lecture on "HVAC Pump Head Calculation" was successfully presented by Mr. Ashwin Kumar from VKA POWER MASTER Pvt. Ltd., organized by the Department of Mechanical Engineering, on 4th July 2023. Around 20 students from 6th Sem Mechanical attended the lecture. The students were taught the importance of pipe head calculation and were taken through the friction charts of pipes, valves and fittings required for pump head calculation.



GUEST LECTURE ON GREEN HYDROGEN HARVESTING AND TECHNICAL CHALLENGES PROF M ESWARAMOORTHY

The Purpose of the guest lecture is to enlighten the students to acquire basic knowledge in green hydrogen production, their various types of harvesting methods, and the technical challenges faced while production.



INDUSTRIAL VISIT TO ALIAGE METAL CASTING BANGALORE

An Industrial visit was organized for a group of III sem B.E of mechanical engineering on 11-11-2022. They were taken to 2 plants where in first plant included the manufacturing process and second plant tested and checked the components for defects.



VISIT TO BIEC IMTEX 2023

An Industrial visit was organized for a group of III sem B.E of mechanical engineering on 24-01-2023. They were taken to BIEC by 1.00PM and they watched the demonstration of world class machine tools at display under one roof.



INDUSTRIAL VISIT TO VEERA VAHAN UDYOG

Department of Mechanical Engineering organized a visit to Veera Vahan Udyog Pvt. Ltd Bangalore on 15-02-2023. Students observed the body building activity of automobiles.



INDUSTRIAL VISIT TO SUPA HYDROELECTRIC PLANT

Department of Mechanical Engineering organized a Power plant visit to SUPA hydroelectric plant on 18th Feb 2023. Students visited the dam site and Power plant house and observed the power generation and transmission systems in place.



INDUSTRIAL VISIT TO SATTVA SPECTRUM KAIKONDRAHALI

Industrial visit to Sattva Spectrum, Kaikondrahalli, under the aegis of ISHRAE Student Chapter for ISHRAE student members were organized on Wednesday 17th May 2023. Students were given exposure to HVAC systems, chillers, Air Handling Unit etc.



INDUSTRIAL VISIT TO CMTI-BANGALORE

An Industrial visit was organized for a group of 38 students of IV sem B.E mechanical engineering on 15-06-2023. There they visited Precision metrology lab, micromachining Nano Technology Lab and sensor Fab lab.



SPORTS ACHIEVEMENTS



VTU State Level Weightlifting (M & W) & Best Physique (M) Championship 2022



VTU State Level Wrestling & Judo Men & Women Competition 2022



VTU Bengaluru South Division Handball Tournament 2022-23



VTU Bangalore South Division Badminton (M&W) Tournament 2022

CULTURAL ACTIVITIES



Janny Vasanth M S has participated in VTU Youth Festival – Yuvothsava -2023 held at Nagarjuna College of Engineering & Technology, Bengaluru from 20 March to 1st April 2023 in Instrumental Music Solo.

PHD AWARDS



KSCST FUNDED PROJECTS



Project Dip Pure (Portable Potable Water Purifier) got selected for State Level Seminar and Exhibition held at Alva's Institute of Engineering and Technology, Moodubidire on 11th and 12th of Aug 2023. The above project is done by final year students Mr. Sumanth N, Mr. Abhishek Kadam M, Mr. Hemanth D, Mr. K Basavaraja under the guidance of Dr. Shreekala N, Associate Professor.

STUDENT PROJECT EXHIBITION

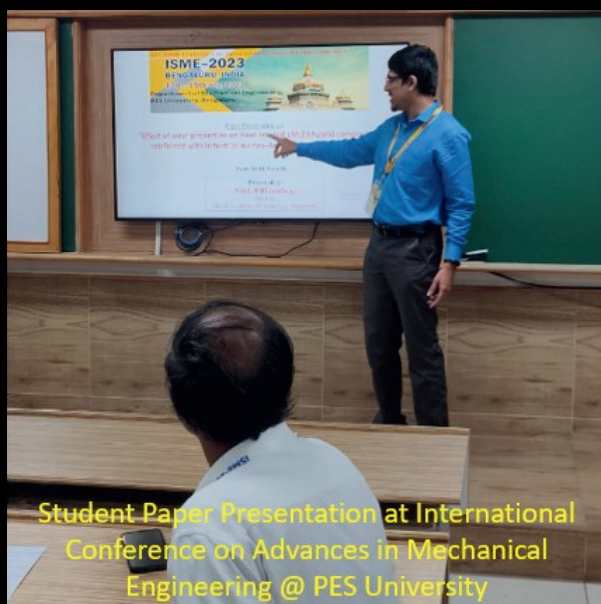


On 8th and 9th May 2023, our department organised a Final Phase Project exhibition whose chief guest was HOD-Department of ME. Students exhibited varieties of fabricated Project work and explained the principle of working to the audience. The major focus was on Interdisciplinary Project so that students could figure out what they want to do in future if they were to choose these career options. Some of the students make a model of Low-cost Water Purifier, Health care Products EV cars, and Agricultural machine.

FACULTY PUBLICATIONS

Sl.No	Name of the Author(s)	Department of the Author(s)	Title of the Paper	Name of the Journal	Month and Year of publication
1	Dr.T.Prashanth	Mechanical Engineering	Base drag estimation in suddenly expanded supersonic flows using backpropagation genetic and recurrent neural networks	Journal of Aerospace Engineering	2022
2	Dr.T.Prashanth	Mechanical Engineering	"CFD based Optimization of Base Pressure Behavior in Suddenly Expanded Flows at Supersonic Regimes using Neural networks"	Progress in Computational Fluid Dynamics, An International Journal	2022
3	DR.T.Krishna Rao	Mechanical Engineering	Sensitivity variation of a flowmeter with varying shapes of the target	Journal of Mines, Metals and Fuels	Jul-22
4	Dr.T.Prashanth	Mechanical Engineering	Heat Transfer Characteristics of Fullerene and Titania Nano-tubes Nanofluids under Agitated Quench Conditions"	ACS OMEGA	Dec-22
5	Dr.T.Prashanth	Mechanical Engineering	"Experimental and numerical investigation of expansion corner effects on isolator performance"	International Journal of Turbo and Jet Engines	2023
6	Asha P.B. , Ravikumar V, Kiran R	Mechanical Engineering	" Assessment of Corrossion Performance of Hybrid-AL-B4C-RM composites Through Taguchi Technique"	European Chemical Bulletin	Jun-23
7	PoornaChandra, Ravikumar V, R. Kiran	Mechanical Engineering	" Tool Life in Turning of Hybrid Composites: Taguchi Analysis"	European Chemical Bulletin	Jul-23

STUDENT PAPER PRESENTATION

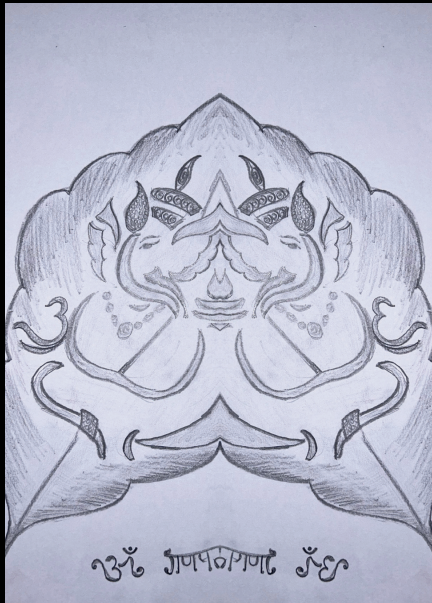


Nitish Bharadvaj final year mechanical engineering student presented his research paper at International Conference on Advances in Mechanical Engineering at PES University.

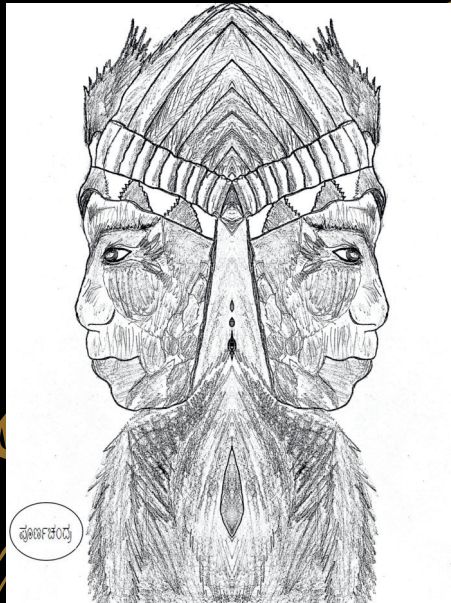
PLACEMENTS

Sl No	Student USN	Name	Company Placed
1	1GA19ME033	KUNAAL PATEL N M	Cognizant Technology Solutions
2	1GA19ME051	RAKSHA K R	Bosch Limited (RBIN)
3	1GA19ME068	UDAY P	Quest Global Engineering Services
4	1GA19ME076	VINOD GOWDA T G	Quest Global Engineering Services
5	1GA20ME412	NIKHIL GOWDA Y	Quest Global Engineering Services
6	1GA19ME038	MEGHANA R	Timken Engineering & Research India Pvt. Ltd
7	1GA19ME035	LAVANYA DS	Hiveminds Innovative Market Solutions Pvt. Ltd.
8	1GA19ME044	NITHIN N	Hiveminds Innovative Market Solutions Pvt. Ltd.
9	1GA19ME016	CHETAN V SWAMY	BYJU'S-Think & Learn Pvt Ltd
10	1GA19ME019	DARSHAN P	BYJU'S-Think & Learn Pvt Ltd
11	1GA19ME044	NITHIN N	Hiveminds Innovative Market Solutions Pvt. Ltd
12	1GA19ME048	PRAJWAL H M	BYJU'S-Think & Learn Pvt Ltd
13	1GA19ME067	TRINESH B G	BYJU'S-Think & Learn Pvt Ltd
14	1GA19ME069	UDITH R	BYJU'S-Think & Learn Pvt Ltd
15	1GA20ME414	RAJATH G	BYJU'S-Think & Learn Pvt Ltd
16	1GA20ME415	RAKSHITH KUMAR G R	BYJU'S-Think & Learn Pvt Ltd
17	1GA20ME417	SUMANTH N	BYJU'S-Think & Learn Pvt Ltd
18	1GA19ME001	ABHAY S	Timken Engineering & Research India Pvt. Ltd

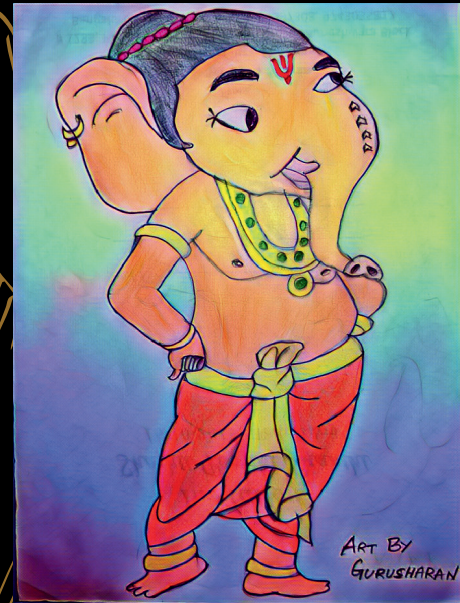
FACULTY SKETCHES



Mrs. Asha P B

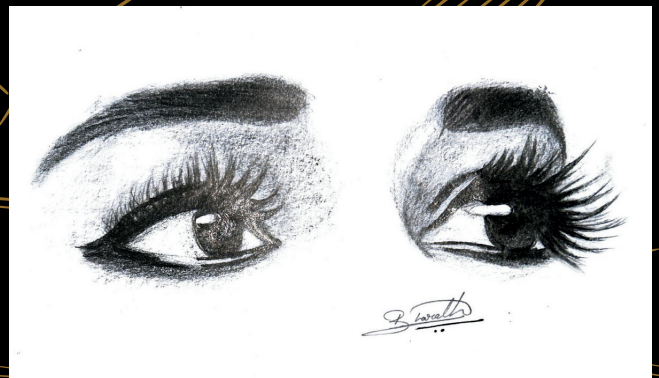


Mr. Poornachandra



Mr. Gurusharan

STUDENT SKETCHES



K S Bharat

FACULTY AND STUDENT POEM

“ಬದುಕು”

ಮಾನವ ನಿನ್ನ ಅರಿತವರು, ಯಾರು ಇಲ್ಲ,
ಧರ್ಮದ ದಾರಿ ಮರೆಯುತ್ತಿರುವೆಯಲ್ಲಾ, I
ನಿನ್ನ ಕರ್ಮಕ್ಕೆ ಹೊಣೆ ಯಾರು ಇಲ್ಲ,
ಮಾನವೀಯತೆಯೇ ಭಗವಂತನು, ಬಲ್ಲವರ್ಯಾರೂ ಇಲ್ಲ, II
ಮಾನವ ನಿನ್ನ ಅಸೆ ಶಿಖರದತ್ತರದಾಚೆ
ಇರದಿರಲಿ ನಿನ್ನಲ್ಲಿ, ಮಾನವೀಯತೆಯ ಕೊರತೆ, I
ಸುಖ ದುಃಖ ಕ್ಷಣಿಕ, ಅರಿಯೋ ನೀ ಮಂಕೆ
ಯಂತ್ರದ ಬದುಕು, ಬಯಸುವೇ ನೀ ಏಕೆ, II
ನಾ ಮೇಲು ನೀ ಕೀಳು ಅನ್ನುವೆಯಲ್ಲಾ,
ಸ್ವಾರ್ಥಿಯಾಗಿಯೇ ಬಾಳುವೆಯಲ್ಲ, I
ಶಾಶ್ವತ ಯಾವುದು, ಯೋಚಿಸಿರಿ ನೀವಲ್ಲ,
ಸಂಬಂಧಗಳಿಗೆ ಬೆಲೆ ಕೊಟ್ಟು ಬಾಳಬೇಕು ಎಲ್ಲಾ, II
ದ್ವೇಷ ಅಸೂಯೆಯೇ ನಮ್ಮನು ಕೊಲ್ಲುವ ಹಂತಕರು
ಬದುಕಿನ ಹಾದಿಯಲ್ಲಿ, ನಾವು ನೀವಲ್ಲ, ಪಯಣಿಗರು I
ಯಶಸ್ಸಿನ ಮೆಟ್ಟಿಲನ್ನು ಏರುವರೆ ಸಾಧಕರು
ನೋವಲ್ಲ, ನಗು ನಗುತಾ ಬಾಳುವವರೇ ಸಿರಿವಂತರು, II
ಆಕಾಶ ಭೂಮಿ ಒಂದಾಗೋದಿಲ್ಲ,
ಸರಿ ತಪ್ಪು ಜೊತೆಗಾರರಲ್ಲ, I
ನ್ಯಾಯ ನೀತಿಗೆ ತಲೆಬಾಗಿರಲ್ಲಾ,
ದೇಶದ ಅಭಿವೃದ್ಧಿಗಾಗಿ ಕೈಜೋಡಿಸಿರಲ್ಲ, II

Dr. Rajesh R

ಸೇವಕ ಭಕ್ತ ದೇವಾಲಯದಲ್ಲಿ ಮಹೇಶ್ವರನಿಗೆ.
ಸುಖಿನ ಶಕ್ತಿ ಮೃಗವನ ತಲೆ ಎರಡು.
ಧರ್ಮಕನ ಕೃಷ್ಣ ಕೃಷ್ಣಾಣಿ ಕಮಲನ ಮುಚ್ಚಿ ತಲೆ ಎರಡು.
ವತ್ಸ ಸಂತೆಹಲ್ಲ ವತ್ಸನವಾಗಿದೆ. ಸ್ವಲ್ಪ ಕಾಲವ ಹೆಚ್ಚಾಗಿದೆ.

ಕನ್ನಡನು ಕನ್ನಡನು ನೆನ್ನನು ಎತ್ತನು.
ನನ್ನಗೆ ಬಿತ್ತ ಬಿತ್ತ ನೀ ಒಂದು ಸಂಜೆನ ಬಿತ್ತ.
ಛಾಯೆ 'ಶಗ' ಒತ್ತಿವೆ ಶ್ವಪ ನೀನಗೆ ಒತ್ತಿವೆ.
ನಿನ್ನನು ಜಗದ ನನ್ನನು ನೀನು.

ಶಿಕ್ಷಣಗಾರನು ನೆನ್ನನಲ್ಲಿ
ಕತ್ತಲಗಿದೆ ಕನ್ನಡನ ಸಾಮಾನ್ಯ
ಮುನ್ನನು ಉಪದೇಶ
ನ ನೀತಿ ನೀತಿ ಕಾನೂನು.

ನ ಉಪದೇಶ ಬಂದ ನೀ ಎಲ್ಲಿ ಕೊಡುವೆ
ನ ಲೇಖನ ಬಂದ ನೀ ಬಂದ ಕೊಡುವೆ.
ನ ಮಕ್ಕಳಲ್ಲಿ ಸಿಕ್ಕುವ ನೀ ಕಾಣುವೆ.
ನ ಎಷ್ಟು ಕಷ್ಟವಿಲ್ಲ ನೀ ಕಷ್ಟವಿಲ್ಲ.

ನಿನ್ನ ನೆನ್ನನ ಕೊನೆಯಲ್ಲಿ
ಭಾವನೆಯ ಮಕ್ಕಳೊಡನೆ
ಶಿಕ್ಷಣದಲ್ಲಿ ಮಕ್ಕಳೊಡನೆ.
ನನ್ನ ಮನ ಭಾವನೆಯ...

K S Bharat

YANTHROHAM

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