



Karnataka State Council for Science and Technology
Indian Institute of Science Campus, Bengaluru - 560 012

Telephone: 080-23341652, 23348848, 23348849 ♦ Telefax: 080-23348840

Email: office@kscst.iisc.ernet.in, office@kscst.org.in ♦ Website: www.kscst.iisc.ernet.in, www.kscst.org.in
office.kscst@iisc.ac.in

H. Hemanth Kumar
Executive Secretary

No: 7.1.03/SPP/91

8th June 2020

The Principal,
K.S. Institute of Technology,
No.14, Raghuvanahalli,
Kanakapura Main Road,
Bengaluru - 560 062.

Dear Sir/Madam,

Sub: 43rd series Student Project Programme (SPP): status of the sanctioned projects

With respect to the 43rd series of SPP, the projects selected from your institution have been already announced in the KSCST website and we hope all the respective project teams are aware of it. The sanction order for the selected projects has been dispatched to your institution.

As per the earlier announcements, midterm evaluations of selected projects at the nodal centers were supposed to be held during the month of April-June 2020. Due to the prevailing lockdown restrictions in the country to contain the COVID-19 pandemic, it is uncertain to conduct the midterm evaluations at the nodal centers unless the situations get back to normal.

In this connection, Council is planning to do away with nodal center evaluations for this 43rd series of SPP and in turn, conduct direct evaluation of the projects online. To conduct the online evaluations, we would like to have the status of completion of the sanctioned projects.

The following are the instructions to be followed to get the projects evaluated online.

- The SPP Coordinator shall update the project status to KSCST on or before 22nd of June 2020 by email to spp@kscst.iisc.ernet.in.
- The evaluation dates will be finalized after 22nd of June 2020.
- The head of the institute shall make sure that all the sanctioned projects get evaluated online.
- Only students (at least one) shall present/demonstrate their project.
- 50% of the sanctioned amount has already been released and on submission of the report and online evaluation, the remaining amount will be released based on the advice of the experts.

The evaluation dates, time-slots and other information regarding the online evaluation will be shared, once we receive the information from your end.

Thanking you and with best regards,

Yours sincerely,


(H. Hemanth Kumar)

Encl: List of sanctioned projects and NEFT details

of released amount.

Sl. No.	PROJECT REFERENCE NO.	PROJECT TITLE	BRANCH	DEGREE	PROJECT STREAM	NAME OF THE GUIDE(S)	NAME OF THE STUDENTS	SANCTIONED AMOUNT (in Rs.)
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KARNATAKA STATE COUNCIL FOR SCIENCE AND TECHNOLOGY

Indian Institute of Science campus, Bengaluru – 560 012

Website: <http://www.kscst.iisc.ernet.in/spp.html> || Email: spp@kscst.iisc.ernet.in || Phone: 080-23600978

43rd Series of Student Project Programme: 2019-20

LIST OF STUDENT PROJECT PROPOSALS APPROVED FOR SPONSORSHIP

58) K.S. INSTITUTE OF TECHNOLOGY, BENGALURU

359.	43S_BE_1303	AUTOMATIC SEGREGATION OF WASTE USING ROBOTIC ARM	ELECTRONICS AND COMMUNICATION ENGINEERING	B.E.	STREAM A	Mrs. V SANGEETHA	Ms. BHOMIKA P M Ms. SONIKA V Ms. SUMA B S Ms. VISMITHA SONNA SATHYANARAYANA	4500.00
360.	43S_BE_1305	RAKSHAK - A BORED WELL RESCUE BOT	ELECTRONICS AND COMMUNICATION ENGINEERING	B.E.	STREAM A	Dr. P N SUDHA	Ms. KADRI SRINIDHI RAO Ms. JEEVITHA KALAASHILPA N C Ms. ASHWINI S Ms. BHAGYA SHREE S J	5500.00
361.	43S_BE_1306	PROPULSION OF TURBOJET ENGINE USING HHO GAS GENERATED FROM WATER BY HHO GENERATOR	MECHANICAL ENGINEERING	B.E.	STREAM A	Mr. ANIL KUMAR A	Mr. SREEKARA K B Mr. SHIVA SHANKAR B M Mr. SUMESH R Mr. SUPREETH K R	5500.00
362.	43S_BE_1307	DESIGN AND FABRICATION OF SOLID WASTE COLLECTOR AND WATER DE-FROTHING DEVICE	MECHANICAL ENGINEERING	B.E.	STREAM A	Prof. UMASHANKAR M	Mr. M VENKATESH KASHYAP Mr. ASHWIN MAIYA M Mr. HARSHITH S Mr. MANOJ R	5500.00
363.	43S_BE_1310	DESIGN AND AUTOMATION OF NUTRIENT FEED SYSTEM TO ENHANCE GROWTH RATE IN HYDROPONICS	MECHANICAL ENGINEERING	B.E.	STREAM A	Mr. GAUTHAM S	Ms. S PECHU MUTHU Mr. PRAMOD RAJ K Mr. SAGAR N Mr. SHARATH S YADAV	5000.00
364.	43S_BE_3377	EMISSION REDUCTION OF DIESEL ENGINE BY USING DPF, DOC AND INJECTING DIESEL EXHAUST FLUID IN EXHAUST PIPE.	MECHANICAL ENGINEERING	B.E.	STREAM B	Dr. NAGAPRASAD K S	Mr. VISHWANATHA B NAIK Mr. CHETAN M KUMAR Mr. HANAMANTAPPA	6500.00



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Mr. H. Hemanth Kumar
Executive Secretary

16th March 2020

Ref: 7.1.01/SPP/953

The Principal,
K.S. Institute of Technology,
Bengaluru - 560 062.

Dear Sir/Madam,

Sub : Sanction of Student Project - 43rd Series: Year 2019-2020
Your Project Proposal Reference No. : **43S_BE_1306**

Ref : Your Project Proposal entitled " **PROPULSION OF TURBOJET ENGINE USING HHO GAS GENERATED FROM WATER BY HHO GENERATOR**

We are pleased to inform that your student project proposal referred above, has been approved by the Council under "Student Project Programme - 43rd Series" with a budgetary break-up as detailed below:

Student / s	Mr. Sreekara K B	Budget	
		Particulars	Amount (Rs.)
	Mr. Shiva Shankar B M		
	Mr. Sumesh R	Materials/Consumables	4,500.00
	Mr. Supreeth K R	Labour	-
Guide/s	Mr. Anil Kumar A	Travel	-
	-	Miscellaneous	500.00
Department	Mechanical Engineering	Report	500.00
		Total	5,500.00
Five Thousand Five Hundred Rupees Only			

The following are the guidelines to carryout the project work :

- The project should be performed based on the objectives of the proposal sent by you.
- The project should be completed in all respects and one copy of the hardbound report along with softcopy of the full report in a CD (.pdf format) should be submitted to KSCST.
- Any change in the project title and objectives, etc., or students is liable to rejection of the project and the amount sanctioned needs to be returned to KSCST.
- Please quote your **project reference number printed above** in all your future correspondences.
- Important:** After completing the project, 2 to 3 page write-up (synopsis) needs to be sent by e-mail [spp@kscst.iisc.ernet.in] and should include following :
 - Title of the project
 - Name of the College & Department
 - Name of the students & Guide(s)
 - Keywords

H. H. Hemanth Kumar
18.5.2020

- 6) Introduction / background
(with specific reference to the project, work done earlier, etc) - about 20 lines
- 6) Objectives (about 10 lines)
- 7) Methodology (about 20 lines)
(materials, methods, details of work carried out, including drawings, diagrams etc)
- 8) Results and Conclusions
(about 20 lines with specific reference to work carried out)
- 9) Scope for future work (about 20 lines).

(Note: The write-up (Synopsis) should be sent with the approval of project guide. The softcopy of the write-up, in MS Word format, should be sent by e-mail (spp@kscst.iisc.ernet.in). In your e-mail, please also include project proposal reference number and title of the project.)

e) Projects selected for Seminar / Exhibition will be awarded.

The sanctioned amount will be sent through crossed cheque to the Principal. Please furnish the bank account details as per the format enclosed with this letter.

The sponsored projects evaluation will be held in the Nodal Centre and the details of the nodal centre will be intimated shortly by e-mail / Website announcement.

Please visit our website for further announcements / information and for any clarifications please email to spp@kscst.iisc.ernet.in

Thanking you and with best regards,

Yours sincerely,



(H. Hemanth Kumar)

Copy to:

- 1) The Head of the Department of
Mechanical Engineering
K.S. Institute Of Technology,
Bengaluru - 560 062.
- 2) Mr. Anil Kumar A
Department of Mechanical Engineering
K.S. Institute Of Technology,
Bengaluru - 560 062.
- 3) The Finance Officer, KSCST, Bengaluru

Encl: As Above



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Mr. H. Hemanth Kumar
Executive Secretary

16th March 2020

Ref: 7.1.01/SPP/953

The Principal,
K.S. Institute of Technology,
Bengaluru - 560 062.

Dear Sir/Madam,

Sub : Sanction of Student Project - 43rd Series: Year 2019-2020
Your Project Proposal Reference No. : **43S_BE_1307**

Ref : Your Project Proposal entitled " **DESIGN AND FABRICATION OF SOLID WASTE COLLECTOR AND WATER DE-FROTHING DEVICE**

We are pleased to inform that your student project proposal referred above, has been approved by the Council under "Student Project Programme - 43rd Series" with a budgetary break-up as detailed below:

Student / s	Mr. M Venkatesh Kashyap Mr. Ashwin Maiya M Mr. Harshith S Mr. Manoj R	Budget	
		Particulars	Amount (Rs.)
Guide/s	Prof. Umashankar M	Travel	-
	-	Miscellaneous	500.00
Department	Mechanical Engineering	Report	500.00
		Total	5,500.00
Five Thousand Five Hundred Rupees Only			

The following are the guidelines to carryout the project work :

- The project should be performed based on the objectives of the proposal sent by you.
- The project should be completed in all respects and one copy of the hardbound report along with softcopy of the full report in a CD (.pdf format) should be submitted to KSCST.
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- Please quote your **project reference number printed above** in all your future correspondences.
- Important:** After completing the project, 2 to 3 page write-up (synopsis) needs to be sent by e-mail [spp@kscst.iisc.ernet.in] and should include following :
 - Title of the project
 - Name of the College & Department
 - Name of the students & Guide(s)
 - Keywords

6) Introduction / background

43S_BE_1307

(with specific reference to the project, work done earlier, etc) - about 20 lines

6) Objectives (about 10 lines)

7) Methodology (about 20 lines)

(materials, methods, details of work carried out, including drawings, diagrams etc)

8) Results and Conclusions

(about 20 lines with specific reference to work carried out)

9) Scope for future work (about 20 lines).

(Note: The write-up (Synopsis) should be sent with the approval of project guide. The softcopy of the write-up, in MS Word format, should be sent by e-mail (spp@kscst.iisc.ernet.in). In your e-mail, please also include project proposal reference number and title of the project.)

e) Projects selected for Seminar / Exhibition will be awarded.

The sanctioned amount will be sent through crossed cheque to the Principal. Please furnish the bank account details as per the format enclosed with this letter.

The sponsored projects evaluation will be held in the Nodal Centre and the details of the nodal centre will be intimated shortly by e-mail / Website announcement.

Please visit our website for further announcements / information and for any clarifications please email to spp@kscst.iisc.ernet.in

Thanking you and with best regards,

Yours sincerely,



(H. Hemanth Kumar)

Copy to:

- 1) The Head of the Department of
Mechanical Engineering
K.S. Institute Of Technology,
Bengaluru - 560 062.

- 2) Prof. Umashankar M
Department of Mechanical Engineering
K.S. Institute Of Technology,
Bengaluru - 560 062.

- 3) The Finance Officer, KSCST, Bengaluru

Encl: As Above



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Mr. H. Hemanth Kumar
Executive Secretary

16th March 2020

Ref: 7.1.01/SPP/953

The Principal,
K.S. Institute of Technology,
Bengaluru - 560 062.

Dear Sir/Madam,

Sub : Sanction of Student Project - 43rd Series: Year 2019-2020
Your Project Proposal Reference No. : **43S_BE_1310**

Ref : Your Project Proposal entitled " **DESIGN AND AUTOMATION OF NUTRIENT FEED SYSTEM TO ENHANCE GROWTH RATE IN HYDROPONICS**

We are pleased to inform that your student project proposal referred above, has been approved by the Council under "Student Project Programme - 43rd Series" with a budgetary break-up as detailed below:

Student / s	Ms. S Pechu Muthu Mr. Pramod Raj K Mr. Sagar N Mr. Sharath S Yadav	Budget	
		Particulars	Amount (Rs.)
Guide/s	Mr. Gautham S	Materials/Consumables	4,000.00
	-	Labour	-
	-	Travel	-
Department	Mechanical Engineering	Miscellaneous	500.00
		Report	500.00
Total			5,000.00

Five Thousand Rupees Only

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 - Name of the College & Department
 - Name of the students & Guide(s)
 - Keywords

- 6) Introduction / background
(with specific reference to the project, work done earlier, etc) - about 20 lines
- 6) Objectives (about 10 lines)
- 7) Methodology (about 20 lines)
(materials, methods, details of work carried out, including drawings, diagrams etc)
- 8) Results and Conclusions
(about 20 lines with specific reference to work carried out)
- 9) Scope for future work (about 20 lines).

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Please visit our website for further announcements / information and for any clarifications please email to spp@kscst.iisc.ernet.in

Thanking you and with best regards,

Yours sincerely,



(H. Hemanth Kumar)

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Mechanical Engineering
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Bengaluru - 560 062.
- 2) Mr. Gautham S
Department of Mechanical Engineering
K.S. Institute Of Technology,
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Mr. H. Hemanth Kumar
Executive Secretary

16th March 2020

Ref: 7.1.01/SPP/953

The Principal,
K.S. Institute of Technology,
Bengaluru - 560 062.

Dear Sir/Madam,

Sub : Sanction of Student Project - 43rd Series: Year 2019-2020
Your Project Proposal Reference No. : **43S_BE_3377**

Ref : Your Project Proposal entitled " **EMISSION REDUCTION OF DIESEL ENGINE BY USING
DPF, DOC AND INJECTING DIESEL EXHAUST FLUID IN
EXHAUST PIPE.**

We are pleased to inform that your student project proposal referred above, has been approved by the Council under "Student Project Programme - 43rd Series" with a budgetary break-up as detailed below:

Student / s	Mr. Vishwanatha B Naik	Budget	
		Particulars	Amount (Rs.)
	Mr. Chetan M Kumar		
	Mr. Hanamantappa	Materials/Consumables	5,000.00
	-	Labour	500.00
Guide/s	Dr. Nagaprasad K S	Travel	-
	-	Miscellaneous	500.00
Department	Mechanical Engineering	Report	500.00
		Total	6,500.00
Six Thousand Five Hundred Rupees Only			

The following are the guidelines to carryout the project work :

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 - Name of the students & Guide(s)
 - Keywords

6) Introduction / background

(with specific reference to the project, work done earlier, etc) - about 20 lines

6) Objectives (about 10 lines)

7) Methodology (about 20 lines)

(materials, methods, details of work carried out, including drawings, diagrams etc)

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(about 20 lines with specific reference to work carried out)

9) Scope for future work (about 20 lines).

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Please visit our website for further announcements / information and for any clarifications please email to spp@kscst.iisc.ernet.in

Thanking you and with best regards,

Yours sincerely,



(H. Hemanth Kumar)

Copy to:

- 1) The Head of the Department of Mechanical Engineering
K.S. Institute Of Technology,
Bengaluru - 560 062.

- 2) Dr. Nagaprasad K S
Department of Mechanical Engineering
K.S. Institute Of Technology,
Bengaluru - 560 062.

- 3) The Finance Officer, KSCST, Bengaluru

Encl: As Above

KARNATAKA STATE COUNCIL FOR SCIENCE AND TECHNOLOGY

Indian Institute of Science Campus, Bengaluru – 560 012

Website: <http://www.kscst.iisc.ernet.in/spp.html> || Email: spp@kscst.iisc.ernet.in

43rd Series of Student Project Programme: 2019-20

BEST PROJECT OF THE YEAR AWARD

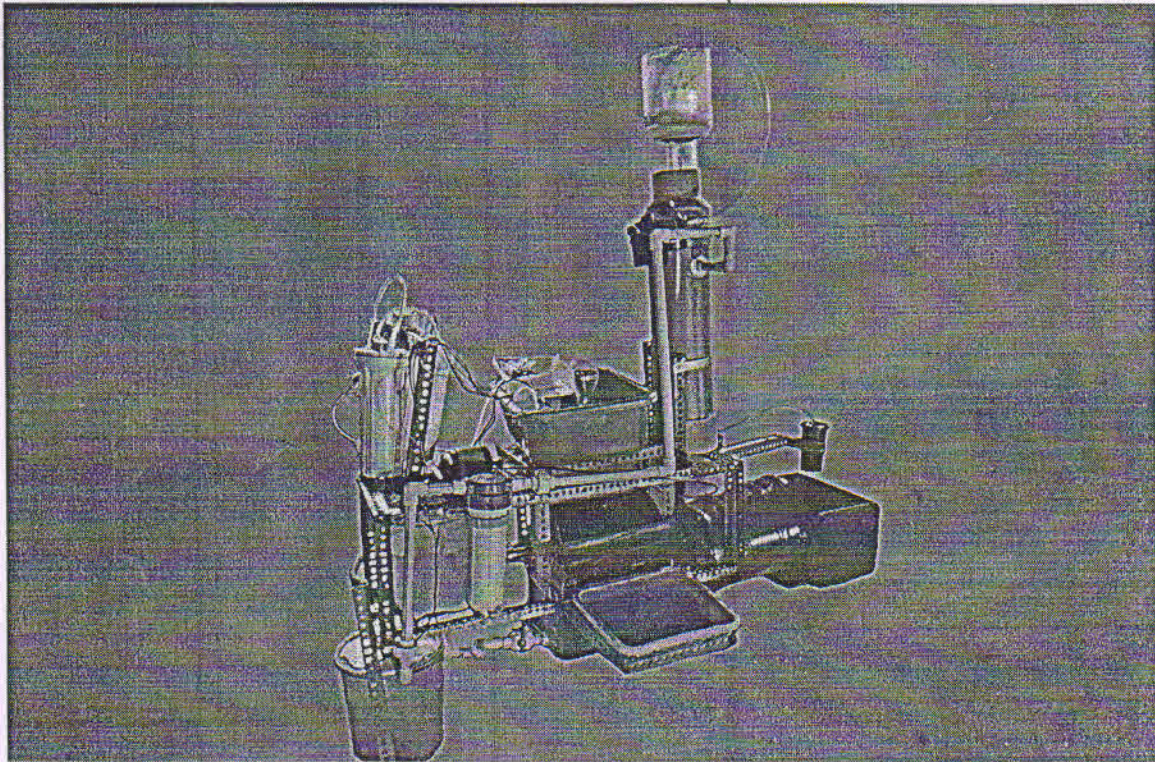
14) MECHANICAL ENGINEERING

69.	43S_BE_1307	DESIGN AND FABRICATION OF SOLID WASTE COLLECTOR AND WATER DE-FROTHING DEVICE COLLEGE: K.S. INSTITUTE OF TECHNOLOGY, BENGALURU GUIDE: Prof. UMASHANKAR M STUDENTS: Mr. M VENKATESH KASHYAP Mr. ASHWIN MAIYA M Mr. HARSHITH S Mr. MANOJ R
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Uthman
29/9/2020

BEST PROJECT OF THE YEAR – 2019-20 KSCST

DESIGN AND FABRICATION OF SOLID WASTE COLLECTOR AND WATER DE-FROTHING DEVICE, is a project completed by Ashwin Miaya, Harshith Sriniva, Venkatesh Kashyap and Manoj R, students of 8th semester, mechanical engineering, under the guidance of Associate Professor and Head of Department, Mr. Umashankar M. This project is funded and awarded as "The best project of the year" by Karnataka State Council for Science and Technology(KSCST) for the 43rd Student Project Program. This project is developed in order to contribute for the reduction in water pollution in metropolitan cities by removing organic and inorganic pollutants from water bodies.



J. Chawwa
29/9/2020



Karnataka State Council for Science and Technology

Indian Institute of Science Campus, Bengaluru - 560 012

Telephone: 080-23341652, 23348848, 23348849 ♦ Website: www.kscst.org.in

Certificate

This is to certify that *Prof. UMASHANKAR M* member of the faculty of
K.S. INSTITUTE OF TECHNOLOGY, BENGALURU

..... participated in the Student Project Programme (SPP) during the year
2019 - 2020 (43rd Series). He / She was the advisor to the group of students who completed the project
entitled *DESIGN AND FABRICATION OF SOLID WASTE COLLECTOR AND WATER DE-FROTHING DEVICE*

..... This
project was adjudged as "Best Project of the Year" during the online evaluation of projects held during
July - August 2020. This program was supported by Department of Science and Technology, Government of
Karnataka and Department of Science and Technology, Government of India.

Prof. Ashok M. Raichur
Secretary, KSCST and
Professor, Department of Materials Engineering, IISc

Prof. Govindan Rangarajan
Director, Indian Institute of Science and
Vice-President, KSCST