#### B2.6. Sponsored Research/Consultancy (2020-21, 2021-22, 2022,23)

(II) Details after evaluation (till the date of Compliance Report) (38,75,600=22,00,000 + 16,75,600)

#### **Research Project by Mechanical Engineering Department**

Name of the Faculty	Project Title	Project Type Research/Consultancy	Funding Agency	Amount	Duration
Dr. Rajesh Kumar	Development of Fault Identification System for Water Turbine Making Use of Vibration Signal and Artificial Intelligence	Research	AICTE New Delhi	17,00,000	2019-2022
Dr. Yogesh Verma	Semi-Analytical Scrutiny of Partially Submerged Rectangular Plate Mode Shapes Through Eigenvector with Experimental Validation	Research	GIA, SLIET	5,00,000/-	2022-2023
Total			÷	22,00,000/-	

#1

Department of Mechanical Engineering
Sant Longowal Institute of Engineer & Technology
LONGOWAL-143106, Distt. Sangrur (Punjab)
(Established by Govt. of India, Deemed University)

### B2.6. Sponsored Research/Consultancy (2017-2020)

### (I) Details as provided in the SAR previously

Name of the	Project Title	Project Type	Funding	Amount (Rs.)	Duration
Faculty		Research/Consultancy	Agency		
Dr. Rajesh Development of		Research	AICTE New	17,00,000/-	2019-2022
Kumar Fault			Delhi		
	Identification				
	System for Water				ix.
195	Turbine Making				
	Use of Vibration			·	
	Signal and	I =			-
	Artificial				
	Intelligence	,			
Mr. Surinder	Tribological	Research	TEQIP III	1,00,000/-	2019-20
Kumar	investigation of				
	synthesized				
	nanoparticles				
	based composite				
	lubricant	*			
Dr. Vivek	Development of	Research	TEQIP III	2,10,000/-	2019-20
Kumar	smart system for				· .
	monitoring of				
	surface				
	roughness in		41		
	turning process		- <u>-</u> -		
Total				20,10,000/-	

HEAD

Department of Mechanical England

Sant Longowal Institute of Log - 5 Technology

LONGOWAL-148106, Dist & VPunjab)

(Established by Govt. of India, Deemed University)



#### ALL INDIA COUNCIL FOR TECHNICAL EDUCATION

(A Statutory body under Ministry of HRD, Govt, of India) Nelson Mandela Marg, Vasant Kunj, New Delhi-110070,

Ref. No.: File No. 8- 39 /RIFD/RPS-NDF/Policy-1/2018-19

Date: 13 March 2019

The Drawing and Disbursing Officer All India Council for Technical Education Nelson Mandela Marg, Vasant Kunj, New Delhi-110070.

Sub: Release of a sum of Rs. 1680000/- being the 1<sup>st</sup> installment of the total grant of Rs. 1700000/- for conduct of Project under Research Promotion Scheme for Research Centres under National Doctoral Fellowship (RPS-NDF) during the financial year 2018-19.

Sir,

This is to convey the sanction of the Council for payment of Rs. 1680000/-(Rupees Sixteen Lakli Elghty Thousand Only) as 1<sup>st</sup> installment out of a total approved grant-in-ald of Rs. 1700000/- for conduct of a Project under the Research Promotion Scheme For Research Centres under National Doctoral Fellowship (RPS-NDF), as per details given below:-

Name and address of the Beneficiary :

Institution

(University / College / Institution)

Principal Investigator's Name

Dept./Course

III Grant-in-aid Sanctioned

IV Grant-in-aid Released as 1<sup>st</sup> installment

during the year 2018-19

V DurationVI Title of the Project

DIRECTOR / REGISTRAR / PRINCIPAL

SANT LONGOWAL INSTITUTE OF ENGINEERING AND TECHNOLOGY Longowal – 148106, Distt. Sangrur PUNJAB

DR. RAJESH KUMAR

MECHANICAL ENGINEERING

Rs. 1700000/- (Rs. 1500000/- for non-recurring and ,Rs.

200000/- for recurring expenditure)

Rs. 1680000/- [(Rs1500000/- Full amount of non-recurring) +

(Rs. 180000/-90 % of recurring sanctioned)]

3 Years

DEVELOPMENT OF FAULT IDENTIFICATION SYSTEM FOR

WATER TURBINE MAKINGUSE OF VIBRATION SIGNAL

AND ARTIFICIAL INTELLIGENCE

#### Terms and conditions

#### I. General:

- 1) The sanctioned grant-in-aid is debitable to the major "601.1(a) (RPS)" Gen. and is valid for payment during the financial year 2018-19.
- 2) The grant-in-aid shall be drawn by the Drawing and Disbursing Officer (DDO), All India Council for Technical Education, New Delhi on the Grants-in-aid bill and shall be disbursed to and credited to the Registrar/Director/Principal of SANT LONGOWAL INSTITUTE OF ENGINEERING AND TECHNOLOGY, Longowal 148106, Distt. Sangrur, PUNJAB through RTGS/PMFS.
- 3) The grantee institution shall open a separate account in a Bank to keep and maintain grant-in-aid released under Research Promotion Scheme. This would enable to keep a track of funds received, drawn by the Institute, interest earned.
- 4) The accounts of the grantee will be opened for test check by the Council or Comptroller & Auditor General of India or by any officer designated by them.

5) The Principal and PI of the institute are requested to verify the correctness of the under mentioned bank account/RTGS/PFMS details submitted by them along with the Proposal, in which the grant is being released. In case of any omission/deletion, the same should be reported to AICTE immediately along with refund of entire grant;

No.	Bank Name	Bank Branch	Bank Branch Address	Account Holder Name	Account Type	Account Number	IFSC Code
AAAAL6685R	Central Bank of India	SLIET Campus Longowal (3105)	SANT LONGOWAL INSTITUTE OF ENGINEERING AND TECHNOLOGY, Longowal, Sangrur Pin-148106	Director, SLIET, Longowal	Saving/ Current	1688335346	CBIN0283105

Contd.pg 2/-

#### II. Disbursement of grant-in-aid to the Institute

6) First installment comprising 100% of the non-recurring grant with 90% of sanctioned recurring grant is being released with this letter. The remaining 10% of the recurring grant shall be relmbursed to the beneficiary institute only after institute has submitted all the mandatory documents for each financial years (details given below) and submitted Project Completion Report in AICTE prescribed formats and other documents and on verification of utilization of grant Head-wise.

#### III. Utilization of grant-in-aid

- 7) The date of receipt of the grant by Institute shall be taken as the date of commencement of the project. The Registrar/Director/Principal of the Institute shall intimate receipt of the grant to AICTE. If the Institute/PI do not take-up the project work within 6 months of the receipt of the grant, approval shall *ipso facto* lapse and the Institute shall become liable to refund the entire grant to AICTE along with interest.
- 8) Any Expenditure, incurred prior to issuance of this Sanction Order, is not allowed to be adjusted. The institute/University shall not charge any overheads on this Project and will provide all the administrative support and timely release of grant to PI for completion of the Project.
- 9) The grantee shall utilize grants strictly for the purpose as specified and only on approved items as mentioned in the Sanction letter and maintain proper accounts of expenditure as per norms / procedures of AICTE / Government of India.
- 10) Grantee institution must follow GFR guidelines and rules in procuring sanctioned items and maintain an audited record of assets acquired wholly or substantially out of the grant-in-aid and a register for assets by the Institute in the prescribed form i.e. GFR-19. GOI GFR rules are at https://doe.gov.in/order-circular/general-financial-rules2017-18)
- 11) Re-appropriation of funds from one Head to another i.e. from Non-recurring to recurring and vice versa is strictly not permitted.
- 12) The equipment(s)/item(s) purchased from out of non-recurring should be as per the specifications and individual item-wise costs sanctioned by AICTE. Item-wise purchase cost shall be matched with the sanctioned cost while settling the accounts. The purchase cost below the sanction cost shall be restricted to actual cost, and in vice versa restricted to sanctioned cost and over and above cost shall be met by the Institute from its own resources.
- 13) Similarly, the recurring grant shall be utilized for the items sanctioned by the AICTE. This should not be used for travel abroad to attend Conference / seminars. However, for presenting a Paper in a Seminar / Conference within the country, the travel expenses may be met from the recurring grant. Further, expenditure incurred towards hiring of staff on contract basis shall be considered only if the same was recommended by the Experts and approved by AICTE. No budget be utilized for hiring permanent staff.
- 14) Interest accrued on the sanctioned grant-in-aid will be reported and refunded back to AICTE and not adjusted against the subsequent second installment. Similarly, unspent amount should also be refunded. Both should be refunded to AICTE through a demand draft in favour of `Member Secretary AICTE' payable at New Delhi.
- IV. Submission of mandatory documents by the Institute / PI:
- 15) The following documents, in the prescribed format, are required to be submitted to AICTE by the PI/Institute, as per time schedule given below:
  - i) Acknowledgement of receipt of grant and letter of acceptance of terms and conditions.
  - ii) Documents to be submitted within one month of completion of each financial year.
  - a) Annual Progress Report, indicating there in the number of patents, publications or any other achievement.
  - b) Utilization Certificate, Audited Utilization Certificate, Receipt & Payments, Statement of Expenditure.
  - c) Audited record of assets acquired wholly or substantially out of the grant-in-aid and a register for assets in the prescribed form i.e. GFR-19.
  - d) Separate Bills/vouchers related to Non-recurring and recurring expenditures duly signed & stamped by the PI & Head of the institution.
  - e) Stock entry register duly verified by the Store-in-charge and PI & counter signed by Head of Institution.
  - iii) <u>Documents to be submitted within two month of completion of the Project.</u>
  - a) Consolidated Utilization Certificate (UC), duly audited.
  - b) Duly audited statement of expenditure mentioning Head-wise break up of expenditure made from the grant-in-ald provided by the Council.
  - c) Project Completion Report duly signed & stamped by PI & Head of the institution with PEC recommendation.
  - d) Feedback form in AICTE format.

\*Prescribed formats of mandatory documents may be downloaded from <u>www.aicte-India.org/schemes/research-innovations-development-schemes</u>.

Contd. pg3/-

## ALL INDIA COUNCIL FOR TECHNICAL EDUCATION Nelson Mandela Marg, Vasant Kunj New Delhi-110070

Ref. No.: 8-29/RIFD/RPS-NDF/POLICY-1/2018-19

Name of the Principal Investigator & Dept./Course : DR. RAJESH KUMAR MECHANICAL ENGINEERING

Name of the Institution

: SANT LONGOWAL INSTITUTE OF ENGINEERING

AND TECHNOLOGY

Longowal - 148106, Distt. Sangrur PUNJAB

Title of the Project

: DEVELOPMENT OF FAULT IDENTIFICATION SYSTEM FOR WATER TURBINE MAKINGUSE OF

VIBRATION SIGNAL AND ARTIFICIAL

INTELLIGENCE

#### Approved Items of Expenditure (Non-Recurring)

SI.	Approved Items	No. of	Amt.
No.	(As per recommendation of Expert Committee)	Units	Recommended
1	Test rig of Francis turbine	1	
2	Test rig of pelton turbine	1	1
3	Centrifugal pump test rig	1	1
4	Uni-axial accelerometer	' 1	
5	Tri-axial accelerometer	1	
6	Acoustic transducer	2 -	1500000
7	DAQ system	1	
8	Tachometer	1	
9	Portable particle counter	1	
10	LabVIEW	3	
11	Pressure sensor	1	
12	Torque sensor	. 1	
		Total	1500000

(Dileep N Malkhede) Advisor (RIFD)

'9 8 MAR 2019

#### V. Request for Recast / Additional grant

- 16) No request for additional grant over and above the sanctioned grant shall be considered by the AICTE. The additional amount, if any, expended beyond the sanctioned grant shall be met by the Institute from its own
- 17) In case the grantee wishes to recast the Project, approval of Council must be obtained for the revise item of expenditure. The revise proposal should be within the total grant sanctioned by AICTE and duly supported with reasons and recommendations of the Project Evaluation Committee.

- a) The Institute must constitute a Project Evaluation Committee in the manner and for the purpose as defined in VI. Constitution of Project Evaluation Committee the RPS guidelines. PEC must regularly vouch progress of RPS-NDF project as also make recommendation etc. in APRs and PCR furnished by the Institute / PI.
  - b) Mid-term review of project will be done by AICTE.

#### VII. Others:

- 19) The assets acquired wholly or substantially out of All India Council for Technical Education's grant shall not be disposed or encumbered or utilized for the purpose other than those for which the Grant was given without proper sanction of the All India Council for Technical Education.
- 20) RPS-NDF project must be completed within the sanctioned time-limit. No extension shall be granted otherwise recommended by the PEC and approved by AICTE. Expenditure incurred beyond the project period shall not be entertained and claims shall accordingly be settled.
- 21) For all other issues including issues concerning change of PI or Institute etc., the grantee shall follow the terms and conditions of Research Promotion Scheme (RPS) as laid down by the Council from time to time.
- 22) The sanction issues in exercise of the powers delegated to the Council. It is also certified that grant-in-aid is being released in conformity with the rules and principles of the Scheme.
- 23) The institute should strictly observe all the terms & conditions contained in the Scheme details under RPS-NDF 2017-18.

As per Annexure-1 VIII. List of approved equipment:

Yours sincerely

(Dileep N. Malkhede) Advisor (RIFD)

MAR 2019

Copy forwarded for information and necessary action to:

- Regsitrar / Director / Principal, SANT LONGOWAL INSTITUTE OF ENGINEERING AND TECHNOLOGY, Longowal – 148106, Distt. Sangrur PUNJAB
- DR. RAJESH KUMAR, MECHANICAL ENGINEERING SANT LONGOWAL INSTITUTE OF ENGINEERING AND TECHNOLOGY, Longowal – 148106, Distt. Sangrur PUNJAB
- 3. OFFICE OF DIRECTOR GENERAL OF AUDIT GENERAL REVENUES, AGCR BUILDING I.P. ESTATE, NEW DELHI-110002.
- 4. Guard File



## Sant Longowal Institute of Engineering & Technology (Deemed to be University, Established by Government of India) Longowal, District- Sangrur, Punjab- 148 106 Office of Dean (Research & Consultancy)

Ref. No. SLIET/Dean/(R&C)/2023/104

Dated: 25/05/2023

OFFICE ORDER

Subject: Sanction of Research Promotion grant as seed money to the newly recruited faculty members.

As per terms and conditions contained in Office order bearing Ref. No. SLIET/Admn./4371-4374 dated: 12/10/2022, sanction of Competent Authority for Research Promotion Grant (RPG) as seed money is hereby communicated to the following newly recruited faculty members,

S. No. Name of Faculty/ PI Deptt		Deptt.	Title of Project	
1,	1. Dr. Jagdeep Singh		Design a machine learning- based framework for detecting malicious traffic in wireless networks	2- Year
2.	Dr. Tajinder Singh	CSE	TDA-Deep Learning for Threat, Derogation, and Animosity Detection in Social Media	2- Year
3.	Dr. Amar Nath	CSE	loRT and Artificial Intelligence Enabled Solution for Precision Agriculture	2- Ycar
4.	Dr. Utkarsh	CSE	Identifying Ethnically and Racially Discriminating Content on Social Network	2- Year
5.	Dr. Rishabh Verma	EIE	Campus Energy Surveillance and Data Acquisition System	2- Year
6.	Dr. Jaspreet Singh	EIE	Development of Low-Cost Thermal Imaging Framework for Biomedical Applications	2- Year
7.	Dr. Kundan Kumar	Design and Fabrication of Self-Multiplexing Circularly Polarized  ECE Antenna using Substrate Integrated Waveguide Technology for 5G and IoT Wireless Systems		2- Year
8.	Dr. Yogesh Verma	ME	Semi-Analytical Scrutiny of Partially Submerged Rectangular Plate Mode Shapes Through Eigenvector with Experimental Validation	2- Year
9,	Dr. Sudhir Kumar	Maths	B-Spline Based Algorithms for Hyperbolic Partial Differential Equations	2- Yenr
10.	Er. Ashwani Kumar	FET	Development and Characterization of Oleogel Based Functional Fat Spread	2- Year

- Sanction of the grant is subject to the terms and conditions as contained in Office order bearing Ref. No. SLIET/Admn/4371-4374 dated: 12/10/2022.
- The total sanction amount to an individual faculty may not exceed Rs. 5.00 Lac under head OH- 35 and OH- 31.
   in view of the requirement of individual faculty members for carrying out the research and further subject to a
   maximum sanction of Rs. 40.00 Lac under head OH- 35 and Rs. 10.00 Lac under head OH- 31 as seed money to
   all these 10 newly recruited faculty members.
- 3. Pls of above said research projects are responsible for maintaining of original files for their sanctioned projects.
- 4. Stock entry of materials/ items purchased for the sanctioned project (s) he recorded at the level of department as well as in the Central Store.

Copy to

- 1 Director
  2 Registrar
- 2 Registrar
- 3 Concerned BODs 4 Concerned Pls
- 5 DR (A&A)
- 6 FL(ACSS)
- 7. File copy

property



# Sant Longowal Institute of Engineering & Technology (Deemed to be University, Established by Government of India) Longowal, District- Sangrur, Punjab- 148 106 Office of Dean (Research & Consultancy)

Ref. No. SLIET/Dean/(R&C)/2023/382

Dated: 31/10/2023

#### Through Email

#### NOTICE

As per Office Order bearing Ref. No. SLIET/Dean (R&C))/2023/104 dated: 25/05/2023, Research Promotion granted as seed money was sanctioned to 10 No. newly recruited faculty members. Further, follow-up meeting about progress of their research projects was conducted on 26/10/2023 in the Office of Dean (R&C). It is requested to all the concerned faculty members to immediately procure the equipments under granted seed money as per already submitted project proposals.

Concerned, HODs are also requested to motivate the concerned faculty members to procure/submit the requirement of equipments up to 6<sup>th</sup> November, 2023 positively.

(Prof. Surinder Singh) Dean (R&C)

#### Copy to:

- 1. Director Cell for kind information.
- 2. Dean (P&D) for kind information.
- 3. Concerned HODs (CSE, EIE, ECE, Mech.Engg., Maths & FET) for information and circulation pl.
- 4. File copy.