# PART-A Proforma

# Format Applicable only for K-FIST (L1), K-FIST(L2) and ECRA schemes only

### **GRANT RELATED DOCUMENT (GRD)**

(To be submitted by Principal Investigator to VGST for an Approval)

GRD	No:					
SI. No.	Name of the Scheme	Duration of the Project	1 <sup>st</sup> instalment Allocated amount (Rs.in lakhs)	2 <sup>nd</sup> instalment Allocated amount (Rs.in lakhs)	Total Allocated amount (Rs.in lakhs)	Tick the appropriate
1	K-FIST (L1)	2 years	10.00	10.00	20.00	
2	K-FIST (L2)	2 years	15.00	15.00	30.00	
3	ECRA	2 years	5.00	5.00	10.00	<b>✓</b>

Title of the Project	"Investigating the Electrochemical Performance of Nanostructured					
	Materials Synthesized via Environmentally Friendly Methods for Lithium-					
v v	Ion Battery Applications".					
	PI Details	Co-PI Details				
Name	Dr. Sumantha H S	Mrs. Pavithra J				
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Department	Department of Physics	Department of Physics				
	900					
Name and Address	DR. K. RAMA NARASIMHA	DR. K. RAMA NARASIMHA				
of the Head of the	PRINCIPAL / DIRECTOR	PRINCIPAL / DIRECTOR				
Institution	K. S. SCHOOL OF	K. S. SCHOOL OF ENGINEERING				
(including Phone ENGINEERING &		& MANAGEMENT				
Nos. & Email)	MANAGEMENT	Email-id: principal@kssem.edu.in				
	Email-id: principal@kssem.edu.in	Ph. No <u>91 9900633688</u>				
	Ph. No <u>91 9900633688</u>	20				

# Summary of Part-A for 1st year

GRD no:	Scheme: ECRA	Phase/Year: 1st
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## Table 1:

	1st year/phase		
Sl. No.	List of non-recurring expenditure (Maximum up to 90%)	Total Total Amo	
NRE1	Microwave muffle furnace	01	3.30
NRE2	Hot air oven	01	0.86
NRE3	Ultrasonicator	01	0.20
NRE4	Magnetic stirrer with Hotplate and digital speed Indicator	01	0.14
	Total Non-recurring	(NRE)	4.5 Lakhs
Sl. No.	List of Recurring Expenditure (minimum of 10% shall be allocated)		Total Amount (Rs. in lakhs)
RE 1	Chemicals		0.30
RE 2	Glassware		0.05
RE 3	Plasticware		0.05
RE 4	Biological Specimen		
RE 5	Electrical & Electronics Spare Parts		0.05
RE 6	Mechanical Spare Parts		
RE 7	Contingency		0.05
RE 8	Books & Journals		
	Total Recurrin		0.50
	1 <sup>ST</sup> PHASE TOTAL NON-RECURRING AND RECUR	RING	5 lakhs

# Summary of Part-A for 2nd year

GRD no:	Scheme: ECRA	Phase/Year: 2 <sup>nd</sup>

## Table 2:

2 <sup>nd</sup> year/phase					
Sl. No.	(Maximum upto 90%)	Total Qty	Total Amount (Rs. in lakhs)		
NRE 1	Hydrothermal Reactor with Teflon liner 2		0.50		
		21			
NRE 2	Vacuum desiccator 1		0.15		
NRE 3	UV-Visible Spectrometer 1		3.5		
	Total non-recu	rring	4.00		
Sl. No.	List of Recurring Expenditure (Minimum of 10% shall be allocated)		Total Amount (Rs. in lakhs)		
RE 1	Characterization charges		0.50		
	Total Recu		0.50		
	2 <sup>nd</sup> PHASE TOTAL NON-RECURRING AND RECURI	RING	5 Lakhs		

## Table 3:

5 lakhs	Total Amount (1st year)	A)
5 lakhs	Total Amount (2 <sup>nd</sup> year)	B)
10 lakhs	GRAND TOTAL $(1^{ST} YEAR + 2^{ND} YEAR)$	C)

# TECHNICAL SPECIFICATIONS OF EQUIPMENT (For Non-Recurring Expenditure only)

## PROPOSED FOR 1ST YEAR

Sl. No.	Name of Equipment & Accessories	Quantity	Details of Technical Specifications as indicated/proposed in the e- procurement document
NRE 1	Microwave muffle furnace	01	Dimensions: 6"×6"×12" (WxHxD)  Material of Construction: Inner: High Alumna  Muffle Outer: Mild Steel Temperature Range: 400 °C to Max.  Temp:1200 °C Working Temp: 1200 °C  Temperature Accuracy: ± 0.1 °C. Temperature Controller:  Microprocessor based Temp. Controller (full PID) with soft-touch keys and front panel  calibration soft keys. Temp. Control: Better than ± 10° Cover the entire range.  Control Panel Consists of: (a) Mains On/Off switch,  (b) Temp Digital Display. Power supply: 230 V/440V ± 10%  Accessories: Spare fuses and 3mtrs Power chord
NRE 2	Hot air oven	1	(Body: Inner: Stainless Steel, SS 304. Outer: Mild Steel duly treated and painted avoid Corrosion. Dimensions: ID: 45 x 45 x 45 cms OD: 50 x 50 x 80 cms Capacity: 100 Liters Shelves/Trays: 2 Nos, SS, perforated. Can be adjusted to any Height Temperature control: Microprocessor based temp Controller with soft touch keys. Temp. Setting & Display: Digital, 7-segment dual, three digits display.)
NRE 3	Ultrasonicator	1	(Tank Capacity:2L Power: 50W Frequency:40KHz Stainless steel bath)
NRE 4	Magnetic stirrer with Hotplate and digital speed Indicator	1	Capacity: 5 Liters, Heating capacity: 500 W, External Dimension: 200x225x185 mm, Power Supply: 220-240Volts 50Hz Single Phase

PROPOSED FOR 2nd VEAD

	PROPOSED FOR 2" YEAR				
Sl. No.	Name of Equipment & Accessories	Quantity	Details of Technical Specification as indicated/proposed in the e- procurement document		
NRE 1	Hydrothermal Reactor with Teflon liner	01	Capacity: 50 ml Material: Shell made of quality stainless steel Teflon Liner materials		
NRE 2	Vacuum desiccator	01	Vacuum, with tabulated cover, stopcock, with spindle with 300 mm diameter		
NRE 3	Uv-Visible Spectrometer	01	Optical System Rowland off-circle arrangement  Single monochromator Double beam type Light source Halogen lamp, Deuterium lamp Wavelength range 190 to 1,100 nm  Wavelength accuracy +/-0.2 nm (at 656.1 nm)  Wavelength repeatability +/-0.1 nm  Spectral bandwidth (SBW) 1 nm		

## JUSTIFICATION FOR THE PURCHASE

(Applicable only for Non-Recurring Expenditure/ Equipment etc.)

## PROPOSED FOR 1st YEAR

SI. No.	List of the Equipment/ Item (relevant to carry out the proposed project)	Justification for the Purchase (in brief)
NRE 1	Microwave muffle furnnace	To synthesis and test the properties of materials at high temperatures, such as their strength, hardness, and thermal expansion
NRE 2	Hot air oven	To sterilise materials such as glassware, chemicals, and sealed containers
NRE 3	Ultrasonicator	Ultrasonicator are required for homogenization, dispersing, wet-milling, emulsification, extraction, lysis, disintegration, and chemical reactions.
NRE 4	Magnetic stirrer with Hotplate and digital speed Indicator	To conduct biological and chemical experiments by mixing two components.

## PROPOSED FOR 2<sup>nd</sup> YEAR

Sl. No.	List of the Equipment/ Item (relevant to carry out the proposed project)	Justification for the Purchase (in brief)
NRE 1	Hydrothermal Reactor with Teflon liner	Hydro thermal reactors are required to synthesis of nanomaterials by hydrothermal method
NRE 2	Vacuum desiccator	Vacuum desiccators remove air and moisture with the use of an in-house laboratory vacuum or vacuum pump and can be brought back to vacuum easily after opening.
NRE 3	UV-Visible Spectrometer	To study the absorption spectrum of the synthesized nanomaterials

### Institution/ Principal Investigator and Co- Principal Investigator shall abide by the following VGST

#### Terms & Conditions:

❖ Procurement for items Rs. 1.00 lakh and above shall be made strictly through E-tendering process using GoK E-portal as per KTPP Act.

❖ To facilitate hassle free procurement of equipment by the Grantee Institution, VGST desires to be flexible by permitting "Package Approval" instead of "Item-wise Approval" in procurement procedure under non-Recurring grants. Yet, the total Non-Recurring Expenditure shall not exceed approved amount.

❖ Further change in the Budget Estimate (Both Non-Recurring & Recurring) will not be entertained.

❖ For purchase of Items less than Rs.1.00 lakh, minimum 3 quotations have to be taken and to be purchased from the lowest quote.

❖ The proposal/PART-A proforma shall include Technical Specification of the Equipment (TSE) and Justification of the Purchase (JPE). This supportive information is most essential for Non-Recurring Budget Estimate.

❖ Procurement procedure has to be initiated as per KTPP act only after obtaining VGST's approval for PART-A proforma.

❖ It is mandatory to submit the equipment list in this VGST format only. If it is submitted in any other format, it is not acceptable to the VGST.

15. Long ( 20/6/14

Signature of Principal/Head of Institution
(With Seal)

Dr. K. RAIVIA NARASIIVIHA
Principal/Director
K S School of Engineering and Management
Bengaluru - 560 109

Sumantha. +1. s.

Signature of Principal Investigator

Signature of Co-PI

Date: 20-06-2024

Place: Bengaluru

<b>GRD</b>	No.	1
arm	110.	

	F 1 0 1
Scheme:	WCKA

# **PURCHASE COMMITTEE**

(APPLICABLE FOR PROCURING ITEMS INDICATED UNDER NON-RECURRING & RECURRING EXPENDITURES OF VGST APPROVED BUDGET ESTIMATE)

Sl. No.	Designation	Name	Signature
1	Principal/ Director	Dr. K. Rama Narasimha	14.600
2	Principal Investigator	Dr. Sumantha H S	Sumantha. HS
3	Co- Principal Investigator	Mrs. Pavithra J	Juth
4	Professor and Head of the Department -Applied Science (Applied Department)	Dr. C. Vasudev	Etasudev
5	Manager/ Finance Officer/ Accounts Officer/Office superintendent	Mrs. Vasudha N M	Wille
6	Professor and Head of the Department-Mechanical Engineering (other than applied department)	Dr. Balaji. B	Chalow: is

The Constitution/Structure of the Purchase Committee shall be as indicated above.

The purchase committee undertakes the responsibility of procuring only those Equipment/ Items indicated in the "VGST approved Budget Estimate" (both Non-Recurring & Recurring) by strictly adhering to the Guidelines, Terms & Conditions of VGST (VGST-GTC).

The decision, methodology in procurement of the items shall be recorded in the "Proceedings of the Purchase Committee" & shall obtain the signatures of all the members of the purchase committee.

The Purchase Committee takes the complete responsibility in case of any anomaly/violation is found in the

procurement procedure.

Any audit query regarding purchase procedure will be responded by the Purchase Committee.

Change in the members in the Purchase Committee is allowed only if there are any changes in the person holding the respective designations. In such cases, grantee institution should take necessary action to revise the committee as soon as there is any such change, and shall intimate to VGST immediately.