

Nandyal - 518501, A. P., India

FACULTY ON-GOING RESEARCH AND ANALYSIS (FORAY) SCHEME

Call for Research Proposals for Academic Year 2021-22

Research and Development activities form a very vital component in building the strength of the college. It is important for faculty to be engaged in research and development activities as part of their continuous learning program. The R&D activities of the college are directed towards facilitating advanced and multidisciplinary research in topics of current interest worldwide as well as to expose the students to the research world and thus helping them to learn. In light of this vision, the R&D Board of the college is coordinating various research activities at the central level.

In this direction, the college has initiated FORAY – Faculty On-going Research and Analysis – scheme as an opportunity for the faculty of the institution, either individually or in groups, to conceive, prepare and present research proposals in the prescribed format enclosed for the prospective funding under this scheme.

Procedure:

- Proposals shall be submitted to the Dean (R&D). The proposals will be scrutinized
 for completeness by the Dean (R&D) and all incomplete proposals or those lacking
 proper justification will be returned to the concerned faculty or investigating team
 for re-drafting.
- Proposals that clear the initial screening will be scheduled for review by the Central Project Review Committee (CPRC). The concerned faculty or investigating team shall make a presentation before the CPRC consisting of Principal, Dean (R&D), Head of the Department, 4 senior faculty members / subject experts nominated by the Dean (R&D).
- The project grant will carry a maximum amount of Rs 5 lakhs to support the research as proposed by the faculty member or investigating team and approved by the CPRC. In case of deserving cases a higher amount may be approved by the CPRC. The decision of the CPRC will be final and binding. Preference will be given to inter-disciplinary research followed by collaborative research and lastly individual research.

Project Duration:

The project shall be tenable for a maximum duration of One (1) year/ 12 Months

Last Date for Submission of Proposals: January 31, 2022

Dr. T. JAYACHANDRA PRASAD

M.E,Ph.D.,

PRINCIPAL

R G M College of Engg. & Tech.,

(Autonomous)

NANDYAL-518 501, Nandyal (Dt), A.P.



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Project Implementation Guidelines

- 1. The grant being released is for the specified research project and should be spent exclusively only for the said project. The investigating team shall submit the acknowledgement form for receipt of the grant in the specified format.
- 2. The investigating team shall maintain separate documentation and account statements for the activities and purchases carried out during the course of the project from the fund received for the same.
- 3. The grant shall be utilized only for the specific heads for which the sanction has been made and shall not be utilized for any other head. If there is a likelihood of the budget head exceeding the sanctioned amount, prior permission needs to be taken from the Principal for readjustment of budget from other sanctioned heads. In no circumstance shall the budget exceed the overall sanctioned amount.
- 4. The PI shall settle the accounts of the project immediately after the completion of the project.
- 5. The date of commencement of the project shall be the date of issue of the sanction order.
- 6. Any un-spent balance out of the amount sanctioned shall be returned to the institution after the completion of the project.
- 7. The following documents shall be submitted to the Dean (R&D) after 6 months of start of the project as well as at the end of the project in the specified format:
 - i) Statement of Expenditure from date of start till date of submission
 - ii) Utilisation Certificate
- 8. Periodic reviews will be conducted for monitoring the progress of the project. The PI along with his team is required to present the status of the work once every 3 months to assess progress vis-à-vis their stated project plan. The presentation shall be limited to 10 minutes covering topics as listed in the Project Completion Report.
- 9. Once the project is completed, the PI shall submit a Project Completion Report in the specified format giving full details of the work carried out, papers published and facilities developed.

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- 10. It shall be the full responsibility of the PI to ensure that the project is completed according to the proposal submitted and within the stipulated one year time. In the event of the PI leaving the institution during the project period, the Co-PI shall take over the responsibility for execution of the project.
- 11. Equipment or facilities established as a result of the grant shall be suitably identified or labelled as funded under 'FORAY'.

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FACULTY ONGOING RESEARCH AND ANALYSIS (FORAY) SCHEME

PAC Meeting Held on 22-01-2022: Recommendations and Resolutions

Review was held on 22-01-2022 for proposals received under FORAY for the academic year 2021-22. A total of 10 proposals were received across departments as listed below.

S. No	Title of Proposal	Dept		
1.	Synthesis of value added nitrogen heterocyclic hybrids as potential apoptotic neuroblastoma inhibitors useful in human health care			
2.	Deep Learning-Based Real-Time System for Monitoring Student Attention in the Classroom: A Method for Recognizing Student Behavior.			
3.	Heat and mass transfer enhancement of Single walled and Multi – walled carbon nanotubes based Maxwell nanofluid flow over rotating stretchable disks embedded in porous medium: Applications in environmental and agricultural sectors.			
4.	Heat Transfer enhancement of carbon – based nanofluid flow inside a cavity: Applications in environmental and agricultural sectors			
5.	The Level of Financial Literacy, According to Different Economic Classes and the Volume of savings in Stock Market in Rayalaseema Region			
6.	A Comparative study of APGB and SBI House loan rate of interest with effect on EMI -Territory of Nandyal district.			
7.	Ohmic Junction Based Tunnel FET for High Frequency and Low Power Applications			
8.	Data encoding techniques to improve the performance of System on Chip	ECE		
9.	Implementation of Fractional Order PID controller for waste water treatment			
10.	Natural convention heat transfer analysis of nanoliquid inside a closed chamber filled with carbon nanotubes	Physics		

The proposals were reviewed by the Program Advisory Committee (PAC) comprising the members:

1. Mr. K. Tippa Reddy

2. Mr. P. Jitendra Kumar

3. Dr. G. Ramachandra Reddy

4. 5. Dr. T. Jayachandra Prasad

5. Dr. B. Rami Reddy

6. Dr. B. B. Prahalada Rao

DGM, SPY Agro Industries, Nandyal.

MD, Entellous IoT Labs, Hyderabad.

Professor, VIT - Vellore.

Principal, RGMCET

Dean, Student affairs

Dean (R&D)

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PRINCIPAL
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The committee places on record its appreciation to all the faculty members who submitted and presented their proposals at the PAC meeting and is pleased to recommend for approval the following proposals and sanction of budget as indicated.

S N	Title of Proposol	Name of the faculty(s)	Dept	Sanction Order No	Budget sanction Rs.
1.	Deep Learning-Based Real-Time System for Monitoring Student Attention in the Classroom: A Method for Recognizing Student Behavior.	Dr. G. Kishor Kumar, Mr. M. Suleman Basha	CSE (DS)	RGM/FORAY/2021- 22/01	1,72,440.00

The budget sanction therein is to cover the activities of this projects only. no additional budgetary allocation will be made.

Based on the recommendations of the PAC, the institution is pleased to release the sanction orders for the above mentioned proposals in response to the call for proposals for the academic year 202\$\mathbb{2}\$-2\$\mathbb{2}\$. Other proposals, which were not taken up for consideration may be revised and resubmitted for possible funding for the next academic year.

Signed

Dean ?

Dean (Student affairs

Principal

Dr. T. JAYACHANDRA PRASAD M.E,Ph.D.,

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Sanction Order

Order No	RGM/FORAY/2021-22/01 15-02-2022			
Title of the Project	Deep Learning-Based Real-Time System for			
	Monitoring Student Attention in the Classroom: A Method for Recognizing Student Behavior.			
PI	Dr. G. Kishor Kumar			
Co-PI	Mr. M. Suleman Basha			

Sanction is accorded for implementation of the above mentioned project at a total cost of Rs. 1,72,440/- (Rupees one lakh seventy two thousand four hundred and forty Only) for a duration of 12 months and also to release an amount of Rs. 1,72,440/- (Rupees one lakh seventy two thousand four hundred and forty Only) to the Principal Investigator. The items of expenditure, for which the total allocation of Rs. 1,72,440/- has been approved, are given below:

S.No	Details of Equipment	Amount (Rs.)			
Equipment					
1	Cameras	15,000.00			
2	Microphones	30,000.00			
3	Dell PowerEdge T40	95,440.00			
4	Miscelleneous	12,000.00			
Contingency		20,000.00			
TOTAL		1,72,440.00			

Sanction of the grant is subject to the conditions as specified in the guidelines for implementation of FORAY research proposals.

The accounts of project shall be open to inspection by sanctioning authority/audit whenever the PI is called upon to do so.

The PI will furnish the Utilization Certificate and statement of expenditure pertaining to the grant immediately after the end of the project duration. Progress report needs to be furnished every six months.

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Principal Dr. T. JAYACHANDRA PRASAD
PRINCIPAL M.E,Ph.D.,

R G M College of Engg. & Tech., (Autonomous) NANDYAL-518 501, Name, al (Dt., san.)