

ACADEMIC PLANNING & DEVELOPMENT SECTION

Phone : (02462) 229242

Fax : (02462) 229574

Website: srtmun.ac.in

E-mail: apds.srtmun@gmail.com

शैक्षणिक वि.निधी / लशोप्र म.अवलोकन / २०१९-२० / ३७२

दि. ०९/०३/२०१९

प्रती

Mr. D. G. Vijiri, Assist. Prof. Shri Renukadevi Mahavidyalaya, Mahur, Dist. Nanded.	Dr. S. M. Reddy, Assoc. Prof. Gramin ACS Mahavidyalaya, Vasantnagar Kotgyal, Dist. Nanded.	Dr. B. B. Ghute, Assit. Prof., Toshiwal ACS College, Sengaon, Dist. Hingoli.
Dr. Amit Kumar Panday, Assist. Prof. Sharadchandra ACS College, Naigaon(BZ), Dist. Nanded	Mr. D.B. Chavan, Assist. Prof. Arts, Commerce & Science College, Gangakhed.	Mr. P D Satav, Assist. Prof. Science College, Nanded.
Mr. V. A. Jadhav, Assist. Prof. Digambarrao Bindu ACS College, Bhokar, Dist. Nanded.	Dr. J.V. Balkhande, Assist. Prof. Digambarrao Bindu ACS College, Bhokar, Dist. Nanded.	Mr. A. B. Gulwe, Assist. Prof., School of Technology, SRTMU Sub-Center, Latur.
Dr. S. S. Pekarmwar, Professor, School of Pharmacy, this University.	Dr. S. D. Khamitkar, Assoc. Prof., School of Computational Sciences, this University.	Dr. Parag Bhalchandra, Assist. Prof., School of Computational Sciences, this University.
Mr. Y. P. Lojge, Assist. Prof., School of Earth Sciences, this University.	Dr. R. V. Pinjari, Assist. Prof., School of Chemical Sciences, this University.	
Dr. Rupali S. Jain, Assist. Prof., School of Mathematical Sciences, this University.	Dr. G. S. Phad, Assist. Prof., School of Mathematical Sciences, this University.	

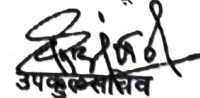
विषय: लघु शोध प्रकल्पाच्या Mid Term Review करिता उपस्थित राहण्याबाबत.

संदर्भ: शैक्षणिक/वि.निधी/लशोप्र ४/म.अहवाल/२०१८-१९/३२०६. दिनांक: ११/०३/२०१९.

महोदय/महोदया,

उपरोक्त विषयी सदरधीय पत्राच्या अनुषंगाने कळविण्यात येते की, विद्यापीठ निधीतून मंजूर केलेल्या लघु शोध प्रकल्पाच्या मंजूर अनुदानातून पहिल्या हप्त्यापोटी देण्यात आलेल्या रकमेतून प्रकल्पावर आपण आजपर्यंत केलेल्या कामाचा आढावा घेण्यासाठी Mid Term Review चे आयोजन दि. २३ जुलै २०१९ रोजी सकाळी ११.३० वाजता विद्यापीठात करण्यात आलेले आहे.

सदर मध्यावधी अवलोकनासाठी विषय तज्ज्ञांच्या समितीसमोर प्रत्यक्ष उपस्थित राहून लघु शोध प्रकल्पाचे सादरीकरण करणे अनिवार्य आहे. अन्यथा आपणास देय असलेली दुसऱ्या तथा अंतिम हप्त्याची रक्कम अदा करण्यात येणार नाही. तसेच आपणास मान्य करण्यात आलेला लघु शोध प्रकल्प रद्द करण्यात येईल.



उपकुलसचिव

शैक्षणिक नियोजन व विकास विभाग

प्रत माहितीस्तव :

मा. प्राचार्य / मा. संचालक, सर्व संबंधित महाविद्यालये व विद्यापीठ संकुले.



॥ सा विद्या या विमुक्तये ॥
स्वामी रामानंद तीर्थ मराठवाडा विद्यापीठ, नanded

"ज्ञानतीर्थ" परिसर, विशुपुरी, नanded - ४३११०९ (महाराष्ट्र)
SWAMI RAMANAND TEERTH MARATHWADA UNIVERSITY NANDED

"Dnyanteerth", Vishupuri, Nanded - 431606 Maharashtra State (INDIA)
Established on 17th September 1994 - Recognized by the UGC U/s 2(f) and 12(B), NAAC, Re-accredited with 'A' Grade

ACADEMIC PLANNING & DEVELOPMENT SECTION

website: srtmun.ac.in e-mail: apds.srtmun@gmail.com

Phone: (02462) 229242 Fax: (02462) 229574

APDS/Uni.MRP/Sci.& Tech.-Chemistry/2017-18/ 2961

March 21, 2018

To,
Dr. S. M. Reddy, Assoc. Prof.
Gramin ACS Mahavidyalaya,
Vasantnagar Kotgyal, Dist. Nanded.

Sub: Minor Research Project of S.R.T.M.Uni.Nanded- release of first installment.

Dear Sir,

This is inform you that, Hon'ble Vice-Chancellor has approved Minor Research Project entitled "Investigation of Reaction mechanism of some Heterocyclic compounds and Chalcone Derivatives through Computational Techniques" in the subject **Chemistry** under the faculty of **Science & Technology** to be undertaken by you. The financial assistance of the University would be limited to **Rs.100000/- (Rupees One Lakh only)** for the project for a period of two years, subject to the conditions given below. An amount of **Rs.92500/- (Rupees Ninety Two thousand Five Hundred only)** is to be released as the first installment on submission of undertaking certificate.

Sr. No	Purpose	Amount Sanctioned Rs.	Amount being released as 1 st installment Rs.
	Non Recurring		100%
01	Equipments (Soft ware only)	85000	85000
	Recurring		50%
02	Field work & Travel	5000	2500
03	Contingency (including special needs)	10000	5000
	Total	100000	92500

The grant is subject to the terms & conditions as mentioned below.

1. A certificate of Undertaking of the conditions governing the research project should be sent immediately to this office.
2. Utilization Certificate and detail report should be submitted time to time.
3. The proposed work will be evaluated Mid-termly and if satisfactory second installment will be released, failing which final installment will not be disbursed & the P.I. has to return the 1st installment with interest.
4. Date of implementation will be the date of sanctioned letter as mentioned in earlier letter.
5. P.I. has to submit the final Utilization Certificate and detail project report duly signed by Director and C.A. with publication within one month after completion of project. The research paper should be published in UGC recognized Journal/Peer reviewed Journal. The copy of the published paper/ acceptance letter/communicated paper must be attached with final report.
6. Every correspondence regarding this scheme should be done through the Principal of the College.
7. You have to submit revised proposal based on comments given by expert.
8. All Pro-forma (Undertaking, U.C., Statement of Expenditure, Field work, Annual/final report etc.) is available on University website www.srtmun.ac.in. These proforma should be submitted in duplicate for office use.

-sd-

Dy. Registrar

Academic Planning & Development Section

Encl: Undertaking certificate

Copy to: 1. The Principal, Gramin ACS Mahavidyalaya, Vasantnagar Kotgyal, Dist. Nanded.

2. The Finance & Account Officer, this University.



॥ सा विद्या या विमुक्तये ॥
स्वामी रामानंद तीर्थ मराठवाडा विद्यापीठ, नांदेड

"ज्ञानतीर्थ" परिसर, विष्णुपुरी, नांदेड - ४३१६०९ (महाराष्ट्र)
SWAMI RAMANAND TEERTH MARATHWADA UNIVERSITY NANDED

"Dnyanteerth", Vishnupuri, Nanded - 431606 Maharashtra State (INDIA)
Established on 17th September 1994 - Recognized by the UGC U/s 2(f) and 12(B), NAAC Re-accredited with 'X' Grade

Phone: (02462) 229242

ACCOUNTS SECTION

website: srtmun.ac.in

e-mail: faosrtmun@gmail.com

Ref.: Accts./Minor Res. Proj./2017-18/ 1248.

Date: 30.03.2018

31.

To:
The Principal,
Gramin ACS Mahavidyalaya,
Vasantnagar, Kotgyal, Dist. Nanded

Sub: - Release of Grants-in-aid For Minor Research Project awarded to
Dr. S.M. Reddy, Asso. Professor under Quality Upgradability Scheme

Ref: 1) शैनिविवि/विनि/लशोप्र(४)२०१८/२०१७-१८/३०४०, दिनांक २६.०३.२०१८
2) APDS/Uni-MRP/Sci & Tech- Chemistry/2017-18/2961, dt. 21.03.2018

Sir,

Please find enclosed herewith a Cheque No. 275289, dated 30.03.2018 amounting to Rs. 92,500/- towards the first instalment of Minor Research Project from University Fund awarded to Dr. S.M. Reddy, Associate Professor of your College under the scheme of Quality Upgradability.

The guidelines for the execution of the Research Project are already executed by the Dy. Registrar, Academic Planning and Development Section of the University. It is expected to follow the purchase procedure as per the Maharashtra Universities Common Account Code and provide the Utilization Certificate of the grants within the time limit.

Please acknowledge the receipt.

Yours faithfully,

Finance & Accounts Officer

Encl: As above.

Copy to:

- 1) Dr. S.M.Reddy, Assoc. Prof., Gramin ACS Mahavidyalaya, Vasantnagar, Kotgayal, Dist. Nanded
- 2) Dy. Registrar, Academic Planning and Development Section, this University.

**SWAMI RAMANAND TEERTH MARATHWADA UNIVERSITY, NANDED.
UNDERTAKING CERTIFICATE FOR MINOR RESEARCH PROJECT.**

Name and address of the Principal Investigator : **Dr. Sanjeev Machindra Reddy**

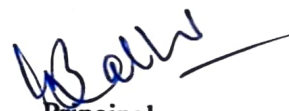
Title of the Project : **Investigation of Reaction Mechanism of Some Heterocyclic Compounds and Chalcone Derivatives Through Computational Techniques**

Broad Subject area/field of classification : **Chemistry**

I agree to the terms and conditions stated in the letter No. **APDS/Uni.MRP/Sci&Tech-Chemistry/2017-18/2961**, dated **21st March, 2018**. The date of start of the **Research Project** will be **1st April, 2018**. I undertake to present my progress through 'Mid-Term Review' and submit 'Final Report' with 'Utilisation Certificate' within stipulate period. I also undertake to publish at least one research paper in the university research journal and assure that one student would carry out 'Dissertation' under this project and would participate in 'Avishkar' Research Festival'.



Principal Investigator
(Dr. S. M. Reddy)



Principal
Principal
Gramin (Art. S. Comm. & Science)
Mahavidyalaya Vasananagar Kotgyl
Tq. Mukhed, Dist. Nanded

SWAMI RAMANAND TEERTH MARATHWADA UNIVERSITY, NANDED.

Annual Report of the work done on the Minor Research Project.
(Report to be submitted within 6 weeks after completion of each year)

1. Project report No. : 1st and 2nd
2. University letter Reference No. : APDS/Uni.MRP/Sci&Tech-Chemistry/2017-18/2961
3. Period of report: from March 2018 to March 2020
4. Title of research project : Investigation of Reaction Mechanism of Some Heterocyclic Compounds and Chalcone Derivatives Through Computational Techniques
5. (a) Name of the Principal Investigator : Dr. S. M. Reddy
(b) School / Dept. and College where work has progressed : Dept. of Chemistry, Gramin Mahavidyalaya, Vasantnagar Tq. Mukhed Dist. Nanded
6. Effective date of starting of the project : 1st April, 2018
7. Grant approved and expenditure incurred during the period of the report:
 - a. Total amount approved : Rs. 1,00,000/-
 - b. Total expenditure : Rs. 1,02,489/-
 - c. Report of the work done: (Please attach a separate sheet)
 - i. Brief objective of the project :

Computational study of plausible mechanisms in the preparation of derivatives of nitrogen containing heterocyclic compounds. The study of plausible mechanisms listed in the preparation of derivatives of chalcones. Computational techniques used for investigation of intermediate structures and binding energies of intermediates. Use of Density Functional Theory (DFT) and comparison of experimental details with theoretical one.

ii. Work done so far and results achieved and publications, if any, resulting from the work (Give details of the papers and names of the journals in which it has been published or accepted for publication : **Possible mechanism in the synthesis and investigation of heterocyclic compounds derived from oxa, thia and aza heterocycles as well as the plausible mechanism in chalcone derivatives are studied by computational techniques. The mechanism of 7-bromo-3 cyano-4-imino-2 methylthio-4H-pyrido[1,2-a]pyrimidine was studied.**

Paper presented in the National Conference on Advances in Chemical Sciences, organized by Yeshwant Mahavidyalaya, Nanded, Title of the paper : Investigation of reaction mechanism of some Nitrogen containing Heterocyclic compounds through Computational Techniques.

iii. Has the progress been according to original plan of work and towards achieving the objective. if not, state reasons : **Yes**

iv. Please indicate the difficulties, if any, experienced in implementing the project : **No**


v. If project has not been completed, please indicate the approximate time by which it is likely to be completed. A summary of the work done for the period (Annual basis) may submit to the University on a separate sheet. **Project Completed.**

vi. If the project has been completed, please enclose a summary of the findings of the study. Two bound copies of the final report of work done may also be sent to the University. **Copy Attached.**

vii. Any other information which would help in evaluation of work done on the project. At the completion of the project, the final report should indicate the output, such as
(a) Manpower trained (b) Ph. D. awarded (c) Publication of results (d) other impact, if any.



**SIGNATURE OF THE PRINCIPAL
INVESTIGATOR**



PRINCIPAL

Principal Investigator
Department of Chemistry
University of Madras
Chennai - 600 009

SWAMI RAMANAND TEERTH MARATHWADA UNIVERSITY, NANDED

UTILIZATION CERTIFICATE

Certified that the grant of Rs. 1,00,000/- (Rupees One Lakh Only) (Actual expenditure Rs. 1,02,489/-) received from the S.R.T.M. University under the scheme of support for Minor Research Project entitled **Investigation of Reaction Mechanism of Some Heterocyclic Compounds and Chalcone Derivatives Through Computational Techniques** in the subject **Chemistry** under faculty of Science vide University letter No. APDS/Uni.MRP/Sci&Tech-Chemistry/2017-18/2961 dated 21st March, 2018 has been fully utilized for the purpose for which it was sanctioned and in accordance with the terms and conditions laid down by the University/UGC.



PRINCIPAL INVESTIGATOR

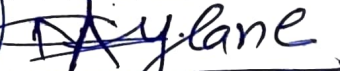


PRINCIPAL
Principal

Gramin (Art. & Comm. & Science)
Mahavidyalaya Vasantnagar Kotgyl
Tq. Mukhed, Dist. Nanded



For Manohar Ayalane & Co.,
Chartered Accountants
FRN No. 116195W



GA Manohar Ayalane
Proprietor
M.No.100740

SEAL AND SIGNATURE OF AUDITOR

SWAMI RAMANAND TEERTH MARATHWADA UNIVERSITY, NANDED


STATEMENT OF EXPENDITURE IN RESPECT OF MINOR RESEARCH PROJECT


1. Name of Principal Investigator : **Dr. Sanjeev Machindra Reddy**
2. Dept. of University/College : **Dept. of Chemistry,
Gramin Mahavidyalaya, Vasantnagar
Mukhed Dist. Nanded**
3. University approval No. and Date : **APDS/Uni.MRP/Sci&Tech-Chemistry/2017-18/2961
Date 21st March, 2018**
4. Title of the Research Project : **Investigation of Reaction Mechanism of Some
Heterocyclic Compounds and Chalcone Derivatives Through Computational Techniques**
5. Effective date of starting the project : **1st April 2018**
6. a. Period of Expenditure: From **April 2019 to March 2020**
- b. Details of Expenditure _____

Sr. No.	Item	Amount Approved Rs. (Installment wise)		Total	Expenditure Incurred Rs.		Total
		Ist	IInd		Ist	IInd	
1	Software	85,000.00	00.00	85,000.00	86,250.00	00.00	86,250.00
	a. Win. Home 10 64Bit Eng.				8050.85		8,050.85
	b. Microsoft Office H & S 2016				22,033.90		22,033.90
	c. NOB7 (Chemistry Software)				39,830.51		39,830.51
	d. QH Total Security IUIY				3,177.97		3,177.97
					86,250.00	00.00	86,250.00
2.	Contingency	5,000.00	5,000.00	10,000.00	5,506.00	5,273.00	10,779.00
	a. Internet Recharge				1,098.00	2,498.00	3,596.00
	b. Internet Recharge				1,098.00		1,098
	c. Toner Cartridge & Paper				1,620.00	2,775.00	4,395.00
	d. TA/DA				1,690.00		1,690.00
					5,506.00	5,273.00	10,779.00
3	Field and Travel	2,500.00	2,500.00	5,000.00	2,780.00	2,680.00	5,460.00
	a. TA/DA				1,790.00	380.00	2,170.00
	b. TA/DA				610.00	510.00	1,120.00
	c. TA/DA				380.00	1790.00	2170.00
					2,780.00	2,680.00	5,460.00
4	Investigator Contribution	2,036.00	453.00	2,489.00			
	Total	94,536.00	7,953.00	1,02,489.00	94,536.00	7,953.00	1,02,489.00



1. It as a result of check or audit objective, some irregularly is noticed, later date, action will be taken to refund, adjust or regularize the objected amounts.
2. Payment @ revised rates shall be made with arrears on the availability of additional funds.
3. It is certified that the grant of Rs. 1,00,000.00 (Rupees One Lakh only) (Actual expenditure Rs. 1,02,489/-) received from the University under the scheme of support for Minor Research Project entitled **Investigation of Reaction Mechanism of Some Heterocyclic Compounds and Chalcone Derivatives Through Computational Techniques** vide University letter No. APDS/Uni.MRP/Sci&Tech-Chemistry/2017-18/2961 Date 21st March, 2018 has been fully utilized for the purpose for which it was sanctioned and in accordance with the terms and conditions laid down by the University/UGC.


SIGNATURE OF PRINCIPAL
INVESTIGATOR


PRINCIPAL
Principal
B.A. (Art & Comm. & Science)
Mahavidyalaya Vasantnagar Kolga
Tq. Mukhed, Dist. Mandad

SEAL AND SIGNATURE OF AUDITOR
For Manohar Ayalane & Co.,
Chartered Accountants
FRN No. 116195W

CA Manohar Ayalane
Proprietor
M.No. 100740



Annexure VI

SWAMI RAMANAND TEERTH MARATHWADA UNIVERSITY,

NANDED PROFORMA FOR SUBMISSION OF PROJECT

DETAILS

1. Name of Investigator : **Dr. Sanjeev Machindra Reddy**
2. School / College : **Gramin (Arts, Comm. & Sci.) Mahavidyalaya, Vasantnagar**
3. Subject : **Chemistry**
4. Project Title : **Investigation of Reaction Mechanism of Some Heterocyclic Compounds and Chalcone Derivatives Through Computational Techniques**
 - a. Objectives : **Computational study of plausible mechanisms in the preparation of derivatives of nitrogen containing heterocyclic compounds. The study of plausible mechanisms listed in the preparation of derivatives of chalcones. Computational techniques used for investigation of intermediate structures and binding energies of intermediates. Use of density functional theory and comparison of experimental details with theoretical one.**
 - b. Methodology: **The results will be obtained using Gaussian 09 ab initio/DFT quantum chemical simulation. All possible confirmation of compounds optimized at gas phase and solvent phase using hybrid density functional-B3 LYP and Pople's split valence basis set with polarization and diffuse functions using default integration grid and without symmetry constraints.**
 - c. Interpretation : **The heterocyclic compounds derived from oxa,thia and aza heterocycles and plausible mechanisms in chalcone derivatives studied by computational techniques.**
 - d. Conclusion: **Computational study of plausible mechanisms in the preparation of derivatives of nitrogen containing heterocyclic compounds done. Computational techniques used for investigation of intermediate structures and binding energies of intermediates. Use of Density Functional Theory (DFT) and comparison of experimental details with theoretical one.**
5. Details of Financial Assistance :

Item	Amount Approved Rs.	Amount Received Rs.
1. Software	85,000.00	85,000.00
2. Contingency	10,000.00	10,000.00
3. Field work & Travel	5,000.00	5,000.00
Total	1,00,000.00	1,00,000.00

6. Sanctioned letter No. and date : **APDS/Uni.MRP/Sci&Tech-Chemistry/2017-18/2961**
Date **21st March, 2018**
7. In case, the project completed whether the work on the project has been published.
In National Conference
8. Summary of report in amount 1000 words may please be attached. **Copy Attached.**



(PRINCIPAL INVESTIGATOR)



(PRINCIPAL)

Principal
Grants (Arts, Comm. & Science)
Mahavidyalaya Vasantnagar Kotgiral
Tq. Mukhed, Dist. Nanded

ANNEXURE - III

STATEMENT OF INCOME & EXPENDITURE

Audited statement of Income & Expenditure in respect of **Minor Research Project** approved by the Swami Ramanand Teerth Marathwada University, Nanded vide letter No. APDS/Uni.MRP/Sci&Tech-Chemistry/2017-18/2961 dated **21st March 2018**

Income (Rs.)			Expenditure (Rs.)		
	Ist	IInd		Ist	IInd
1. Equipments (Software)	85,000/-		Convolt Systems, Nanded B. No. 126, Dt. 22/12/18	86,250/-	
			Total	86,250/-	
2. Fieldwork and Travel	2,500/-	2,500/-	Pune TA/DA Date 12/05/18	1,790/-	
			Nanded TA/DA Date 17/05/18	610/-	
			Nanded TA/DA Date 12/06/18	380/-	
			Pune TA/DA Date 22/05/2019		1,790/-
			Nanded TA/DA Date 25/05/2019		510/-
			Nanded TA/DA Date 10/06/2019		380/-
			Total	2,780/-	2,680/-
3. Contingency	5,000/-	5,000/-	Darshan Mobile, Mukhed B. No. 567 Dt. 13/05/18	1,098/-	
			Darshan Mobile, Mukhed B. No. 579 Dt. 12/07/18	1,098/-	
			Shrikant Xerox, Mukhed B. No. 1558 Dt. 17/08/18	1,620/-	
			TA/DA Dt. 05/06/18	1,690/-	
			Vishnu Mobile, Mukhed Date 15/05/2019		2,498/-
			Shrikant Xerox, Mukhed 1280, Date 23/07/2019		1,500/-
			Shrikant Xerox, Mukhed 1291, Date 23/02/2020		1,275/-
			Total	5,506/-	5,273/-
6. Investigator Contribution	2,036/-	453/-		94,536/-	7,953/-
Total :	94,536/-	7,953/-	Total :	1,02,489/-	

SIGNATURE OF PRINCIPAL
INVESTIGATOR

PRINCIPAL

Principal
Grama Arts. Comm. & Science
Mahavidyalaya Vasanthnagar Kolga
Tq. Mukhed, Dist. Nanded



SEAL AND SIGNATURE OF AUDITOR
For Manohar Ayalane & Co.,
Chartered Accountants
FRN No 116195W

CA Manohar Ayalane
Proprietor
M.No. 100740



॥ सा विद्या या विमुक्तये ॥
स्वामी रामानंद तीर्थ मराठवाडा विद्यापीठ, नांदेड
"ज्ञानतीर्थ" परिसर, विष्णुपुरी, नांदेड - ४३१६०६ (महाराष्ट्र)
SWAMI RAMANAND TEERTH MARATHWADA UNIVERSITY NANDED
"Dnyanteerth", Vishnupuri, Nanded - 431606 Maharashtra State (INDIA)
Established on 17th September 1994 - Recognized by the UGC U/s 2(f) and 12(B), NAAC Re-accredited with 'A' Grade

ACADEMIC PLANNING & DEVELOPMENT SECTION

Phone: (02462) 229242
Fax: (02462) 229574

website: srtmun.ac.in
e-mail: apds.srtmun@gmail.com

APDS/com. Cert./Uni. Fund- MRP-IV/2020-21/ **3644**.

June 10, 2021

To,
Dr. S. M. Reddy
Associate Professor
Gramin (Arts, Commerce & Science) Mahavidyalaya,
Vasantnagar Kotgyal, Dist. Nanded.

Sub: Completion for Minor Research Project.

Sir,

This is to certify that the Minor Research Project funded by the Swami Ramanand Teerth Marathwada University, Nanded in the subject for Chemistry, entitled "Investigation for Reaction mechanism for some Heterocyclic compounds and Chalcone Derivatives through Computational Techniques" under the faculty for Science and Technology sanctioned to you for Rs.100000/- (Rupees One lakh only) has successfully been completed, finalized and settled.


Director

Innovation, Incubation and Linkages