



Vinayak Vidnyan Mahavidyalaya, Nandgaon Kh.

Affiliated to Sant Gadge Baba Amravati University, Amravati

NAAC

Criterion-III

Research, Innovations and Extension

<https://vinayakmahankh.in> 

+91 7221222245 

vvm197@sgbau.ac.in 

Nandgaon Khandeshwar, Amravati 

CRITERION-III

3.2- Innovation Ecosystem



3.2.1 Institution has created an ecosystem for innovations and has initiatives for creation and transfer of knowledge (patents filed, published, incubation center facilities in the HEI to be considered)



VINAYAK VIDNYAN MAHAVIDYALAYA

Nandgaon Khandeshwar, Dist. Amravati

(An Institute run by Pravin Khodke Memorial Trust, Amravati)

Sau. Sulbha Sanjay Khodke
(MLA, Amravati)
President, P.K.M Trust, Amt.

College Code: 197, Ph. No. 07221-222245
Email: vvm197@sgbau.ac.in

Dr. Alka Anant Bhise
(Principal)
Mob.9823526341

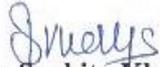
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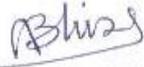
Dt. 10/05/2023

SELF DECLARATION

This is to certify that, the information, reports, true copies of the supporting documents, numerical data and web links furnished in this file are verified by I.Q.A.C. and head of the Institution and found correct.

Hence this certificate is issued.


Dr. Suchita Khodke
I.Q.A.C. Co-ordinator
Vinayak Vidnyan Mahavidyalaya
Nandgaon Kh.


Dr. Alka A. Bhise
PRINCIPAL
Vinayak Vidnyan Mahavidyalaya,
Nandgaon Khan, Dist. Amravati



3.2.1 Institution has created an ecosystem for innovations and has initiatives for creation and transfer of knowledge (patents filed, published, incubation center facilities in the HEI to be considered)

The institute has a well-defined and published research development and promotion policy. Faculty members are encouraged and financially supported to determine, accomplished, and explore the research. The effective implementation of annual performance appraisal system encourages faculty members to boost their teaching, research, and administrative skills. Faculty members are continuously motivated to undergo professional development programs and organize and participate in Conferences, Seminars and Workshops. Leave is granted and financial support is provided for research publication, membership fees, national/international conference fees. Teaching and non-teaching staff are encouraged to upgrade their qualifications and pursue part-time Ph.D. programs.

Human Resources: The institute recruits dynamic & highly qualified faculty to mentor and channelize the young minds. Institute has taken an initiative to encourage the faculty members to pursue their Ph.D. work. Faculty are also encouraged to participate in various skill enhancement programs under govt. schemes.

Research infrastructure: The College has sufficient facility to carryout research in the field of science and commerce. The faculty members write research projects and submit it to various supporting agencies like DRDO, DST, DBT, SERB, ISRO, CSIR etc. The IQAC is constantly trying to create research culture among faculty members and students.

Organization-Institute and Institute-Institute MoU: The institution has thirteen active MoUs with other academic institutes and non- academic organizations which sets out opportunities for students through Faculty Exchange Programme and invited expert academician through guest lectures on important topics. Many job-oriented courses are offered in cooperation with Career Katta for students and unemployed graduates. The institute has active MOUs with government local bodies like Tahsil Office and Panchayat Samiti office which help to implement the social activities for the betterment of the society. We have five research collaborations with other institutes.

Institute-Institute Research Collaborations:

The institution has five research collaboration with other academic institutes and under which 42 research papers were published up till now.

Patents Published:

The college has 2 Patents published by Dr. Prashant Kharat, Department pf Physics. We are constantly motivating and facilitating the Staff members and students for patenting their innovative ideas and provide platform for it.

Contents

- 1. Research Development and Promotion Policy**
- 2. Financial Support to Staff Members Under the Research Promotion Policy**
- 3. Patents Published**
- 4. Institute-Institute Research Collaborations**
- 5. Activities Under Research Collaborations**



1. Research Development and Promotion Policy



VINAYAK VIDNYAN MAHAVIDYALAYA

Nandgaon Khandeshwar, Dist. Amravati

(An Institute run by Pravin Khodke Memorial Trust, Amravati)

Sau. Sulbha Sanjay Khodke
(MLA, Amravati)
President, P.K.M Trust, Amt.

College Code: 197, Ph. No. 07221-222245
Email: vvm197@sgbau.ac.in

Dr. Alka Anant Bhise
(Principal)
Mob.9823526341

Research Development and Promotion Policy

The college is bounded to encourage growth in the research activities like enhancement in the research publications in peer reviewed journals, research Projects/ grants, patents, collaborations, doctoral program, and faculty development program. In view of this the college propose the research development and promotion polices in the following categories:

- All eligible faculty members should be register as Ph.D. Supervisor in the University.
- Research publications of Faculty members in peer reviewed journals /reputed journals are appreciated with appropriate incentives.
- The Research ethics must be followed by the staff members and the practices like invention, falsification, plagiarism etc. are strictly prohibited.
- The Budget for Research expenses in terms of financial support to the staff members for Research publications/ Conferences/Professional bodies membership fees/Faculty development programs shall be sanctioned by the College Development Committee (CDC).
- The IQAC coordinator has all rights to sanction money up to 20,000 for research fundings for smooth functioning.

VINAYAK VIDNYAN MAHAVIDYALAYA

Nandgaon Khandeshwar, Dist. Amravati

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College Code: 197, Ph. No. 07221-222245
Email: yvm197@sgbau.ac.in

Dr. Alka Anant Bhise
(Principal)
Mob.9823526341

- Before submission of any publication and research paper, must clear plagiarism checking.
- Every doctorate faculty members are encouraged to apply for a government funded project or they can apply for internal project with an aim to apply for external funding. To initiate the project there is a provision for providing seed money.
- The College shall provide the infrastructure required to conduct the funded research.
- All departments shall make every effort for recognition by National/International agencies through schemes/funding such as DST, DBT, UGC etc.
- Faculty members are encouraged to identify inter-disciplinary research in their chosen field of research.
- The departments of the college shall tie-up with industries and corporate bodies to undertake funded research in emerging areas and industry relevant areas.
- All innovative projects of faculty members are assigned for filing patents on successful completion
- All research conducted shall be covered by IPR and copyright laws.

Date: 11/05/2017


Dr. Waman K. Pokale

PRINCIPAL
Vinayak Vidnyan Mahavidyalaya,
Nandgaon Khan. Dist. Amravati



**2. Financial Support to Staff Members Under the
Research Promotion Policy**



2. Financial Support to Staff Members Under the Research Promotion Policy

Teachers provided with financial support to attend conferences/workshops and towards membership fee of professional bodies:

Year	2017-18	2018-19	2019-20	2020-21	2021-22
Number	3	1	0	9	13

Teachers provided with financial support to attend conferences/ workshop and towards membership fee of professional bodies

Year	Name of teacher	Name of conference/ workshop attended for which financial support provided	Name of the professional body for which membership fee is provided	Amount of support received (in INR)
2017-18	Mr. S.S. Joshi	Faculty Development Program on Empowering Academic Excellence with an Overview of Industry 4.0		1000
2017-18	Dr. Suchita P. Khodke	State Level Seminar on Current Scenario of Botanical Research		600
2017-18	Dr. V.K Pokale		Principal's Forum Nagpur University, Nagpur [R.T.M.]	2500
2018-19	Mr. Manoj Kale	Workshop		3550
2018-19	Mr. Manoj Kale		Membership fee	500
2019-20	NILL	NILL	NILL	NILL
2020-21	Dr. Anant Wadatkar	NANOMAT-2020		2000
2020-21	Dr. Prashant Kharat	NANOMAT-2020		2000
2020-21	Mr. Ajay Ambhore	NANOMAT-2020		2000

Vinayak Vidnyan Mahavidyalaya Nandgaon Kh.

2020-21	Dr. Nitesh Chore	ILA Conference Fee		300
2020-21	Dr. Nitesh Chore	ILA Paper Publication Fee		1000
2020-21	Dr. Nitesh Chore	Orientation Program Ramanujan College		1100
2020-21	Dr. Nitesh Chore	Refresher Course- Library Science		1500
2020-21	Dr. Gajendrasingh Pachlore	ICICI Bank		900
2020-21	Dr. Gajendrasingh Pachlore	Refresher Course in Life Sciences		1000
2021-22	Dr. Anant S. Wadatkar	2nd International Conference on Recent Advance in Materials Science & Nanotechnology (RAMAN-2022)		2000
2021-22	Dr. Gajendrasingh Pachlore		Book Publication- Dhyanpath	2000
2021-22	Dr. Dashrath Kale		Publication Fee	500
2021-22	Dr. Kavita Kakade	ICMRS-2023		1500
2021-22	Dr. Nitesh Chore	Refresher course in Library and Information Science		1000
2021-22	Dr. Kavita Kakade	Manuscript Submission/DOI		700
2021-22	Dr. Gajendrasingh Pachlore	ASC College UGC Account		600
2021-22	Dr. Dashrath Kale	Publication fee		500
2021-22	Dr. Gajendrasingh Pachlore	Refresher Course in Life Sciences		1000
2021-22	Dr. Gajendrasingh Pachlore		ESDA India	1000
2021-22	Dr. Vinod Sherekar	ICMRS-2023		1500
2021-22	Dr. Gajendrasingh Pahlore		Book Publication	2000
2021-22	Dr. Pratibha Mahalle		Publication Fee	850

Academic Year: 2017-18

Teachers provided with financial support to attend conferences/ workshop and towards membership fee of professional bodies				
Year	Name of teacher	Name of conference/ workshop attended for which financial support provided	Name of the professional body for which membership fee is provided	Amount of support received (in INR)
2017-18	Mr. S.S. Joshi	Faculty Development Program on Empowering Academic Excellence with an Overview of Industry 4.0		1000
2017-18	Dr. Suchita P. Khodke	State Level Seminar on Current Scenario of Botanical Research		600
2017-18	Dr. V.K Pokale		Principal's Forum Nagpur University, Nagpur [R.T.M.]	2500
Total				4100

Vinayak Vidnyan Mahavidyalaya Nandgaon Kh.

Audit Statement 2017-18

VINAYAK VIDNYAN MAHAVIDYALAYA , NANDGAON KHANDESHWAR
GRANT ACCOUNT
RUN BY PRAVIN KHODKE MEMORIAL TRUST, AMRAVATI
F / 8513 / AMT. & MAHA / 9296 / AMT.
RECEIPTS & PAYMENTS STATEMENT FOR THE YEAR ENDED 31ST MARCH 2018

RECEIPTS	AMOUNT	PAYMENTS	AMOUNT
OPENING BALANCES	194984.45	University Fees Paid (As per Annexure "A")	369765.00
Cash in Hand	1226.00		
Bank of Maharashtra, SB - 53179	80605.20		
Central Bank of India, SB - 37397	5828.50	Contingencies Expenses (As per Annexure "B")	439722.50
State Bank of India, CA - 28318	23070.25		
State Bank of India, SB - 31494	84234.50		
Grant Received	5681767.00	Salary Expenses	4727809.00
Salary Grant	4727809.00	Basic Pay	1546810.00
CHB Salary Grant	887520.00	Grade Pay	353200.00
DA Arrears	66438.00	D.A.	2538998.00
		H.R.A.	190001.00
Bank Interest Received	327.00	T.A.	64800.00
Interest Received From University	21006.00	C.L.A.	14000.00
Fees Received From Students	384745.00	Special Allowance	20000.00
Student Fees Received Against Scholarship	341515.00	CHB Salary Paid	887520.00
University Exam. Grant Received	15000.00	DA Arrears Paid	66438.00
Salary Deduction	700912.00	Salary Deduction Paid	700912.00
DCPS	301388.00	DCPS	301388.00
LIC	72824.00	LIC	72824.00
Profession Tax	24500.00	Profession Tax	24500.00
TDS	302200.00	TDS	302200.00
Loans & Advances Received From PKMT	140000.00	Loans & Advances Return To PKMT	74000.00
Vinayak Vidnyan Non Grant A/c.	16242.00	Vinayak Vidnyan Non Grant A/c.	16484.00
Sundry Creditors	14673.00	FIXED ASSETS	112273.00
Aditya Scientific Arts	7000.00	Projector Purchase	15000.00
Veeval Enterprises	7673.00	Books Purchase	29410.00
Accounting Charges Payable (F.Y. 17-18)	8000.00	Computer Purchase	59890.00
Audit Fee Payable (F.Y. 17-18)	9440.00	Laboratory Equipment	7973.00
		CLOSING BALANCES	133667.95
		Cash in Hand	1667.00
		Bank of Maharashtra, SB - 53179	29961.20
		Central Bank of India, SB - 37397	6049.50
		State Bank of India, CA - 28318	12522.75
		State Bank of India, SB - 31494	83467.50
TOTAL RS...	7528591.45	TOTAL RS...	7528591.45

Date : 08.10.2021
Place : Amravati

Checked & found to be correct
For Shah Baheti Chandak & Co.
Chartered Accountants
FRN 108513w

Sulbha S. Khodke, President
Dr. Suchita P. Khodke, Vice President
Dr. Suchita P. Khodke, Principal
PRINCIPAL
VINAYAK VIDNYAN MAHAVIDYALAYA
NANDGAON KH. DIST. AMRAVATI

CA Rajesh Chandak, Partner
M. No. 41917
UDIN : 21041917AAAAEC4533

Vinayak Vidnyan Mahavidyalaya Nandgaon Kh.

VINAYAK VIDNYAN MAHAVIDYALAYA , NANDGAON KHANDSHWAR
GRANT ACCOUNT FOR THE YEAR ENDED 31ST MARCH 2018

Annexure "A"
University Fees Paid :-

Annual Fees	28980.00
Affiliation Fees	5000.00
Ashwamegh Fees	12420.00
Corpus Fund	2070.00
Student Welfare Fund	4140.00
Student Council Fee	2070.00
Student Safety Insurance	4140.00
Emergency Fund	4140.00
Examination Fees	263505.00
Enrollment Fees	19300.00
Entry Fees	2300.00
Gazette Fees	1000.00
Sport Fees	20700.00
Total...	369765.00

Annexure "B"
Contingencies Expenses :-

Building Rent	180000.00
Bank Charges	2993.50
Printing & Stationary Expenses	42291.00
Electricity Expenses	26670.00
Telephone Expenses	17578.00
EPF Consultancy Fees	50000.00
College Expenses	10825.00
News Paper & Periodicals	5108.00
Laboratory Expenses	28628.00
Repairs & Maintenance Exps	19601.00
Annual Function Expenses	7073.00
College Scholarship Paid to Student	4800.00
Audit Fee (F.Y. 13-14 & 17-18)	16520.00
Accounting Charges (F.Y. 17-18)	8000.00
Photo Copy Expenses	15535.00
Research Expenses	4100.00
Total...	439722.50

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PRINCIPAL
VINAYAK VIDNAYAN MAHAVIDYALAYA
NANDGAON KH. DIST. AMRAVATI

प्रति-
प्राचार्य
विनायक विद्यालय महविद्यालय
नांदगाव खरी.

अर्जदार: सा. श्रीकांत एस. जोशी.

महोदय, मी विमती पुर्विक मजि साह्य कुमारे छि
दि. 21/12/2017 ते 23/12/2017 साताकावधीमध्ये
सीपना आम्बियासीकी महाविद्यालयमध्ये (दोक घातकी
कार्यशाळेला (A Three Days Faculty Development
Program) मध्ये मी प्रख्या करिता 2000-1000
संख्ये करवात आहे.

Shri Kale
18/12-17
Cheno-923609
Mno-10001-1

18/12/2017
आफला विरवायु.



UGC Sponsored
State Level Seminar on
Current Scenario of Botanical Research
February 2nd, 2018
Organized by: Department of Botany
Shri Shivaji College of Arts, Commerce and Science, Akola – 444003 (MS)
In Collaboration with SGBAU, Botany Teachers Association

Receipt No. 132 Date: 02/02/2018

Received with thanks from Prof./Dr./Mr./Mrs. Suchita Khadke
Vidya Vinayak mandir Nandgaon Khandeshwar
an amount of Rs. Six hundred only
by Cash / RTGS/ Draft / Cheque No. Dated On
account of Registration / Accommodation / Advertisement / Donation / Sponsorship fees for
SSCSBR – 2018

Signature

PRINCIPAL'S FORUM NAGPUR UNIVERSITY, NAGPUR (R.T.M.)

Receipt No. 549 **Receipt** **KIT Issue** Date 1/07/2017

Received the Amounts of Rs. 2500/- by Cash / D.D. / Cheques
(in Words) Two thousand five hundred only
from Shri / Dr. M. K. Pakale
on Account of Reg.
Registration fee
Cashier / Secretary

Academic Year: 2018-19

Teachers provided with financial support to attend conferences/ workshop and towards membership fee of professional bodies				
Year	Name of teacher	Name of conference/ workshop attended for which financial support provided	Name of the professional body for which membership fee is provided	Amount of support received (in INR)
2018-19	Mr. Manoj Kale	Workshop		3550
2018-19	Mr. Manoj Kale		Membership fee	500
Total				4050

Vinayak Vidnyan Mahavidyalaya Nandgaon Kh.

Audit Statement 2018-19

VINAYAK VIDNYAN MAHAVIDYALAYA, NANDGAON KHANDESHWAR
GRANT ACCOUNT
RUN BY PRAVIN KHODKE MEMORIAL TRUST, AMRAVATI
F/8513/AMT. & MAHA/9296/AMT. [REDACTED]
RECEIPTS & PAYMENTS STATEMENT FOR THE YEAR ENDED 31ST MARCH 2019

RECEIPTS		AMOUNT	PAYMENTS		AMOUNT
OPENING BALANCES		133667.95	University Fees Paid		429566.00
Cash in Hand	1667.00		(As per Annexure "A")		
Bank of Maharashtra, SB - 53179	29961.20		Contingencies Expenses		541326.40
Central Bank of India, SB - 37397	6049.50		(As per Annexure "B")		
State Bank of India, CA - 28318	12522.75		Salary Expenses		3380912.00
State Bank of India, SB - 31494	83467.50		Basic Pay	1076980.00	
Grant Received		8557546.00	Grade Pay	254200.00	
Salary Grant	3380912.00		D.A.	1863814.00	
CHB Salary	5083560.00		H.R.A.	133118.00	
DA Arrears	93074.00		T.A.	52800.00	
Bank Interest Received		240.00	CHB Salary Expenses		5083560.00
Interest Received From University		14652.00	DA Arrears Paid		93074.00
Fees Received From Students		847230.00	Employee Medical Reimbursement		62229.00
Student Fees Received Against Scholarship		436862.50	Salary Deduction Paid		534594.00
University Exam. Grant Received		65470.00	DCPS	319562.00	
Employee Medical Reimbursement		62229.00	LIC	85032.00	
Salary Deduction		534594.00	Profession Tax	22500.00	
DCPS	319562.00		TDS	107500.00	
LIC	85032.00		Loans & Advances Given		268770.00
Profession Tax	22500.00		Loan Returned To PKMT	208000.00	
TDS	107500.00		Loan Returned To Vinayak Vidnyan Mahavidyalaya, Non Grant A/c.	19770.00	
Loans & Advances Received From PKMT	129000.00	149000.00	Vinayak Vidya Mandir Sr. College	41000.00	
Vinayak Vidnyan Non Grant A/c.	20000.00		Sundry Creditors Paid		14673.00
Sundry Creditors		54659.00	Aditya Scientific Arts	7000.00	
Sudhir Enterprises	54659.00		Veeval Enterprises	7673.00	
Accounting Charges Payable (F.Y. 18-19)		8000.00	FIXED ASSETS		178749.00
Audit Fee Payable (F.Y. 18-19)		9440.00	Sound System Purchase	13500.00	
CHB Salary Payable	1520200.00		Books Purchase	11358.00	
			Computer Purchase	9400.00	
			Furniture Purchase	137991.00	
			Thumb Machine Purchase	6500.00	
			CLOSING BALANCES		1806337.05
			Cash in Hand		2574.00
			Bank of Maharashtra, SB - 53179		1549419.80
			Central Bank of India, SB - 37397		6264.50
			State Bank of India, CA - 28318		6582.75
			State Bank of India, SB - 31494		241496.00
TOTAL RS		12393790.46	TOTAL RS		12393790.46

Date : 08.10.2021
Place : Amravati

Checked & found to be correct
For Shah Baheti Chandak & Co
Chartered Accountants
FRN 109513w

CA Rajesh Chandak
Partner
M. No. 41917
UDIN 21041917AAAAEE9972

Dr. Alka A. Bhoir
Principal
PRINCIPAL
VINAYAK VIDNYAN MAHAVIDYALAYA
NANDGAON KH. DIST. AMRAVATI

Vinayak Vidnyan Mahavidyalaya Nandgaon Kh.

VINAYAK VIDNYAN MAHAVIDYALAYA , NANDGAON KHANDESHWAR
GRANT ACCOUNT FOR THE YEAR ENDED 31ST MARCH 2019

Annexure "A"
University Fees Paid :-

Annual Fees	29120.00
Convocation & Degree	5000.00
Ashwamegh Fees	12480.00
Corpus Fund	2080.00
Student Welfare Fund	4856.00
Student Council Fee	2080.00
Student Safety Insurance	4160.00
Emergency Fund	4160.00
Examination Fees	321020.00
Enrollment Fees	16600.00
Entry Fees	3200.00
Gazette Fees	1000.00
Sport Fees	20800.00
Registration Fee	2700.00
Immigration Fee	310.00
Total...	429566.00

Annexure "B"
Contingencies Expenses :-

Building Rent	180000.00
Advertisement Expenses	27090.00
Accounting Charges (F.Y.13-14 To 15-16 & 18-19)	26000.00
Audit Fee (F.Y.18-19)	9440.00
Bank Charges	3788.40
Printing & Stationary Expenses	38156.00
Electricity Expenses	37630.00
Telephone Expenses	13812.00
College Expenses	12710.00
News Paper & Periodicals	21300.00
Computer Expenses	4250.00
Scholarship Paid to Student	5400.00
Laboratory Expenses	98292.00
Maintenance & Repairs Exps	12368.00
NAAC Registration Fee	35600.00
Annual Function Expenses	7440.00
College Website Expenses	4000.00
Research Expenses	4050.00
Total...	541326.40

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PRINCIPAL
VINAYAK VIDNAYAN MAHAVIDYALAY/
NANDGAON KH. DIST. AMRAVATI

दिनांक : १२/०६/२०१८

मा. प्राचार्य
विनायक विज्ञान महाविद्यालय
नांदगांव खंडेश्वर, जि. अमरावती

अर्जदार : मनोज गुलाबराव काळे

संदर्भ : शिक्षण संचालनालय (उच्च शिक्षण), पूणे यांचे पत्र क्रमांक उशिसं/TADA/मवि-1/2017/1303
दिनांक 31/01/2018

विषय : वार्षिक अधिवेशनास दैनिक व प्रवास भत्ता मिळणेबाबत...

महोदय,

उपरोक्त संदर्भाकित व वरील विषयाला अनसरुण अर्जदार यांनी सादर करितो की मी दिनांक 03.02.2018 ला पाली, जि. रायगड येथे शिक्षकेत्त्र कर्मचारी संघाच्या 40 वे अधिवेशनीता गेलो होतो तरी मला अधिवेशनास दैनिक व प्रवास भत्ता खाली दिलेल्या विवरणाप्रमाणे देण्यात यावे.

हि विनंती विवरण खालील प्रमाणे आहेत

प्रवास भत्ता	
अमरावती ते पूणे	1070 = 00
पूणे ते पाली	210 = 00
पाली ते पूणे	210 = 00
पूणे ते अमरावती	1070 = 00
दैनिक भत्ता 3 दिवस	490 = 00
नोंदणी शुल्क	500 = 00
एकूण	3550 = 00 (अक्षरी : तीन हजार पाचशे पन्नास रुपये फक्त)

तरी आपणांस विनंती की मंजूरत द्यावी.

हि विनंती

आपला विश्वासू

मनोज गुलाबराव काळे

18/3550/-

17/10/18

सहपत्र : 1. मा शिक्षण संचालनालय याचे पत्राची छायांकित प्रत
2. अशासकीय महाविद्यालयीन शिक्षकेत्त्र कर्मचारी संघ यांच्या पत्राची छायांकित प्रत

अशासकीय महाविद्यालयीन शिक्षकेतर कर्मचारी संघ
 श्रमिक संघ अधिनियमान्वे नोंदणीकृत का.उ.आ./ठाणे ५०५९/९६
 द्वारा : आर.के.तलरेजा कॉलेज, उल्हासनगर -३.
 संपर्क पता : तळमजला, मौलाना अबुल कलाम आझाद भवन, विद्यानगरी, कलीना, मुंबई - ४०० ०९८

घावती क्र. **3059** दिनांक : **31/2/18**

शिक्षकेतर कर्मचाऱ्याचे नाव : **मनोज गुलामराव कोळ**
 महाविद्यालयाचे नाव : **विनायक विज्ञान महाविद्यालय
 नांदगाव स्वस्व - अमरावती**

	रुपये
प्रवेश फी	
वार्षिकवर्गणी जानेवारी ते डिसेंबर -	
महासंघ वर्गणी	1 x 100
अ.भा.वि.म. महासंघ	500
अधिवेशन वर्गणी	
दफणी	
रोख चेकद्वारे मिळाले	
	एकूण
अक्षरी रुपये	500
अक्षरी रुपये	५१५२१ फ ०००

घन्यवाद

डॉ. आर. बी. सिंह
 अध्यक्ष

श्री. माधव साऊळ
 सारचिटणीस

WLS
 वसूल करणाऱ्याची सही

Academic Year: 2020-21

Teachers provided with financial support to attend conferences/ workshop and towards membership fee of professional bodies				
Year	Name of teacher	Name of conference/ workshop attended for which financial support provided	Name of the professional body for which membership fee is provided	Amount of support received (in INR)
2020-21	Dr. Anant Wadatkar	NANOMAT-2020		2000
2020-21	Dr. Prashant Kharat	NANOMAT-2020		2000
2020-21	Mr. Ajay Ambhore	NANOMAT-2020		2000
2020-21	Dr. Nitesh Chore	ILA Conference Fee		300
2020-21	Dr. Nitesh Chore	ILA Paper Publication Fee		1000
2020-21	Dr. Nitesh Chore	Orientation Program Ramanujan College		1100
2020-21	Dr. Nitesh Chore	Refresher Course-Library Science		1500
2020-21	Dr. Gajendrasingh Pachlore	ICICI Bank		900
2020-21	Dr. Gajendrasingh Pachlore	Refresher Course in Life Sciences		1000
Total				11800

Vinayak Vidnyan Mahavidyalaya Nandgaon Kh.

Audit Statement 2020-21

VINAYAK VIDNYAN MAHAVIDYALAYA, NANDGAON KHANDESHWAR			
GRANT ACCOUNT			
RUN BY PRAVIN KHODKE MEMORIAL TRUST, AMRAVATI			
F / 8513 / AMT. & MAHA / 9296 / AMT.			
RECEIPTS & PAYMENTS STATEMENT FOR THE YEAR ENDED 31 ST MARCH 2021			
RECEIPTS	AMOUNT	PAYMENTS	AMOUNT
OPENING BALANCES	716899.49	University Fees Paid	268485.00
Cash in Hand	3116.00	(As per Annexure "A")	
Bank of Maharashtra, SB - 53179	365959.00	Contingencies Expenses	408417.40
Central Bank of India, SB - 37397	6487.50	(As per Annexure "B")	
State Bank of India, CA - 28318	29200.99	Salary Expenses	25610892.00
State Bank of India, SB - 31494	312136.00	Basic Pay	19367850.00
Grant Received	25610892.00	Grade Pay	100700.00
Salary Grant	25610892.00	D.A.	4159629.00
Bank Interest Received	215.00	H.R.A.	1570713.00
Interest Received From University	17588.00	Special Allowance	54000.00
Fees Received From Students	585305.00	T.A.	358000.00
Faculty Training Programme Receipt	15000.00	CHB Salary Expenses	254320.00
Tree Plantation Grant Received	3700.00	CHB Salary Advance To Teacher	20000.00
University Exam. Grant Received	10000.00	Grant Return to JDHE Govt. Deptt.	75000.00
Student Fees Received Against Scholarship	315444.50	Loans & Advances Given To	53810.00
Salary Deduction	5206116.00	Vinayak Vidnyan Non Grant A/c.	53810.00
DCPS	2088107.00	Salary Deduction Paid	5206116.00
Govt Ded Covied 19	241921.00	DCPS	2088107.00
GPF	360000.00	Govt Ded Covied 19	241921.00
LIC	93588.00	GPF	360000.00
Profession Tax	76500.00	LIC	93588.00
Society Loan	81000.00	Profession Tax	76500.00
TDS	2265000.00	Society Loan	81000.00
Sundry Creditors Payable	51329.00	TDS	2265000.00
Popoolar Book Center	51329.00	Sundry Creditors Paid	165140.00
Loan & Advances Received From	173393.00	Dot Com Infotech Pvt Ltd	27850.00
PKMT	166000.00	PC Point & Computer & Hardware	65000.00
Vinayak Vidnyan Non Grant A/c.	7393.00	Popoolar Book Center	42290.00
Accounting Charges Payable (F.Y. 19-20 & 20-21)	16000.00	Sudhir Enterprises	30000.00
Audit Fee Payable (F.Y.19-20 & 20-21)	18880.00	FIXED ASSETS	84889.00
TOTAL RS...	32740771.99	Books Purchase	76329.00
		Sanitazer Machine	8560.00
		CLOSING BALANCES	593702.53
		Cash in Hand	2812.00
		Bank of Maharashtra, SB - 53179	39280.54
		Central Bank of India, SB - 37397	6688.50
		State Bank of India, CA - 28318	117978.99
		State Bank of India, SB - 31494	426942.50
		TOTAL RS...	32740771.99

Date : 08.10.2021
Place : Amravati

Checked & found to be correct
For Shah Baheli Chandak & Co.
Chartered Accountants
FRN 109513w

CA Rajesh Chandak
Partner
M. No. 41917
UDIN : 21041917AAAAE1568

Sultha S. Khodke
President

Dr. Sanchita P. Khodke
Vice President

Dr. Aika A. Bhise
Principal

VINAYAK VIDNYAN MAHAVIDYALAYA,
NANDGAON KH. DIST. AMRAVATI

Vinayak Vidnyan Mahavidyalaya Nandgaon Kh.

VINAYAK VIDNYAN MAHAVIDYALAYA , NANDGAON KHANDESHWAR
GRANT ACCOUNT FOR THE YEAR ENDED 31ST MARCH 2021

Annexure "A"
University Fees Paid :-

Annual Fees	23310.00
Affiliation Fees	10000.00
Ashwamegh Fees	9990.00
Corpus Fund	1665.00
Student Welfare Fund	3330.00
Student Council Fee	1665.00
Student Safety Insurance	3330.00
Emergency Fund	3330.00
Examination Fees	151175.00
Enrollment Fees	11800.00
Gazette Fees	1000.00
E-Journal Subcription Fee	10000.00
Convocation & Degree	18240.00
Exam From Fees	3000.00
Sport Fees	16650.00
Total...	268485.00

Annexure "B"
Contingencies Expenses :-

Building Rent	180000.00
Scholarship Paid To Student	5400.00
Accounting Charges (F.Y.19-20 & 20-21)	16000.00
Audit Fee (F.Y.19-20 & 20-21)	18880.00
Bank Charges	3123.46
Printing & Stationary Expenses	49773.00
Electricity Expenses	41400.00
Telephone Expenses	35508.00
College Expenses	12017.00
News Paper & Periodicals	22293.00
Maintainence & Repairs Exps	1933.00
Research Expenses	11800.00
Online Work & Typing Expenses	8240.00
Computer Expenses	2050.00
Total...	408417.46

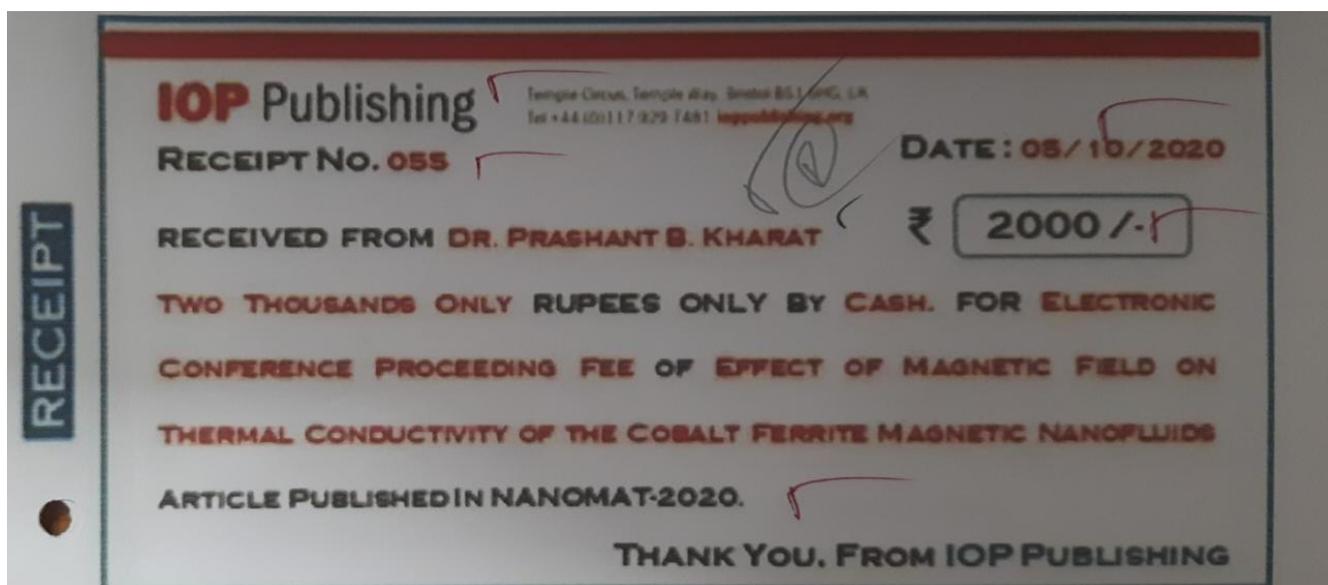
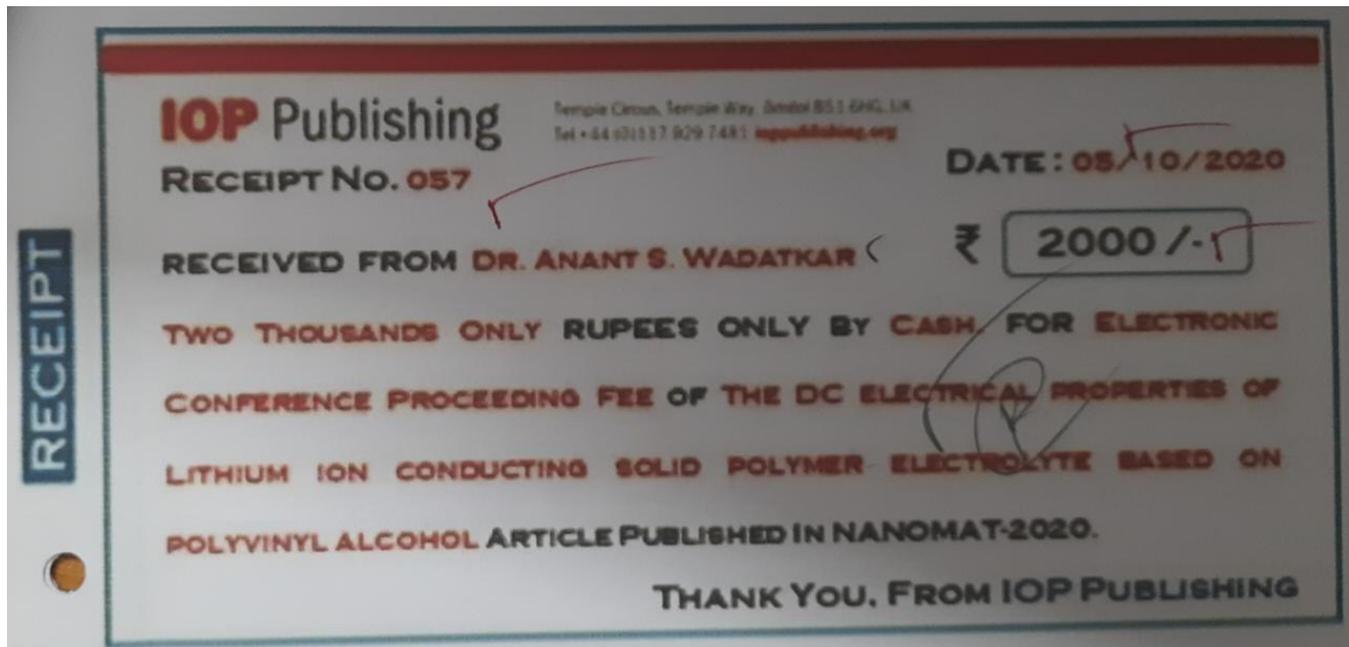
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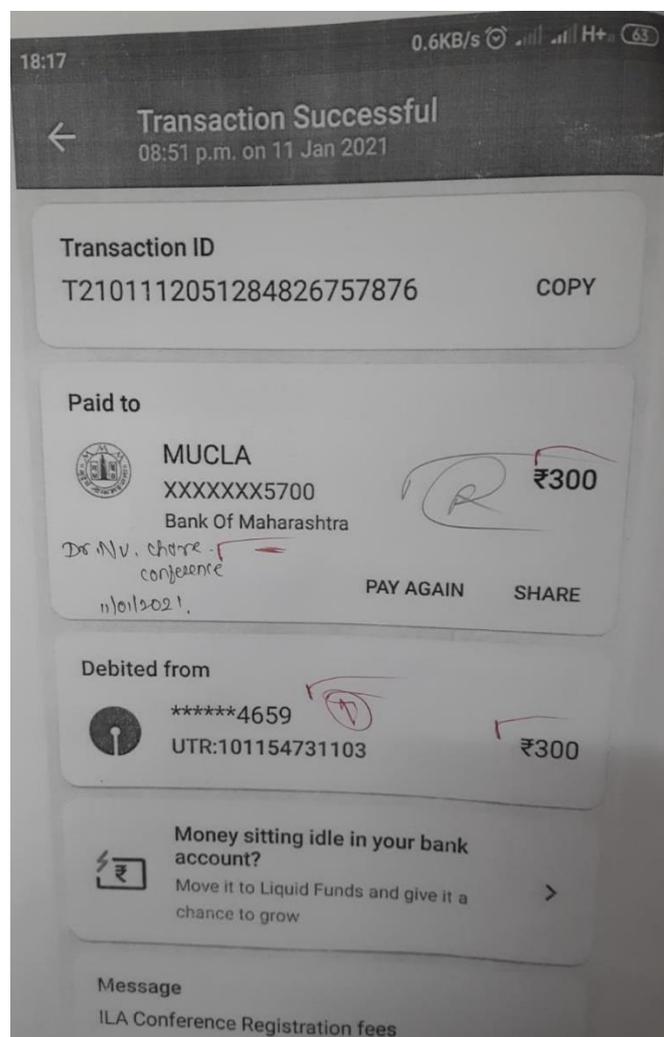
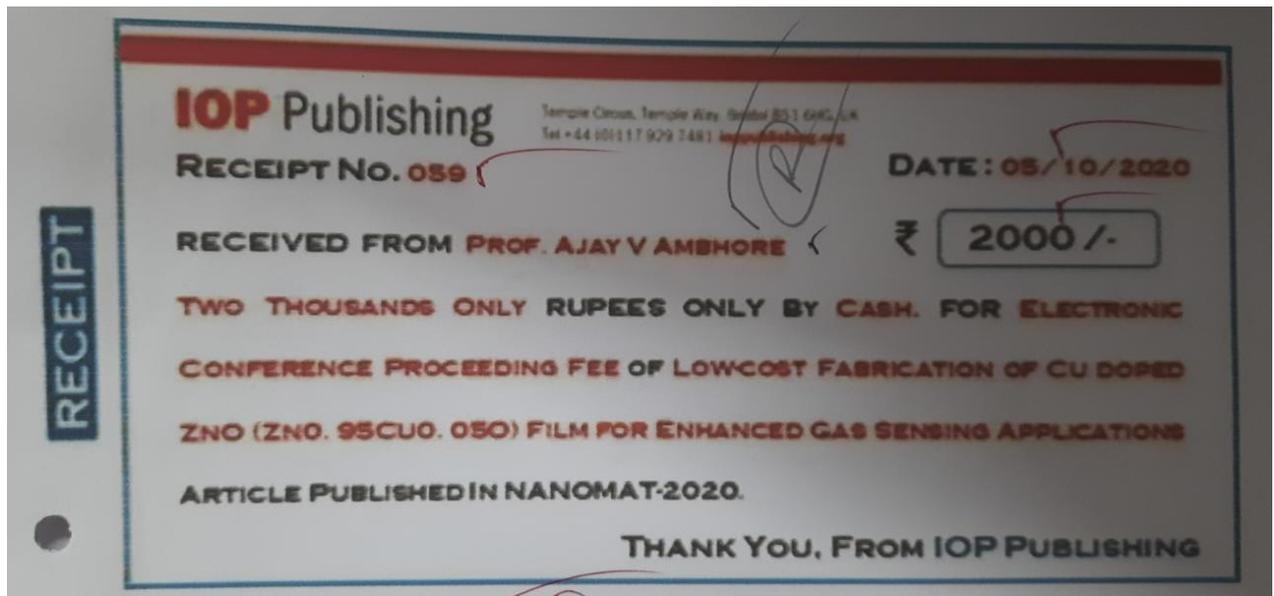
> *[Handwritten Signature]*

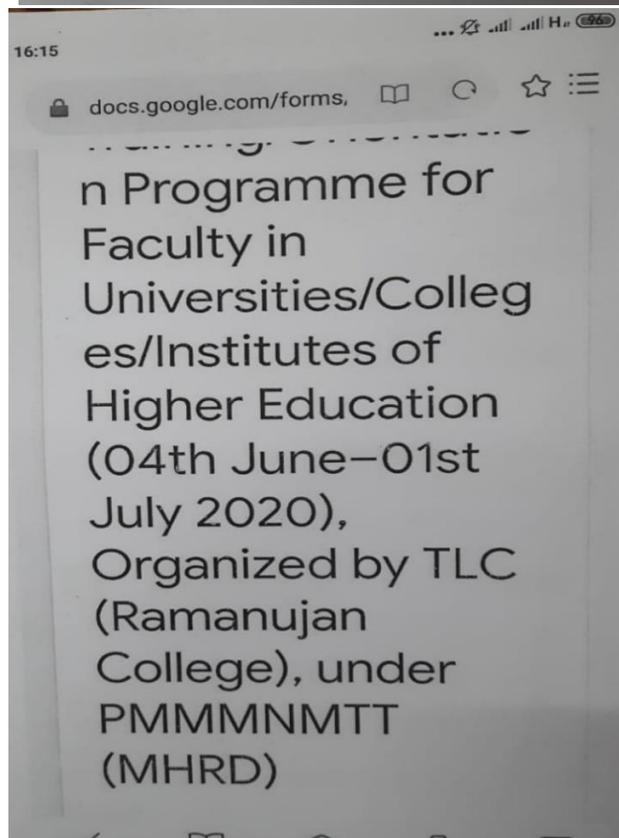
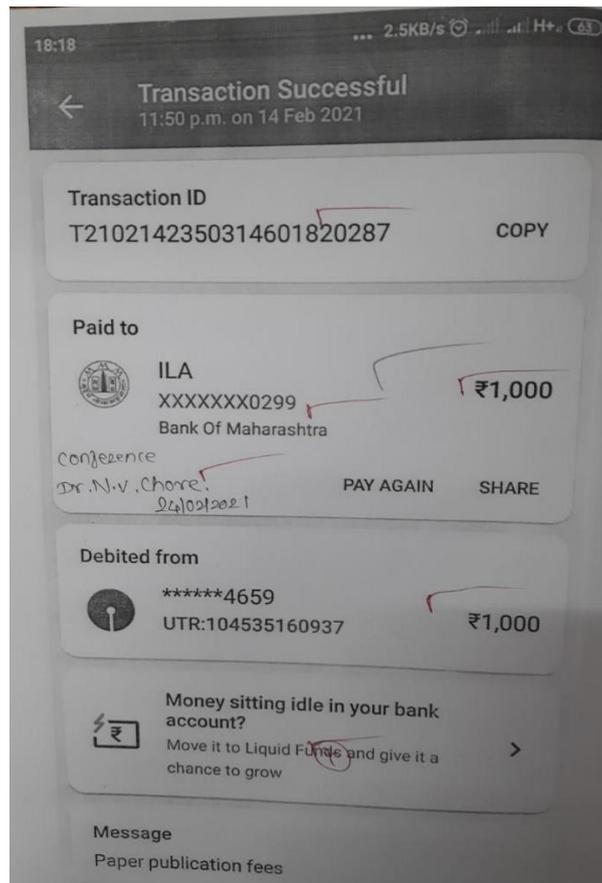
> *[Handwritten Signature]*
PRINCIPAL

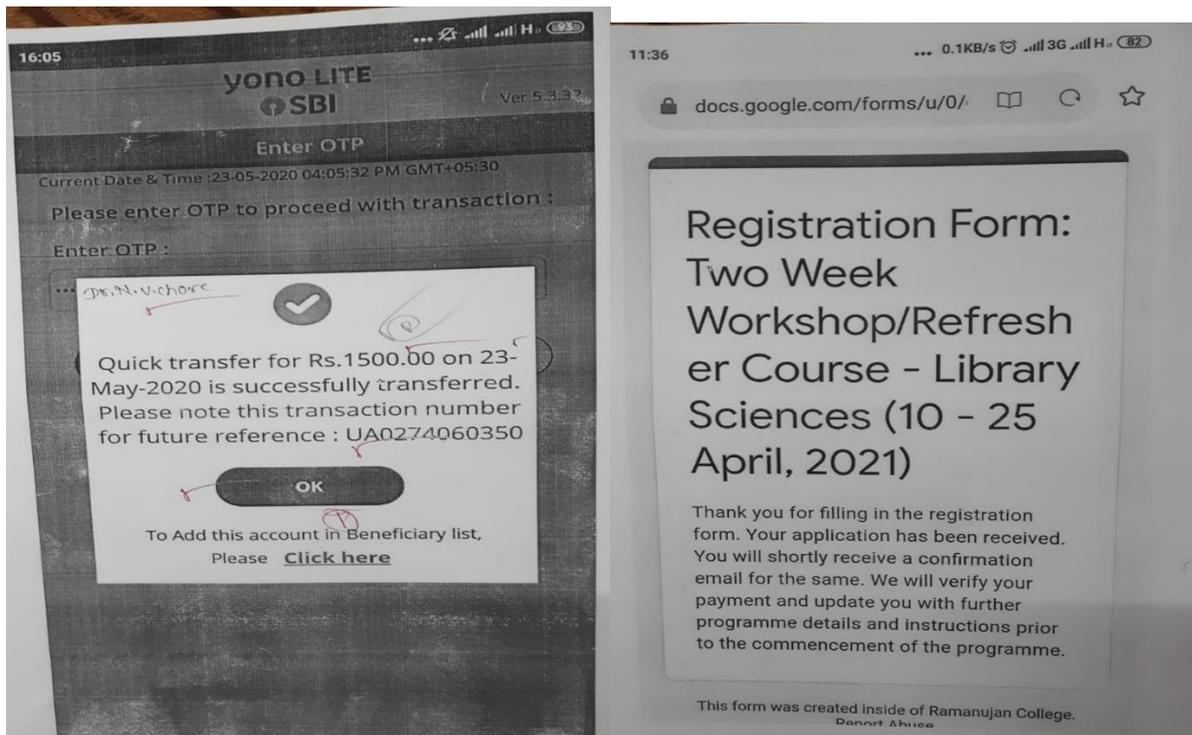
VINAYAK VIDNAYAN MAHAVIDYALAYA
NANDGAON KH. DIST. AMRAVATI

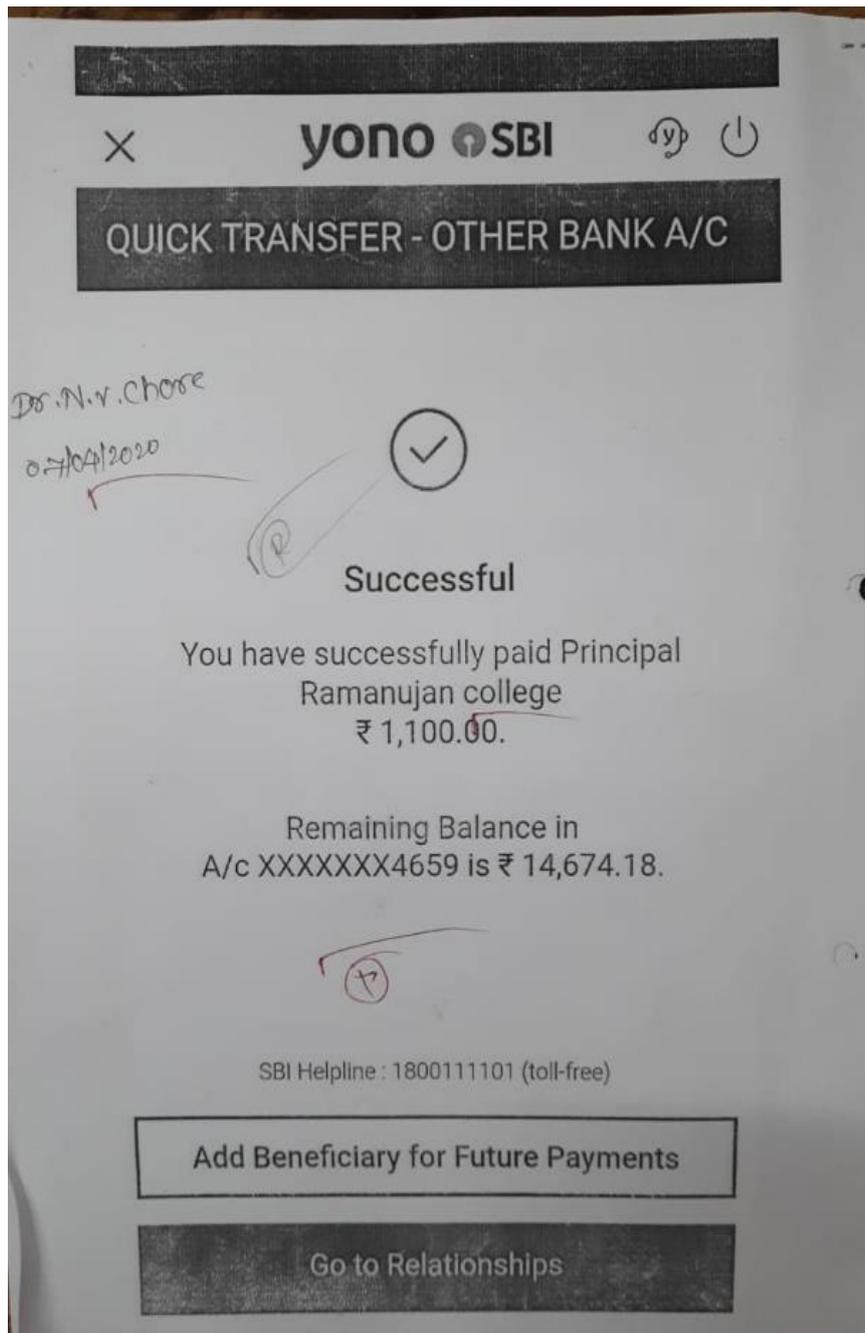


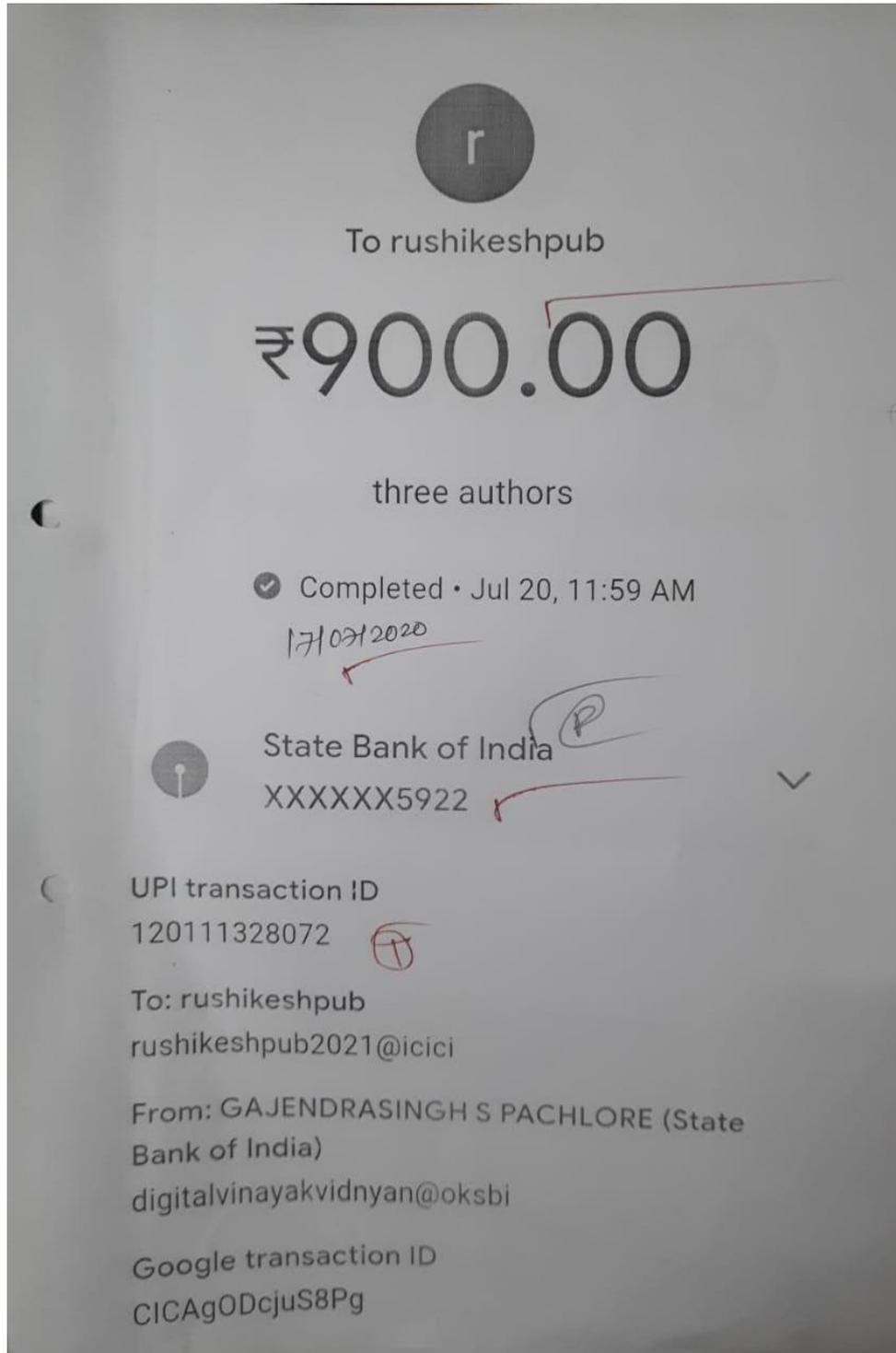


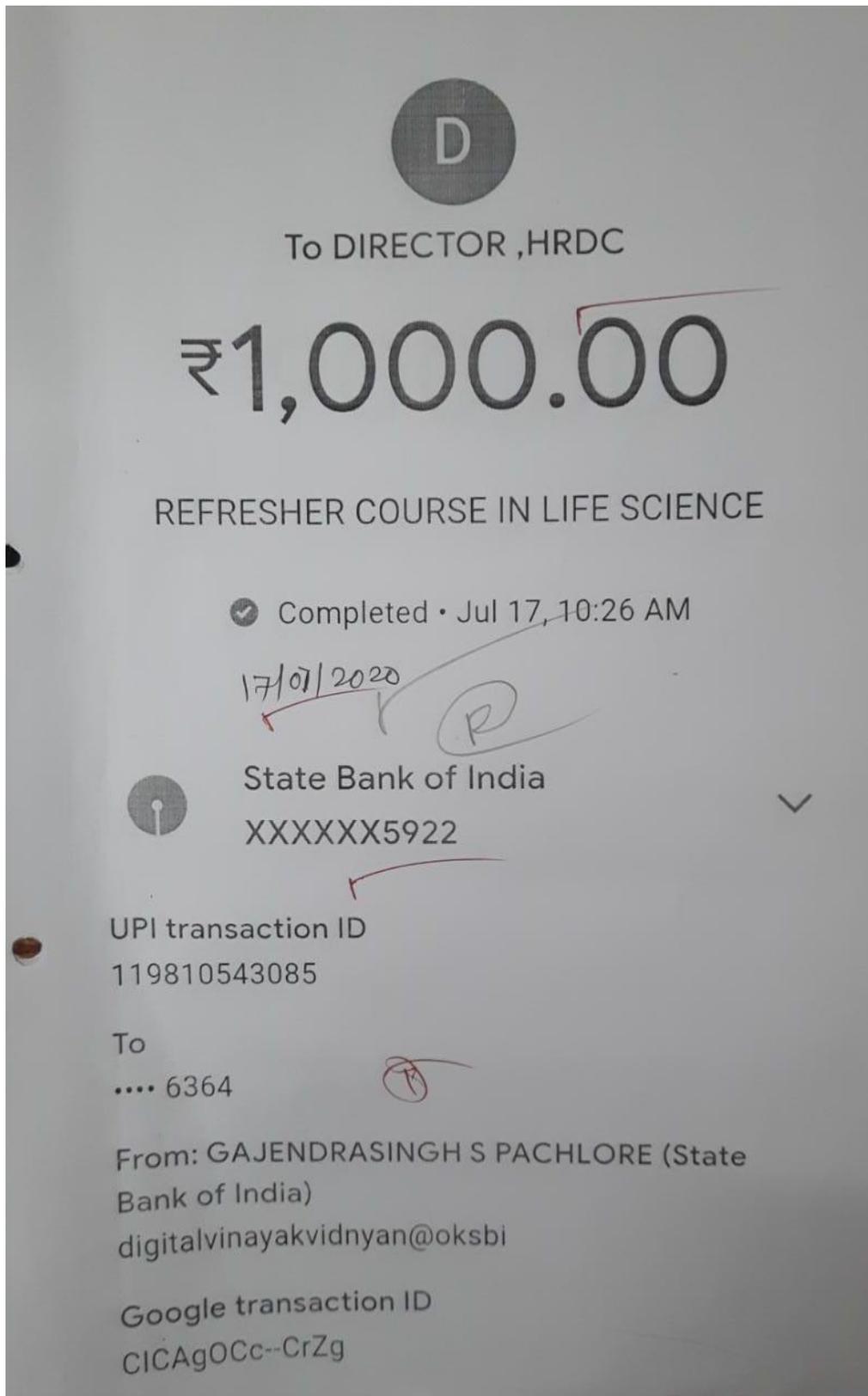












Academic Year: 2021-22

Teachers provided with financial support to attend conferences/workshops and towards membership fee of professional bodies				
Year	Name of teacher	Name of conference/ workshop attended for which financial support provided	Name of the professional body for which membership fee is provided	Amount of support received (in INR)
2021-22	Dr. Anant S. Wadtkar	2nd International Conference on Recent Advance in Materials Science & Nanotechnology (RAMAN-2022)		2000
2021-22	Dr. Gajendrasingh Pachlore		Book Publication-Dhyanpath	2000
2021-22	Dr. Dashrath Kale		Publication Fee	500
2021-22	Dr. Kavita Kakade	ICMRS-2023		1500
2021-22	Dr. Nitesh Chore	Refresher course in Library and Information Science		1000
2021-22	Dr. Kavita Kakade	Manuscript Submission/DOI		700
2021-22	Dr. Gajendrasingh Pachlore	ASC College UGC Account		600
2021-22	Dr. Dashrath Kale	Publication fee		500
2021-22	Dr. Gajendrasingh Pachlore	Refresher Course in Life Sciences		1000
2021-22	Dr. Gajendrasingh Pachlore		ESDA India	1000
2021-22	Dr. Vinod Sherekar	ICMRS-2023		1500
2021-22	Dr. Gajendrasingh Pahlore		Book Publication	2000
2021-22	Dr. Pratibha Mahalle		Publication Fee	850

Vinayak Vidnyan Mahavidyalaya Nandgaon Kh.

Audit Statement 2021-22

VINAYAK VIDNYAN MAHAVIDYALAYA, NANDGAON KHANDESHWAR
GRANT ACCOUNT
RUN BY PRAVIN KHODKE MEMORIAL TRUST, AMRAVATI
F / 8513 / AMT. & MAHA / 6296 / AMT.
RECEIPTS & PAYMENTS STATEMENT FOR THE YEAR ENDED 31ST MARCH 2022

RECEIPTS	AMOUNT	PAYMENTS	AMOUNT
OPENING BALANCES	593702.53	University Fees Paid (As per Annexure "A")	488340.00
Cash in Hand	2812.00	Contingencies Expenses (As per Annexure "B")	767587.16
Bank of Maharashtra, SB - 53179	39280.54	Salary Expenses	28429926.00
Central Bank of India, SB - 37397	6888.50	Basic Pay	21105600.00
State Bank of India, CA - 28318	117978.99	D.A	4712054.00
State Bank of India, SB - 31494	426942.50	H.R.A	1778930.00
Grant Received	30389177.00	Special Allowance	54000.00
Salary Grant	28375602.00	T.A	360000.00
Salary Arrears Grant	1531411.00	P.H.D & P.cement Arrears	365018.00
CHB Salary Grant	427840.00	Employes Medical Claim	54324.00
Employes Medical Claim	54324.00	Salary Arrears Paid	1531411.00
Bank Interest Received	378.00	CHB Salary Expenses	110000.00
Interest Received From University	15571.00	Accounting Charges Payable Paid	16000.00
Fees Received From Students	774210.00	Audit Fee Payable Paid	18880.00
Student Fees Received Against Scholarship	364731.50	Loans & Advances Given To PKMT	10000.00
University Exam. Grant Received	65755.00	Vinayak Vidnyan Non Grant A/c	76420.00
Accounting Charges Payable (F.Y. 21-22)	15000.00	Salary Deduction Paid	5900396.00
Audit Fee Payable (F.Y. 21-22)	9440.00	DCPS	2462048.00
Loan & Advances Received From PKMT	500000.00	Govt Ded Covied 19	66860.00
Salary Deduction	5900396.00	GPF	360000.00
DCPS	2462048.00	LIC	75988.00
Govt Ded Covied 19	66860.00	Profession Tax	82500.00
GPF	360000.00	Society Loan	108000.00
LIC	75988.00	TDS	2745000.00
Profession Tax	82500.00	Decrease in Sundry Creditors	65851.00
Society Loan	108000.00	PC Point & Computer & Hardware	16250.00
TDS	2745000.00	Popoolar-Book Center	49601.00
Increase in Sundry Creditors	292919.00	FIXED ASSETS	647195.00
Kunal Sales	40280.00	Books Purchase	70058.00
Sudhir Enterprises	252639.00	Computer Purchase	50000.00
		Science Laboratory Equipment & Material Purchase	492919.00
		Water Purifier Cooler	34218.00
		CLOSING BALANCES	859273.87
		Cash in Hand	13137.00
		Bank of Maharashtra, SB - 53179	465763.54
		Central Bank of India, SB - 37397	6884.50
		State Bank of India, CA - 28318	89814.83
		State Bank of India, SB - 31494	283674.00
TOTAL RS...	38921280.03	TOTAL RS...	38921280.03

Date: 10.02.2023
Place: Amravati

Checked & found to be correct
For Shah Baheti Chandak & Co.
Chartered Accountants
FRN 109513w

Dr. Alka A Bhise
PRINCIPAL
Vinayak Vidnyan Mahavidyalaya,
Nandgaon Khan, Dist. Amravati

CA Rajesh Chandak
Partner
M. No. 41917
UDIN : 23041917BGUNWL8270

Vinayak Vidnyan Mahavidyalaya Nandgaon Kh.

VINAYAK VIDNYAN MAHAVIDYALAYA, NANDGAON KHANDESHWAR
GRANT ACCOUNT FOR THE YEAR ENDED 31ST MARCH 2022

Annexure "A"
University Fees Paid :-

Annual Fees	32620.00
Affiliation Fees	5000.00
Ashwamegh Fees	13980.00
Corpus Fund	2330.00
Cultural Activities Fee	3900.00
Student Welfare Fund	4660.00
Student Council Fee	2330.00
Student Safety Insurance	4660.00
Emergency Fund	4660.00
Examination Fees	317780.00
Enrollment Fees	22040.00
Entry Fee	14500.00
Registration Fees	4000.00
Gazette Fees	1000.00
E-Journal Subcription Fee	10000.00
Convocation & Degree	21280.00
Exam From Fees	300.00
Sport Fees	23300.00
Total...	488340.00

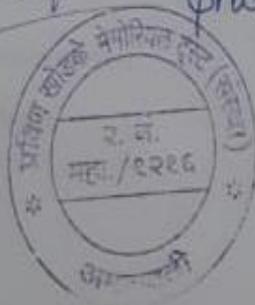
Annexure "B"
Contingencies Expenses :-

College Building Rent	180000.00
Scholarship Paid To Student	10800.00
Accounting Charges	31000.00
Audit Fee	28320.00
Advertisement Expenses	17128.00
Annual Function Expenses	5620.00
Bank Charges	3023.16
Printing & Stationary Expenses	142327.00
Electricity Expenses	51676.00
Telephone Expenses	52579.00
College Expenses (Misc. Exp.)	39570.00
News Paper & Periodicals	11940.00
Maintainence & Repairs Exps	33353.00
Examination Work Expenses	29328.00
Granted Tree Plantation	5820.00
Remuneration to Resource Expenses	700.00
Reserch Expenses	19916.00
Internet Expenses	10702.00
ISO Certificate Regitration Fee	11800.00
Library Expenses	19745.00
Sport Expenses	13640.00
Sweeper Salary	15000.00
Online Work & Typing Expenses	10000.00
Computer Expenses	23600.00
Total...	767587.16

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PRINCIPAL
Vinayak Vidnyan Mahavidyalaya,
Nandgaon Khan, Dist. Amravati



Vinayak Vidnyan Mahavidyalaya Nandgaon Kh.

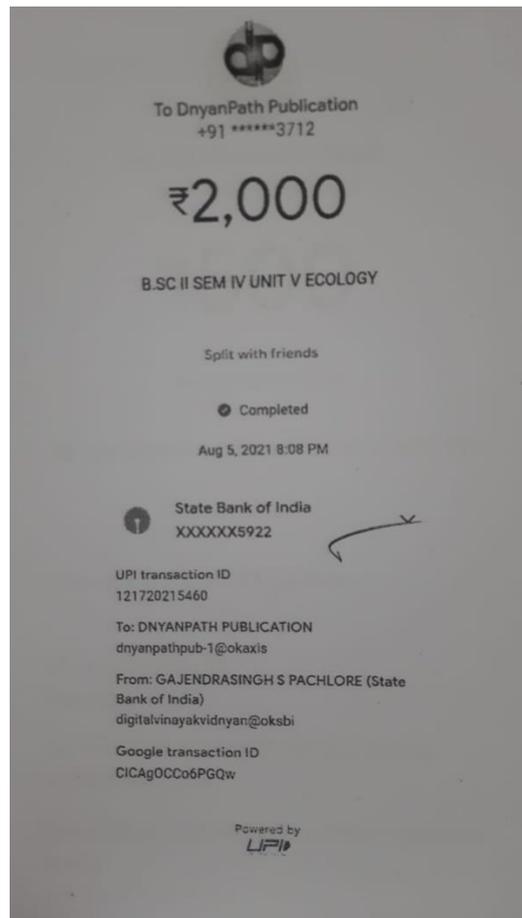
G.S.Tompe Mahavidyalaya Sarvajanic Trust's
G. S. Tompe Arts, Commerce & Science College
Chandur Bazar, Dist. Amravati, Maharashtra

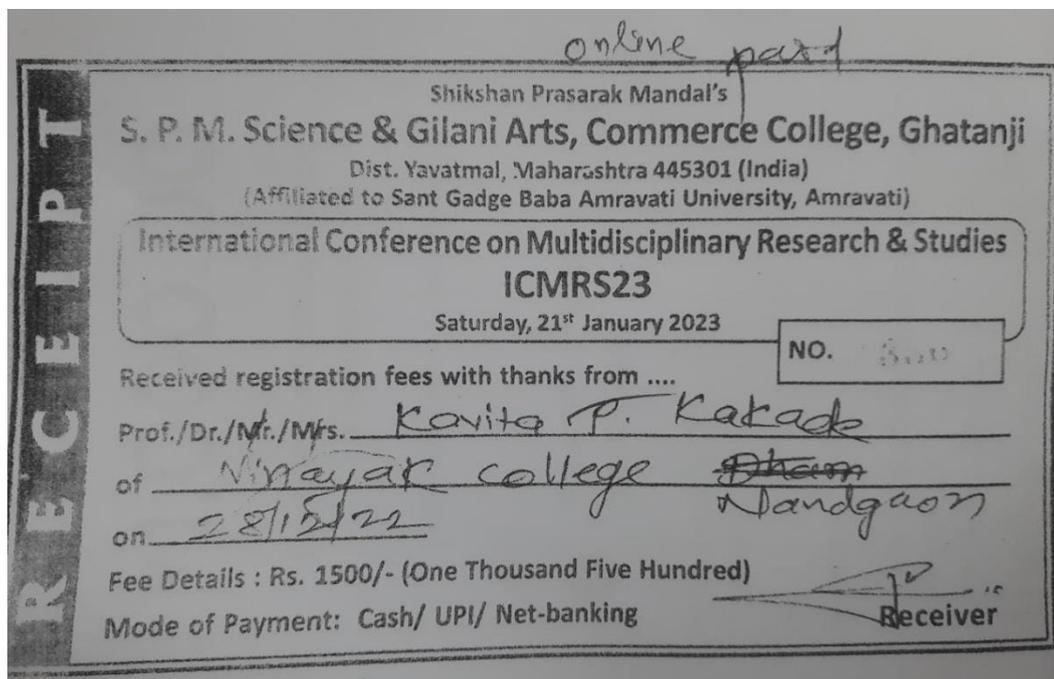
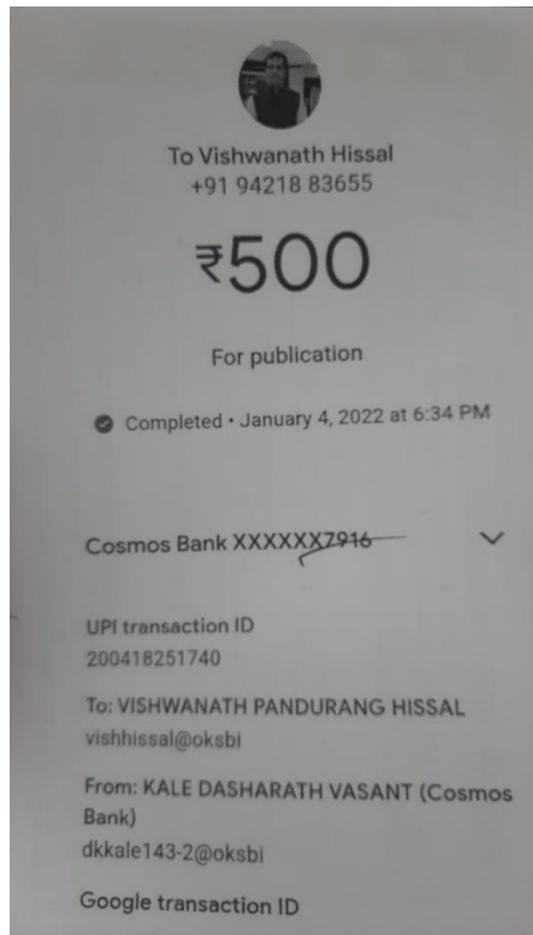
12/04/2022 DST-SERB, New Delhi Sponsored 2nd International Conference
RAMAN-2022 12th - 14th May 2022
Receipt No. **158**

Name of Participant Aanand Wadtkar
Name of College/Organization Vinayak Mahavidyalay
Nandgaon Khandeshwar.
Conference Fees Two Thousand only.

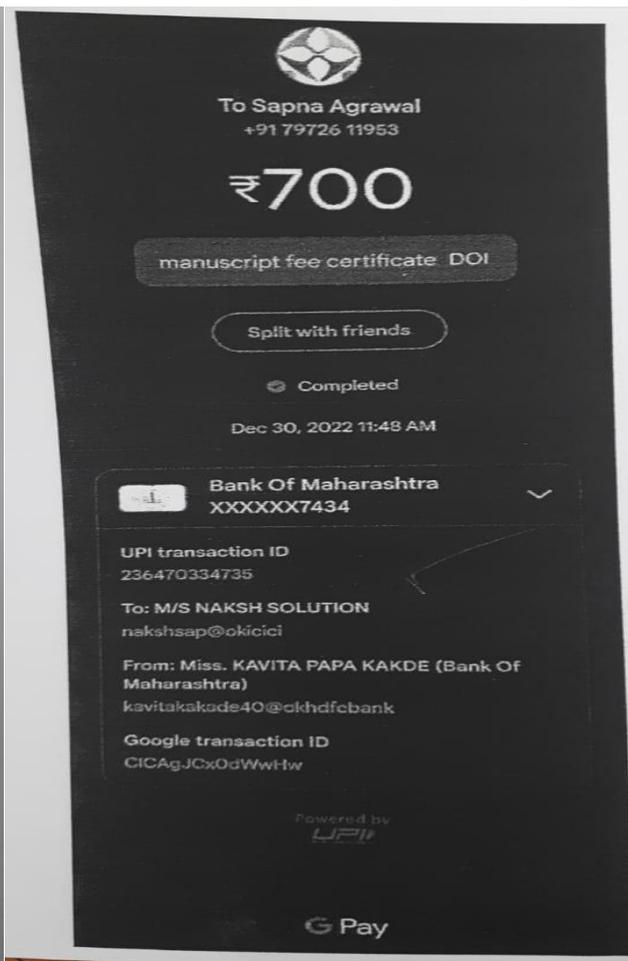
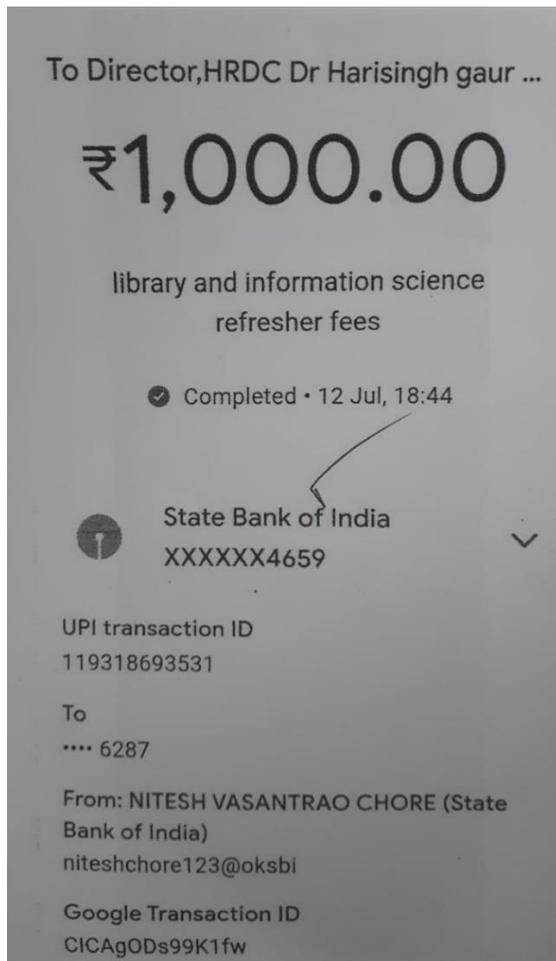
Received....! **Thank You...!**

Rs. 2000/- Receivers Sign. Representative Sign.

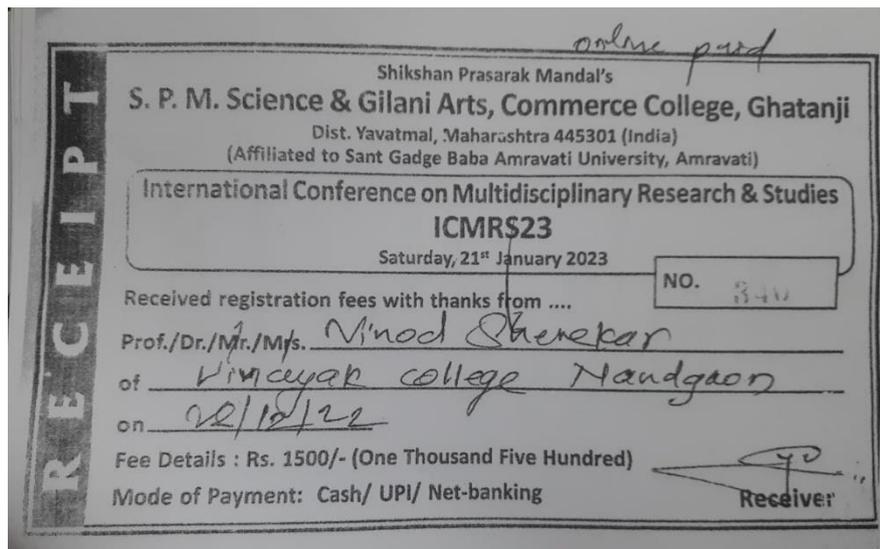
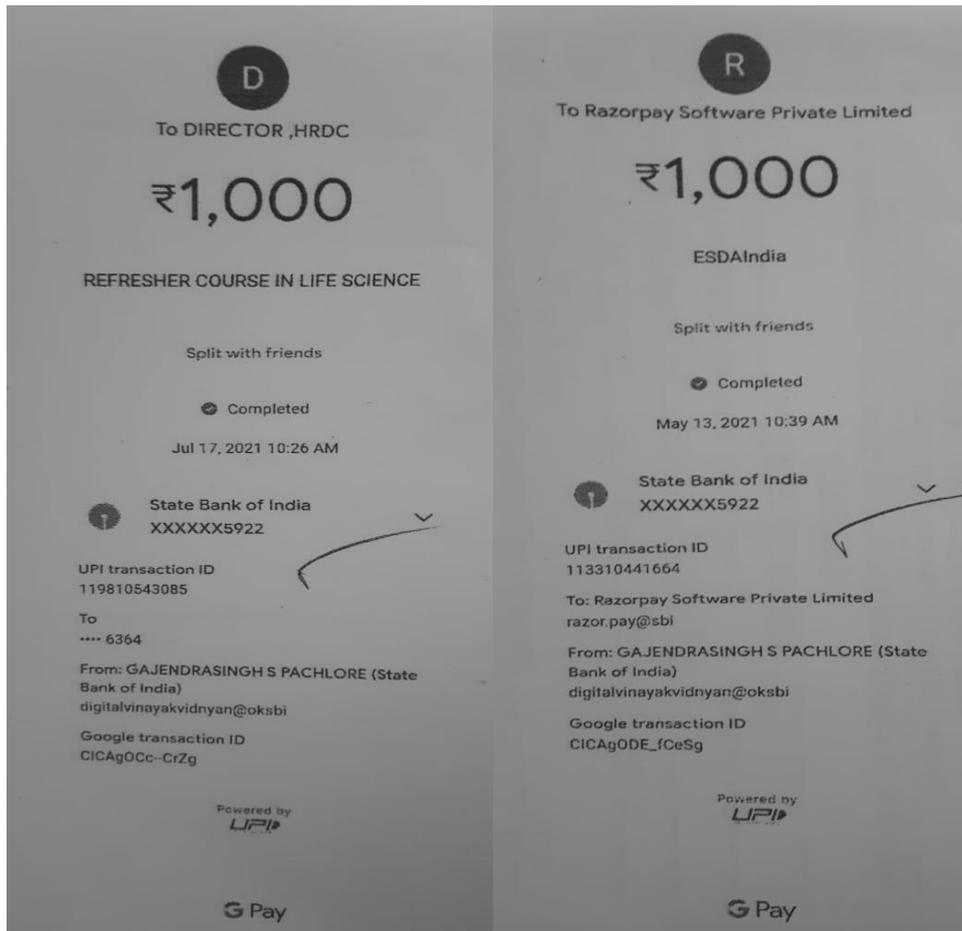


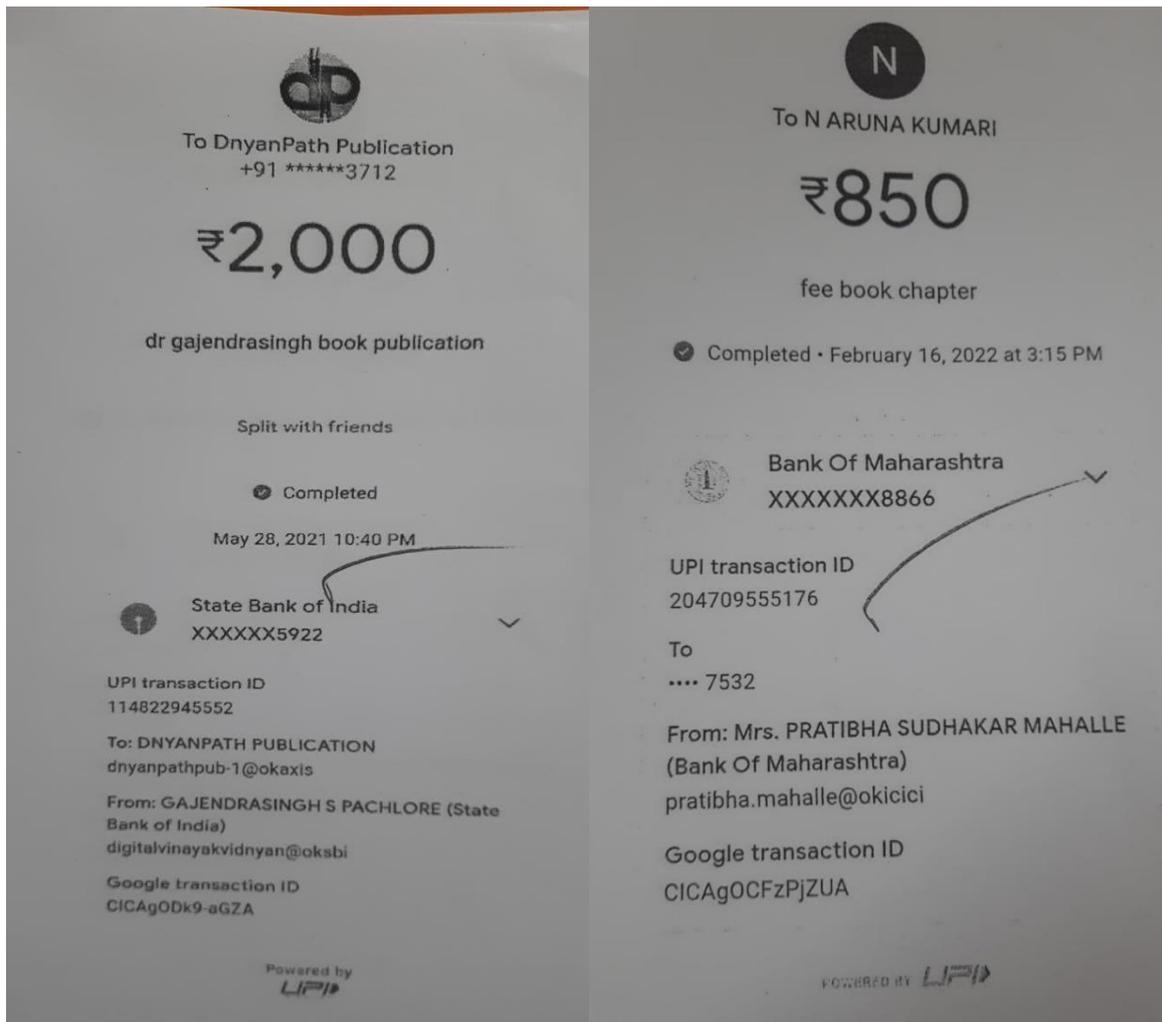


Vinayak Vidnyan Mahavidyalaya Nandgaon Kh.



Vinayak Vidnyan Mahavidyalaya Nandgaon Kh.







3. Patents Published



3. Patents Published

Year	2017-18	2018-19	2019-20	2020-21	2021-22
Number	0	0	0	0	2

पेटेंट कार्यालय
शासकीय जर्नल

**OFFICIAL JOURNAL
OF
THE PATENT OFFICE**

निर्गमन सं. 19/2022 ISSUE NO. 19/2022	शुक्रवार FRIDAY	दिनांक: 13/05/2022 DATE: 13/05/2022
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पेटेंट कार्यालय का एक प्रकाशन
PUBLICATION OF THE PATENT OFFICE

(12) PATENT APPLICATION PUBLICATION

(21) Application No.202241025379 A

(19) INDIA

(22) Date of filing of Application :30/04/2022

(43) Publication Date : 13/05/2022

(54) Title of the invention : DESIGN OF SOLAR THERMAL POWER INTEGRATION SYSTEMS TO INCREASE THE EFFICIENCY OF RENEWABLE ENERGY RESOURCES

<p>(51) International classification :H02J0003380000, F03G0006060000, G06Q0010060000, H02J0003460000, F22B0001000000</p> <p>(86) International Application No Filing Date :PCT// :01/01/1900</p> <p>(87) International Publication No : NA</p> <p>(61) Patent of Addition to Application Number Filing Date :NA :NA</p> <p>(62) Divisional to Application Number Filing Date :NA :NA</p>	<p>(71)Name of Applicant : 1)SENTHIL KUMAR R Address of Applicant :ASSISTANT PROFESSOR, DEPARTMENT OF MECHANICAL ENGINEERING, SRI SAI RAM ENGINEERING COLLEGE, CHENNAI, 600044 -----</p> <p>2)KRISHNARAJ S 3)MUGANDA MUNIR MANINI 4)PRAVAT KUMAR SWAIN 5)DR. NIMISH H. VASOYA 6)DR.S.PRATIMA KUMARI 7)RAVINDRAKUMAR HANMANT YADAV 8)S KRISHNAKUMAR 9)DR. M.TAMILARASI 10)DR.C.GNANAVEL 11)PREM CHANDRA 12)PRASHANT BABURAO KHARAT Name of Applicant : NA Address of Applicant : NA</p> <p>(72)Name of Inventor : 1)SENTHIL KUMAR R Address of Applicant :ASSISTANT PROFESSOR, DEPARTMENT OF MECHANICAL ENGINEERING, SRI SAI RAM ENGINEERING COLLEGE, CHENNAI, 600044 -----</p> <p>2)KRISHNARAJ S Address of Applicant :ASSISTANT PROFESSOR, DEPARTMENT OF MECHANICAL ENGINEERING, SRI SAI RAM ENGINEERING COLLEGE, CHENNAI, 600044 -----</p> <p>3)MUGANDA MUNIR MANINI Address of Applicant :SENIOR LECTURER, ECONOMICS, FINANCE&ACCOUNTING, IBABII UNIVERSITY, BUNGOMA, 699-50200 -----</p> <p>4)PRAVAT KUMAR SWAIN Address of Applicant :ASSISTANT PROFESSOR, DEPARTMENT OF BASIC SCIENCES AND HUMANITIES, SATYASAI ENGINEERING COLLEGE, AT-SRIKONA, P.O.: PANJIBAG, CHANDIPUR ROAD, BALASORE-756002, -----</p> <p>5)DR. NIMISH H. VASOYA Address of Applicant :DEPARTMENT OF BALBHAVAN, CHILDREN'S UNIVERSITY GANDHINAGAR -----</p> <p>6)DR.S.PRATIMA KUMARI Address of Applicant :CH.SD.ST.THERESAS COLLEGE FOR WOMEN, ELURU -----</p> <p>7)RAVINDRAKUMAR HANMANT YADAV Address of Applicant :DR. JIMCOE, JAYSINGPUR DIST. KOLHAPUR 416101 -----</p> <p>8)S KRISHNAKUMAR Address of Applicant :ASSISTANT PROFESSOR/EEE,VEL TECH RANGARAJAN DR. SAGUNTHALA R&D INSTITUTE OF SCIENCE AND TECHNOLOGY,AVADL600062 ---</p> <p>9)DR. M.TAMILARASI Address of Applicant :DR.M.TAMILARASI, ASSISTANT PROFESSOR, AMET UNIVERSITY, CHENNAI- 603 112 -----</p> <p>10)DR.C.GNANAVEL Address of Applicant :ASSISTANT PROFESSOR/MECHANICAL, VELS INSTITUTE OF SCIENCE, TECHNOLOGY AND ADVANCED STUDIES, CHENNAI, 600117 -----</p> <p>11)PREM CHANDRA Address of Applicant :201, 2/96, SECTOR-2, RAJENDRA NAGAR, SAHIBABAD, GHAZIABAD -----</p> <p>12)PRASHANT BABURAO KHARAT Address of Applicant :ASSISTANT PROFESSOR, DEPARTMENT OF PHYSICS, VINAYAK VIDNYAN MAHAVIDYALAYA, NANDGAON KHANDESHWAR, AMRAVATI - 444708, MAHARASHTRA, INDIA -----</p>
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(57) Abstract :
 Design of solar thermal power integration systems to increase the efficiency of renewable energy resources is the proposed invention. The invention focuses on designing a solar based framework that integrates the solar thermal power systems. The ultimate goal of the proposed invention is to utilize the energy i.e., renewable energy resource for domestic and commercial activities and reducing the dependence on non-renewable energy resources.

No. of Pages : 13 No. of Claims : 5

**पेटेंट कार्यालय
शासकीय जर्नल**

**OFFICIAL JOURNAL
OF
THE PATENT OFFICE**

निर्गमन सं. 21/2022
ISSUE NO. 21/2022

शुक्रवार
FRIDAY

दिनांक: 27/05/2022
DATE: 27/05/2022

पेटेंट कार्यालय का एक प्रकाशन
PUBLICATION OF THE PATENT OFFICE

The Patent Office Journal No. 21/2022 Dated 27/05/2022

31986

(12) PATENT APPLICATION PUBLICATION
 (19) INDIA
 (22) Date of filing of Application :08/05/2022

(21) Application No.202241026584 A
 (43) Publication Date : 27/05/2022

(54) Title of the invention : NANO COATING OF SUPER CAPACITOR ON CAR TO SUPPORT RECHARGING OF EV VEHICLES ON THE RUN EFFICIENTLY

<p>(51) International classification :H01M0010625000, B60L0050400000, B60L0053140000, H01M0010613000, B60L0053650000</p> <p>(86) International Application No Filing Date :PCT// :01/01/1900</p> <p>(87) International Publication No : NA</p> <p>(61) Patent of Addition to Application Number Filing Date :NA :NA</p> <p>(62) Divisional to Application Number Filing Date :NA :NA</p>	<p>(71)Name of Applicant : 1)DR.B.SIRANTHINI Address of Applicant :ASSISTANT PROFESSOR/EEE DEPARTMENT, SRM INSTITUTE OF SCIENCE AND TECHNOLOGY, RAMAPURAM CAMPUS, PORUR, CHENNAI ----- 2)DR. N M G KUMAR 3)SARVESHWAR KASARLA 4)DR.A.PARTHIBAN 5)NAVEEN RANA 6)SUMIT KATARIA 7)NIKHIL RASTOGI 8)YOGENDRA KUMAR 9)DR.S.BHARATHIDASAN 10)PAWAN SURESH KACHAVE 11)ANUJA MANIKRAO MOPARI 12)PRASHANT BABURAO KHARAT Name of Applicant : NA Address of Applicant : NA (72)Name of Inventor : 1)DR.B.SIRANTHINI Address of Applicant :ASSISTANT PROFESSOR/EEE DEPARTMENT, SRM INSTITUTE OF SCIENCE AND TECHNOLOGY, RAMAPURAM CAMPUS, PORUR, CHENNAI ----- 2)DR. N M G KUMAR Address of Applicant :PROFESSOR, DEPARTMENT OF ELECTRICAL AND ELECTRONICS ENGINEERING,SREE VIDYANIKETHAN ENGINEERING COLLEGE,TIRUPATHI, ANDHAR PRADESH -517101 ----- 3)SARVESHWAR KASARLA Address of Applicant :ASSISTANT PROFESSOR, DEPARTMENT OF PHYSICS, INSTITUTE OF SCIENCE, NAGPUR-440001. ----- 4)DR.A.PARTHIBAN Address of Applicant :ASSOCIATE PROFESSOR/ MECHANICAL ENGINEERING, VELS INSTITUE OF SCIENCE,TECHNOLOGY & ADVANCED STUDIES, PALLAVARAM, CHENNAI-600117 ----- 5)NAVEEN RANA Address of Applicant :ASSISTANT PROFESSOR, DEPARTMENT OF MECHANICAL ENGINEERING, SCHOOL OF TECHNOLOGY, QUANTUM UNIVERSITY, ROORKEE, 247667 ----- 6)SUMIT KATARIA Address of Applicant :ASSISTANT PROFESSOR, DEPARTMENT OF ELECTRICAL AND ELECTRONICS ENGINEERING, SCHOOL OF TECHNOLOGY, QUANTUM UNIVERSITY, ROORKEE, 247667 ----- 7)NIKHIL RASTOGI Address of Applicant :DEPT. OF PHYSICS, SCHOOL OF BASIC SCIENCE & TECHNOLOGY, IIMT UNIVERSITY, MEERUT, UP, INDIA ----- 8)YOGENDRA KUMAR Address of Applicant :ASSISTANT PROFESSOR, DEPARTMENT OF PHYSICS, VSP GOVERNMENT PG COLLEGE KAIRANA, SHAMLI, UP, PIN CODE: 247774 ----- 9)DR.S.BHARATHIDASAN Address of Applicant :ERODE SENGUTHAR ENGINEERING COLLEGE AUTONOMOUS ----- 10)PAWAN SURESH KACHAVE Address of Applicant :ASSISTANT PROFESSOR, DEPARTMENT OF PHYSICS, DSM COLLEGE PARBHANI 431401. ----- 11)ANUJA MANIKRAO MOPARI Address of Applicant :ASSISTANT PROFESSOR, DEPARTMENT OF CHEMISTRY, SHRI SHIVAJI COLLEGE OF ARTS, COMMERCE & SCIENCE, AKOLA-444001, MAHARASHTRA, INDIA ----- 12)PRASHANT BABURAO KHARAT Address of Applicant :ASSISTANT PROFESSOR, DEPARTMENT OF PHYSICS, VINAYAK VIDNYAN MAHAVIDYALAYA, NANDGAON KHANDESHWAR, AMRAVATI -- 44708, MAHARASHTRA, INDIA -----</p>
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(57) Abstract :
 Nano coating of super capacitor on car to support recharging of EV vehicles on the run efficiently is the proposed invention. The invention focuses on designing a vehicle in such a way that the vehicle's external layer is coated with nano materials of super capacitor to absorb more energy. The proposed invention generates electrical energy on go of the vehicle and thus increasing the efficacy of electric vehicles.

No. of Pages : 12 No. of Claims : 5



4. Institute-Institute Research Collaborations



4. Institute-Institute Research Collaborations

Establishment Year : 1962

Shiksha Mandal's
Bajaj College of Science, Wardha
(Formerly known as Jankidevi Bajaj College of Science, Wardha)
Autonomous College
A Linguistic Minority College
Reaccredited 'A' Institution (CGPA 3.21), NAAC (UGC), Bangalore
College with Potential for Excellence, UGC, New Delhi

Office/Fax : (07152) 230515
 Admn. Off. : (07152) 241696
 Library : (07152) 255070
 E-mail : jbsciencewardha@yahoo.co.in
 website : jbsw.shikshamandal.org

Jamnala Bajaj Marg,
 Civil Line
 Wardha – 442 001 (Maharashtra)
 Uni. College No. : 652
 Jr. College No. : 07-01-003



Ref No. J.B.C./ /2019-2020 Date : 23/10/2019

Collaborative Research Programme-Recognition

It is a great honour for me to declare the *Collaborative Research Programme* in association with Dr Gajendrasingh Pachlore , Assistant Professor Department of Zoology of Vinayak Vidnyan Mahavidyalaya, Nandgaon Khandeshwar affiliated to Sant Gadge Baba Amravati University, is continued from 2019 till the date.

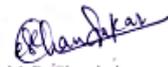
It is to be indicated for recognition that the research collaboration is in the form of active research work with faculty from Zoology Department in the field of *Molecular Biology/Taxicology/Biodiversity/Environment/Conservation etc.* The collaboration is intensively observed from few mentioned publication below.

Name of the Paper	Journal Name	Year of Publication
Guaging the online Learning preferences of students as a Stakeholder in higher education institute during the COVID-19 Lockdown scenario through online survey Page no – 331 to 335	SCHE-DC19-LPINW 2020, Vol. 1. (ISBN: 978-93-5407-920-7)	2020
Survey to understand the impact of home-schooling on children's due to lock-down and role of Women as a Bridge between School and schooling	International Journal of Science & Technology and Management	2020
Solid Waste management by Amravati Municipality Corporation Before and during Global Pandemic Scenario:A case study to understand strategy and Policy for Solid waste management During Covid - 19 Pandemic	Journal of Research and Development : A multidisciplinary international level refereed and peer reviewed Journal	2021
Constraints Analysis of Kadaknath Meat preference over other poultry birds meat in the district of Amravati using Garret Ranking Method.	B.Adhar International Peer reviewed indexed research Journal	2021
Biodiversity of Moths in Hinganghat Taluka, Wardha, Maharashtra (India)	Advances in Zoology and Botany	2022

The collaboration is for following purpose

1. **Organizing training workshop for the students and faculties.**
2. **Joint publication and research proposals.**

I found the faculty member Dr Gajendrasingh Pachlore of Zoology Department_of Vinayak Vidnyan Mahavidyalaya, Nandgaon Khandeshwar is very actively involved in the research Work. He is very punctual in his work.


 Dr. M. R. Chandrakar
 Head
 Department of Zoology
 Head / Incharge
 Department Of Zoology
 Bajaj College Of Science, Wardha

1

Dr. Babasaheb Ambedkar Marathwada University
Aurangabad-431004, Maharashtra, India
DEPARTMENT OF PHYSICS
(DST-FIST and UGC-Supported)

Dr. Kamalakar M. Jadhav
Ph.D., FMASc
Senior Professor and Head



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Email : drjadhavkm@gmail.com

“NAAC Reaccredited with "A" Grade”

Date : 1st August 2022

Collaborative Research Programme Recognition

It is the honour for me to declare the Collaborative Research Programme in association of faculty member Dr. Prashant B. Kharat of the Physics Department of Vinayak Vidnyan Mahavidyalaya, Nandgaon Khandeshwar affiliated to Sant Gadge Baba Amravati University, is continued from 26th December 2019 to 31st July 2022.

It is to be indicated for recognition that the research collaboration is in the form of active research activities with faculties from the Physics Department in the field of Magnetic Nanomaterials. The collaboration is intensively observed from below some of the research papers published jointly,

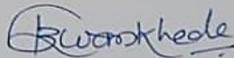
Sr. No.	Title of the Paper	Name of Journal, Publisher	Date of Publication
1	Induction heating analysis of surface-functionalized nanoscale CoFe ₂ O ₄ for magnetic fluid hyperthermia toward noninvasive cancer treatment	ACS Omega, ACS Publications	02/09/2020
2	Hyperthermic evaluation of oleic acid coated nano-spinel magnesium ferrite: Enhancement via hydrophobic-to-hydrophilic surface transformation	Journal of Alloys and Compounds, Elsevier	15/09/2020
3	Multifunctional nano-magnetic particles assisted viral RNA-extraction protocol for potential detection of COVID-19	Materials Research Innovations, Taylor & Francis	11/05/2020
4	Impact of crystallites on enhancement of bandgap of Mn _{1-x} Zn _x Fe ₂ O ₄ (1 ≥ x ≥ 0) nanospinels	Chemical Physics Letters, Elsevier	16/04/2020
5	Structural, infrared, magnetic and ferroelectric properties of Sr _{0.5} Ba _{0.5} Ti _{1-x} Fe _x O ₃ nanoceramics: Modifications via trivalent Fe ion doping	Physica B: Condensed Matter, Elsevier	15/03/2020

The collaboration is of following purpose

1. Organizing training workshop for the students and faculties.
2. Joint publication and research proposals.

I found the **Dr. Prashant B. Kharat**, faculty member of the Physics Department of Vinayak Vidnyan Mahavidyalaya, Nandgaon Khandeshwar, are very actively involved in the research activities. He is are very punctual in their work.


Dr. Kamalakar M. Jadhav
Ph.D., FMASc
Department of Physics
Senior Professor and Head
Dr. Babasaheb Ambedkar
Marathwada University,
Aurangabad.

	 <p>Shri Shivaji Education Society, Amravati's SHRI SHIVAJI SCIENCE COLLEGE Shivaji Nagar, Morshi Road, Amravati - 444 603 (M.S.)</p> <p>NAAC Accredited by Grade "A*" with CGPA of 3.42 (IV Cycle) UGC Awarded Status of CPE (II Phase) Identified by DST, Government of India for FIST, SGBAU-Lead College, ISO 9001 : 2015 Certified College & nirf-2022 Rank Band : 151 - 200</p>	
Shri. Harshvardhan P. Deshmukh President	Dr. G.V. Korpe Principal	Dr. Panjabrao alias Bhausaheb Deshmukh
● E-mail : shivajiscamt.office@gmail.com ● Website : www.shivajiscamt.org ● Off. : 0721-2660855, 0721-2991778, Principal : 0721-2991785		
Ref. No. SC/ / /	Date : / /	
<u>Collaborative Research Programme-Recognition</u>		
<p>It is the honour for me to declare the Collaborative Research Programme in association of faculty member/s of Department of Botany, Vinayak Vidnyan Mahavidyalaya, Nandgaon Khandeshwar affiliated to Sant Gadge Baba Amravati University, is continued from 2017 till the date 11/04/2023.</p>		
<p>It is to be indicated for recognition that the research collaboration is in the form of active research activities with faculties from Department of Botany, Shri Shivaji Science College, Amravati the field of Mycorrhizal Bio-Technology. The collaboration is intensively observed from year 2017.</p>		
<p>The collaboration is of following purpose</p>		
<ol style="list-style-type: none">1. Organizing training workshop for the students and faculties.2. Joint publication and research proposals.		
<p>I found the faculty members of Department of Botany, Vinayak Vidnyan Mahavidyalaya, Nandgaon Khandeshwar, are very actively involved in the research activities. They are found very punctual in their work and we wish a great work ahead for future endeavours.</p>		
 (Dr. TUSHAR WANKHEDE) Professor & Head Department of Botany Shri Shivaji Science College, Amravati		



Vidarbha Youth Welfare Society's
Bar. Ramrao Deshmukh Arts, Smt. Indiraji Kapadiya Commerce
Nyayamutri Krushnarao Deshmukh Science College
Badnera-Amravati (M.S.) Pin-444701
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Ph.No.2681232,2580232 Fax:0721-26681232,Email-edik_kd@rediffmail.com,Website-www.rdikandkd.org

Date: 01/10/2021

Collaborative Research Programme-Recognition

It is the honour for us to declare the **Collaborative Research Programme** in association of faculty members of **Mathematics Department** of **Vinayak Vidnyan Mahavidyalaya, Nandgaon Khandeshwar** affiliated to Sant Gadge Baba Amravati University, has been continued since 2020.

It is to be indicated for recognition that the research collaboration is in the form of active research activities with faculties from Mathematics Department in the field of **Cosmology/General Theory of Relativity/Modified Theories of Relativity**. The collaboration is intensively observed from Research Papers.

The collaboration is of following purposes

1. Organizing training workshop for the students and faculties.
2. Joint publication and research proposals.

I found the faculty members of Mathematics Department of Vinayak Vidnyan Mahavidyalaya, Nandgaon Khandeshwar, are very actively involved in the research activities. They are very punctual in their work.

Dr. Vijay Mete
Head, Department of Mathematics
R.D.I.K. College, Amravati.

Dr. V. G. Mete
Professor & Head
Department of Mathematics,
R.D.I.K. & K.D. College, Badnera-Amravati

Estd. 1972

॥ ज्ञानम् विज्ञान सहितम् ॥

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Dr. D.S. Dhote
Principal

Shri Brijlal Biyani Shiksha Samiti's
Brijlal Biyani Science College
Biyani Educational Campus, AMRAVATI - 444 605

[Affiliated to Sant Gadge Baba Amravati University, Amravati.]
[Re-accredited by NAAC Bangalore at B** Level]

Website: www.bbbscamt.com
Email ID: biyani_college@yahoo.com sbbsm125@sgbau.ac.in

Date: 04/04/2022

Collaborative Research Programme-Recognition

It is the honour for us to declare the **Collaborative Research Programme** in association of faculty members of **Mathematics Department** of **Vinayak Vidnyan Mahavidyalaya, Nandgaon Khandeshwar** affiliated to Sant Gadge Baba Amravati University, has been continued since 2020.

It is to be indicated for recognition that the research collaboration is in the form of active research activities with faculties from Mathematics Department in the field of **Cosmology/General Theory of Relativity/Modified Theories of Relativity**. The collaboration is intensively observed from Research Papers.

The collaboration is of following purposes

1. Organizing training workshop for the students and faculties.
2. Joint publication and research proposals.

I found the faculty members of Mathematics Department of Vinayak Vidnyan Mahavidyalaya, Nandgaon Khandeshwar, are very actively involved in the research activities. They are very punctual in their work.

Dr. Prachi Agrawal
Head, Department of Mathematics
Brijlal Biyani Science College, Amravati.

Dr. P. R. Agrawal
Asstt. Professor & Head
Dept. of Mathematics
Brijlal Biyani Science College



**4. Activities Under Research Collaborations itute-
Institute Research Collaborations**



5. Activities Under Research Collaborations

➤ I. Collaboratives activities for Research during the year 2017-18

1. Collaborative research work with **Dr. Rekha C. Maggirwar**, Department of Botany, Shri Shivaji Science College, Amravati.

➤ II. Collaboratives activities for Research during the year 2018-19

2. Collaborative research work with **Dr. Rekha C. Maggirwar**, Department of Botany, Shri Shivaji Science College, Amravati.

➤ III. Collaboratives activities for Research during the year 2019-20

3. Collaborative research work with **Dr. Vijay G. Mete**, Department of Mathematics, R.D.I.K. and K.D. College, Badnera-Amravati.
4. Collaborative research work with **Dr. K. M. Jadhav**, Department of Physics, Dr. Babasaheb Ambedkar Marathwada University, Aurangabad.
5. Collaborative research work with **Dr. S. G. Onkar**, Department of Physics, Adarsha Science, Jairamdas Bhagchand Arts and Birla Commerce Mahavidyalaya, Dhamangaon Rly.
6. Collaborative research work with **Dr. S. B. Somwanshi**, Research Scholar, Department of Chemistry, Dr. B. A. M. University, Aurangabad, Maharashtra, 431004 India.
7. Collaborative research work with **Dr. S. B. Somvanshi**, Research Scholar, School of Materials Engineering, Purdue University, West Lafayette, IN 47907, U.S.

➤ IV. Collaboratives activities for Research during the year 2020-21

8. Collaborative research work with **Dr. Rekha C. Maggirwar**, Department of Botany, Shri Shivaji Science College, Amravati.
9. Collaborative research work with **Dr. Mamta Chandrakar**, Department of Zoology, Bajaj College of Science, Wardha.
10. Collaborative research work with **Dr. Vijay G. Mete**, Department of Mathematics, R.D.I.K. and K.D. College, Badnera-Amravati.
11. Collaborative research work with **Dr. K. M. Jadhav**, Department of Physics, Dr. Babasaheb Ambedkar Marathwada University, Aurangabad.

➤ **V. Collaboratives activities for Research during the year 2021-22**

12. Collaborative research work with **Dr. Mamta Chandrakar**, Department of Zoology, Bajaj College of Science, Wardha.
13. Collaborative research work with **Dr. Prachi Agrawal**, Assistant professor, Brijlal Biyani Science College Amravati..
14. Collaborative research work with **Dr. K. M. Jadhav**, Department of Physics, Dr. Babasaheb Ambedkar Marathwada University, Aurangabad.
15. Collaborative research work with **Dr. S. B. Somvanshi**, Research Scholar, School of Materials Engineering, Purdue University, West Lafayette, IN 47907, United States.

I. Collaborative Research Activities -Year 2017–2018

Collaborative Publications of Dr. Suchita Khodke with Dr. Rekha C. Maggirwar

Sr No.	Authors	Paper Details (Title, Journal, issue, pages etc.)	Year of Publication	Link to Paper
1	R. C. Maggirwar G.B. Hedawoo, S.P. Khodke , P. B. Bobade	International journal of researches in biosciences, agriculture, and technology, (2), vol-v, ISSN No. 2347-517X (Online)	July 2017	https://ijrbat.in/upload_papers/02102017064624204.pdf
2	Maggirwar RC, Khodke SP , Deshmukh SB Malokar SG	Int. J. of Life Sciences, Special Issue, A8 , ISSN: 2320-7817	2017	RCMIJLSsep2017(6).pdf

II. Collaborative Research Activities-Year 2018 – 2019

Collaborative Publication of Dr. Suchita Khodke with Dr. Rekha C.

Maggirwar

Sr No.	Authors	Paper Details (Title, Journal, issue, pages etc.)	Year of Publication	Link to Paper
1.	P. W. Deotare, S. P. Khodke , R. C. Maggirwar, S. K. Kharwade	An International Research Journal in Botany, Volume 01, Issue 06,	2019	EBSCOhost 147538592 Arbuscular Mycorrhizal and Endophytic (DSE) association in the dominant grasses of Melghat Forest (Phase - II), India.
2	P.W. Deotare, S.P. Khodke , R.C. Maggirwar S.K. Kharwade	Journal of Plant Science and Research, 36 (1-2) 211-224,	2020	http://olddrji.lbp.world/JournalVolumeDetails.aspx?jid=2581-589X&vol=Volume%20:%201%20Issue%20:%206,%20March,%202019&volid=6#

III. Collaborative Research Activities - Year 2019 – 2020

Collaborative Publication of Dr. Abhijit Bansod with Dr. Vinayak G. Mete

Sr No.	Authors	Paper Details (Title, Journal, issue, pages etc)	Year of Publication	Link to Paper
1.	V. G. Mete, A. S. Bansod P. B. Murade2	AEGAEUM JOURNAL, ISSN NO: 0776-3808, Volume 8, Issue 3, 2020, Page No. 992-1005	March 2020	https://www.researchgate.net/publication/340162485_Bianchi_Types_Cosmological_Models_with_Cold_Dark_Matter_and_Anisotropic_Dark_Energy_in_Saez-Ballester_Theory_of_Gravitaton

Collaborative Publication of Dr. Prashant Kharat with Dr. K. M. Jadhav

Sr No.	Authors	Paper Details (Title, Journal, issue, pages etc)	Year of Publication	Link to Paper
1.	Dhananjay N. Bhojar, Sandeep B. Somvanshi, Prashant B. Kharat , A. A. Pandit, K. M. Jadhav	Structural, infrared, magnetic and ferroelectric properties of Sr0.5Ba0.5Ti1-xFexO3 nanoceramics: Modifications via trivalent Fe ion doping. Physic B: Condensed Matter, Elsevier Volume 581 , 15 March 2020, 411944.	March 2020	https://www.sciencedirect.com/science/article/abs/pii/S0921452619308245
2.	Mangesh V. Khedkar, Swapnil A. Jadhav, Sandeep B. Somvanshi, Prashant B. Kharat , K. M. Jadhav	Physicochemical properties of ambient pressure dried surface modified silica aerogels: effect of pH variation SN Applied Sciences, Springer Nature Article number: 696 (2020)	March 2020	https://link.springer.com/article/10.1007/s42452-020-2463-3
3.	Sandeep B. Somvanshi, Prashant B. Kharat , Mangesh V. Khedkar, K. M. Jadhav	Hydrophobic to hydrophilic surface transformation of nano-scale zinc ferrite via oleic acid coating: Magnetic hyperthermia study towards biomedical applications Ceramics International, Elsevier Volume 46, Issue 6 , 15 April 2020, Pages 7642-7653	April 2020	https://www.sciencedirect.com/science/article/pii/S027884219334583

Sr No	Authors	Paper Details (Title, Journal, issue, pages etc)	Year of Publication	Link to Paper
4.	Supriya R. Patade, Deepali D. Andhare, Prashant B. Kharat , Ashok V. Humbe, K. M. Jadhav	Impact of crystallites on enhancement of bandgap of $Mn_{1-x}Zn_xFe_2O_4$ ($1 \geq x \geq 0$) nanospinels Chemical Physics Letters, Elsevier Volume 745 , 16 April 2020, 137240	April 2020	https://www.sciencedirect.com/science/article/abs/pii/S000926142030155X
5.	Sandeep B. Somvanshi, Mangesh V. Khedkar, Prashant B. Kharat , K. M. Jadhav	Influential diamagnetic magnesium (Mg^{2+}) ion substitution in nano-spinel zinc ferrite ($ZnFe_2O_4$): Thermal, structural, spectral, optical and physisorption analysis Ceramics International, Elsevier Volume 46, Issue 7 , May 2020, Pages 8640-8650	May 2020	https://www.sciencedirect.com/science/article/pii/S0272884219335862
6.	Sandeep B. Somvanshi, Prashant B. Kharat , Tukaram S. Saraf, Saurabh B. Somvanshi, Sumit B. Shejul, K. M. Jadhav	Multifunctional nano-magnetic particles assisted viral RNA-extraction protocol for potential detection of COVID-19 Materials Research Innovations, Taylor & Francis Volume 25, 2021 - Issue 3	11 May 2020	https://www.tandfonline.com/doi/full/10.1080/14328917.2020.1769350
7.	Sandeep B. Somvanshi, Swapnil A. Jadhav, Mangesh V. Khedkar, Prashant B. Kharat , S. D. More, K. M. Jadhav	Structural, thermal, spectral, optical and surface analysis of rare earth metal ion (Gd^{3+}) doped mixed Zn–Mg nano-spinel ferrites Ceramics International, Elsevier Volume 46, Issue 9 , 15 June 2020, Pages 13170-13179	June 2020	https://www.sciencedirect.com/science/article/pii/S0272884220304132
8.	Pallavi G. Undre, Prashant B. Kharat , Jitendra S. Kounsalye, R. V. Kathare, K. M. Jadhav	Structural, morphological and magnetic properties of Cu^{2+} doped ZnO nanoparticles Journal of Physics: Conference Series, IOP Publishing Pallavi G. Undre <i>et al</i> 2020 <i>J. Phys.: Conf. Ser.</i> 1644 012008	June 2020	https://iopscience.iop.org/article/10.1088/1742-6596/1644/1/012008/meta
9.	Prashant B. Kharat , Sandeep B. Somvanshi, Pankaj P. Khirade and K. M. Jadhav	Effect of magnetic field on thermal conductivity of the cobalt ferrite magnetic nanofluids Journal of Physics: Conference Series, IOP Publishing Prashant B. Kharat <i>et al</i> 2020 <i>J. Phys.: Conf. Ser.</i> 1644 012028	June 2020	https://iopscience.iop.org/article/10.1088/1742-6596/1644/1/012028
10.	A. S. Wadatkar, Prashant B. Kharat , A. V. Turkhade, S. G. Onkar and P. S. Bodkhe	The D.C electrical properties of lithium ion conducting solid polymer electrolyte based on polyvinyl alcohol Journal of Physics: Conference Series, IOP Publishing A. S. Wadatkar <i>et al</i> 2020 <i>J. Phys.: Conf. Ser.</i> 1644 012037	June 2020	https://iopscience.iop.org/article/10.1088/1742-6596/1644/1/012037

Collaborative Publications of Dr. Prashant Kharat with Dr. S. G. Onkar

Sr No	Authors	Paper Details (Title, Journal, issue, pages etc)	Year of Publication	Link to Paper
1.	A. S. Wadatkar, Prashant B. Kharat , Ajay V. Ambhore, S. G. Onkar	Low-cost fabrication of Cu doped ZnO(Zn _{0.95} Cu _{0.05} O) film for enhanced gas sensing applications Journal of Physics: Conference Series, IOP Publishing <i>J. Phys.: Conf. Ser.</i> 1644 012059	June 2020	https://iopscience.iop.org/article/10.1088/1742-6596/1644/1/012059
2.	A. S. Wadatkar, Prashant B. Kharat , A.V. Turkhade, S. G. Onkar and P. S. Bodkhe	The D.C electrical properties of Lithium ion conducting solid polymer electrolyte based on polyvinyl alcohol Journal of Physics: Conference Series Volume: 1644, <i>J. Phys.: Conf. Ser.</i> 1644 012037	June 2020	https://iopscience.iop.org/article/10.1088/1742-6596/1644/1/012037
3.	A. S. Wadatkar, Prashant B. Kharat , Ajay V. Ambhore and S. G. Onkar	Low-cost Fabrication of Cu doped ZnO (Zn _{0.95} Cu _{0.05} O) Film for Enhanced Gas Sensing Applications Journal of Physics: Conference Series Volume: 1644,	June 2020	https://iopscience.iop.org/article/10.1088/1742-6596/1644/1/012059
4.	A S Wadatkar, S G Onkar , S B Nagdeote, and P B Kharat	Gas sensing behavior of ZnO thick film sensor towards H ₂ S, NH ₃ , LPG and CO ₂ . Journal of Physics: Conference Series Volume: 1644, <i>J. Phys.: Conf. Ser.</i> 1644 012060	June 2020	https://iopscience.iop.org/article/10.1088/1742-6596/1644/1/012060/meta
5.	S G Onkar , S B Nagdeote, A S Wadatkar, Prashant B. Kharat	Gas sensing behavior of ZnO thick film sensor towards H ₂ S, NH ₃ , LPG and CO ₂ Journal of Physics: Conference Series, IOP Publishing S G Onkar <i>et al</i> 2020 <i>J. Phys.: Conf. Ser.</i> 1644 012060	June 2020	https://iopscience.iop.org/article/10.1088/1742-6596/1644/1/012060
6.	A. S. Wadatkar, Prashant B. Kharat , Ajay V. Ambhore, S. G. Onkar	Low-cost fabrication of Cu doped ZnO(Zn _{0.95} Cu _{0.05} O) film for enhanced gas sensing applications Journal of Physics: Conference Series, IOP Publishing A. S. Wadatkar <i>et al</i> 2020 <i>J. Phys.: Conf. Ser.</i> 1644 012059	June 2020	https://iopscience.iop.org/article/10.1088/1742-6596/1644/1/012059

Collaborative Publications of Dr. Prashant Kharat with Dr. Saurabh B. Somwanshi

Sr No	Authors	Paper Details (Title, Journal, issue, pages etc)	Year of Publication	Link to Paper
1.	B. H. Devmunde, Saurabh B. Somwanshi, Prashant B. Kharat , Madhukar B. Solunke	Rare earth ion (La ³⁺) doped BaTiO ₃ Perovskite nanoceramics for spintronic applications B. H. Devmunde, Saurabh B. Somwanshi, Prashant B. Kharat , Madhukar B. Solunke Journal of Physics: Conference Series, IOP Publishing B. H. Devmunde <i>et al</i> 2020 <i>J. Phys.: Conf. Ser.</i> 1644 012055	June 2020	https://iopscience.iop.org/article/10.1088/1742-6596/1644/1/012055
2.	Saurabh B. Somwanshi , Sandeep B. Somvanshi, Prashant B. Kharat	Visible light driven photocatalytic activity of TiO ₂ nanoparticles prepared via gel-combustion process Journal of Physics: Conference Series, IOP Publishing Saurabh B. Somwanshi <i>et al</i> 2020 <i>J. Phys.: Conf. Ser.</i> 1644 012042	June 2020	https://iopscience.iop.org/article/10.1088/1742-6596/1644/1/012042
3.	Saurabh B. Somwanshi , Sandeep B. Somvanshi, Prashant B. Kharat	Nanocatalyst: A brief review on synthesis to applications Journal of Physics: Conference Series, IOP Publishing Saurabh B. Somwanshi <i>et al</i> 2020 <i>J. Phys.: Conf. Ser.</i> 1644 012046	June 2020	https://iopscience.iop.org/article/10.1088/1742-6596/1644/1/012046
4.	Saurabh B. Somwanshi , Sandeep B. Somvanshi, Prashant B. Kharat	Multifunctional magnetic nano-platforms for advanced biomedical applications: A brief review Journal of Physics: Conference Series, IOP Publishing Prashant B. Kharat <i>et al</i> 2020 <i>J. Phys.: Conf. Ser.</i> 1644 012036	June 2020	https://iopscience.iop.org/article/10.1088/1742-6596/1644/1/012036

Collaborative Publication of Dr. Anant Wadatkar with Dr. Sandeep B. Somvanshi

Sr No	Authors	Paper Details (Title, Journal, issue, pages etc)	Year of Publication	Link to Paper
1.	Prashant B. Kharat, Anant S. Wadatkar , Sandeep B. Somvanshi , Pankaj Koinkar, Harsharaj S. Jadhav, Prasanta Ghosh, Arti D. Rushi	Preface: International web conference on advanced material science and nanotechnology (NANOMAT-2020) Journal of Physics: Conference Series, IOP Publishing Prashant B. Kharat <i>et al</i> 2020 <i>J. Phys.: Conf. Ser.</i> 1644 011001	June 2020	https://iopscience.iop.org/article/10.1088/1742-6596/1644/1/011001

IV. Collaborative Research Activities -Year 2020–2021

Collaborative Publication of Dr. Suchita Khodke with Dr. Rekha C. Maggirwar

Sr No	Authors	Paper Details (Title, Journal, issue, pages etc)	Year of Publication	Link to Paper
1.	K. G. Wankhade, Dr. R. C. Maggirwar, S. P. Khodke	World Journal of Pharmaceutical and life sciences, wjpls, 2021, Vol. 7, Issue 4, 118 - 122	January 2021	https://www.wjpls.org/home/ahhttp://www.ijstm.com/images/short_pdf/1619502411_GST_13.pdfrticle_abstract/2202
2.	Priti Dhakulkar, Suchita Khodke Rekha Maggirwar	International Journal of Science, Technology and Management, Volume No. 10, Special issue No.1, 69-75,	April 2021	http://www.ijstm.com/images/short_pdf/1619502411_GST_13.pdf
3.	Ragini Zade, Suchita Khodke , Rekha Maggirwar	International Journal of Recent Scientific Research, Vol.12, Issue (03) A, pp. 41207-41210	March 2021	http://recentscientific.com/studies-am-fungi-associated-tagetes-erecta-l-melghat-forest-maharashtra

Collaborative Publication of Dr. Gajendrasingh Pachlore with Dr. Mamta Chandrakar

Sr No	Authors	Paper Details (Title, Journal, issue, pages etc)	Year of Publication	Link to Paper
1.	Dr Gajendrasingh Pachlore* , Dr Mamta Chandrakar, Dr Pratibha Mahalle*	International Journal of Science Technology and Management, Vol No. 01, Queens of Era-2021	April 2021	http://www.ijstm.com/images/short_pdf/1619502144_GST_2.pdf

Collaborative Publication of Dr. Abhijit Bansod with Dr. Vijay Mete

Sr No	Authors	Paper Details (Title, Journal, issue, pages etc)	Year of Publication	Link to Paper
1.	V.G. Mete A.S. Bansod, P. B. Murade	International Journal of Mathematics Trends and Technology, Volume 66 Issue 11, 117-127, November 2020	November 2020	https://www.researchgate.net/publication/346314112_Accelerating_Anisotropic_Bianchi_Type-V_Model_with_Barotropic_Matter_and_Viscous_Dark_Energy_in_Lyra_Geometry

Collaborative Publication of Dr. Prashant Kharat with Dr. K. M. Jadhav

Sr No	Authors	Paper Details (Title, Journal, issue, pages etc)	Year of Publication	Link to Paper
1.	Sandeep B. Somvanshi, Supriya R. Patade, Deepali D. Andhare, Swapnil A. Jadhav, Mangesh V. Khedkar, Prashant B. Kharat , Pankaj P. Khirade, K. M. Jadhav	Hyperthermic evaluation of oleic acid coated nano-spinel magnesium ferrite: Enhancement via hydrophobic-to-hydrophilic surface transformation Journal of Alloys and Compounds, Elsevier Volume 835 , 15 September 2020, 155422	September 2020	https://www.sciencedirect.com/science/article/abs/pii/S0925838820317850
2.	Prashant B. Kharat , Sandeep B. Somvanshi, Pankaj P. Khirade, K. M. Jadhav	Induction heating analysis of surface-functionalized nanoscale CoFe ₂ O ₄ for magnetic fluid hyperthermia toward noninvasive cancer treatment ACS Omega, ACS Publications <i>ACS Omega</i> 2020, 5, 36, 23378–23384	September 2020	https://pubs.acs.org/doi/10.1021/acsomega.0c03332
3.	V. R. Bhagwat, Mangesh V. Khedkar, Govind Kulkarni, Prashant B. Kharat , K. M. Jadhav	Dextrose assisted sol-gel auto combustion synthesis and magnetic characterizations of cobalt ferrite nanoparticles. AIP Conference Proceedings, AIP Publishing AIP Conference Proceedings 2265 , 030085 (2020).	November 2020	https://aip.scitation.org/doi/abs/10.1063/5.0017310
4.	Supriya R. Patade, Deepali D. Andhare, Sandeep B. Somvanshi, Prashant B. Kharat , K. M. Jadhav	Effect of zinc doping on water-based manganese ferrite nanofluids for magnetic hyperthermia application AIP Conference Proceedings, AIP Publishing AIP Conference Proceedings 2265 , 030557 (2020).	November 2020	https://aip.scitation.org/doi/10.1063/5.0017051

V. Collaborative Research Activities -Year 2021–2022

Collaborative Publication of Dr. Gajendrasingh Pachlore with Dr. Mamta Chandrakar

Sr No	Authors	Paper Details (Title, Journal, issue, pages etc)	Year of Publication	Link to Paper
1.	Chandrakar M. R. Kalwade P. S. Pachlore G. S.	Advances in Zoology and Botany 10(1): 18-24, 2022	March 2022	https://www.hrpub.org/journals/article_info.php?aid=11908

Collaborative Publication of Dr. Abhijit Bansod with Dr. Prachi Agrawal

Sr No	Authors	Paper Details (Title, Journal, issue, pages etc)	Year of Publication	Link to Paper
1.	Prachi Agrawal, Abhijit Bansod , Umesh Takey3	International Journal of All Research Education and Scientific Methods (IJARESM), ISSN: 2455-6211 Volume 10, Issue 6, June-2022	June 2022	http://www.ijaresm.com/uploaded_files/document_file/Prachi_AgrawalxHxL.pdf

Collaborative Publication of Dr. Prashant Kharat with Dr. K. M. Jadhav

Sr No	Authors	Paper Details (Title, Journal, issue, pages etc)	Year of Publication	Link to Paper
1.	Sandeep B. Somvanshi, Prashant B. Kharat , K. M. Jadhav	Surface Functionalized Superparamagnetic Zn-Mg Ferrite Nanoparticles for Magnetic Hyperthermia Application Towards Noninvasive Cancer Treatment Macromolecular Symposia, Wiley Publishing 2100124	December 2021	https://onlinelibrary.wiley.com/doi/abs/10.1002/masy.202100124

Collaborative Publication of Dr. Prashant Kharat with Dr. Sandeep B. Somvanshi

Sr No	Authors	Paper Details (Title, Journal, issue, pages etc)	Year of Publication	Link to Paper
1.	Saurabh B. Somvanshi, Sandeep B. Somvanshi, Prashant B. Kharat , Nanasaheb D. Thorat	Magnetically Retrievable Fe-doped TiO ₂ Nanoparticles for Photo-induced Toxic Dye Removal Applications Macromolecular Symposia, Wiley Publishing 2100112	December 2021	https://onlinelibrary.wiley.com/doi/abs/10.1002/masy.202100112
2.	Prashant B. Kharat , Sandeep B. Somvanshi, Saurabh B. Somvanshi, Anuja M. Mopari	Investigation of Super-Capacitive Properties of Nanocrystalline Copper-Zinc (Cu _{0.5} Zn _{0.5} Fe ₂ O ₄) Ferrite Nanoparticles Macromolecular Symposia, Wiley Publishing 2100162	December 2021	https://onlinelibrary.wiley.com/doi/abs/10.1002/masy.202100162
3.	Sandeep B. Somvanshi, Prashant B. Kharat , K. M. Jadhav	Surface Functionalized Superparamagnetic Zn-Mg Ferrite Nanoparticles for Magnetic Hyperthermia Application Towards Noninvasive Cancer Treatment Macromolecular Symposia, Wiley Publishing 2100124	December 2021	https://onlinelibrary.wiley.com/doi/abs/10.1002/masy.202100124
4.	Prashant B. Kharat , Sandeep B. Somvanshi, Saurabh B. Somvanshi, Anuja M. Mopari	Low-cost Fabrication of Zn-doped MnFe ₂ O ₄ (Mn _{0.5} Zn _{0.5} Fe ₂ O ₄) Film for H ₂ S Gas Sensing Applications Macromolecular Symposia, Wiley Publishing 2100147	December 2021	https://onlinelibrary.wiley.com/doi/abs/10.1002/masy.202100147