



Nagar Yuwak Shikshan Sanstha's

Yeshwantrao Chavan College of Engineering

(An Autonomous Institution affiliated to Rashtrasant Tukadoji Maharaj Nagpur University)

Hingna Road, Wanadongri, Nagpur - 441 110

NAAC Accredited with 'A++' Grade

Ph.: 07104-242919, 242623, 242588

Summary of 3.1.2

The institution provides seed money to its teachers for research:

3.1.2.1 Seed money provided by the institution to its teachers for research during the year (INR in lakhs):

| | |
|-----------------------|-----------|
| Year | 2022-2023 |
| (INR In Lacks) | 4.821 |

Supporting Documents

1. Sanction Letters of the seed money for the Proposal
2. Project Documents

Dr. U. P. Waghe
(Principal)



Index-3.1.2

2022-23

| Sr. No | Name of Supporting Document | Page Nos. |
|---------------|---|------------------|
| 1. | Sanction Letters of the Seed Money for the Proposal | 1-31 |
| 2. | Project Documents | 32-77 |

Sanction Letters of the Seed Money for the Proposal

R&D Cell, YCCE

NOTE

2nd March, 2021

Sub: Request for approval of budget for In-house funding schemes

As per discussions policies for two in-house funding schemes have been proposed for approval. The schemes include 1. Innovative Minor Patentable Product Scheme and 2. Innovative Experimental Setup Scheme. It is proposed that the schemes would be launched in two phases, Phase I – March 2021 to Sept. 2021 and Phase II- July 2021 to December 2021. Details of the proposed budget for Phase-I is given below

| Phase | Scheme | Budget in Rs. Lakh |
|---------|--|--------------------|
| Phase I | Innovative Minor Patentable Product Scheme | 3.00 |
| | Innovative Experimental Setup Scheme. | 3.00 |

It is requested that the budget proposed for Phase-I of Rs. 6.00 Lakh may please be approved.

Amande

(Dr. A.M. Pande)

Submitted to Hon. Secretary NYSS, through Principal YCCE

O.K.
YCCE

may be approved
G. S. Singh
02-03-21

For NA
G. S. Singh
03-03-21
G.A. □

Maym. - To send approval copy to
Dr. A.M. Pande, and
Shri Ravin Singh.

E. S. Singh
31/03

**Innovative Experimental Setup- Phase 3****Minutes of Meeting**

A review meeting was conducted in Board Room, YCCE at 12.00 Noon on 11 March 2023 for review of Innovative Experiment Set up submitted by faculty for possible seed funding.

The following committee members reviewed the proposal

1. Dr. Manali Kshirsagar, Director, Technical and Advisor, MGI
2. Dr. N. V. Thakur, Mentor, R and D
3. Dr. U. H. Gawande, Dean, R and D
4. Dr. Y. U. Chitri, Asst. Dean, FRP Division, R and D
5. Dr. Tejeswini Panase, Coordinator, FRP Division, R and D
6. Dr. M. M. Mushrif, Prof. ET Department
7. Dr. P. T. Karule, Prof. EE, Department
8. Dr. S. V. Prayagi, Prof. ME Department
9. M. S. Sawangikar, Applied Chemistry
10. Dr. B. P. Nandurkar, CE Department

Following are the remarks of the review committee for the proposal

| SN | Name of Faculty | Department | Title of the Proposal | Remarks by Committee | Amount Approved |
|----|-----------------------|-------------------------|--|--|-----------------|
| 1. | Dr. Y. A. Suryawanshi | Electronics Engineering | Microcontroller Based Automatic water level detection and controlling water flow | Recommended | 12,000/- |
| 2. | M. S. Tufail | Mechanical Engineering | EDM Process Duration Measurement | Recommended | 9,300/- |
| 3. | Sanjivini Panditkar | Applied Chemistry | Needle Based Electrospinning Apparatus | Reduce the budget to 25,000/- with proper justification. | - |

**Office of Dean Research and Development**

| | | | | | |
|----|--------------------|-----------------------------------|--|---|----------|
| | | | | Discuss with Electrical and Mechanical Department for High Voltage Supply and Rotating drum | |
| 4. | Charuta S Waghmare | Civil Engineering | Modified Roughing Filter | Recommended | 15,000/- |
| 5. | Dr. Bharati Masram | Electronics and Telecommunication | To Perform various interfacing with the development board of Microcontroller 8051 | Revise the budget and resubmit. Resubmitted Recommended | 21,600/- |
| 6. | Kanchan Kamble | Electronics and Telecommunication | To study and verify the operation of various types of waveform generator using IC 741 | Recommended | 7,000/- |
| 7. | Swati Nitaware | Electronics and Telecommunication | To design the logic circuit to control a motorized device that moves by signal from photocell sensors. | Recommended (Only Non-Recurring) | 10,000/- |
| 8. | Prasad Hatwalne | Mechanical Engineering | Determination of Metacentric Height | Recommended | 1900/- |
| 9. | Dr. Bharti Patil | Applied Physics | To Study VI Characteristics of Solar Cell | Procurement of new readily available kit to perform experiment is not the part of new experimental setup; hence the proposal is not appropriate for the scheme. Not Recommended | - |



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Hingna Road, Wanadongri, Nagpur - 441 110

Ph: 07104-237919, 234623, 329249, 329280 Fax: 07104-232376, Website: www.ycce.edu

Office of Dean-Research and Development

| | | | | | |
|-----|----------------------|------------------------|--|--|-----------------|
| 10. | Mrs. Lata Tembhare | Computer Technology | Network Monitoring Using SNMP Protocol | No Funding is required hence not considered in this scheme | |
| 11. | Mrs. Pradnya Moon | Computer Technology | Cheddar- An Open Source Real Time Schedulability Tool/ Scheduling Simulator (Proposal Not submitted) | No Funding is required hence not considered in this scheme | |
| 12. | Mrs. Vishakha Akhare | Information Technology | Experimental Report on Setting up a Cloud computing Environment | No Funding is required hence not considered in this scheme | |
| 13. | J. R. Yadav | Information Technology | Build a Basic Salesforce REST APT Integration | No Funding is required hence not considered in this scheme | |
| | | | | Total | 76,800/- |

It is therefore requested to approve the above mentioned amount under Innovative Experimental Set Up Scheme.


15/03/2023

Dr. Yogita Chitriv
Assistant Dean, FPD, R and D

Forwarded for approval

Through,



Dr. Ujwala Gawande
Dean, R and D



Dr. U. P. Waghe

Principal, YCCE

Encl.

1. Approval of budget for In- house funding schemes

**Office of Dean-Research and Development**

Date: 11 March 2023

Innovative Minor Patentable Product/Project Development Scheme- Phase 3**Minutes of Meeting**

A review meeting of Inhouse funding under Innovative Minor Patentable Product/Project Development Scheme was conducted in Board Room, YCCE at 12.00 Noon on 11 March 2023 for possible seed funding to the faculties who have submitted the proposals under this scheme.

The committee members for the review process are

1. Dr. Manali Kshirsagar, Director, Technical and Advisor, MGI
2. Dr. N. V. Thakur, Mentor, R and D
3. Dr. U. H. Gawande, Dean, R and D
4. Dr. N. D. Rehpade, Asst. Dean, IPR Division, R & D
5. Dr. B. Y. Masram, Member, IPR Division, R & D
4. Dr. M. M. Mushrif, Prof. ET Department
5. Dr. P. T. Karule, Prof. EE, Department
6. Dr. S. V. Prayagi, Prof. ME Department
7. Dr. B. P. Nandurkar, Asst. Prof. CE Department
8. Dr. S. P. Adhau, Asso. Prof. EL Department

Following are the remarks of the review committee for the proposals.

| SN | Name of Faculty | Department | Title of the Proposal | Remarks by Committee | Approved Amount |
|----|--------------------------|------------------------|---|----------------------|-----------------|
| 1. | Prof. Priyanka Jaiswal | Information Technology | Classification of Oral Apical Lesions using ensemble approach | Not Considered | - |
| 2. | Prof. Bhushan Bawankar | Information Technology | Nadi pariksha : Disease Prediction system | Resubmit | - |
| 3. | Prof. Shraddha Gogulothu | Information Technology | IOT based Pest Monitoring System | Resubmit | - |



Office of Dean-Research and Development

| | | | | | |
|-----|---|---|--|-----------------------------|---------|
| 4. | Prof. Chandrayani N.Rokde | | Color Matrix Based Virtual Password System | Not Considered | - |
| 5. | Prof. Kavita H. Gudadhe | Information Technology | Diabetes Prediction Using Machine Learning | Not Considered | - |
| 6. | Prof. Trupti Tembhekar | Electrical Engineering | Electricity Generation in a non-conventional way by applying methods of wasted footstep technology | Rejected | - |
| 7. | Prof. Prachi Gawande Prof. Yogesh Kale | Electronics Engineering and Electronics & Telecommunication | True Water Power Saver for Common Washroom | Recommended | 17470/- |
| 8. | Prof. V. B. Niranjane | Electronics & Telecommunication | Canal water Data Monitoring System | Recommended | 15539/- |
| 9. | Prof. Nivedita Pande | Electronics & Telecommunication | Voice Controlled Elevator with Solar backup and SOS Messaging | Resubmit | - |
| 10. | Prof. S. A. Desai/ Dr. M. M. Mushrif/ Dr. C. S. Gode | Electronics & Telecommunication | IOT based Electrical energy monitoring system | Recommended | 27550/- |
| 11. | Prof. S.W. Dhenagare | Civil Engineering | Development of Quaternary Concrete | ABSENT | - |
| 12. | Prof. Prashant Pande | Civil Engineering | Light Weight Bricks | Recommended | 24350/- |
| 13. | Prof. Prashant Pande | Civil Engineering | Reinforced hollow Bricks | Shifted to seed fund of LLP | - |
| 14. | Prof. Vivek Jayale | Civil Engineering | Horizon -X1 | Recommended | 26800/- |
| 15. | Prof. Prasad Hatwalne | Mechanical Engineering | Development of a device for slowing or | Recommended | 19500/- |



Nagar YuwakShikshanSanstha's

Yashwantrao Chavan College of Engineering

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Ph: 07104-237919, 234623, 329249, 329250 Fax: 07104-232376, Website: www.ycce.edu

Office of Dean-Research and Development

| | | | | | |
|-----|--|------------------------|--|--------------|---------------|
| | | | stopping a moving human powered carts | | |
| 16. | Prof. M.S. Tufail / Prof .C.A. Mahatme | Mechanical Engineering | Analysis of Plastic Molding Clamp By Using Additive Manufacturing. | Recommended | 13900/- |
| 17. | Prof. Vijay Thakre | Mechanical Engineering | Design and fabrication of weeding Robot for agriculture applications | Resubmit | - |
| | | | | Total | 145109 |

It is therefore requested to approve the above mentioned amount under Innovative Minor Patentable Product/Project Development Scheme- Phase 3

Dr. Nita D. Rehpade,
Assistant Dean, IPR, R and D

Forwarded for approval

Through,

Dr. Ujwala Gawande
Dean, R and D

Dr. U. P. Waghe
Principal, YCCE

Encl.

1. Approval of budget for In- house funding schemes



Yeshwantrao Chavan College of Engineering

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Hingna Road, Wanadongri, Nagpur - 441 110

Ph: 07104 237019, 234623, 329249, 329250 Fax: 07104 232376, Website: www.ycce.edu

Research and Development Cell

YCCE/R and D Cell/2022-23/ 172

Date: 15 March 2023

To
[Redacted]
Dr. Y. A. Suryawanshi
Department of Electronics Engineering

Subject: Approval of Proposal submitted under In-House Scheme of Innovative Experimental Setup

Dear Dr. Y. A. Suryawanshi

We are pleased to inform you that your proposal titled "Microcontroller Based Automatic water level detection and controlling water flow" is recommended by the committee for approval and the proposal is approved for financial assistance of **Rs. 12,000/-**.

You are requested to initiate the work on the project at the earliest.

Dr. Yogita Chitriv
Assistant Dean, FPD, R and D

Dr. Ujwala Gawande
Dean, R and D

Dr. U. P. Waghe
Principal

Principal
Yeshwantrao Chavan
College of Engineering
Wanadongri Hingna Road,
NAGPUR-441110

Copy To

- HoD, Department of Electronics Engineering, YCCE
- A/C Section, YCCE





Research and Development Cell

YCCE/R and D Cell/2022-23/ 173

Date: 15 March 2023

To

M. S. Tufail

Department Mechanical Engineering

Subject: Approval of Proposal submitted under In-House Scheme of Innovative Experimental Setup

Dear M. S. Tufail

We are pleased to inform you that your proposal titled "EDM Process Duration Measurement" is recommended by the committee for approval and the proposal is approved for financial assistance of **Rs. 9,300/-**.

You are requested to initiate the work on the project at the earliest.

Dr. Yogita Chitriv
Assistant Dean, FPD, R and D

Dr. Ujwala Gawande
Dean, R and D

Dr. U. P. Waghe
Principal

Principal
Yeshwantrao Chavan
College of Engineering
Wanadongri Hingna Road,
NAGPUR-441110

Copy To

- HoD, Department of Mechanical Engineering, YCCE
- A/C Section, YCCE





Nagpur Yeshwantrao Chavan

Yeshwantrao Chavan College of Engineering

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Hingna Road, Wanadongri, Nagpur - 441 110

Ph: 07104 237919, 234623, 229249, 229250 Fax: 07104 232376, Website: www.ycce.edu

Research and Development Cell

YCCE/R and D Cell/2022-23/ 174

Date: 15 March 2023

To
Charuta S Waghmare
Department of Civil Engineering

Subject: Approval of Proposal submitted under In-House Scheme of Innovative Experimental Setup

Dear Charuta S Waghmare

We are pleased to inform you that your proposal titled "Modified Roughing Filter" is recommended by the committee for approval and the proposal is approved for financial assistance of **Rs. 15,000/-**.

You are requested to initiate the work on the project at the earliest.

Dr. Yogita Chitriv
Assistant Dean, FPD, R and D

Dr. Ujwalla Gawande
Dean, R and D

Dr. U. P. Waghe
Principal

Principal
Yeshwantrao Chavan
College of Engineering,
Wanadongri Hingna Road,
NAGPUR-441110

Copy To

- HoD, Department of Civil Engineering, YCCE
- A/C Section, YCCE





Research and Development Cell

YCCE/R and D Cell/2022-23/475

Date: 15 March 2023

To

Dr. Bharati Masram

Department of Electronics and Telecommunication Engineering

Subject: Approval of Proposal submitted under In-House Scheme of Innovative Experimental Setup

Dear Dr. Bharati Masram

We are pleased to inform you that your proposal titled "To Perform various interfacing with the development board of Microcontroller 8051" is recommended by the committee for approval and the proposal is approved for financial assistance of **Rs. 21,600/-**.

You are requested to initiate the work on the project at the earliest.

Dr. Yogita Chitriv
Assistant Dean, FPD, R and D

Dr. Ujwalla Gawande
Dean, R and D

Dr. U. P. Waghe
Principal

Principal
Yeshwantrao Chavan
College of Engineering
Wanadongri Hingna Road,
NAGPUR-441110

Copy To

- HoD, Department of Electronics and Telecommunication Engineering, YCCE
- A/C Section, YCCE





Research and Development Cell

YCCE/R and D Cell/2022-23/ *A76*

Date: 15 March 2023

To
Kanchan Kamble
Department of Electronics and Telecommunication Engineering

Subject: Approval of Proposal submitted under In-House Scheme of Innovative Experimental Setup

Dear Kanchan Kamble

We are pleased to inform you that your proposal titled "To study and verify the operation of various types of waveform generator using IC 741" is recommended by the committee for approval and the proposal is approved for financial assistance of **Rs. 7,000/-**.

You are requested to initiate the work on the project at the earliest.

Dr. Yogita Chitriv
Assistant Dean, FPD, R and D

Dr. Ujwalla Gawande
Dean, R and D

Dr. U. P. Waghe
Principal

Principal
Yeshwantrao Chavan
College of Engineering
Wananongri Hingna Road,
NAGPUR-441110

Copy To

- HoD, Department of Electronics and Telecommunication Engineering, YCCE
- A/C Section, YCCE





Research and Development Cell

YCCE/R and D Cell/2022-23/ 177

Date: 15 March 2023

To
Swati Nitnaware
Department of Electronics and Telecommunication Engineering

Subject: Approval of Proposal submitted under In-House Scheme of Innovative Experimental Setup

Dear Swati Nitnaware

We are pleased to inform you that your proposal titled "To design the logic circuit to control a motorized device that moves by signal from photocell sensors" is recommended by the committee for approval and the proposal is approved for financial assistance of Rs. 10,000/-.

You are requested to initiate the work on the project at the earliest.

Dr. Yogita Chitriv
Assistant Dean, FPD, R and D

Dr. Ujwalla Gawande
Dean, R and D

Dr. U. P. Waghe
Principal

Principal
Yeshwantrao Chavan
College of Engineering
Wanadongri Hingna Road,
NAGPUR-441110

Copy To

- HoD, Department of Electronics and Telecommunication Engineering, YCCE
- A/C Section, YCCE





Research and Development Cell

YCCE/R and D Cell/2022-23/478

Date: 15 March 2023

To
Prasad Hatwalne
Department of Mechanical Engineering

Subject: Approval of Proposal submitted under In-House Scheme of Innovative Experimental Setup

Dear Prasad Hatwalne

We are pleased to inform you that your proposal titled "Determination of Metacentric Height" is recommended by the committee for approval and the proposal is approved for financial assistance of **Rs. 1900/-**.

You are requested to initiate the work on the project at the earliest.

Dr. Yogita Chitriv
Assistant Dean, FPD, R and D

Dr. Ujwalla Gawande
Dean, R and D

Dr. U. P. Waghe
Principal

Principal
Yeshwantrao Chavan
College of Engineering
Wanadongri Hingna Road,
NAGPUR-441110

Copy To

- HoD, Department of Mechanical Engineering, YCCE
- A/C Section, YCCE





Nagar Yuwak Shikshan Sanstha's

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Research and Development Cell

YCCE/R and D Cell/2022-23/464

Date: 15 March 2023

To

Prof. Prachi Gawande

Department of Electronics Engineering

Prof. Yogesh Kale

Department of Electronics & Telecommunication

Subject: Approval of Proposal submitted under In-House Innovative Minor Patentable Product/Project Development Scheme.

Dear Prof. Prachi Gawande / Prof. Yogesh Kale

We are pleased to inform you that your proposal titled "True Water Power Saver for Common Washroom" is recommended by the committee for approval and the proposal is approved for financial assistance of **Rs. 17470/-**.

You are requested to initiate the work on the project at the earliest.

Dr. Nita D. Rehpade
Assistant Dean,
IPR

Dr. Ujwala Gawande
Dean, R and D

Dr. U. P. Waghe
Principal
Principal
Yeshwantrao Chavan
College of Engineering
Wanadongri Hingna Road,
NAGPUR-441110

Copy To

- HoD, Department of Electronics Engineering, YCCE
- HoD, Department of Electronics & Telecommunication, YCCE
- A/C Section, YCCE





Nagar Yuwak Shikshan Sanstha's

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Research and Development Cell

YCCE/R and D Cell/2022-23/ 465

Date: 15 March 2023

To
Prof. V. B. Niranjane
Department of Electronics & Telecommunication


Subject: Approval of Proposal submitted under In-House Innovative Minor Patentable Product/Project Development Scheme.


Dear Prof. V. B. Niranjane

We are pleased to inform you that your proposal titled "Canal Water Data Monitoring System" is recommended by the committee for approval and the proposal is approved for financial assistance of **Rs. 15539/-**.

You are requested to initiate the work on the project at the earliest.


Dr. Nita D. Rehpade
Assistant Dean,
IPR


Dr. Ujwala Gawande
Dean, R and D


Dr. U. P. Waghe
Principal
Principal
Yeshwantrao Chavan
College of Engineering
Wanadongri Hingna Road,
NAGPUR-441110

Copy To

- HoD, Department of Electronics & Telecommunication, YCCE
- A/C Section, YCCE





Research and Development Cell

YCCE/R and D Cell/2022-23/4 66

Date: 15 March 2023

To

Prof. S. A. Desai/ Dr. M. M. Mushrif/ Dr. C. S. Gode
Department of Electronics & Telecommunication

Subject: Approval of Proposal submitted under In-House Innovative Minor Patentable Product/Project Development Scheme.

Dear Prof. S. A. Desai/ Dr. M. M. Mushrif/ Dr. C. S. Gode

We are pleased to inform you that your proposal titled "IOT based Electrical energy monitoring system" is recommended by the committee for approval and the proposal is approved for financial assistance of **Rs. 27550/-**.

You are requested to initiate the work on the project at the earliest.

Dr. Nita D. Rehpade
Assistant Dean,
IPR

Dr. Ujwalla Gawande
Dean, R and D

Dr. U. P. Waghe
Principal

Principal
Yeshwantrao Chavan
College of Engineering
Wanadongri Hingna Road,
NAGPUR-441110

Copy To

- HoD, Department of Electronics & Telecommunication, YCCE
- A/C Section, YCCE





Research and Development Cell

YCCE/R and D Cell/2022-23/ 469

Date: 15 March 2023

To
Prof. Prasad Hatwalne
Department of Mechanical Engineering

Subject: Approval of Proposal submitted under In-House Innovative Minor Patentable Product/Project Development Scheme.

Dear Prof. Prasad Hatwalne

We are pleased to inform you that your proposal titled "Development of a device for slowing or stopping a moving human powered carts" is recommended by the committee for approval and the proposal is approved for financial assistance of **Rs. 19500/-**.

You are requested to initiate the work on the project at the earliest.

Dr. Nita D. Rehpade
Assistant Dean,
IPR

Dr. Ujwalla Gawande
Dean, R and D

Dr. U. P. Waghe
Principal

Principal
Yeshwantrao Chavan
College of Engineering
Wanadongri Hingna Road,
NAGPUR-441110

Copy To

- HoD, Department of Mechanical Engineering, YCCE
- A/C Section, YCCE





Research and Development Cell

YCCE/R and D Cell/2022-23/470

Date: 15 March 2023

To

Prof. M.S. Tufail / Prof. C. A. Mahatme
Department of Mechanical Engineering

Subject: Approval of Proposal submitted under In-House Innovative Minor Patentable Product/Project Development Scheme.

Dear Prof. M.S. Tufail / Prof. C.A. Mahatme

We are pleased to inform you that your proposal titled "Analysis of Plastic Molding Clamp By Using Additive Manufacturing" is recommended by the committee for approval and the proposal is approved for financial assistance of Rs. 13900/-.

You are requested to initiate the work on the project at the earliest.

Dr. Nita D. Rehpade
Assistant Dean,
IPR

Dr. Ujwala Gawande
Dean, R and D

Dr. U. P. Waghe
Principal

Principal
Yeshwantrao Chavan
College of Engineering
Wanadongri Hingna Road,
NAGPUR-441110

Copy To

- HoD, Department of Mechanical Engineering, YCCE
- A/C Section, YCCE





Research and Development Cell

YCCE/R and D Cell/2022-23/ 468

Date: 15 March 2023

To
Prof. Vivek Jayale
Department of Civil Engineering

Subject: Approval of Proposal submitted under In-House Innovative Minor Patentable Product/Project Development Scheme.

Dear Prof. Vivek Jayale

We are pleased to inform you that your proposal titled "Horizon -X1" is recommended by the committee for approval and the proposal is approved for financial assistance of Rs. 26800/-.

You are requested to initiate the work on the project at the earliest.

Dr. Nita D. Rehpade
Assistant Dean,
IPR

Dr. Ujwala Gawande
Dean, R and D

Dr. U. P. Waghe
Principal

Principal
Yeshwantrao Chavan
College of Engineering
Wanadongri Hingna Road,
NAGPUR-441110

Copy To

- HoD, Department of Civil Engineering, YCCE
- A/C Section, YCCE





Research and Development Cell

YCCE/R and D Cell/2022-23/ 467

Date: 15 March 2023

To
Prof. Prashant Pande
Department of Civil Engineering

Subject: Approval of Proposal submitted under In-House Innovative Minor Patentable Product/Project Development Scheme.

Dear Prof. Prashant Pande

We are pleased to inform you that your proposal titled "Light Weight Bricks" is recommended by the committee for approval and the proposal is approved for financial assistance of Rs. 24350/-.

You are requested to initiate the work on the project at the earliest.

Dr. Nita D. Rehpade
Assistant Dean,
IPR

Dr. Ujwala Gawande
Dean, R and D

Dr. U. P. Waghe
Principal

Principal
Yeshwantrao Chavan
College of Engineering
Hingna Road, Nagpur

Copy To

- HoD, Department of Civil Engineering, YCCE
- A/C Section, YCCE



Yeshwantrao Chavan College of Engineering

Hingna Road Wanadongri,
N A G P U R - 441110

Student Project Expenses
Ledger Account

1-Apr-2022 to 6-Sep-2023

| Date | Particulars | Vch Type | Vch No | Debit | Page 1 Credit |
|-----------|--|----------|---------------|------------------|------------------|
| 5-7-2022 | Cr Moharil R.M | JOURNAL_ | YCCE/ JV- 389 | 6,447.00 | |
| | Primary Cost Category | | | | |
| | Electrical Engg[E L] | | | 6,447.00 Cr | |
| | Primary Cost Category | | | | |
| | Electrical Engg[E L] | | | 6,447.00 Dr | |
| | <i>being amount of Provision for Project Expenses submitted by Dept of Electrical - Project Titled-Hybrid Power Generation & Storage MGMT - Material Purchase from Engineers Lab of Inv No. EL-03-24.04.2022 Student Name- Aninrose Mulla, Devyani Yadav, Janhavi Ambadkar, Rutuja Ingole, Pranay Kothale, Prathmesh Thabhane] Guide Name - DR R Moharil]</i> | | | | |
| | | | | <u>6,447.00</u> | |
| | Dr Closing Balance | | | | 6,447.00 |
| | | | | <u>6,447.00</u> | <u>6,447.00</u> |
| 1-4-2023 | Cr Opening Balance | | | 6,447.00 | |
| 14-8-2023 | Cr Doifode V. R. | JOURNAL_ | YCCE/ JV- 656 | 41,493.00 | |
| | Primary Cost Category | | | | |
| | Electrical Engg[E L] | | | 24,463.00 Dr | |
| | 5 nos | | | | |
| | <i>being amount of Project Expenses submitted by Dept of Electrical [Rs. 24463/- Topics To Generate Electricity by using Smarts Speed Breakers- Student Name - Aditya Jaitly, Neahl Wande, Nikki Singh & Janhavai katey & Rs. 17030/- Topics-Design of Pumped Storage Hydro Power Plant- Student Name- Suresh Patane, Prathmesh Chitode, Bhargawi Wagh, Chaitnay Khati & Pratiksha Raut]</i> | | | | |
| | | | | <u>47,940.00</u> | |
| | Dr Closing Balance | | | | 47,940.00 |
| | | | | <u>47,940.00</u> | <u>47,940.00</u> |

Yeshwantrao Chavan College of Engineering

Hingna Road Wanadongri,

NAGPUR - 441110

Student Project Expenses

Ledger Account

1-Apr-2022 to 4-Sep-2023

Page 1

| Date | Particulars | Vch Type | Vch No. | Debit | Credit |
|-----------|--|----------|---------------|-----------|--------|
| 10-9-2022 | Cr Thote Dhiraj K Primary Cost Category Electronics & Telecomm. [E & T] 2,838.00 Cr | JOURNAL_ | YCCE/ JV- 716 | 2,838.00 | |
| | Primary Cost Category Electronics & Telecomm. [E & T] 2,838.00 Dr <i>being expenses submitted by student of dept of E & T [Project Name- Moedm e-trolley for good purchase with inventory management using android application] student name-Shantanu Kasale, Manjeet thakur, Parth Chinchalkar] Amazon in-Rs. 1199/- +419& Sarvana Electronics-1220/</i> | | | | |
| | Cr Madankar A A Primary Cost Category Electronics & Telecomm. [E & T] 12,440.00 Cr | JOURNAL_ | YCCE/ JV- 717 | 12,440.00 | |
| | Primary Cost Category Electronics & Telecomm. [E & T] 12,440.00 Dr <i>being expenses submitted by student of dept of E & T [Project Name-Accident detecting and prevation systems integrated in electric Pole] student Name - Ritesh Gokhe, Harshal Dharmik, Nikita Borate] - Novelty Electronics of /bill No. 159 dt. 03.10.2021</i> | | | | |
| 24-9-2022 | Cr Desai Sandip A. Primary Cost Category Electronics & Telecomm [E & T] 910.00 Dr | JOURNAL_ | YCCE/ JV- 803 | 3,331.00 | |
| | <i>ANUKSHA SAKALKAR, PRERANA MESHRAM, ABHILASHA WALKE being expenses incurred for Project expenses submitted by dept of E & T [Project Name- Plant Water Systems for Rs. 910/- & Automatic Plant Watering Systems for Rs. 690/- & Water level Indicator for Rs. 408/- & Bluetooth Controlled door lock for Rs. 733/- & Automatic Visitor Counter for Hospita for Rs. 590/-]</i> | | | | |

yes **wantrao Chavan College of Engineering**
 Student Project Expenses Ledger Account : 1-Apr-2022 to 4-Sep-2023

| Date | Particulars | Vch Type | Vch No. | Debit | |
|-----------|---|----------|---------------|------------------|------------------|
| | Brought Forward | | | 18,609.00 | |
| 24-9-2022 | Cr MASRAM BHARATI Primary Cost Category Electronics & Telecomm. [E & T] 596.00 Dr BHARGAV SABLE, NIKHIL TATATULE, OM GATUWAR <i>being expenses incurred for Project expenses submitted by dept of E & T [Project Name- Automatic plant irrigation systems using, microcontroller 8051 for Rs. 596/- & Water level indicator using 8051 microcontrollrer for Rs. 638/- & Automaic room Light Controller for Rs. 548/- & Automatic Railway Gate for Rs. 537/- & Automatic visitor Counter for Rs. 844/- & Automatic Hand sanitisation Systems]</i> | JOURNAL_ | YCCE/ JV- 804 | 3,730.00 | |
| | Cr Choudhari Anagha V Primary Cost Category Electronics & Telecomm. [E & T] 1,587.00 Dr SHSHRUT PANTAONE <i>being expenses incurred for Project expenses submitted by dept of E & T [Project Name- Automatic hand sanitisation machine for Rs. 1587/-Fastage finger First , Led Togglng for Rs. 1103/- & To Check the LPG Gas Leakage for Rs. 802/-]</i> | JOURNAL_ | YCCE/ JV- 805 | 3,492.00 | |
| | Cr MASRAM BHARATI Primary Cost Category Electronics & Telecomm. [E & T] 590.00 Dr AYUSH MISHRA, AYUSH GAWANDE, NAKSHATRA SHINEKER <i>being expenses incurred for Project expenses submitted by dept of E & T [Project Name- Voling Machine using 8051 Micro Controller for Rs. 590/- & Automaic Plant Watering Systems for Rs. 672/- & Bluthooth Controlled door lock system for Rs. 1309/-]</i> | JOURNAL_ | YCCE/ JV- 806 | 2,571.00 | |
| | Cr Choudhari Anagha V Primary Cost Category Electronics & Telecomm. [E & T] 1,864.00 Dr RITESH UCHITKAR, LATIKA DHABALE, ATHANRVA DANI <i>being expenses incurred for Project expenses submitted by dept of E & T [Project Name- Automtic Plant watering systems , led blinking for Rs. 1864/- & Gasleakage idenfification & Led Togglng for Rs. 761/- & Automatic watering system, led Togglng for Rs. 1675/-]</i> | JOURNAL_ | YCCE/ JV- 807 | 4,300.00 | |
| | | | | 32,702.00 | |
| Dr | Closing Balance | | | | 32,702.00 |
| | | | | 32,702.00 | 32,702.00 |

Yeshwantrao Chavan College of Engineering

Hingna Road Wanadongri,

N A G P U R - 441110

Student Project Expenses

Ledger Account

1-Apr-2022 to 31-Jul-2023

Page 1

| Date | Particulars | Vch Type | Vch No. | Debit | Credit |
|-----------|--|----------|---------------|----------|-----------|
| 24-9-2022 | Cr Ambekar S.V. Primary Cost Category Civil Department [C E] 3,260.00 Cr SRUSHTI DEWANAND CHINDHALOR Primary Cost Category Civil Department [C E] 3,260.00 Dr M-TECH <i>being expenses incurred for Project expenses submitted by dept of Civil [Project Name-Performance evaluation of Micorlage for treatment of Industrial Waster Water- 1770+720+300+100+170+200]P G PROJECT]</i> | JOURNAL_ | YCCE/ JV- 808 | 3,260.00 | |
| | Cr Meshram V.G. Primary Cost Category Civil Department [C E] 5,510.00 Cr SHUBHAM ATRAM,GAGAN PAL, AKANSHA LALWANI, SHAILESH DHONGI, SAMIKSHA BHITADE Primary Cost Category Civil Department [C E] 5,510.00 Dr <i>being expenses incurred for Project expenses submitted by dept of Civil [Project Name-Light weight Concrete containing recyled Plastic - 1510/+4000/-]</i> | JOURNAL_ | YCCE/ JV- 809 | 5,510.00 | |
| | Cr Gajbhiye A . R. Primary Cost Category Civil Department [C E] 5,590.00 Cr MOHD ASHADULLAH ANSARI Primary Cost Category Civil Department [C E] 5,590.00 Dr <i>being expenses incurred for Project expenses submitted by dept of Civil [Project Name-Utilisation of Waste Plastic in manufacturing of Bricks using Cement - 2100+1200+400+1890]</i> | JOURNAL_ | YCCE/ JV- 810 | 5,590.00 | |
| | Cr Nandurkar Bhupesh Primary Cost Category Civil Department [C E] 7,690.00 Cr RUPESH NARKHEDE, NISHANT MASKE, SIDDHESH MUDDOMWAR Primary Cost Category Civil Department [C E] 7,690.00 Dr ESHAN GHARPURE, SIDDHANT WARADE, ADITI HARDE <i>being expenses incurred for Project expenses submitted by dept of Civil [Project Name-Utilisation of Water Glass in Concrete - 3600+1380+2160+550]</i> | JOURNAL_ | YCCE/ JV- 811 | 7,690.00 | |
| | Carried Over | | | | 22,050.00 |

| Date | Particulars | Vch Type | Vch No. | Debit | Credit |
|-----------|--|----------|---------------|-----------|--------|
| | Brought Forward | | | 22,050.00 | |
| 24-9-2022 | Cr Raut Sanjay Padmakar Primary Cost Category Civil Department [C E] 11,895.00 Cr SWAPNIL RAIPUR, TANMAY *AMBUDE, TEKESDRA SANDIYE | JOURNAL_ | YCCE/ JV- 812 | 11,895.00 | |
| | Primary Cost Category Civil Department [C E] 11,895.00 Dr ATHARVA YERNE, RUTUJA RATHOD, SUMIT NANORE <i>being expenses incurred for Project expenses submitted by dept of Civil [Project Name - Development of sustainable concrete using Textile effluent sludge - 11800+95]</i> | | | | |
| | Cr Mendhe Vaishali N Primary Cost Category Civil Department [C E] 9,356.00 Cr GAURAV BHAKTE, DATTA DESHMUKH, PIPRANTNA PATIL | JOURNAL_ | YCCE/ JV- 813 | 9,356.00 | |
| | Primary Cost Category Civil Department [C E] 9,356.00 Dr SUSHANT NIMBALKAR, SARTHK RAMTEKE, RAJESH MADAVI <i>being expenses incurred for Project expenses submitted by dept of Civil [Project Name - Experimental Study of Concrete by Partial replacement with Fly Ash and Fine aggregate with by copper Slag - 2970+500 +5886]</i> | | | | |
| | Cr ANSARI KHALID SHAMIM Primary Cost Category Civil Department [C E] 25,032.00 Cr AMATYA PAHANPATE, KAMLESH BIIOND, SHUBHAM AKHARE | JOURNAL_ | YCCE/ JV- 814 | 25,032.00 | |
| | Primary Cost Category Civil Department [C E] 25,032.00 Dr ISHA JIWANE, NIKHITA UPRE, VAIDEHI WAGALWAR <i>being expenses incurred for Project expenses submitted by dept of Civil [Project Name - Experimental analysis of grey water treatment by hybrid process of solar based electrocoagulation and semi-membrane process - 12844.30+12188.22]</i> | | | | |

Carried Over

68,333.00

| Date | Particulars | Vch Type | Vch No. | Debit | Credit |
|-----------|---|----------|---------------|-----------|--------|
| | Brought Forward | | | 68,333.00 | |
| 24-9-2022 | Cr Agrawal Dhiraj G | JOURNAL_ | YCCE/ JV- 815 | 16,837.00 | |
| | Primary Cost Category | | | | |
| | Civil Department [C E] 16,837.00 Cr | | | | |
| | ANIKET KOPARKAR, SARANG BHIMANWAR, TEJAS TIPALE | | | | |
| | Primary Cost Category | | | | |
| | Civil Department [C E] 16,837.00 Dr | | | | |
| | JANVI SARODI, SHIVANI NAMOJWAR, VAIDEHI BANSODE | | | | |
| | being expenses incurred for Project expenses submitted by dept of Civil [Project Name - Static and dynamic behavior of regulensed concrete - 1025+7232+150 +3630+4800] | | | | |
| | Cr Hinge Pawan | JOURNAL_ | YCCE/ JV- 816 | 2,460.00 | |
| | Primary Cost Category | | | | |
| | Civil Department [C E] 2,460.00 Cr | | | | |
| | ANIKET NAGE, VAIBHAV TUMALE, RUSHIKESH HIWANJ | | | | |
| | Primary Cost Category | | | | |
| | Civil Department [C E] 2,460.00 Dr | | | | |
| | ATHARVA KASLIKAR, PRANAY RAHATE, SUYUESH RAKHUNDE | | | | |
| | being expenses incurred for Project expenses submitted by dept of Civil [Project Name - Insvestigation of E Waste as Replacement of Concrete agg in M S Concrete - 360+1400+700] | | | | |
| | Cr Yadav Amruta A | JOURNAL_ | YCCE/ JV- 817 | 2,138.00 | |
| | Primary Cost Category | | | | |
| | Civil Department [C E] 2,138.00 Cr | | | | |
| | KARTIK INGLE, AHMED RAZA KHAN, RISHIKESH KARALE | | | | |
| | Primary Cost Category | | | | |
| | Civil Department [C E] 2,138.00 Dr | | | | |
| | SAURABH MADANKAR, MANTHAN PARTEKI, BHUSHAN MADAVI | | | | |
| | being expenses incurred for Project expenses submitted by dept of Civil [Project Name - Effect on strength Concrete using metakaolin & Copper slag - 2138] | | | | |
| | Cr Meshram Sangita S | JOURNAL_ | YCCE/ JV- 818 | 5,094.00 | |
| | Primary Cost Category | | | | |
| | Civil Department [C E] 5,094.00 Cr | | | | |
| | DHIRAJ RATHOD, SAHIL JAGTAP, RITESH DHUMNE | | | | |
| | Primary Cost Category | | | | |
| | Civil Department [C E] 5,094.00 Dr | | | | |
| | SHAIKESH BIND, SUBODH GAIKWAD, RAHIL INGLE | | | | |
| | being expenses incurred for Project expenses submitted by dept of Civil [Project Name - Development of Building Block using capola slag as inéol granular material -5094/-] | | | | |
| | Carried Over | | | 94,862.00 | |

| Date | Particulars | Vch Type | Vch No. | Debit | Credit |
|-----------|---|----------|---------------|-----------|-------------|
| | .Brought Forward | | | 94,862.00 | |
| 24-9-2022 | Cr WAGH Monali R Primary Cost Category - Civil Department [C E] 15,282.00 Cr YASH PISE, YASH KENE, YASH BHAWATKAR, Primary Cost Category Civil Department [C E] 15,282.00 Dr AYUSH THAKRE, DIGUJAY DASTURE, OM JIRAPURE being expenses incurred for Project expenses submitted by dept of Civil [Project Name - Study of soil compacting concrete using bagasse ash & Molakaalin -3540+944 +7788+3010] | JOURNAL_ | YCCE/ JV- 810 | 15,282.00 | |
| | Cr Kalamkar Sanket G Primary Cost Category Civil Department [C E] 7,340.00 Cr AMAY TINKHIDE, ANIKET NAGIRKAR, KINSHEK KARMARKAR Primary Cost Category Civil Department [C E] 7,340.00 Dr AACHAL GADIYALE, YASH NETKE, DIVYA CHIMURKER being expenses incurred for Project expenses submitted by dept of Civil [Project Name - Reduction of surface rain water by developing previous concrete using waste material -640+6700] | JOURNAL_ | YCCE/ JV- 820 | 7,340.00 | |
| | Cr RAJESH M BHAGAT Primary Cost Category Civil Department [C E] 13,452.00 Cr VEDIKA KAMDI, UTKARSHA GOHETRE, PRATIK JASWANTI Primary Cost Category Civil Department [C E] 13,452.00 Dr AASHITA PARBUDE, MEENAL KOTPALLIWAR, RACHNA BOKSE being expenses incurred for Project expenses submitted by dept of Civil [Project Name -Evaluation of Adsorption capacity of Adsorbents prepared fro Waste -5310+1416 +5310+1416] | JOURNAL_ | YCCE/ JV- 821 | 13,452.00 | |
| | Cr Khandeshwar S.R. Primary Cost Category Civil Department [C E] 43,359.00 Cr M-TECH Primary Cost Category Civil Department [C E] 43,359.00 Dr ANUJA RAVINDRA GANGTHADE being expenses incurred for Project expenses submitted by dept of Civil [Project Name -Study membrane Bioreactor & to check the performance of Ceramic membrane Bio reaction -8390+43359]P G PROJECT] | JOURNAL_ | YCCE/ JV- 822 | 43,359.00 | |
| | Carried Over | | | | 1,74,295.00 |

| Date | Particulars | Vch Type | Vch No. | Debit | Credit |
|-----------|--|----------|---------------|-------------|-------------|
| | Brought Forward | | | 1,74,295.00 | |
| 24-9-2022 | Cr Ambekar S.V. Primary Cost Category Civil Department [C E] M-TECH 12,280.00 Cr | JOURNAL_ | YCCE/ JV- 823 | 12,280.00 | |
| | Primary Cost Category Civil Department [C E] PRADHINYA VIIHALRAO KOLHE being expenses incurred for Project expenses submitted by dept of Civil [Project Name - Study the feasibility of Electro fenton Process-1500+350+195+500+1820+1500 +700+1000] P G PROJECT | | | | |
| | Cr Waghmare Charuta S Primary Cost Category Civil Department [C E] BHABESH BASAK, DIGVIJAY DASTURE, PRATHAMESH URADE 7,887.00 Cr | JOURNAL_ | YCCE/ JV- 824 | 7,887.00 | |
| | Primary Cost Category Civil Department [C E] RAKSHA DHAKATE, REVATI KOKATE, SHEFALI MOHILE being expenses incurred for Project expenses submitted by dept of Civil [Project Name - Development of Horizontal raughing filter for pretreatment of Grey Water - 382 +260+3000+300+1220+70+2655] | | | | |
| | Cr Warade Harshal Primary Cost Category Civil Engg monika deoprasad TIWARI 12,450.00 Cr | JOURNAL_ | YCCE/ JV- 825 | 12,450.00 | |
| | Primary Cost Category Civil Department [C E] M-TECH being expenses incurred for Project expenses submitted by dept of Civil [Project Name - Recirculation of Digoslate in C S T R - 2500+2200+1100+800+1600+500+250 +3500] P G PROJECT] | | | | |
| | Cr RAJESH M BHAGAT Primary Cost Category Civil Department [C E] NEHAL GHARODE 10,746.00 Cr | JOURNAL_ | YCCE/ JV- 826 | 10,746.00 | |
| | Primary Cost Category Civil Department [C E] M-TECH being expenses incurred for Project expenses submitted by dept of Civil [Project Name - Removal of Nichel from aquous soil using agricultural waste based composite addorbent - 4720+1062+2124+650+235 +480+220+1222- P G PROJECT] | | | | |
| | Carried Over | | | | |
| | | | | | 2,17,658.00 |

Yeshwantrao Chavan College of Engineering

Student Project Expenses Ledger Account : 1-Apr-2022 to 31-Jul-2023

| Date | Particulars | Vch Type | Vch No. | Debit | Credit |
|-----------|---|----------|---------------|-------------|-------------|
| | Brought Forward | | | 2,17,658.00 | |
| 24-9-2022 | Cr RAJESH M BHAGAT Primary Cost Category Civil Department [C E] 12,036.00 Cr ROSHAN R BHURSE Primary Cost Category Civil Department [C E] 12,036.00 Dr M-TECH <i>being expenses incurred for Project expenses submitted by dept of Civil [Project Name - Utilisation of Agricultural Waste based adsorbe for removal of Copper from waster water - 1416+5310+5310- P G PROJECT]</i> | JOURNAL_ | YCCE/ JV- 827 | 12,036.00 | |
| | | | | | 2,29,694.00 |
| Dr | Closing Balance | | | | 2,29,694.00 |
| | | | | 2,29,694.00 | 2,29,694.00 |

Project Document

HYBRID POWER GENERATION AND STORAGE MANAGEMENT FOR SMART STREET LIGHTING

This project report is submitted to

Yeshwantrao Chavan College of Engineering

(An Autonomous Institution Affiliated to Rashtrasant Tukadoji Maharaj Nagpur University)

In partial fulfilment of the requirement

For the award of the degree

of

Bachelor of Electrical Engineering

By

ARINAROSE MULLA

RUTUJA INGOLE

DEVYANI YADAV

PRANAY KOTHALE

JANHAVI AMBADKAR

PRATHMESH TABHANE

Under the guidance of

Dr. R. M. Moharil



DEPARTMENT OF ELECTRICAL ENGINEERING

Nagar Yuwak Shikshan Sanstha's

YESHWANTRAO CHAVAN COLLEGE OF ENGINEERING

(An Autonomous Institution Affiliated to Rashtrasant Tukadoji Maharaj Nagpur University)

NAGPUR – 441 110

2021-2022

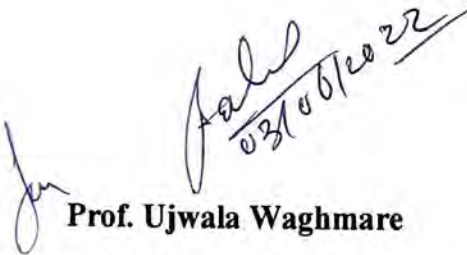
CERTIFICATE OF APPROVAL

Certified that the project report entitled “Hybrid Power Generation and Storage Management for Smart Street Lighting” has been successfully completed by Arinarose Mulla, Devyani Yadav, Janhavi Ambadkar, Rutuja Ingole, Pranay Kothale and Prathmesh Tabhane under the guidance of **Dr. R. M. Moharil** in recognition to the partial fulfilment for the award of the Degree of Bachelor of Electrical Engineering, YESHWANTRAO CHAVAN COLLEGE OF ENGINEERING (An Autonomous Institution Affiliated to Rashtrasant Tukadoji Maharaj Nagpur University).



Dr. R. M. Moharil

(Project Guide)



03/06/2022

Prof. Ujwala Waghmare

(Project Coordinator)



Dr S. G. Kadwane

(Head of Department,
Electrical Engineering)



03/06/2022

Signature of External Examiner

Name: **Dr. V. S. Dhok**

Date of Examination:

**“PERFORMANCE EVALUATION OF MICROALGAE
FOR TREATMENT OF WASTEWATER”**

This project report is submitted to

Yeshwantrao Chavan College of Engineering

(An Autonomous Institution Affiliated to Rashtrasant Tukdoji Maharaj Nagpur University)

In partial fulfillment of the requirement

For the award of the degree

of

Master of Technology in Environmental Engineering

By

Srushti D. Chindhalore

Under the guidance of

(Guide)

Dr. S.V. Ambekar

(Professor, Department of civil Engineering)

(Co-Guide)

Dr. Prashant Dhorabe

(Director, Green Bee Resources Pvt. Ltd.)



DEPARTMENT OF CIVIL ENGINEERING

Nagar Yuwak Shikshan Sanstha's

YESHWANTRAO CHAVAN COLLEGE OF ENGINEERING,

*(An autonomous institution affiliated to Rashtrasant Tukdoji Maharaj Nagpur University,
Nagpur)*

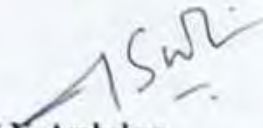
NAGPUR – 441 110

2021-2022


|

CERTIFICATE OF APPROVAL

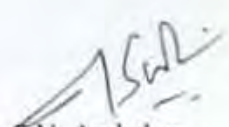
Certified that the project report entitled "**Performance evaluation of microalgae for treatment of wastewater**" has been successfully completed by **Srushti D. Chindhalore** under the guidance of **Dr. S.V. Ambekar** in recognition to the partial fulfillment for the award of the degree of Master of Technology in Environmental Engineering, **Yeshwantrao Chavan College of Engineering (An Autonomous Institution Affiliated to Rashtrasant Tukdoji Maharaj Nagpur University)**



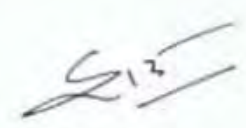
Dr. S.V. Ambekar
(Guide)



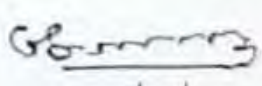
Dr. Peashant Dhorabe
(Co-Guide)



Dr. S.V. Ambekar
(Coordinator)



Dr. S.P. Raut
(HOD, CE Dept.)



Dr. U.P. Waghe
(Principal)

Prof. P.B. Kulkarni
Signature of External Examiner:

Name:

**“Lightweight Concrete Containing Recycled Plastic
Aggregates”**

*This project report is submitted to
Yeshwantrao Chavan College of Engineering
(An Autonomous Institution Affiliated to Rashtrasant Tukadoji Maharaj Nagpur
University)*

*In partial fulfillment of the requirement
For the award of the degree
Of
Bachelor of Engineering in Civil Engineering*

By

SHUBHAM ATRAM GAGAN PAL
SHAILESH DHONGE SAMIKSHA BHITADE
AAKANKSHA LALWANI

Under the guidance of

Dr. V. G. Meshram



DEPARTMENT OF CIVIL ENGINEERING
Nagar Yuwak Shikshan Sanstha's

YESHWANTRAO CHAVAN COLLEGE OF ENGINEERING
(An autonomous institution affiliated to Rashtrasant Tukadoji Maharaj Nagpur University, Nagpur)

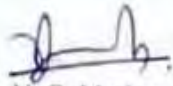
NAGPUR – 441 110

2021-22

i

CERTIFICATE OF APPROVAL

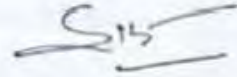
Certified that the project report entitled "Lightweight Concrete Containing Recycled Plastic Aggregates" has been successfully completed by Kunal Deshmukh ,Shubham Atram, Gagan Pal , Shailesh Dhonge , Samiksha Bhitade and Aakanksha Lalwani under the guidance of DR.VILAS GANUJI MESHRAM in recognition to the partial fulfilment for the award of the degree of Bachelor of Technology in Civil Engineering, Yeshwantrao Chavan College of Engineering(An Autonomous Institution Affiliated to Rashtrasant Tukdoji Maharaj Nagpur University)



DR. V. G. Meshram
(Guide)



Ms. S.K.Kamble
(Coordinator)



DR. S.P.RAUT
(HOD)

Signature of External Examiner :

Name :

Date of Examination :

"UTILISATION OF WASTE PLASTIC IN MANUFACTURING OF BRICKS BY USING CEMENT"

This project report is submitted to

Yeshwantrao Chavan College of Engineering

*(An Autonomous Institution Affiliated to Rashtrasant Tukdoji Maharaj Nagpur
University)*

In partial fulfillment of the requirement

For the Award of the degree

Of

Bachelor of Engineering in Civil engineering

By

Ms. Akshari Sawant

Ms. Sharayu Pohankar

Mr. Mohd Ashadullah Ansari

Ms. Irish Shaikh

Ms. Vaishnavi khawse

Mr. Siddharth Jain

Under the guidance of

Dr. A. R. GAJBHIYE

(Guide)



DEPARTMENT OF CIVIL ENGINEERING

Nagar Yuvak Shikshan Sansta's

Yeshwantrao Chavan College of Engineering

**(An Autonomous Institution Affiliated to Rashtrasant Tukdoji Maharaj Nagpur
University, Nagpur)**

NAGPUR-441 110

2021-2022

CERTIFICATE OF APPROVAL

Certified that the project report entitled "Utilization of Waste Plastic In Manufacturing of Bricks By Using Cement" has been successfully completed by Ms. Akshari Sawant, Ms. Irish Shaikh, Ms. Sharayu Pohankar, Ms. Vaishnavi Khawse, Mr. Mohd Ashadullah Ansari and Siddharth Jain under the guidance of Dr. A. R. Gajbhiye in recognition to the partial fulfillment for the award of the degree of Bachelor of Engineering in Civil Engineering, **Yeshwantrao Chavan College of Engineering (An Autonomous Institution Affiliated to Rashtrasant Tukdoji Maharaj Nagpur University)**



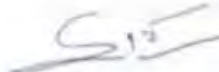
Dr. A. R. Gajbhiye

(Guide)
Signature




Ms. S. K. Kamble

(Coordinator)
Signature



Dr. S. P. Raut

(HOD)
Signature

Name and Signature of External:  Prof. P. S. Bhandari
Examiner: Date of Examination: 30-5-2022

**UTILISATION OF WASTE GLASS IN CONCRETE:
GLASS CONCRETE**

This project report is submitted to

Yeshwantrao Chavan College of Engineering

*(An Autonomous Institution Affiliated to Rashtrasant Tukdoji Maharaj Nagpur
University, Nagpur)*

In partial fulfilment of the requirement

For the award of the degree

Of

Bachelor of Engineering in Civil Engineering

By

DEEPESH NARKHEDE

SIDDHANT HARDE

ESHAN GHARPURE

SIDDHESH MUDDAMWAR

NISHANT MASKE

ADITI HARDE

Under the guidance of

Dr. B.P. NANDURKAR



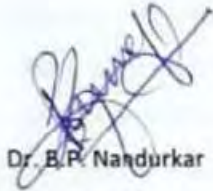
DEPARATMENT OF CIVIL ENGINEERING

**YESHWANTRAO CHAVAN COLLEGE OF ENGINEERING,
NAGPUR – 441110**

2021-2022

CERTIFICATE OF APPROVAL

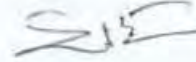
Certified that the project report entitled "UTILISATION OF WASTE GLASS IN CONCRETE: GLASS CONCRETE" has been successfully completed under the guidance of DR. BHUPESH P. NANDURKAR in recognition to the partial fulfillment for the award of the degree of Bachelor of Technology in Civil Engineering, Yeshwantrao Chavan College of Engineering (An Autonomous Institution Affiliated to Rashtrasant Tukdoji Maharaj Nagpur University)



Dr. B.P. Nandurkar
(Guide)



Prof. S. Kamble
(Coordinator)



Dr. S. P. Raut
(HOD, CE Dept.)

Signature of External Examiner :

Name :

Date of Examination :

**DEVELOPMENT OF SUSTAINABLE CONCRETE USING TEXTILE EFFLUENT
SLUDGE**

This project report is submitted to
Yeshwantrao Chavan College of Engineering

(An Autonomous Institution Affiliated to Rashtrasant Tukdoji Maharaj Nagpur University)

In partial fulfillment of the requirement

For the award of the degree

Of

Bachelor of Engineering in Civil Engineering

BY

RUTUJA RATHOD

SWAPNIL RAIPURE

ATHARVA YERNE

TANMAY AMBADE

SUMIT NONARE

TEKENDRA SANODIYA

Under the guidance of

Guide: Dr. Sanjay P. Raut
Co-Guide: Prof. Udaysingh Patil



DEPARTMENT OF CIVIL ENGINEERING

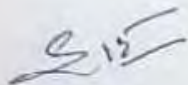
Nagar YuvakShikshan Sanstha

YESHWANTRAO CHAVAN COLLEGE OF ENGINEERING
(An autonomous institution affiliated to Rashtrasant Tukadoji Maharaj Nagpur University, Nagpur)
NAGPUR – 441110

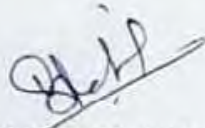
2021-22

CERTIFICATE OF APPROVAL

Certified that the project report entitled "DEVELOPMENT OF SUSTAINABLE CONCRETE USING TEXTILE EFFLUENT SLUDGE" has been successfully completed by Rutuja Vijay Rathod, Atharva Rajkumar Yerne, Sumit Ashok Nonare, Swapnil WarluRaipure, Tanmay Prakash Ambade and Tekendra Ishwar Prasad Sanodiya under the guidance of Dr. Sanjay P. Raut in recognition to the partial fulfillment for the award of the degree of Bachelor of Engineering in Civil Engineering, Yeshwantrao Chavan College of Engineering (An Autonomous Institution Affiliated to Rashtrasant Tukdoji Maharaj Nagpur University)



Dr. S. P. Raut
(Guide)



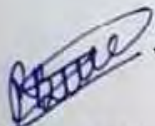
Prof. Uday Singh Patil
(Co-Guide)



Prof. S. K. Kamble
(Coordinator)



Dr. S. P. Raut
(HoD)



Signature of External Examiner

Name: R. S. Buse

Date of Examination: 31/05/22

**EXPERIMENTAL STUDY OF CONCRETE BY PARTIAL
REPLACEMENT OF CEMENT WITH FLY ASH AND
FINE AGGREGATE BY COPPER SLAG.**

This project report is submitted to
Yeshwantrao Chavan College of Engineering

(An Autonomous Institution Affiliated to Rashtrasant Tukdoji Maharaj Nagpur University)

In partial fulfillment of the requirement for the award of the degree

Of

**Bachelor of Engineering in
Civil Engineering**

BY

Mr. Sarthak M. Ramteke

Mr. Dipratna U. Patil

Mr. Rajesh M. Madavi

Mr. Sushant D. Nimbalkar

Mr. Gaurav P. Bhakte

Mr. Datta P. Deshmukh

Under the guidance of

Mrs. Vaishali Mendhe



DEPARTMENT OF CIVIL ENGINEERING

Nagar Yuwak Shikshan Sanstha

YESHWANTRAO CHAVAN COLLEGE OF ENGINEERING

**(An autonomous institution affiliated to Rashtrasant Tukdoji Maharaj Nagpur University,
Nagpur)**

NAGPUR – 441110

2021-22

CERTIFICATE OF APPROVAL

Certified that the project report entitled "EXPERIMENTAL STUDY OF CONCRETE BY PARTIAL REPLACEMENT OF CEMENT WITH FLY ASH AND FINE AGGREGATE BY COPPER SLAG." has been successfully completed by DIPRATNA UDAYBHAN PATIL, SUSHANT DIGAMBAR NIMBALKAR, SARTHAK MADHUKAR RAMTEKE, RAJESH MAHADEO MADAVI, GAURAV PRAKASH BHAKTE AND DATTA PANDITRAO DESHMUKH under the guidance of Mrs. Vaishali Mendhe in recognition to the partial fulfillment for the award of the degree of Bachelor of Engineering in Civil Engineering, Yeshwantrao Chavan College of Engineering (An Autonomous Institution Affiliated to Rashtrasant Tukdoji Maharaj Nagpur University)



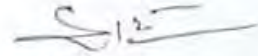
Signature

Mrs. Vaishali Mendhe
(Guide)



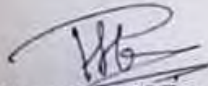
Signature

Prof. Snehal Kamble
(Co-Ordinator)



Signature

Dr Sanjay P. Raut
(HoD)



Signature of External

Examiner Name:- Prof. P. S. Bhandari

Date of Examination:- 31/05/2022

**EXPERIMENTAL ANALYSIS OF GREY WATER
TREATMENT BY HYBRID PROCESS OF SOLAR BASED
ELECTROCOAGULATION AND SEMI-MEMBRANE
PROCESS**

This project report is submitted to

Yeshwantrao Chavan College of Engineering
(An Autonomous Institution Affiliated to Rashtrasant Tukdoji Maharaj Nagpur University)

In partial fulfillment of the requirement

For the award of the degree

Of

Bachelor of Engineering in Civil Engineering

By

**NIKHITA UPARE, AMATYA PAHANPATE, SHUBHAM AKHARE,
VAIDEHI WASLWAR, ISHA JIWANE, KAMLESH BHOND**

Under the guidance of

Mr. Khalid S. Ansari



DEPARTMENT OF CIVIL ENGINEERING

Nagar Yuwak Shikshan Santa's

YESHWANTRAO CHAVAN COLLEGE OF ENGINEERING,

(An autonomous institution affiliated to Rashtrasant Tukadoji Maharaj Nagpur University, Nagpur)

NAGPUR – 441 110

2021-22

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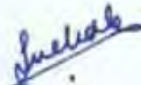
CERTIFICATE OF APPROVAL

Certified that the project report entitled "**Experimental Analysis of Grey Water Treatment by Hybrid Process of Solar Based Electrocoagulation and Semi-membrane Process**" has been successfully completed by Nikhita Upare, Amatya Pahanpate, Shubham Akhare, Vaidehi Wasalwar, Isha Jiwane, Kamlesh Bhond under the guidance Mr. Khalid S. Ansari in recognition to the partial fulfillment for the award of the degree of Bachelor of Engineering in Civil Engineering, **Yeshwantrao Chavan College of Engineering** (An Autonomous Institution Affiliated to Rashtrasant Tukdoji Maharaj Nagpur University)



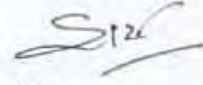
Signature

Mr. Khalid S. Ansari
(Guide)



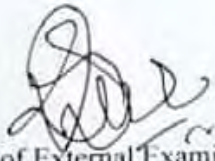
Signature

Mrs. Snehal Kamble
(Coordinator)



Signature

Dr. S.P Raut
(HOD, CE Dept.)



Signature of External Examiner

Name

Date of Examination

STATIC & DYNAMIC BEHAVIOR OF RUBBERIZED CONCRETE

This project report is submitted to

Yeshwantrao Chavan College of Engineering
*[An Autonomous Institution Affiliated to Rashtrasant Tukadoji Maharaj Nagpur
University]*

*In partial fulfilment of the requirement
For the award of the degree*

Of
Bachelor of Engineering in Civil Engineering

By
**Janvi Sarode
Shivani Namojwar
Vaidehi Bansod
Aniket Koparkar
Sarang Bhimanwar
Tejas Tipale**

Under the guidance of
Prof. D. G. Agrawal



DEPARTMENT OF CIVIL ENGINEERING
Nagar Yuvak Shikshan Sanstha's
YESHWANTRAO CHAVAN COLLEGE OF ENGINEERING,
NAGPUR - 441110
*(An Autonomous Institution affiliated to Rashtrasant Tukadoji Maharaj Nagpur
University, Nagpur)*
2021-2022

CERTIFICATE OF APPROVAL


Certified that the project report entitled "STATIC & DYNAMIC BEHAVIOR OF RUBBERIZED CONCRETE" has been successfully completed by JANVI SARODE, SHIVANI NAMOJWAR, VAIDEHI BANSOD, ANIKET KOPARKAR, SARANG BHIMANWAR, TEJAS TIPALE, under the guidance of Prof. D. G. AGRAWAL in recognition to the partial fulfilment for the award of the degree of Bachelor of Engineering in Civil Engineering, Yeshwantrao Chavan College of Engineering (An Autonomous Institution Affiliated to Rashtrasant Tukdoji Maharaj Nagpur University)



Signature
Prof. D. G. Agrawal
(Project Guide)



Signature
Prof. S. K. Kamble
(Coordinator, CE Dept.)



Signature
Dr. S. P. Raut
(HOD, CE Dept.)

**INVESTIGATION OF ELECTRONIC WASTE AS A
REPLACEMENT OF COARSE
AGGREGATE IN M50 CONCRETE**

*This project report is submitted to
Yeshwantrao Chavan College of Engineering
(An Autonomous Institution Affiliated to Rashtrasant Tukadoji Maharaj Nagpur
University)*

In partial fulfillment of the requirement

For the award of the degree

Bachelor of Engineering in Civil Engineering

By

ATHARVA KASLIKAR

PRANAY RAHATE

SUYASH RAKHUNDE

RUSHIKESH HIWANJ

ANIKET NAGE

VAIBHAV JUMALE

Under the guidance of

Prof. P. K. Hinge



**DEPARTMENT OF CIVIL ENGINEERING
Nagar Yuwak Shikshan Santa's
YESHWANTRAO CHAVAN COLLEGE OF ENGINEERING,
(An autonomous institution affiliated to Rashtrasant Tukadoji
Maharaj Nagpur University, Nagpur)
NAGPUR – 441 110
2021-22**

(i)

CERTIFICATE OF APPROVAL

Certified that the project report entitled **Investigation of Electronic waste as a replacement of coarse Aggregate in M 50 grade of Concrete.** has been successfully completed by **ATHARVA KASLIKAR, PRANAY RAHATE, SUYASH RAKHUNDE, ANIKET NAGE, VAIBHAV JUMALE** and **RUSHIKESH HIWANJ** under the guidance of **P.K. HINGE** sir in recognition to the partial fulfilment for the award of the degree of Bachelor of Technology in Civil Engineering, **Yeshwantrao Chavan College of Engineering (An Autonomous Institution Affiliated to Rashtrasant Tukdoji Maharaj Nagpur University)**



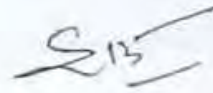
Signature

Prof.P.K.Hinge
(Guide)



Signature

Snehal Kamble
(Co-ordinator)



Signature

Dr.Sanjay P. Raut
(HoD)



Signature of External Examiner :

Name : M.D. Pidurkuo

Date of Examination: 31/05/2022

(ii)

**EFFECT ON STRENGTH OF CONCRETE BY USING
METAKAOLIN AND COPPER SLAG.**

This project report is submitted to

Yeshwantrao Chavan College of Engineering

*(An Autonomous Institution Affiliated to Rashtrasant Tukdoji Maharaj Nagpur
University)*

In partial fulfilment of the requirement

For the award of the degree

Of

Bachelor of Engineering in Civil

Engineering

By

SAURABH MANDAOKAR

MANTHAN PARTETI

AHMEDRAZA KHAN

KARTIK INGLE

RISHIKESH KARALE

BHUSHAN MADAVI

Under the guidance of: **Ms. Amruta A. Yadav**



DEPARTMENT OF CIVIL ENGINEERING

Nagar Yuwak Shikshan Santa's

YESHWANTRAO CHAVAN COLLEGE OF ENGINEERING,

**(An autonomous institution affiliated to Rashtrasant Tukadoji Maharaj
Nagpur University, Nagpur)**

NAGPUR – 441 110

2021-22

CERTIFICATE OF APPROVAL

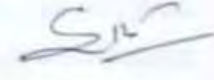
Certified that the project report entitled "EFFECT ON STRENGTH OF CONCRETE BY USING METAKAOLIN AND COPPER SLAG" has been successfully completed by Saurabh Mandaokar, Manthan Parteti, Ahmeadraza Khan, Kartik Ingle, Rishikesh Karale, Bhushan Madavi under the guidance of Ms. Amruta A. Yadav in recognition to the partial fulfilment for the award of the degree of Civil Engineering, **Yeshwantrao Chavan College of Engineering, Nagpur** (An Autonomous Institution Affiliated to Rashtrasant Tukdoji Maharaj Nagpur University)


Signature

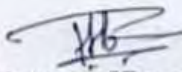
Name of Guide
(Ms. Amruta A. Yadav)


Signature

Name of co-ordinator
(Ms. Snehal Kamble)


Signature

Name of Head of deptt.
(Dr. S.P. Raut)


Signature of External Examiner :
Name: Prof. P.S. Bhandari
Date of Examination: 30-5-2022

**DEVELOPMENT OF BUILDING BLOCKS BY USING
CUPOLA SLAG AS AN INERT GRANULAR MATERIAL**

This project is submitted to

Yeshwantrao Chavan College of Engineering
(An Autonomous Institute Affiliated to Rashtrasant Tukdoji Maharaj Nagpur University)

In Partial fulfillment of the requirement

For the award of the degree

Of

Bachelor of Engineering in Civil Engineering

By

Shailesh Bind Sahil Jagtap Rahi Ingale

Subodh Gaykwad Ritesh Dhumne Dhiranjay Rathod

Under the Guidance of

Prof. S.S. Meshram

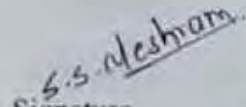

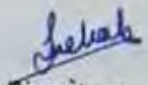
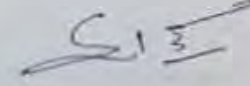


DEPARTMENT OF CIVIL ENGINEERING
Nagar Yuwak Shikshan Sanstha's
YESHWANTRAO CHAVAN COLLEGE OF ENGINEERING
(An Autonomous institution affiliated to Rashtrasant Tukdoji Maharaj Nagpur University, Nagpur)
NAGPUR - 441 1100

2021 – 2022

CERTIFICATE OF APPROVAL

Certified that the project report entitled "DEVELOPMENT OF BUILDING BLOCKS BY USING CUPOLA SLAG AS AN INERT GRANULAR MATERIAL " has been successfully completed by Shailesh Bind, Sahil Jagtap, Rahi Ingale, Subodh Gaykwad, Ritesh Dhumne, Dhiranjay Rathod under the guidance of Prof. S.S. Meshram in recognition to the partial fulfillment for the award of the degree of Bachelors of Technology in Civil Engineering, Yeshwantrao Chavan College of Engineering (An Autonomous Institution Affiliated to Rashtrasant Tukdoji Maharaj Nagpur University)

| | | | |
|--|---|---|--|
|  Signature |  Signature |  Signature |  Signature |
| Prof. S.S. Meshram (Guide) | Prof. S.N. Harinkhede (Co. Guide) | Prof. S.K. Kamble (Co.ordinator) | Dr. S.P. Raut (HOD ,Civil dept.) |

Signature of External Examiner

Name

Date of Examination:

“STUDY ON SELF COMPACTING CONCRETE USING BAGASSE ASH AND METAKAOLIN”

*This project report is submitted to
Yeshwantrao Chavan College of Engineering
(An Autonomous Institution Affiliated to Rashtrasant Tukdoji Maharaj Nagpur University)*

*In partial fulfilment of the requirement
For the award of the degree*

Of

Bachelor of Engineering in Civil Engineering

By

| | |
|------------------|-------------|
| AYUSH THAKARE | OM JIRAPURE |
| DIGVIJAY DASTURE | YASH PISE |
| YASH BHAGWATKAR | YASH KENE |

Under the guidance of

Prof. M. R. Wagh



DEPARTMENT OF CIVIL ENGINEERING

Nagar Yuwak Shikshan Sanstha's
YESHWANTRAO CHAVAN COLLEGE OF ENGINEERING
(An autonomous institution affiliated to Rashtrasant Tukadoji
Maharaj Nagpur University, Nagpur)
Nagpur - 441 110

2021-22

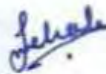
(i)

Certificate of Approval

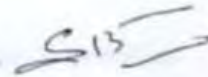
This is to Certified that the project report entitled "STUDY ON SELF COMPACTING CONCRETE USING BAGASSE ASH AND METAKAOLIN" has been successfully completed by Ayush Thakare, Om Jirapure, Digvijay Dasture, Yash Pise, Yash Bhagwatkar, Yash Kene under the guidance of Prof. Monali R. Wagh in recognition to the partial fulfilment for the award of the degree of Bachelor of Engineering in Civil Engineering, Yeshwantrao Chavan College of Engineering, Nagpur. (An Autonomous Institution Affiliated to Rashtrasant Tukdoji Maharaj Nagpur University)



Signature
Prof. Monali R. Wagh
(Guide)



Signature
Prof. Snehal Kamble
(Coordinator)



Signature
Dr. S. P. Raut
(Head of Department)

Signature of External Examiner:

Name:

Date of Examination:

(ii)

**Reduction of surface runoff by developing the pervious
concrete using waste materials.**

This project report is submitted to

Yeshwantrao Chavan College of Engineering

*(An Autonomous Institution Affiliated to Rashtrasant Tukadoji Maharaj Nagpur
University)*

In partial fulfillment of the requirement

For the award of the degree

Of

Bachelor of Engineering in CIVIL ENGINEERING

By

Aachal Gadpayle

Yash Netke

Divya Chimurkar

Amey Tinkhede

Aniket Nagarikar

Kinshuk Karmarkar

Under the guidance of

Prof. S. G. Kalamkar



DEPARTMENT OF CIVIL ENGINEERING

Nagar Yuwak Shikshan Sanstha's

YESHWANTRAO CHAVAN COLLEGE OF ENGINEERING

**(An Autonomous Institution Affiliated to Rashtrasant Tukadoji Maharaj
Nagpur University, Nagpur)**

NAGPUR - 441 110

2021-22

CERTIFICATE OF APPROVAL

Certified that the project report entitled " REDUCTION OF SURFACE RUNOFF BY DEVELOPING THE PERVIOUS CONCRETE USING WASTE MATERIALS" has been successfully completed by AACHAL GADPAYLE, YASH NETKE, DIVYA CHIMURKAR, AMEY TINKHEDE, ANIKET NAGARIKAR, KINSHUK KARMARKAR under the guidance of PROF. S. G. KALAMKAR in recognition to the partial fulfilment for the award of the degree of Bachelors of Engineering in Civil Engineering, **Yeshwantrao Chavan College of Engineering (An Autonomous Institution Affiliated to Rashtrasant Tukdoji Maharaj Nagpur University).**



Signature

Prof. S. G. Kalamkar

(Guide)



Signature

Prof. S. K. Kamble

(Coordinator)



Signature

Dr. S. P. Raut

(HoD, CE DEPT)

**“Evaluation of Adsorption Capacity of Adsorbents Prepared
from Agricultural & Industrial Waste”**

This project report is submitted to

Yeshwantrao Chavan College of Engineering

(An Autonomous Institution Affiliated to Rashtrasant Tukadoji Maharaj Nagpur University)

In partial fulfillment of the requirement

For the award of the degree

Of

Bachelor of Engineering in Civil Engineering

By

Ms. Aastha Panbude

Ms. Meenal Katpalliwar

Ms. Rachana Bokse

Ms. Vedika Kamdi

Mr. Pratik Jaswante

Mr. Utkarsh Gohatre

Under the guidance of

Prof. Rajesh Bhagat

(Guide)

Dr. Prakash T. Kosankar

(Co- Guide)



DEPARTMENT OF CIVIL ENGINEERING

Nagar Yuwak Shikshan Sanstha's

YESHWANTRAO CHAVAN COLLEGE OF ENGINEERING,

(An autonomous institution affiliated to Rashtrasant Tukadoji Maharaj Nagpur University,

Nagpur)

NAGPUR – 441 110

2021-2022

CERTIFICATE OF APPROVAL

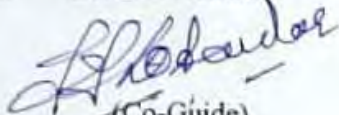
Certified that the project report entitled “**Evaluation of Adsorption Capacity of Adsorbents Prepared from Agricultural & Industrial Waste**” has been successfully completed by Ms. Aastha Panbude, Ms. Vedika Kamdi, Ms. Meenal Katpalliwar , Mr. Pratik Jaswante, Ms. Rachna Bokse and Mr. Utkarsh Gohatre under the guidance of Prof. Rajesh Bhagat and Dr. Prakash Kosankar in recognition to the partial fulfillment for the award of the degree of Bachelor of Engineering in Civil Engineering, **Yeshwantrao Chavan College of Engineering(An Autonomous Institution Affiliated to Rashtrasant Tukdoji Maharaj Nagpur University)**

Prof. Rajesh Bhagat



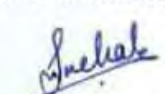
(Guide)
Signature

Dr. P.T. Kosankar



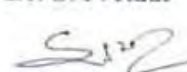
(Co-Guide)
Signature

Snehal Kamble



(Coordinator)
Signature

Dr. S. P. Raut



(HOD)
Signature

**“TO STUDY MEMBRANE BIOREACTOR AND TO CHECK
THE PERFORMANCE OF CERAMIC MEMBRANE
BIOREACTOR”**

This project report is submitted to
Yeshwantrao Chavan College of Engineering
(An Autonomous Institution Affiliated to Rashtrasant Tukadoji Maharaj Nagpur University)

In partial fulfillment of the requirement for the award of the degree
Of

Master of Technology in Environmental Engineering

By

Anuja R. Gangthade

Under the guidance of

Dr. Shantanu R. Khandeshwar

(Guide)

Er. Jagdish Lanjewar

(Director, Sun Enviro Technologies, Pvt. Ltd)

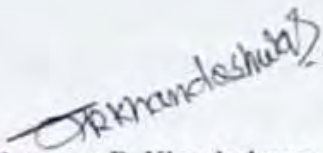
(Co-Guide)

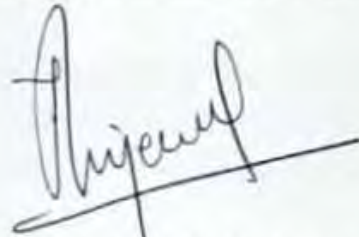


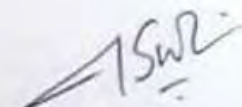
DEPARTMENT OF CIVIL ENGINEERING
Nagar Yuwak Shikshan Sanstha's
YESHWANTRAO CHAVAN COLLEGE OF ENGINEERING,
(An autonomous institution affiliated to Rashtrasant Tukadoji Maharaj Nagpur University, Nagpur)
NAGPUR – 441 110
2021-2022

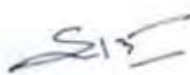
CERTIFICATE OF APPROVAL

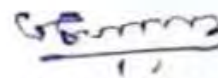
Certified that the project report entitled "To Study Membrane Bioreactor and To Check the Performance of Ceramic Membrane Bioreactor" has been successfully completed by **Anuja Ravindra Gangthade** under the guidance of **Dr. Shantanu Khandeshwar** and **Er. Jagdish Lanjewar** in recognition to the partial fulfillment for the award of the degree of Master of Technology in Civil Engineering, **Yeshwantrao Chavan College of Engineering, Nagpur (An Autonomous Institution Affiliated to Rashtrasant Tukdoji Maharaj Nagpur University)**

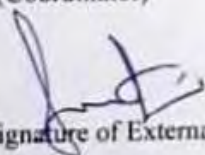

Dr. Shantanu R. Khandeshwar
(Guide)


Er. Jagdish Lanjewar
(Co-Guide)
(Director of Sun Enviro Technologies
Pvt Ltd., Nagpur)


Dr. S.V. Ambekar
(Coordinator)


Dr. S.P. Raut
(HOD, CE Dept.)


Dr. U.P. Waghe
(Principal)


Signature of External:
Examiner Name:

**Feasibility Study of Electro-Fenton Process for
Treatment of Wastewater**

This project report is submitted to

*Yeshwantrao Chavan College of Engineering
(An Autonomous Institution Affiliated to Rashtrasant Tukadoji Maharaj Nagpur University)*

In partial fulfillment of the requirement

For the award of the degree

Of

Master of Technology in Environmental Engineering

By

Pradhnya .V. Kolhe

Under the guidance of

(Guide)

Dr. S.V.Ambekar

(Professor, Department of civil Engineering)

(Co-Guide)

Dr. Prashant Dhorabe

(Director Green Bee Resources Pvt. Ltd. Nagpur)



DEPARTMENT OF CIVIL ENGINEERING

Nagar Yuvak Shikshan Sanstha's


YESHWANTRAO CHAVAN COLLEGE OF ENGINEERING,
(An autonomous institution affiliated to Rashtrasant Tukadoji Maharaj Nagpur University,
Nagpur)


NAGPUR – 441 110

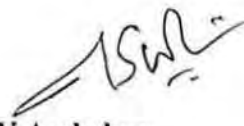
2021-2022


CERTIFICATE OF APPROVAL

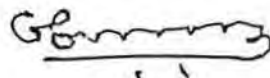
Certified that the project report entitled “Feasibility Study of Electro-Fenton Process for Treatment of Wastewater” has been successfully completed by Pradhnya .V. Kolhe under the guidance of Dr. S.V.Ambekar in recognition to the partial fulfillment for the award of the degree of Master of Technology in Mechanical Engineering, Yeshwantrao Chavan College of Engineering (*An Autonomous Institution Affiliated to Rashtrasant Tukdoji Maharaj Nagpur University*)


Dr. S.V.Ambekar
(Guide)


Dr. Prashant Dhorabe
(Co-Guide)


Dr. S.V.Ambekar
(Coordinator)


Dr. S.P.Raut
(HOD, CE Dept.)


Dr. U.P.Waghe
(Principal)

Signature of External Examiner:
Name: Prof. P. B. Kulkarni.

DEVELOPMENT OF HORIZONTAL ROUGHING FILTER FOR PRE-TREATMENT OF WATER

This project report is submitted to

Yeshwantrao Chavan College Of Engineering

(An autonomous Institution Affiliated to Rashtrasant Tukdoji Maharaj Nagpur University)

In partial fulfillment of the requirement for the award of the degree

Of

Bachelor of Engineering in Civil Engineering

By

Raksha Dhakate

Revati Kokate

Shefali Mohile

Bhabesh Basak

Digvijay Dasture

Prathamesh Urade

Under the guidance of

Prof. Charuta S. Waghmare



DEPARTMENT OF CIVIL ENGINEERING

Nagar Yuwak Shikshan Sanstha's

YESHWANTRAO CHAVHAN COLLEGE OF ENGINEERING,

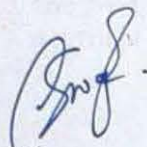
**(An Autonomous Institution Affiliated to Rashtrasant Tukdoji Maharaj Nagpur
University, Nagpur)**

NAGPUR – 441 110

2021-2022

CERTIFICATE OF APPROVAL

Certified that project report entitled " **DEVELOPMENT OF HORIZONTAL ROUGHING FILTER FOR PRE-TREATMENT OF WATER** " has been successfully completed by **RAKSHA DHAKATE, REVATI KOKATE, SHEFALI MOHILE, BHABESH BASAK, DIGVIJAY DASTURE, PRATHAMESH URADE**, under the guidance of **PROF. C. S. WAGHMARE** in recognition to the partial fulfilment for the award of the degree of Bachelor of Engineering in Civil Engineering, **Yeshwantrao Chavhan College of Engineering (An Autonomus Institution Affiliated to Rashtrasant Tukdoji Maharaj Nagpur University)**



Signature

Prof. C. S. Waghmare

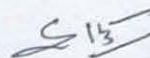
(Project Guide)



Signature

S. K. Kamble

(Dept. Co-ordinator)



Signature

Dr. S.P. Raut

(HOD, CE Dept.)

Signature of External Examiner

Name :

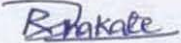
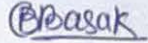
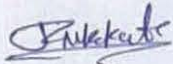


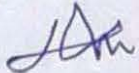
Date of Examination :

DECLARATION

We certify that,

- The work contained in this project has been done by us under the guidance of our supervisor.
- The work has not been submitted to any other Institute for any degree or diploma.
- We have followed the guidelines provided by the Institute in preparing the project report.
- We have conformed to the norms and guidelines given in the Ethical Code of Conduct of the Institute.
- Whenever we have used materials (data, theoretical analysis, figures, and text) from other sources, we have given due credit to them by citing them in the text of the report and giving their details in the references. Further, we have taken permission from the copyright owners of the sources, whenever necessary.

Signature of students

| Name of the student | Signature of the Student | Name of the student | Signature of the Student |
|---------------------|---|---------------------|---|
| Raksha Dhakate |  | Bhabesh Basak |  |
| Revati Kokate |  | Digvijay Dasture |  |
| Shefali Mohile |  | Prathamesh Urade |  |

**ASSESSMENT OF BIOGAS PRODUCTION BY
EXPERIMENTAL AND THEORETICAL METHODS
USING REPOSENCE SURFACE METHODOLOGY**

This project report is submitted to
Yeshwantrao Chavan College of Engineering
(An Autonomous Institution Affiliated to Rashtrasant Tukdoji Maharaj Nagpur University)

In partial fulfillment of the requirement for the award of the degree

Of

Master of Technology in Environmental Engineering

By

Monika Devpratap Tiwari

Under the guidance of

Dr. Harshal M Warade

(Guide)

Prof. Khalid Ansari

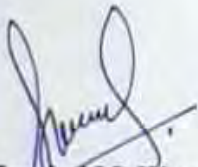
(Co-Guide)



DEPARTMENT OF CIVIL ENGINEERING
Nagar Yuwak Shikshan Sanstha's
YESHWANTRAO CHAVAN COLLEGE OF ENGINEERING,
(An autonomous institution affiliated to Rashtrasant Tukadoji Maharaj Nagpur University, Nagpur)
NAGPUR – 441 110
2021-2022

CERTIFICATE OF APPROVAL

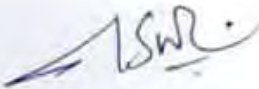
Certified that the project report entitled " Assessment of Biogas Production by Experimental and Theoretical Methods using Response Surface Methodology " has been successfully completed by **Monika Devpratap Tiwari** under the guidance of **Dr. Harshal M Warade and Prof. Khalid Ansari** in recognition to the partial fulfillment for the award of the degree of Master of Technology in Civil Engineering, **Yeshwantrao Chavan College of Engineering, Nagpur (An Autonomous Institution Affiliated to Rashtrasant Tukdoji MaharajNagpur University)**



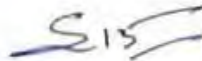
Dr. Harshal M. Warade
(Guide)



Prof. Khalid Ansari
(Co-Guide)

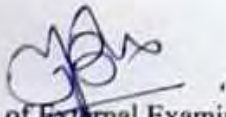


Dr. S.V. Ambekar
(Coordinator)



Dr. S.P. Raut
(HOD, CE Dept.)

Dr. U.P. Waghe
(Principal)



Signature of External Examiner

Name:

Date of Examination:

**REMOVAL OF NICKEL FROM AQUEOUS SOLUTION
USING AGRICULTURAL WASTE BASED COMPOSITE
ADSORBENTS**

This project report is submitted to

YESHWANTRAO CHAVAN COLLEGE OF ENGINEERING, NAGPUR

(An Autonomous Institution Affiliated to Rashtrasant Tukdoji Maharaj Nagpur University)

In partial fulfillment of the requirement

For the award of the degree

Of

Master of Technology in Environmental Engineering

By

Mr. Nehal Gharde

Under the guidance of

Prof. Rajesh Bhagat (Guide)

Dr. Prashant Dhorabe (Co-Guide)



DEPARTMENT OF CIVIL ENGINEERING

Nagar Yuwak Shikshan Sanstha's

YESHWANTRAO CHAVAN COLLEGE OF ENGINEERING, NAGPUR

(An Autonomous Institution Affiliated to Rashtrasant Tukdoji Maharaj Nagpur

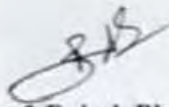
University, Nagpur)

NAGPUR – 441 110

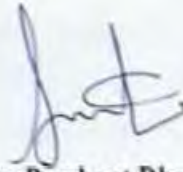
2021-2022

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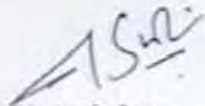
Certified that the project report entitled "**Removal of Nickel from aqueous solution using agricultural waste based composite adsorbent**" has been successfully completed by and **Nehal N. Gharde** under the guidance of **Prof. Rajesh Bhagat** and **Dr. Prashant Dhorabe** in recognition to the partial fulfillment for the award of the degree of Master of Technology in Environmental Engineering, **Yeshwantrao Chavan College of Engineering (An Autonomous Institution Affiliated to Rashtrasant Tukdoji Maharaj Nagpur University)**



Prof. Rajesh Bhagat
(Guide)



Dr. Prashant Dhorabe
(Director, Green Bee
Resources Pvt. Ltd)
(Co-Guide)



Dr. S. V. Ambekar
(Coordinator)



Dr. S.P. Raut
(HOD, CE Dept)

**“UTILIZATION OF AGRICULTURAL WASTE-BASED
ADSORBENT FOR REMOVAL OF COPPER FROM
WASTEWATER”**

This project report is submitted to

Yeshwantrao Chavan College of Engineering

*(An Autonomous Institution Affiliated to Rashtrasant Tukadoji Maharaj Nagpur
University)*

In partial fulfillment of the requirement for the award of the degree

Of

Master of Technology in Environmental Engineering

By

Roshan Ramesh Bhurse

Under the guidance of

Prof. Rajesh M. Bhagat

(Guide)

Dr. Ratnakumar Mudliar

(Co-Guide)



DEPARTMENT OF CIVIL ENGINEERING

Nagar Yuwak Shikshan Sanstha's

YESHWANTRAO CHAVAN COLLEGE OF ENGINEERING,

*(An autonomous institution affiliated to Rashtrasant Tukadoji Maharaj Nagpur
University, Nagpur)*

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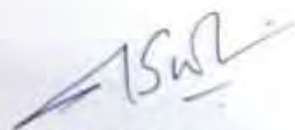
Certified that the project report entitled "UTILIZATION OF AGRICULTURAL WASTE BASED ADSORBENT FOR REMOVAL OF COPPER FROM WASTEWATER" has been successfully completed by **Roshan R. Bhurse** under the guidance of **Prof. Rajesh M. Bhagat** and **Dr. Ratnakumar Mudliar** in recognition to the partial fulfilment for the award of the degree of Master of Technology in Environmental Engineering, **Yeshwantrao Chavan College of Engineering (An Autonomous Institution Affiliated to Rashtrasant Tukdoji Maharaj Nagpur University)**



Prof Rajesh M Bhagat
(Guide)



Dr. Ratnakumar Mudliar
(Co- Guide)
(Chief Advisor,
Indian Environment Consultancy
and research services)



Dr. S. V. Ambekar
(Coordinator)



Dr. S.P. Raut
(HOD, CE Dept)



Nagar Yuwak Shikshan Sanstha's

Yeshwantrao Chavan College of Engineering

(An Autonomous Institution Affiliated to Rashtrasant Tukadoji Maharaj Nagpur University)

Hingna Road, Wanadongari, Nagpur-441110

NAAC Accredited with 'A++' Grade

Ph. : 07104- 295083, 295085

Website : www.ycce.edu , Email : principal@ycce.edu

Declaration by the Head of the Institution

I hereby declare that the data, information and support documents attached herewith are genuine and correct to my knowledge.

Dr. U.P. Waghe

Principal

Principal

Yeshwantrao Chavan
College of Engineering
Wanadongri Hingna Road,
NAGPUR-441110

