



BETWEEN

**The Poona Gujarati Kelvani Mandal's Haribhai V. Desai College of Arts, Science and Commerce, Department of Microbiology, 596, Budhwar Peth, Pune 411002**

**Through its resource persons (Email ID: [mukund.ambawade@hvdesaicollege.edu.in](mailto:mukund.ambawade@hvdesaicollege.edu.in))**

- 1) Dr. Rajendra Gurao (Principal)**
- 2) Prof. Dr. Rajashree Patwardhan (Vice Principal)**
- 3) Dr. Mukund Ambawade (Contact Person)**

**FIRST PARTY**

AND

**Jeevitnadi Living River Foundation, Flat No 4, Profile Regency, S. No. 6/9, Erandawane Pune 411004. Mail Id: [jeevitnadi@gmail.com](mailto:jeevitnadi@gmail.com)**

**Through its resource persons**

- 1) Ms. Ashwini Bhilare (Director)**
- 2) Ms. Mrinal Vaidya (Director)**
- 3) Mr. Kalyan Mane (Contact Person)**

**SECOND PARTY**

**Place of MOU:**

**Haribhai V. Desai College of Arts, Science and Commerce, Pune**

**PREFACE**

Rivers in Pune City containing large amounts of emerging pollutants displayed detrimental effects on human and ecosystem health. The pollution poses a serious threat to river water quality. Some emerging pollutants are persistent organic pollutants that are not easily degraded and have a long-term existence in the aquatic environment. The treatment of these pollutants has increasingly become a big challenge in recent years. Therefore, it is a priority to develop proper methods to treat emerging pollutants in river water for the benefit of the environment, public health and economic activities. Biochar, as an effective adsorbent, plays an important role in the management of emerging pollutants

in aquatic systems. This MoU aims to use biochar for emerging pollutants remediation in aquatic systems and facilitate research on emerging pollutants removal, thereby reducing their environmental risk.

On above background the First Party and the Second Party hereby agree to act together with abovementioned object and scope of activities and role of each of them is agreed to be as follows:

### **Objectives and Role of Jeevitnadi Living River Foundation**

1. Jeevitnadi aims to create Biochar as per requirement for the experiment (It depends on availability of raw material)
  - a. Water Hyacinth – as per availability
2. Rice husk - Cow dung –Coconut shells- Ground nut shells –
3. Orientation and time to time suggestions.
4. Water samples from other rivers – Ramnadi, Mula river, Pawana river
5. Initial River water quality tests from NABL laboratory for reference base.
6. Post experiment River water quality tests from NABL laboratory.
7. Use of Portable Water filter.
8. **Resource Commitments:**  
Expertise: Retired NCL Sr. Scientist Dr. Pramod Moghe,

### **Objectives and Role of Haribhai V. Desai College of Arts, Science and Commerce, Department of Microbiology.**

1. Collection of required quantity of River water samples.
2. Use of Ash / Biochar with WH bio char in different proportions and run through filter using sand, pebbles, cobbles to make filter media coarse.
3. Conduction of experimental trials 10 times of each product.
4. Monitoring of River water quality of every permutation to access reduction of pollutants.
5. Designing of a prototype model for the filtration of polluted water for
  - i. Removal of heavy metals
  - ii. Removal of pesticides
6. Improving the Design of a prototype after various tests.
7. Preparation of a short report for sharing in open source
8. Study of Limitations

9. **Resource Commitments:** Laboratory facilities, Equipments, River water samples collection

**Revision of Memorandum of Understanding**

This MoU may be revised at any time for any reason by either party with the consent of the other Party.

**IN WITNESS WHEREOF EACH OF THE PARTIES HAVE SIGNED ON THIS MOU ON THIS 24<sup>TH</sup> DAY OF THE MONTH OF APRIL IN THE YEAR 2024**

The Poona Gujarati Kelvani Mandal's  
Haribhai V. Desai College of Arts, Science  
and Commerce, Department of  
Microbiology  
Through its resource persons

1) Dr. Rajendra Gurao ( Principal)



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**First Party**

Jeevitnadi Living River Foundation  
Through its resource persons

1) Ms. Ashwini Bhilare (Director)



2) Ms. Mrinal Vaidya (Director)



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**Second Party**