

**MEMORANDUM OF UNDERSTANDING**  
**BETWEEN**  
**THE DEPARTMENT OF BIOTECHNOLOGY (INDIA)**  
**AND**  
**THE UNIVERSITY PIERRE ET MARIE CURIE**  
**AND**  
**THE CENTRE NATIONAL DE LA RECHERCHE SCIENTIFIQUE**  
**ON COLLABORATION FOR THE ESTABLISHMENT OF**  
**A NATIONAL INSTITUTE OF MARINE BIOLOGY AND BIOTECHNOLOGY IN**  
**INDIA**

**BETWEEN**

**The Department of Biotechnology**, hereinafter referred to as **DBT**, Ministry of Science and Technology, of the Republic of India, whose registered address is Block-2, 7th Floor, C.G. O. Complex, Lodhi Road, New Delhi-110003, India, represented by **Krishnaswamy VIJAYRAGHAVAN**, Secretary to the Government of India,

**AND**

**The Centre National de la Recherche Scientifique**, hereinafter referred to as **CNRS**, a public scientific and technological organization, whose registered address is 3, rue Michel Ange, 75794 Paris cedex 16, France, represented by **Alain FUCHS**, President,

**AND**

**The Université Pierre et Marie Curie Paris 6**, hereinafter referred to as **UPMC**, a public scientific and professional institution, whose registered address is 4, place Jussieu, 75252 Paris cedex 05, France, represented by **Jean CHAMBAZ**, President

Hereinafter referred to jointly as the "Parties" and individually as the "Party";

CNRS and UPMC have a long history and experience in the field of marine sciences. Through the three leading French marine stations located in Banyuls-sur-Mer, Roscoff, and Villefranche-sur-Mer, they have developed excellence in research and teaching, with proven experience in the management of marine research infrastructures, and they are internationally recognized as amongst the best marine stations.

India is a nation with a vast coastline, a strong tradition of excellent higher education and excellent research in Life Sciences and Biotechnology. The DBT plans to enhance its efforts in marine life sciences and biotechnology by establishing a National Institute of Marine Biology and Biotechnology (Henceforth referred to as the Marine Biology Institute). This

Marine Biology Institute, driven by a mission to do the best fundamental science with a multidisciplinary approach, will collaboratively address the most important topics in marine biology and marine biotechnology.

Recognizing the extraordinary technical requirements of modern marine stations and the highest standards of the French Marine stations, the DBT will collaborate to utilize the highly specialized expertise of CNRS and UPMC for the design, construction and maintenance of the Marine Biology Institute. Recognizing Indian interest and expertise in cell- and molecular—biology and biotechnology, the the CNRS and UPMC will collaborate to have Indian researchers access to the French Marine Stations. This joint cooperation will rely on three fundamental pillars:

- I. the development of dynamic synergies between French and Indian research teams by strengthening Indo-French ties in frontier marine science and technology research through the establishment of collaborative research programmes.
- II. the training of highly qualified scientists to provide top-level researchers and seniors staff scientists to the future Marine Biology Institute,
- III. the collaboration in the establishment of efficient research infrastructures, facilities and technologies in India and the use of facilities in France .

The implementation of these three pillars will be defined in specific agreements.

## **CONSIDERING**

- The visit of a delegation from DBT led by Prof. K. VijayRaghavan to the three marine biology stations of Banyuls-sur-Mer, Roscoff and Villefranche-sur-Mer in November 2014,
- The letter sent by Prof. K. VijayRaghavan to CNRS and UPMC on 30 November 2014,
- The visit of a delegation of UPMC led by President Jean Chambaz in New Delhi in December 2014
- The visit of a delegation of CNRS led by Dr Catherine Jessus in New Delhi in February 2015

The Parties have reached as follows, recognizing the importance of establishing a close cooperative relationship between the Parties, with a view to the further development of the three organizations.

### **1. Object of this Memorandum of Understanding**

The aim of this Memorandum of Understanding, hereinafter referred to as MOU, is to establish the framework of the future cooperation between the Parties. The future cooperation will cover Scientific research and development, educational and training, technical and logistical aspects including their legal and financial aspects.

Under this MOU, the French parties will assist the DBT in the completion of a technical requirement and feasibility study for the establishment of the Marine Biology Institute. While the DBT develops all the necessary documents for the establishment of the Marine

Biology Institute, all parties recognize that creation of the Institute is subject to examination and approval by the Government of the Republic of India.

## 2. Coordination of the cooperation

Each Party shall designate Referents to develop and coordinate the implementation of the activities agreed upon. The designated Referents for the purposes of this MOU shall be:

For CNRS	For UPMC	For DBT
Catherine Jessus, Director of the Institute of Life Sciences or her representative	- Paul Indelicato, Vice President for Research, UPMC	- K. VijayRaghavan, Secretary to the Government of India,
Stéphanie Thiebault, Director of the Institute of Ecology and Environment, or her representative	- Danielle Seilhean, Vice-President for International Affairs, UPMC	- Arun S. Ninawe Advisor, Department of Biotechnology
Chamira Lessigny Deputy Director for India, CNRS Europe and International Cooperation Office	- Sabine Lopez, Director, International Affairs, UPMC	- Shailja Vaidya Gupta, Director, International Collaboration

## 3. Work plan

In the framework of this MOU, the Parties will have several types of regular and/or occasional meetings, organized in France or in India, to discuss possible subjects for the future cooperation considering:

- the building process of the Indian Marine Biology Institute, involving scientists, administrative representatives and technical staff,
- the internationalization of training in marine biology and connected subjects by the mean of students exchanges and joint programs on both French and Indian sides,
- the development of common research projects.

The meetings will be organized face to face or by tele/videoconferencing. In the case of a face to face meeting, each Party will cover the travel expenses of its personnel.

The administration and management of those meetings will be coordinated by the referents designed above (article 2).

The referents shall agree on the themes of those meetings and shall appoint, for each meeting, coordinators to be in charge of its organization.

At the end of the meeting, the coordinators shall send a report to the referents.

All those reports will be compiled by the referents in order to draft the study of feasibility for the establishment of Marine Biology Institute.

## 4. Workshop

The Parties agree to organize a scientific workshop at the earliest. This workshop will discuss the research themes that will define the scientific activities of the future Indian

Marine Biology Institute. The inputs from the workshop will be invaluable in developing the scientific direction of the new Marine Biology Institute.

This roadmap shall constitute a part of the study of feasibility for the establishment of an Indian Institute of Excellence in Marine Biology.

### 5. Confidentiality and Intellectual Property

The Parties undertake to treat all information communicated under this MOU or their collaboration as strictly confidential and not to disclose the received information to third parties.

If a joint research activity is performed under this MOU, a specific agreement defining the intellectual property rights will be preliminary signed by the Parties, in accordance with the laws of the Parties.

### 6. Interpretation of terms

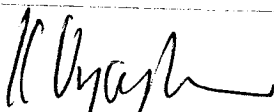
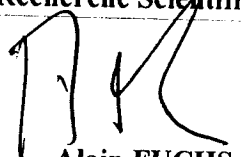

In the event doubts should arise in the interpretation of the provisions of this MoU or problems about matters not described therein, the Parties shall consult each other and settle them amicably in the spirit of this MoU.

### 7. Effective Period of the MOU

The effective period of this MOU shall be one (1) year, starting from the date of its signing. In the event one of the Parties desires to extend the effective period, it may be extended with expansion in scope of cooperation after mutual consultation and written agreement.

This MOU is executed in three (3) originals in English, three (3) originals in Hindi and three (3) originals in French, all texts being equally authentic. In case of inconsistency, the English version should prevail.

In Paris, on 10 April 2015,

For the Department of Biotechnology	For the Centre National de la Recherche Scientifique	For the Université Pierre et Marie Curie Paris 6
 K. VIJAYRAGHAVAN Secretary to the Government of India	 Alain FUCHS, President	 Jean CHAMBAZ, President