Center for Marine Environmental Studies (CMES), Ehime University,
Joint Usage/Research Center, Leading Academia in Marine and Environment Pollution Research (LaMer)

Fiscal Year 2026 (April, 2026 – Mar, 2027)
Joint Usage / Research Application

Aims of LaMer: To promote environmental research, Center for Marine Environmental Studies (CMES), Ehime University is operating a joint usage/research center "LaMer" by practical use of the environmental specimen bank (es-BANK) and related analytical equipment, the research vessel (R/V) "Isana", and International Collaborative Research Laboratory. LaMer aims to implement advanced cutting-edge research in environmental sciences via international collaboration. Application for joint usage, collaboration and research meeting through LaMer is invited for the fiscal year 2026.

1. Category of application

Applications including original research ideas of the applicants for the following four categories (A, B, C and D) are welcome. The application must include at least one faculty member of LaMer (see "Faculty members of LaMer, Center for Marine Environmental Studies, CMES" at item 15) as a co-investigator of the project.

A. General collaboration on chemical pollution and coastal environment researches

Research projects to use analytical equipment (see "Joint usage equipment list" in Table 1 at item 16) and samples stored in es-BANK.

B. Creation of new discipline and Interdisciplinary fusion research

Joint research projects related to the following research topics 1 and 2, proposed by the research team of multiple LaMer members, are welcome. In addition, other research proposals from researchers outside LaMer members are also called for.

Research 1:

Research Title: Pathogen and pest control with reduced drug dependence and environmental impact: towards sustainable infectious disease control and agriculture

Research Team: Kozo Watanabe, Hisato Iwata, Tatsuya Kunisue, Xinyu Guo, Akihiko Morimoto

Outline: The objective of this flagship project is to propose a sustainable approach to control infectious diseases and increase agricultural productivity while minimizing the environmental and ecological impact of chemicals derived from pharmaceuticals, pesticides, and other agents.

The project has four topics: 1) development of biologically based technologies for pathogen and pest control that reduce chemical use, 2) comprehensive detection and search for environmentally persistent and bio-accumulative agents, 3) modeling of the movement and spread of chemical contaminants derived from agents from watersheds to coastal areas, and 4) modeling of the various processes by which agents pose toxic effects on wildlife such as fish, birds, and mammals. By integrating these topics in a multidisciplinary manner, we will ultimately predict the effects of the introduction of technologies to biologically control pathogens and pests on the environment and ecosystem. Field research will be conducted in Asian countries and domestic regions in Japan with close ties to LaMer staffs.

Research 2:

Research Title: Creation of platform for signal toxicity evaluation starting from the development of neurotransmission network disturbance detection method

Research Team: Kei Nomiyama, Hisato Iwata

Outline: Environmental pollutants include endocrine disrupting chemicals that disrupt/inhibit endogenous hormones and pesticides that disrupt/inhibit neurotransmission. However, these actions are believed to have something in common and are an idea for a new mechanism of action called "signal toxicity". In this theme, we aim to establish a new imaging technology and develop a sensitive biomarker in order to detect neurotransmission network disturbance caused by signal toxicity, which could not be detected by conventional exposure and toxicity tests. We also aim to establish a new method for monitoring chemical exposure and its biomarkers by conducting in vivo/in vitro exposure tests. As a future, we aim to establish these single detection/diagnosis technologies as a "signal toxicity assessment platform".

Others:

New discipline and interdisciplinary fusion research proposed by applicants.

C. International joint research on Asian environmental problems

Collaboration research by international team including LaMer members focusing on environmental survey and research in Asia.

D. International symposium and research meeting

Organization of international or domestic meeting. Attendees of foreign researchers, young scientists and graduate students are encouraged.

2. Duration of joint usage/research

Joint usage/research starts from early April, 2026 and is expected to end by February 28, 2027.

3. Qualification of applicant and participant

Researchers affiliated to Japanese and foreign universities, institutes and private companies can

apply (including graduate students and fifth and sixth grade students of six-year universities). Individuals whose primary research activities in fiscal year 2026 will not be conducted in the laboratories of faculty members of LaMer. Other persons who can be recognized as suitable for applying by director of the LaMer can also apply.

If the graduate student is the principal investigator of the application, his/her faculty advisor must **also participate as a co-investigator of the research and submit the approval of supervisor (Form 2)**. Note that if the faculty advisor applies as the principal investigator of the application and the graduate student participates as a co-investigator of the application, it is not necessary to submit the approval of supervisor.

4. Budget

LaMer offers travel funds and accommodation expenses to the project members through the LaMer member of the project, if the application is accepted. Please note that the Ehime University Guest House will be permanently closed at the end of March 2026. Therefore, it will not be available for use from the next fiscal year onward. When planning your visit to Ehime University, please make alternative arrangements for accommodation.

In the case of category A, B, and C, if you wish to apply for consumable expenses, consult with the LaMer member of the project in advance.

In the case of category D, expenses for rental charges of the venue for the seminar, symposium, and meeting, printing expenses of abstract book and travel expenses for the participants will be provided through the LaMer member.

All the expenses in the application form may be reduced depending on the total annual budget of LaMer.

5. How to apply

Please discuss with LaMer member(s) listed in item 15. Fill in the attached form (Form 1) and submit by e-mail to the address below.

6. Deadline of application

All application forms should be submitted to LaMer Office by **January 15, 2026**.

7. Contact information

All application forms and documents should be sent to:

LaMer Office of Research Support Division,

Ehime University, Bunkyo 2-5, Matsuyama, 790-8577 Japan

E-mail: lamer_ap**@stu.ehime-u.ac.jp**

Note that our e-mail address has changed.

Tel: +81-89-927-8187

8. Selection of the project

Selection of the projects will be made by the screening and reviewing by LaMer Committee. In particular, “necessity, creativity, and possibility of achievement” will be an important criterion for judgment. In addition, the following issues will also be considered in the selection process.

1) Incomplete applications, those containing content that is not in line with the purpose of LaMer, or those without prior notification to the LaMer members.
2) In order to avoid excessive concentration on specific LaMer members and the diversity of research projects, the number of selected projects will be limited to within a maximum of 10 per LaMer member.
3) Considering the diversity of research projects, within a maximum of 2 applications from the same laboratory will be accepted.
4) Maximum accommodation fee is 40,000 JPY per application. If the number of nights you will be staying exceeds the maximum amount, please make arrangements in advance with your host professor regarding how the additional costs will be covered.

9. Notification of selection

The decision by LaMer Committee will be notified to the principal investigator by early April.

10. Specifying acknowledgement

When reporting the outcome from the joint usage, collaboration, and seminar and meeting, please add a brief acknowledgement as shown in the following example. Additionally, please submit printed matters (manuscript reprint, abstract book and so on) to the LaMer Office (lamer_re@stu.ehime-u.ac.jp).

Example of acknowledgement

“This study was supported by the Ministry of Education, Culture, Sports, Science and Technology, Japan (MEXT) to a project on Joint Usage/Research Center, Leading Academia in Marine and Environment Pollution Research (LaMer).”

11. Report of research product and meetings

Principal investigator should report the outcome of research and/or meeting by February 28, 2027. Form 3 should be used for submitting the report to LaMer Office (lamer_re@stu.ehime-u.ac.jp). The report will be open to the public through the LaMer website. If the report must be kept confidential for patent application, please contact the LaMer Office.

12. Intellectual property right

If the intellectual property right is to be produced by the collaboration project, please consult with appropriate division of the principal investigator’s institute.

13. Legal process for animal experiments and recombinant DNA experiments

All of legal process should be completed by the side of applicants before starting the project.

14. Security export control

When the research group contains foreign researchers, a written pledge for classification is needed according to the foreign exchange control law and/or foreign trade law.

15. Faculty members of LaMer, Center for Marine Environmental Studies, CMES

each address should be ****@ehime-u.ac.jp

Director of LaMer	Hisato Iwata	iwata.hisato.mz

Division of Environmental Dynamics

Professor	Xinyu Guo	guo.xinyu.mz
Professor	Akihiko Morimoto	morimoto.akihiko.cl
Professor*	Hirofumi Hinata	hinata.hirofumi.dv
Professor	Michinobu Kuwae	kuwae.michinobu.mc
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Assistant Professor	Yusuke Ushijima	ushijima.yusuke.fp

Division of Environmental Chemistry and Ecotoxicology

Professor	Hisato Iwata	iwata.hisato.mz
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Associate Professor	Kei Nomiyama	nomiyama.kei.mb
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Assistant Professor	Kazuki Kanda	kanda.kazuki.hi

Division of Ecosystem Health Sciences

Professor	Kozo Watanabe	watanabe.kozo.mj
Professor*	Seiya Watanabe	watanabe.seiya.my
Professor*	Yo Miyake	miyake.yo.mm
Professor*	Richard Culleton	culleton.richard.oe
Senior Assistant Professor	Yumiko Obayashi	obayashi.yumiko.nn
Assistant Professor	Kohei Hamamoto	hamamoto.kohei.fy

Office for International and Social Cooperation

Associate Professor	Yasutsugu Suzuki	suzuki.yasutsugu.ao

* : Adjunct faculty member

16. Joint usage equipment list

Table 1, Joint usage equipment

Equipment	Person in charge
Research vessel Isana	A. Morimoto
Rosette Niskin water sampler (2L x 10 bottles) equipped on Isana	A. Morimoto
Quantitative echo sounder system equipped on Isana	A. Morimoto
Ship mounted Acoustic Doppler Current Profiler (ADCP) equipped on Isana	A. Morimoto
Remotely operated underwater vehicle (ROV) system equipped on Isana	A. Morimoto
Bottom mounted Acoustic Doppler Current Profiler (ADCP)	A. Morimoto
Submersible ultraviolet nitrate analyzer	A. Morimoto
High Performance Computer system	X. Guo
Gamma detector system	M. Kuwae
Two-dimensional gas chromatography － time-of-flight mass spectrometer (GC×GC－TOF MS)	T. Kunisue
Gas chromatography－quadrupole mass spectrometer	T. Kunisue
High performance liquid chromatography－tandem mass spectrometer (LC－MS/MS)	R. Tanoue
High performance liquid chromatography－time-of-flight tandem mass spectrometer	K. Nomiyama
All-in-one fluorescence microscope	H. Iwata
Real-time PCR system	H. Iwata
Integrated computing chemical system	H. Iwata
Biohazard clean bench	K. Watanabe

Mosquito vector rearing and blood feeding system	K. Watanabe
Microinjector	K. Watanabe
Microplate reader	Y. Obayashi

Form 1: Application Form

Please download the Application Form (Excel file) from the link below.

Form1-Application　Form(2026)

Form 2

Approval of supervisor

I hereby approve that my student under my supervision Mr/Miss _____ applies for the project/meeting of Joint Usage/Research Center, LaMer, as a member.

Date (d , m , y)

Affiliation

Position

Name

Form 3

Annual Report

LaMer, Ehime University (Fiscal Year 2026)

Date (d , m , y)

To Director of LaMer

Principle Investigator:

Affiliation _____

Position _____

Name in print _____

Include the report on the result of the project/meeting in a separate page.

1. Project / Meeting title

2. Members of project / meeting

Name	Age	M/F	Affiliation	Position	Contribution part
PI Members					
LaMer Faculty member in charge					

3. Achievements of the project/meeting (publications, conference presentations, awards, patents, etc.)

*** As for the publications, only ones with acknowledgement to LaMer should be listed.**

4. Research report (Follow the guideline on the next page)

Guidelines for "4. Research report"

When preparing the "4. Research report", pay attention to the following points.

(1) The page setup should be A4 and 30 lines (12 point).

(2) The number of pages should not exceed 5, including figures and tables.

(3) Write the report concisely and concretely in the following order: title of research project, names of project members (including affiliation), purposes, methods, results, and future challenges. If there are any materials from the research project/meeting (academic paper, symposium abstract book, etc.), attach them with the report. Be sure to inform any academic papers (**only with acknowledgments to LaMer**) that are published after the report is submitted.

(4) The report will be open to the public through the LaMer website. If you need to suspend the public access of your results due to a patent application, please contact the LaMer Office.

LaMer Office

Ehime University, Bunkyo 2-5, Matsuyama, 790-8577 Japan

E-mail: lamer_re@stu.ehime-u.ac.jp

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