# Ocean Institute AAP Research Projects -Phase 2 Application Form

Deadline: January, 31st 12:00 am 2022

The phase 2 proposal form should be completed in English incorporating in one single file the CVs of participating researchers and letters of co-financing engagement or stakeholder support. Revised Phase 2 proposals should integrate the feedback provided by the OCEAN research committee during Phase 1.

Should your project be selected a total budget of 70000 will be granted and you will be required to undertake the following minimum dissemination actions:

Please note that your proposal will be reviewed by **minimum** of 2 external experts and marked on the following criteria:

Scientific Excellence (40%), Interdisciplinarity (20%), Internationalisation (20%), link and relevance to socio-economic stakeholders (MSE) (20%).

Two copies of the same application form labelled ‘surname of principal supervisor’AAP-ReseachPro-OCEAN.**doc** &‘surname of principal supervisor’AAP-ResearchPro-OCEAN.**pdf** should be sent to the Oceans Project Manager Kalliopi Pediaditi [kalliopi.pediaditi@univ-amu.fr](mailto:kalliopi.pediaditi@univ-amu.fr) .

IMPORTANT. The pdf file should be signed by the Laboratory Director of the principal supervisor acknowledging they will provide the necessary administration support.

## Title of project

## List 5 key words

## List the number of the OCEAN challenge which your project addresses

## Include a 300 word abstract description of your project which will be published should your project be selected for funding.

## Research Project team: List the key researchers which will participate in this project

|  |  |  |  |
| --- | --- | --- | --- |
| PI Name | Lab /establishment | email | Specialisation |
| Collaborator 1 |  |  |  |
| Collaborator 2 |  |  |  |
| Collaborator x |  |  |  |

## List max 5 publications relevant to the research topic proposed published by the PI

## In a table list each different partner of the project describing their specific role/contribution to this project. Please distinguish between internal, international and MSE partners. (please note that for partners external to AMU you are requested to provide a letter of support)

## Describe the research question addressed by your project (2 sentences max)

## Outline in bullet points the research objectives of the proposed project

## Describe the research design and methodology of the project (max 1000 words + gantt chart)

## Describe the expected outcomes and deliverables of the project

## List past, ongoing, and other parallel submitted projects which are linked to this project.

|  |  |
| --- | --- |
| Past relevant project on which this research will build upon |  |
| Current on going projects which this research project will complement |  |
| Submitted future projects which this research project may complement |  |

## **Interdisciplinarity**: Describe the Specific interdisciplinarity characteristics of your proposed project. What is the added research value and innovative elements of the interdisciplinary approach proposed? (200 words )

## **Internationalisation**: What specific actions does your project propose for increasing the international visibility and collaborations of the University? (200 words)

## **MSE**: Describe the specific actions your project proposes to reinforce the links between your research and socio-economic stakeholders. What is the added value of the strengthed link and collaborations proposed?

## BUDGET ( Please note the OCEAN funds 70000 euros towards your project) Please make sure to refer to AMIDEX finance vademecum regarding eligible expenses. Also please note that the OCEAN research project funds are predominantly aimed for hiring post doc researchers. Please verify with AMIDEX Noemie Coeur the cost of post doc.

* 1. Budget / partner brakedown

|  |  |  |  |  |
| --- | --- | --- | --- | --- |
| Partner | OCEAN Budget 2022 | Cofinancing  2022 | OCEAN Budget 2023 | Cofinancing  2023 |
|  |  |  |  |  |
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* 1. **OCEAN Budget brakedown**

|  |  |  |  |  |
| --- | --- | --- | --- | --- |
| Partner Name | Budget expenditure description | Amount | (MS/ FONCT/INV) | Year 2022/ 2023 |
|  |  |  |  |  |
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* 1. **Cofinancing Budget brakedown**

|  |  |  |  |
| --- | --- | --- | --- |
| Partner Name | Budget expenditure description | Amount | Year 2022/ 2023 |
|  |  |  |  |
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|  |  |  |  |

## Please describe the publication and communication actions you will undertake (conferences publications, international meetings etc)

* 1. **Please note that should you be selected for this funding you engage as a minimum to the following dissemination actions:**
     + Creation of 2 video podcasts (Duration 2 minutes each) to be published through the OCEAN website you tube channel.
     + Presentation of project in 1 ocean institute event per year
     + Acknowledgement of institute and funding according to the Amidex charte
     + Give one hour seminar to Ocean Master students & parallel online webinar
     + Post minimum 3 times per year on Ocean social media, information on the project
     + Create project description text and a results summary to be published on OCEAN website

## Include cv of principal supervisor

## Include letters of support and evidence of co-financing commitment

**Annex 1 OCEAN SCIENCES INSTITUTE POLICY**

The Ocean Science Institute brings together a wide range of interdisciplinary scientists, engineers, students, political and business stakeholders aiming to:

1. Understand the past and present status of our oceans, for a sustainable future
2. Support ocean literacy and informed governance processes
3. Innovate for blue economy circularity & climate neutrality
4. End Pollution from source to sea.
5. Restore ocean biodiversity under adverse climate and anthropogenic pressures

**OCEAN SCIENCE CHALLENGES**

**CHALLENGE 1. Improving knowledge and communication of present and past dynamics of the ecosystems, impact of climate change, vulnerability, resilience to natural and anthropogenic pressures, forecast changes, services and mitigation:**

1.1. Understanding the dynamics of the Ocean and ecosystems’ functioning

1.2. Understanding pollution and climate impacts

1.3 Understanding Ocean-Atmosphere interactions

1.4. Forecasting the relationship between the ocean dynamics, biodiversity and ecosystems’ functioning and services

1.5 Adapting to climate change and definition of mitigation measures

1.6 Evaluating accurately long term (past, present and future) ocean resources and ecosystems

1.7 Reversing the long term overexploitation of the marine ecosystems

**CHALLENGE 2. Effective risk management and protection of coastal areas:**

2.1 Reducing the threat on coastal ecosystems and the negative effects on human-related activities

2.2. Evaluating, communicating and reducing the coastal risks of pollution

2.3. Forecasting coastal erosion and submersion for integrated coastal zone management

2.4. Improved decision support systems for sustainable Port and maritime management

2.5 Improved governance through scientifically informed MSP and MPA and improved juridical procedures

2.6 Improved international collaborations through better communication and understanding of cultural and historical contexts.

**CHALLENGE 3. Contribution to the creation of a digital twin of our oceans through accessible and interoperable ocean science data and observation systems:**

3.1. Advancing Marine and Maritime Intelligent Robotics systems

3.2. Tailor-made sensors and platforms, embedding AI to observe the ocean and its biodiversity

3.3. Intelligent Maritime and Offshore Security and safety systems

3.4. Modelling of Ocean dynamics & intelligent forecasting oceanic variables

3.5. Big data Passive Acoustics for long term and large-scale ocean monitoring

3.6. Advancing Trajectography, tracking and automatic monitoring systems

**CHALLENGE 4. Innovations in Marine engineering, Blue growth businesses, and governance based on an ocean literate society :**

4.1. Promote the engineering of maritime transport and offshore structure as well as those related to Marine Renewable Energies (MRE). Hydrodynamics and flows, wave and wave studies, optimization of energy performance, materials, durability of offshore structures, offshore wind

4.2 Promote public-private partnerships to overcome some obstacles of new activities including new sensors for pollutants, bioremediation measures, as well as new processes (for plastics and emerging contaminants) retention in wastewater treatment plans, satellite data services.

4.3. Establish strategies to encourage and facilitate cluster development in the Ocean, in Pollution, green material development, data science, through federation of Research/Industry.

4.4. Provide scenarios of environmental changes, investigating the impact of ecological changes to people, of alternative socio economics development pathways and blue growth.

4.5. Pilot innovative methods for citizen and stakeholder engagement, open science, ocean literacy and advocacy.