

Submission
Guidelines for
Scientific Projects
using Ocean Drilling
Archives (SPARCs)



# INTERNATIONAL OCEAN DRILLING PROGRAMME

# **Submission Guidelines for SPARCs**

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# 1. Overview of Scientific Projects using Ocean Drilling Archives (SPARCs)

## 1.1. Introduction and Scope

The IODP<sup>3</sup> "Scientific Projects using Ocean Drilling Archives" (SPARCs) initiative supports large-scale research projects that may address any aspect of the "2050 Science Framework". However, it particularly encourages the development of ambitious projects that contribute to the implementation of the Flagship Initiatives defined in the "2050 Science Framework".

Alongside scientific ocean drilling proposals, SPARCs provide a mechanism for the international scientific ocean drilling community to propose new large-scale projects involving interdisciplinary collaborations. They further extend the legacy asset-based concepts introduced towards the end of the International Ocean Discovery Program (LeAPs, ReCoRD), or other long-established legacy grants (e.g. ANZIC IODP Legacy Analytical Funding).

SPARCs should address globally significant processes/problems and use innovative, creative, and multidisciplinary approaches that could include, for example, the production of large new datasets from samples, integration of data across multiple expeditions and/or multiple boreholes, and/or the application of new methods or technologies (e.g. XRF core scanning, AI, "big data" approaches) that were not available when the legacy assets were collected.

The scientific ambition of SPARC projects should far exceed that of standard requests for samples or data as they are intended to provide a new avenue to facilitate collaboration at scales larger than conventional single or multi-proponent research projects. Standard requests for access to legacy samples and data by the science community are unrelated to the SPARC initiative and may be submitted at any time.

SPARCs will have objectives that maximise the return on the legacy assets (i.e. cores, samples, and data) from current and past scientific ocean drilling programmes without new drilling or other operations at sea. SPARC proposals that seek to exploit legacy assets to add value to upcoming scheduled expeditions are permitted if they have stand-alone scientific objectives that are not reliant on the success of future offshore operations.

The SPARCs initiative also provides the following community benefits:

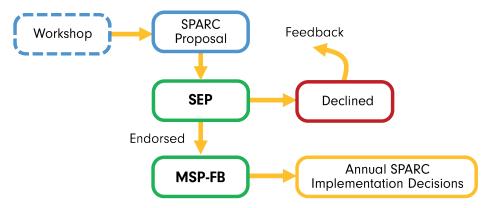
- it encourages open involvement and participation from the community, expanding the shore-based participation in scientific ocean drilling.
- it provides opportunities to mentor early career scientists via their inclusion in SPARC Expedition Science Teams, and to generate particularly attractive research opportunities for early career researchers, to support their transition from training to scientific leadership roles.

Each SPARC will have a funded duration of three years and will receive €300,000 for its implementation. Proposals should have a **maximum of five co-proponents**, with the maximum possible diversity within this team in terms of scientific expertise, affiliation, nationalities, gender, and career stage. Proponents can be from any nation that is currently or was previously a member of a scientific ocean drilling programme, with at least three out of the five proponents coming from IODP³ member nations. Lead proponents from non-IODP³ member nations are permitted. Proponent groups consisting of participants from a single country, from a single career stage, or representing a single scientific discipline are not permitted. SPARC proposals are submitted through the **IODP³ Gateway**, available via the IODP³ website at https://www.iodp3.org.

All co-proponents of a funded SPARC will automatically become SPARC Expedition Science Team members (with two selected as Co-Chief Scientists), but the remaining Science Team members will

be selected following an open call for applications. The overall size of the final Expedition Science Team for a SPARC is flexible and can be adapted to project needs, but should typically consist of ~30 scientists (with a minimum permissible size of 15 scientists and no fixed upper limit).

Proposals may be submitted at any time, but the final deadline for submission to each annual SPARC funding round is **31 January each year** (unless indicated otherwise in announcements on the IODP<sup>3</sup> website). The suite of applications received by this deadline each year will then be assessed by the Science Evaluation Panel (SEP), resulting in proposals either being endorsed and forwarded to the MSP Facility Board (MSP-FB) for potential funding or being declined (with feedback). The MSP-FB will make SPARC funding recommendations to the IODP<sup>3</sup> Executive Board (ExB) each year, with successful proponents being notified no later than one month after the ExB meeting. SPARC proposals that are not selected for immediate implementation will be held at the MSP-FB and considered for implementation in subsequent rounds. Note that there is no guarantee that all SPARC proposals forwarded to the MSP-FB will be implemented within the timeframe of IODP<sup>3</sup>, as the number of proposals that can be funded each year will depend on available programmatic budgets.



The SPARC proposal evaluation process

Proposals that involve biosphere-related objectives may be affected by the "Nagoya Protocol on Access to Genetic Resources and the Fair and Equitable Sharing of Benefits Arising from their Utilization to the Convention on Biological Diversity" (https://www.cbd.int/abs/). Proponents of SPARC proposals intending to use samples that were collected within an Exclusive Economic Zone or an Extended Continental Shelf should explore the documentation associated with relevant expeditions and consider contacting relevant drilling operators to establish informed consent status(es) prior to proposal submission.

# 1.2. Formation of SPARC Expedition Science Teams

#### 1.2.1. SPARC Proponents

Proponents of SPARC proposals selected for funding in each round will be notified by the MSP-FB, who will also invite two proponents to lead the SPARC as Co-Chiefs Scientists (based normally on SEP nominations). The other proponents will automatically be included in the SPARC Expedition Science Team without the need to submit applications to participate.

#### 1.2.2. Announcement of Opportunities

Once appointed, the Co-Chief Scientists will be required to write a *Scientific Prospectus* for their SPARC. The prospectus should provide details of:

- The background to the SPARC.
- The scientific objectives of the SPARC and how they relate to the ambitions of the "2050 Science Framework" or beyond.

- The scientific ocean drilling legacy resources planned to be used by the SPARC.
- The range of analytical techniques and methods planned to be employed in the SPARC that are considered critical to its success.
- Sampling and data collection strategies.
- Risks and contingency planning.
- Plans for sample and data sharing among the Science Team.

Following editorial and peer review, the *Scientific Prospectus* will be published in the IODP³ journal "*Proceedings of the International Ocean Drilling Programme*" and on the IODP³ website, and an open call for participation in the SPARC will be issued by the IODP³ Science Office (IODP³-SO). Applications to participate will be open to scientists from IODP³ member nations and more generally to scientists from any nation that was a member of a predecessor scientific ocean drilling programme. However,  $\geq 75\%$  of the SPARC Expedition Science Team must come from IODP³ member nations.

The Co-Chief Scientists will also be required to hold a webinar for the wider scientific community before the application deadline of the call for participation, organised with the assistance of the IODP<sup>3</sup>-SO.

#### 1.2.3. Evaluation of Applications for SPARC Expedition Science Team Membership

Applications for participation in the SPARC Expedition Science Team in response to the open call will be submitted to the IODP<sup>3</sup>-SO via the online **IODP<sup>3</sup> Gateway** (available at https://www.iodp3.org), which will make them available to the relevant IODP<sup>3</sup> Programme Member Offices (PMOs) for scientific evaluation. Based on their evaluations of the applicants, each PMO will provide a nomination proposal to the IODP<sup>3</sup>-SO, taking into account the need to balance required expertise, national quotas (according to financial contributions to IODP<sup>3</sup>), and gender and career stage profiles.

The nomination proposals will then be used by the Co-Chief Scientists to select the remaining SPARC Expedition Science Team members, ensuring that ≥75% of the overall team (including the three other SPARC proponents but excluding the Co-Chief Scientists) come from IODP³ member nations and taking into account, wherever possible, any additional requirements specified by the PMOs. The Co-Chief Scientists will be advised during the selection process by the Directors of the Science Office (in consultation with the PMOs) to ensure that the final selection is appropriate in terms of desired programmatic balances.

In addition to the main SPARC Expedition Science Team selected via the competitive open call, up to two additional "Widening Participation" places can be assigned to scientists from nations with no previous formal involvement in scientific ocean drilling at the invitation and discretion of the Co-Chief Scientists. These additional scientists do not have to submit formal applications for Science Team membership, but the Co-Chief Scientists should email details of scientists they select for Widening Participation places to the IODP³-SO at proposals@iodp3.org.

# 1.3. Budget and Implementation Plans

Each SPARC approved for implementation by the MSP-FB will receive a fixed budget of €300,000 to be used over a three-year funding period. If the scope of a SPARC requires additional funding above this amount, then it is expected that the SPARC Expedition Science Team will raise the extra funding required from other sources, as no additional funding from IODP³ will be made available.

Once the SPARC Expedition Science Team is finalised, the Co-Chief Scientists must produce an Indicative Budget Statement that outlines how the award of €300,000 will be used to support the project most effectively, covering travel and subsistence, analytical work, consumables, bench fees and similar items. SPARC funds should not be used for salary support for SPARC Expedition Science

Team members or associated researchers, or for the purchase of new equipment. Note that some SPARC funds may be used to facilitate short visits by Widening Participation SPARC Expedition Science Team members to research facilities provided by other team members to conduct SPARC-related analyses.

The €300,000 budget must be held at the institution of one of the SPARC Expedition Science Team members based in an IODP³ member nation (normally that of one of the Co-Chief Scientists), and this institution must be named in the indicative budget statement. The budget will be subject to that institution's internal financial regulations. However, no overheads may be charged to the award, and this should be considered when deciding which institution will hold and administer the budget. The Indicative Budget Statement must therefore be accompanied by an Overhead Waiver Letter from the administration of the institution identified to hold the budget stating that they agree to administer the award without charging overheads (see Section 2.5).

The Co-Chief Scientists will also be required to provide a **SPARC Implementation Plan** outlining project milestones and deliverables for the three-year funded period. In the case of SPARCs that require extensive sampling of legacy cores, **this plan must be discussed with the Curators of the Core Repositories before it is submitted** (see **Section 1.4**).

The Indicative Budget Statement and SPARC Implementation Plan must be approved by all SPARC Expedition Science Team members before submission by email to the IODP<sup>3</sup>-SO. These documents will then be reviewed by the MSP-FB Co-Chairs (in consultation with the Curators of the Core Repositories for the SPARC Implementation Plan).

Once these additional documents are approved, the SPARC Science Team member whose institution will hold the budget will liaise with the IODP<sup>3</sup> Managing Agency (via the IODP<sup>3</sup>-SO) to develop a formal contract between their institution and CNRS in France (who administer the IODP<sup>3</sup> budgets). When signed, this contract will facilitate payment of the budget to the institution via an invoice issued to CNRS.

# 1.4. Interaction with Core Repositories

#### 1.4.1. Responsibilities of SPARC Proponents and Science Team Members

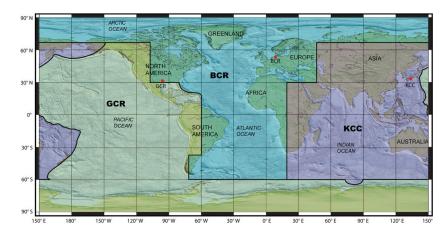
Successful SPARC proposals that involve new analyses of core materials are likely to require numbers of samples that far exceed those commonly associated with individual sample requests. Proponents of SPARC proposals are therefore strongly encouraged to discuss the scope of their project with the Curators of the three Core Repositories [Bremen Core Repository (BCR), Gulf Coast Repository (GCR), Kochi Core Center (KCC)] during the earliest stages of development of their proposal to discuss the availability of staffing resources and of materials to ensure the feasibility of their research plans. Contact details of the Curators are provided in Section 4.

Once approved for funding, SPARC Co-Chief Scientists and Expedition Science Team members will be responsible for submitting sample requests (and requests for use of any of the analytical equipment housed in the Core Repositories) via the relevant repository systems for approval in advance, following appropriate guidelines. They will also need to negotiate the timing and the number of scientists attending associated SPARC sampling events with the individual repositories well in advance to ensure that these activities can fit within the schedules of these facilities.

#### 1.4.2. Core Distribution Scheme

The geographic distribution scheme for the storage and curation of scientific ocean drilling cores and samples acquired during successive drilling programs (Deep Sea Drilling Project; Ocean Drilling Program; Integrated Ocean Drilling Program; International Ocean Discovery Program) is:

- The BCR stores all cores from the Atlantic and Arctic Oceans as well as the Mediterranean, and the Black and Baltic Seas.
- The GCR stores all cores from the Pacific Ocean (defined as east of the western boundary of the Pacific Plate), Caribbean Sea, the Gulf of Mexico, and all Southern Oceans (defined as south of 60° except for the Kerguelen Plateau).



U. Röhl adapted from Firth, JV, Gupta, LP and Röhl, U (2009) New focus on the Tales of the Earth - Legacy Cores Redistribution Project Completed. Scientific Drilling, 7. 31-33. doi:10.2204/iodp.sd.7.03.2009. [Map Mar 15, 2016]. Retrieved from http://www.marum.de/en/Cores\_at\_BCR.html

• The KCC stores all cores from the Pacific Ocean (defined as west of the western boundary of the Pacific Plate), Indian Ocean (North of 60°S), the Kerguelen Plateau, and the Bering Sea.

## 1.5. Availability of Data Generated by a SPARC

All data generated during the three-year funded period of a SPARC must be made available to the wider scientific community via the *Proceedings of the International Ocean Drilling Programme*. This serial publication is managed by the IODP<sup>3</sup>-SO and acts as the formal record of scientific analyses and results funded by IODP<sup>3</sup> through its drilling expeditions and SPARCs. Data generated after the end of the funded period should also, where possible, be made freely available via an open-access route. This can be achieved via: (i) reporting data in open-access primary journal publications and their supplementary materials; (ii) uploading datasets to an appropriate open-access database; and/or (iii) publication in a *Data Report* associated with the SPARC *Proceedings* volume.

## 1.6. Publication Requirements

#### 1.6.1. IODP<sup>3</sup> Publications

SPARC Expeditions are treated similarly to IODP<sup>3</sup> scientific ocean drilling expeditions in terms of programmatic publication expectations. Each funded SPARC will be assigned its own volume of the IODP<sup>3</sup> journal *Proceedings of the International Ocean Drilling Programme*. Each SPARC *Proceedings* volume will consist of:

- i. the SPARC Expedition Scientific Prospectus, written by the Co-Chief Scientists following approval of the SPARC by the MSP-FB and the ExB (see Section 1.2.2)
- ii. a SPARC Expedition Summary, authored by the Co-Chief Scientists and Expedition Science Team members, submitted no later than 18 months after the start date of the SPARC. This should expand upon the content of the Scientific Prospectus to outline the full scope of the project, describe the range of activities being conducted by the Expedition Science Team, and highlight progress made so far. To facilitate publication of high-impact results obtained early during the funded period in the open literature, the SPARC Co-Chief Scientists may request a delay to submission and publication of their SPARC Expedition Summary in the Proceedings volume by negotiation with the Proceedings Editorial Board (contactable by email at publications@iodp3.org).
- iii. a series of SPARC Data Reports that present the new data produced during the threeyear funded period. These may be submitted at any time, but the final deadline for submission will be six months after the end of the funded period. Results should be

organised logically by discipline into individual *Data Reports*, with each describing the context and rationale for the analyses undertaken, including an outline of the method(s) employed. Results should be presented and briefly described without detailed interpretation, and associated datasets should be appended in an accessible format (e.g. as Excel spreadsheets). The authorship list of each *Data Report* should name the main contributors first but then include all Science Team members as co-authors (see **Section 1.6.4**). Full presentation, discussion and interpretation of SPARC results should be achieved via publications in the open literature (see **Section 1.6.3**). To facilitate this, lead authors of individual *SPARC Data Reports* may request a delay to publication of their reports in the *Proceedings* volume by negotiation with the *Proceedings* Editorial Board (contactable by email at publications@iodp3.org).

#### 1.6.2. Co-Chief Scientist Responsibilities Within the IODP<sup>3</sup> Publication Process

Co-Chief Scientists will be responsible for coordinating the production of content for the *Proceedings* volume associated with their SPARC, and for leading the writing of the *SPARC Scientific Prospectus* and *Expedition Summary*. They will ensure that all SPARC Expedition Science Team members complete and submit their contributions to the *Proceedings* report by fixed deadlines, without requiring extensions.

The Co-Chief Scientists should select appropriate SPARC Expedition Science Team members to attend a virtual editorial meeting, organised by the IODP<sup>3</sup>-SO, where the content of the *SPARC Expedition Summary* will be finalised prior to submission. They are also responsible for responding to external reviews of the *Scientific Prospectus* and *SPARC Expedition Summary* and for reviewing final galley proofs promptly.

The Co-Chief Scientists will also be required to monitor the status of the SPARC Expedition Science Team members actions to fulfil their publication obligation requirements (see **Section 1.6.3**) and ensure that details of accepted publications outside of the *Proceedings* volume are reported to the IODP<sup>3</sup>-SO Publications Manager (at publications@iodp3.org).

#### 1.6.3 Individual Researcher Obligations

In addition to the formal IODP<sup>3</sup> publications outlined above, SPARC Expedition Science Team members are obligated to conduct research and to publish their results in the open literature, i.e., a peer-reviewed scientific journal or book that is published in English. To fulfil this obligation, manuscripts must be submitted no later than 12 months after the end of the funded period. Failure to meet this obligation may adversely affect future applications to participate in IODP<sup>3</sup>.

Any datasets produced after the funded period that are not reported in the open literature may alternatively be published as additional *Data Reports* within the relevant issue of the *Proceedings of the International Ocean Drilling Programme*. Such additional Data reports may be submitted up to 36 months after the funded period.

#### 1.6.4 Authorship Requirements

IODP<sup>3</sup> SPARC Expeditions, like scientific ocean drilling/coring expeditions, depend on contributions from the whole Science Team to ensure successful outcomes. All publications based on data generated during the three-year funded SPARC period and subsequently submitted to the open literature, therefore, must be co-authored by all SPARC Expedition Science Team members. The lead authors of such publications are required to list all Science Team members individually in full to ensure that publications are linked to the ORCiD, Scopus or other online bibliographic database records of Science Team members. The only exception is if journal guidelines limit the number of authors that may be listed, in which case the form "and IODP<sup>3</sup> Expedition xxxS' Scientists" in the authorship may be used instead, where 'xxxS' refers to the expedition number assigned to the SPARC by IODP<sup>3</sup>.

# 1.7. Financial Requirements

The €300,000 budget is transferred to the institution selected to administer the award. As noted in Section 1.3, this institution must agree to administer the award without charging overheads, and this must be confirmed by submission of an Overhead Waiver Letter to the IODP³-SO (by email to proposals@iodp3.org) after selection for implementation by the MSP-FB and ExB, along with the SPARC Implementation Plan and Indicative Budget Statement (see Section 2.5). Approval of these documents by the MSP-FB then triggers the preparation of a contract with CNRS, who will pay the award to the host institution in response to receipt of an invoice once the contract is signed. It is essential, therefore for the nominated budget holder to receive approval of the award through their own institution's research grant administrative processes in advance of submitting the SPARC Implementation Plan, Indicative Budget Statement and Overhead Waiver Letter to the IODP³-SO.

After submission of these additional documents and their approval by the MSP-FB, a formal start date of the SPARC is agreed between the Co-Chief Scientists, the IODP<sup>3</sup> Managing Agency and the IODP<sup>3</sup> Science Office. At the end of the three-year funded period of the SPARC, the Co-Chief Scientists must submit a **Final Financial Statement** accounting for the actual use funds, accompanied by an explanatory covering letter. This must be received by the **IODP<sup>3</sup> Managing Agency** no later than six months after the end of the funded period (i.e. within 42 months of the SPARC start date), along with the return of any unspent funds.

# 2. SPARC Proposal Content Requirements

SPARC proposals are submitted to the **IODP**<sup>3</sup> **Gateway** system via the "Submit a Proposal" link on the IODP<sup>3</sup> website (https://iodp3.org), and should be prepared following the guidance below.

# 2.1. Structure of SPARC Proposals

SPARC proposals should contain self-contained, well-justified scientific plans that can be implemented with available legacy assets and within a reasonable length of time.

Proposals will consist of the following elements:

- a) an IODP<sup>3</sup> Proposal Cover Sheet (generated interactively via the IODP<sup>3</sup> Gateway system see Section 3.4.1) containing:
  - the title of the SPARC project
  - up to 5 keywords
  - an abstract (≤ 400 words)
  - a statement of scientific objectives (≤ 250 words)
  - a Science Communication Plain Language Summary (≤ 400 words) describing the proposed research and its broader impacts in a way that can be understood by a general audience (see Section 2.4).
- b) two tables outlining the **range of legacy resources required by the SPARC** (see **Section 2.3** and **Section 3.4.2**), along with confirmation that the proponents have discussed the scope and feasibility of the project with the Curators of the Core Repositories (see **Section 1.4**).
- c) a list of proponents (maximum 5; generated interactively via the IODP<sup>3</sup> Gateway system see **Section 3.4.3**), specifying the name, country, email address, organisational affiliation, ORCiD identifier, area of expertise and career stage of each proponent. The Lead Proponent must be

listed first and must prepare and submit the application on the Gateway system. (See also **Section 1.1** for guidance regarding the composition of the proponent team).

- d) a **PDF of the Main Text of the proposal** (see **Section 3.4.4**) with embedded figures/tables (≤ 8000 words, including figure/table captions but excluding the reference list; ≤ 10 figures/tables), following the guide to content provided in **Section 2.2** and the format requirements listed in **Section 2.6**.
- e) **two-page Curricula Vitae of proponents** (see **Section 3.4.5**), each including a list of up to 10 significant publications and an outline of prior experience in scientific ocean drilling (if any). Each CV must follow the format requirements listed in **Section 2.6**, and should then be combined into a single PDF for upload via the IODP<sup>3</sup> Gateway system.

These elements are provided by completing the series of webforms on the IODP<sup>3</sup> Gateway system, as listed in the table on page 9 and documented in **Section 3**.

### 2.2. Content of the Main Text of a SPARC Proposal

The **Main Text** of a SPARC proposal should describe all aspects of the scientific objectives of the SPARC, the use of legacy assets, the research approaches, and indicate expected outcomes and deliverables. It should:

- Outline the background and rationale for the SPARC, including reference to any previous relevant research.
- State the scientific aims and objectives and explain how they relate to or advance the 2050 Science Framework.
- Describe the target legacy assets and justify the need for using legacy assets to accomplish the scientific objectives. If using legacy cores, ensure that the prime targets referred to here are consistent with those listed in the Required Resources webform.
- Describe the proposed research approach and suitability of the methods for addressing the scientific objectives.
- Describe any planned development or application of advanced and non-standard research or technical approaches.
- Note any relationships to other bio- or geoscience programmes or initiatives, if applicable.
- Describe the expected outcomes and deliverables, likelihood of success, and how success will be assessed and measured.

The main text of a SPARC Proposal can contain a maximum of 8,000 words, including captions for figures and tables but excluding the reference list. Proposals may contain a maximum of 10 figures and/or tables, that should be embedded in the text.

#### IODP<sup>3</sup> Gateway SPARC Proposal Submissions - Information Requirements

#### Webform 1: Proposal Cover Sheet:

- SPARC Proposal Title
- Keywords (maximum of 5)
- Project Abstract (≤ 400 word text-box)
- Scientific Objectives (≤ 250 word text-box)
- Science Communication Plain Language Summary (≤ 400 word text-box) (see Section 2.4)

#### Webform 2: Required Resources

Completion of a two expandable webform tables to provide a Summary of Required Legacy Resources (see Section 2.3):

- Tick-box confirmation that you have discussed your project with the Curators of the IODP Core Repositories (see Section 1.4)
- Samples (Leg/Expedition; Site; Hole; Core Repository; Intervals of Interest specified by ranges of core numbers [free-text])
- Data (Leg/Expedition; Site; Hole; Types of Legacy Data [free-text])

#### Webform 3: Proponent Details (see Section 1.1 for guidance on composition)

Completion of a webform table with a maximum of 5 rows (one per proponent). Fields are:

Title

- Name
- Surname
- Country
- Email address
- Organisation
- ORCiD
- Area of Expertise (free-text)
- Career Stage (pull-down list: PhD student; Early Career Researcher (≤ 10 years post-PhD); Senior Scientist (> 10 years post-PhD)

#### Webform 4: Main Text of Proposal (see Section 2.2 and Section 2.6)

• Drag and Drop/Select Document box for upload of single PDF file of Main Text (≤ 8000 words, including figure/table captions but excluding the reference list; ≤ 10 figures and/or tables combined)

#### Webform 5: Curricula Vitae (see Section 2.1)

 Drag and Drop/Select Document box for upload of a PDF file containing a two-page CV for each proponent combined into a single document

#### Webform 6: Understanding of Responsibilities

Tick-box confirmation that you have read and understood the:

- IODP<sup>3</sup> Code of Conduct and Anti-Harassment Policy
- IODP<sup>3</sup> Sample, Data and Obligations Policy

and commit to abide by these policies if your proposal is implemented as a SPARC Expedition

# 2.3. Table of Scientific Ocean Drilling Legacy Resources Required by the SPARC

This will require input of the following information via the IODP<sup>3</sup> Gateway system (see Section 3.4.2):

- Leg/Expedition, Site and Hole numbers and Core Repository codes (BCR, GCR, KCC) related to legacy core materials targeted by the SPARC and estimated associated intervals of interest specified by ranges of Core numbers
- Leg/Expedition, Site and Hole numbers and associated types of legacy data to be used by the SPARC

# 2.4. Science Communication Plain Language Summary

Information provided in the Science Communication Plain Language Summary is used to support the development of SPARC communication plans and other IODP<sup>3</sup> outreach goals. The Science Communication Plain Language Summary asks proponents: "Describe the proposed research and its broader impacts in a way that can be understood by a general audience." This is intended to provide a non-technical summary of a proposal's research and societal impacts; it is not intended to include specific outreach activities. Proponents should consider the unique aspects of their proposed research in writing their summary. The Science Communication Plain Language Summary will be evaluated during the SPARC proposal review process, and proponents of successful SPARC proposals may receive feedback and advice on how to improve their summary prior to the start of the project (e.g., by speaking with communication specialists within IODP<sup>3</sup>).

### 2.5. Additional Required Information (see also **Section 1.3**)

If your SPARC proposal is endorsed by the IODP<sup>3</sup> SEP and is **selected for implementation by the MSP-FB and ExB,** once the SPARC Expedition Science Team is assembled you will also be requested to submit the following documents as PDFs by email to the IODP<sup>3</sup>-SO at **proposals@iodp3.org** (adhering to the format requirements listed in **Section 2.6**):

- a **SPARC Implementation Plan** of ≤ 1000 words (excluding title, Gantt chart title and any references). This should:
  - Describe the roles of the co-proponents in the leadership of the SPARC.
  - Describe plans for collaboration between SPARC Expedition Science Team members and how this will be facilitated and managed to promote focused research and progress (e.g., plans for in-person sampling parties, frequency of dedicated zooms, plans for SPARC workshops, e.g., attached to major conferences), and how results will be disseminated.
  - Outline discussions held with the Curators of the Core Repositories regarding the availability of core materials and plans for accessing and using repository facilities (see Section 1.4).
  - Plans for obtaining additional funding to complete the research, if this cannot be achieved using the € 300,000 SPARC award.
  - A Gantt chart showing the timelines for the research, key milestones and deliverables.
- an **Indicative Budget Statement** of ≤ 1000 words that outlines how the award of €300,000 will be used to support the project most effectively. This should also outline any significant additional funding or in-kind contributions (e.g., analytical support) brought to the project by members of the SPARC Expedition Science Team.
- an **Overhead Waiver Letter** from the institution selected to hold the budget stating that they agree to administer the award without charging overheads.

Note that both the SPARC Implementation Plan and Indicative Budget Statement must be approved by all SPARC Expedition Science Team members before submission to the IODP<sup>3</sup>-SO, who will forward them to the MSP-FB Co-Chairs for review (in consultation with the Curators of the Core Repositories for the SPARC Implementation Plan).

# 2.6. SPARC Proposal Format Requirements

The main text of SPARC proposals, SPARC Implementation Plans and Indicative Budget Statements must adhere to the following formatting requirements:

page size: A4

font type: Arial (or equivalent)

• font size: 11- or 12-point

• line spacing: 1.5

margin: 1.5 cm all around

figures: cannot be larger than a single page A4

in-text references: must be (Author, year) and not numerical superscripts

The two-page curricula vitae of proponents must adhere to the following formatting requirements:

page size: A4

font type: Arial (or equivalent)

• font size: 11- or 12-point

• line spacing: single

margins: 1.5 cm all around.

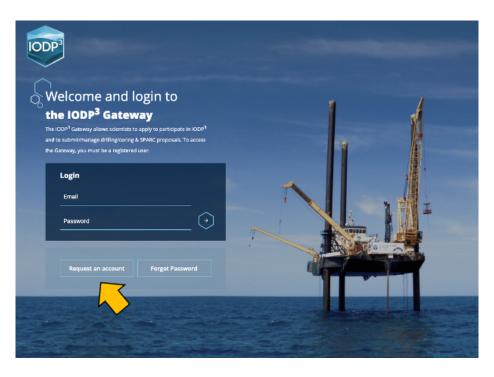
The individual CVs should then be combined into a single PDF for submission.

Note that the maximum file size for individual PDFs is 15 MB.

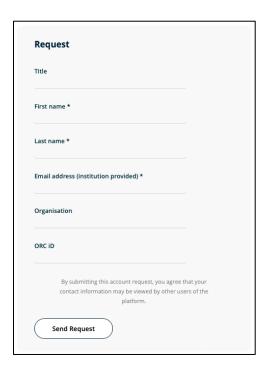
# 3. Using the IODP<sup>3</sup> Gateway System for SPARC Proposal Submission

# 3.1. Requesting an IODP<sup>3</sup> Gateway account

The IODP<sup>3</sup> Gateway log-in page can be accessed via **Submit a Proposal** on the IODP<sup>3</sup> website, or directly at **https://gateway.iodp3.org**. From there, you can request an IODP<sup>3</sup> Gateway account (or login if already registered):



You will then need to complete this registration form and submit your request:



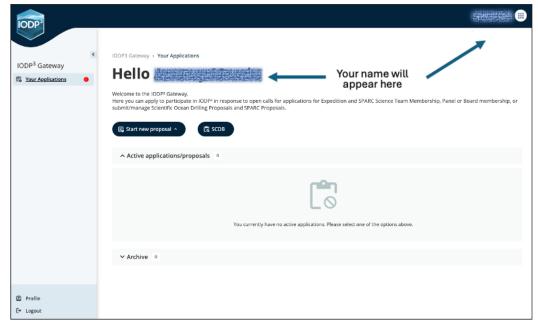
**NOTE:** Registration is faster using a university/institutional email address. Registration using a generic email address (e.g. Gmail) is possible but requires validation by the IODP<sup>3</sup> Science Office.

After you click "Send Request", you will receive an email asking you to validate your account and set up your IODP<sup>3</sup> Gateway account password. This email may take some time to arrive (please check your spam folder!).

If you do not receive an email confirmation within 24 hours then please contact the IODP<sup>3</sup> Science Office at **enquiries@iodp3.org** for assistance.

# 3.2. Selecting the SPARC Proposal system

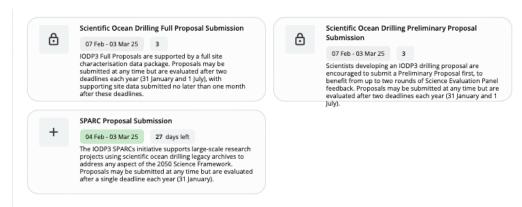
Once registered, log-in to the IODP<sup>3</sup> Gateway. Your homepage will initially look like this:



**Note:** Clicking on the "bento box" icon (9 dot grid symbol) in the top-right corner of the Gateway system and on the "IODP<sup>3</sup> Gateway" icon that then appears will take you to this homepage at any time

**Note:** Please ignore the "Research Planning" icon that also pops up when you click on the "bento box" icon as this isn't used in the IODP<sup>3</sup> Gateway within the Marine Facilities Planning software environment.

Click on "**Start new proposal**". A pop-up box showing proposal types will appear, as in the example below. Note that the appearance may vary from that shown here and will also depend on the width of your browser window. Click on the SPARC Proposal Submission box:



This will take you to a page of general information about SPARC proposal submission, and you then need to work through the webforms listed in the lefthand menu to prepare your submission.

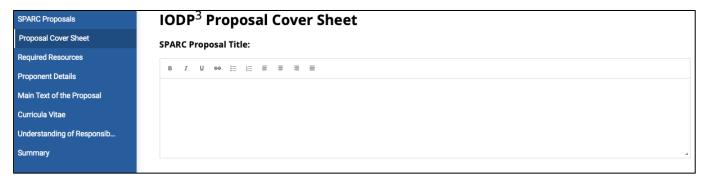
**NOTE:** You can complete the webforms listed in the left-hand menu in any order, but you must click "Next" to save the content of the current webform. If you select another webform from the left-hand menu without clicking "Next" then your entries on the current webform will not be saved. Please also click on "Next" to save if leaving a session unattended for any length of time as the system will automatically time-out and require a new log-in if left inactive for too long.

#### 3.4. The SPARC Submission Webforms

#### 3.4.1. "Proposal Cover Sheet" Webform

This consists of:

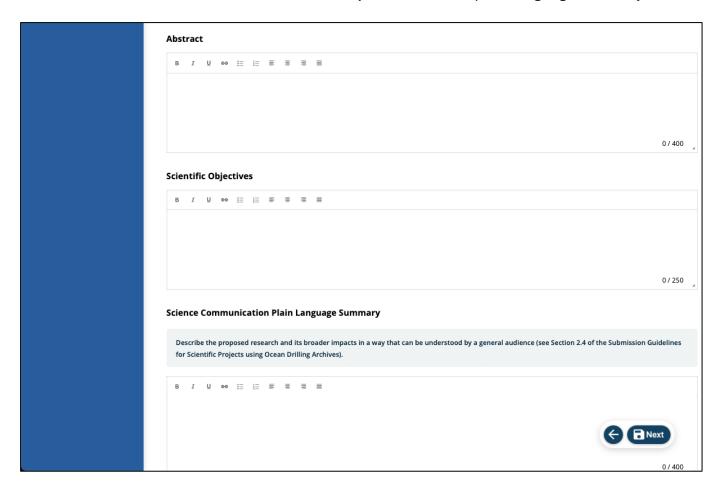
• a text-box for the title of the SPARC:



a tool for inputting up to five keywords:



• three text-boxes for the abstract, scientific objectives, and the plain language summary:



You can either complete the text-boxes by typing directly in the form or by pasting in text that you previously prepared elsewhere. Use the formatting tools provided as you wish. If you exceed the word limits and click "Next" to save, the system will flag this and prevent you from saving until you shorten the text accordingly.

#### 3.4.2. "Required Resources" Webform

Here you need to confirm that you have discussed the scope and feasibility of your proposal with the IODP Core Repository staff, and complete two webform tables outlining the sample:



#### and data resources:

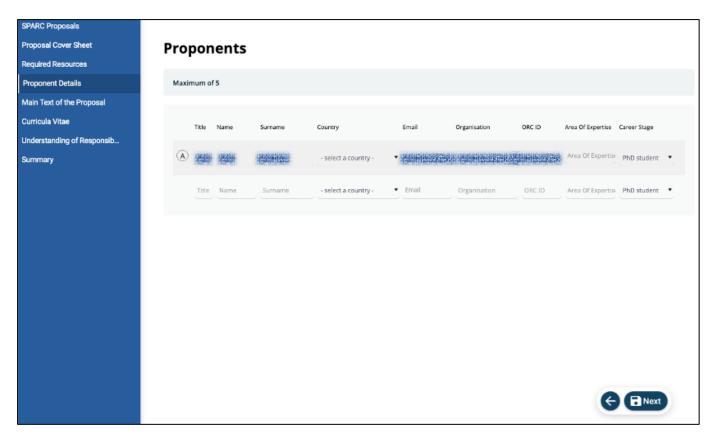


required by your SPARC. The tables are self-expanding, but multiple sample intervals or data types in/from the same hole can be specified on each line.

#### 3.4.3. "Proponent Details" Webform

This webform table will expand as each proponent's details are added, up to a maximum of five proponents. Some of the Lead Proponent (i.e. the person submitting the proposal) details are prefilled in the first row of the table from their Gateway registration information.

- Titles should be given in the way proponents are usually addressed in correspondence (e.g. Prof, Dr, Mr, Ms, Mx) and not using academic roles (e.g., not "Researcher", "Student" etc.).
- Country refers to where you are based, and not your nationality by citizenship
- Email addresses should be institutional ones, although the system will accept other types (e.g., Gmail)
- Inclusion of ORCiDs for proponents is optional but highly recommended, since this gives Science Evaluation Panel members a convenient way to access academic profiles.
- The broad area of expertise of each proponent must be specified as free-text. Please keep the descriptors you use concise and informative (e.g., microbiology, structural geology etc).
- The career stage of each proponent is selected from a pull-down list.



# 3.4.4. "Main Text of the Proposal." Webform

This consists of a "Drag and drop document here or select document" box for upload of a PDF file containing the main text of your SPARC proposal:



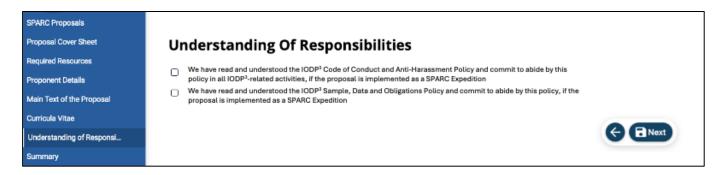
# 3.4.5. "Curricula Vitae" Webform

This consists of a "Drag and drop document here or select document" box for uploading a PDF file containing the combined set of two-page CVs for the proponent team:



#### 3.4.6. "Understanding of Responsibilities" Webform

Here you must confirm that you have an understanding of the responsibilities associated with IODP<sup>3</sup> SPARC expeditions, by agreeing to two statements:

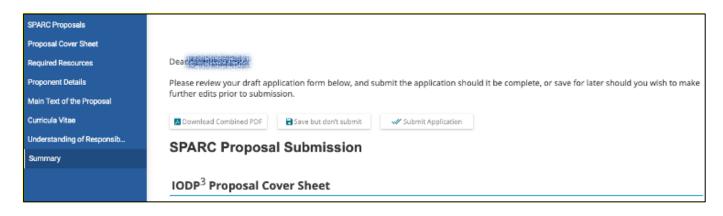


The IODP<sup>3</sup> Code of Conduct and Anti-Harassment Policy may be found on the IODP<sup>3</sup> website **here**, and the Sample, Data and Obligations Policy may be found **here**.

#### 3.4.7. "Summary" Webform

This provides an overview of your proposal (not shown in the screenshot below). This on-screen summary excludes the content of the uploaded PDFs containing your Main Text and CVs (note: these are included in the downloadable PDF – see below).

There are also three buttons with the following functions:

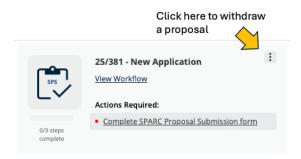


Download Combined PDF: This downloads a single PDF to your computer that contains all
of your responses to the webforms, with the content of the uploaded Main Text and CVs

**appended at the end**. You can use this to review your whole proposal before further editing at any time or to download a copy of your finalised proposal prior to submitting.

- Save but don't submit: Use this to save your proposal between Gateway sessions. Your proposal will then appear on your Gateway homepage under "Active Applications" and can be reopened from there.
- **Submit Application**: Click this to submit only when you are certain you are happy with your proposal. Once clicked, the proposal will still appear under "Active Applications" on your Gateway homepage, but you will only be able to view it and not edit it further.

If after submitting you subsequently find an error or omission in your proposal prior to the annual SPARC deadline, you can simply withdraw your proposal by opening the menu accessed by clicking on the vertical ellipsis (three dots) in the top right corner of its "Active Applications" panel on the IODP<sup>3</sup> Gateway homepage and then start afresh. If you do this, your fresh proposal will be given a new unique identifier code on the Gateway system. Proposals withdrawn and started afresh **after** the submission deadline will be considered in the next annual round of SPARC proposal evaluation that starts after the next annual submission deadline.



**Note:** Proposals may also be withdrawn in this way prior to submission if you no longer wish to proceed.

Note that submission changes the status of your proposal under "Actions Required" on your IODP<sup>3</sup> Gateway homepage from "Complete SPARC Proposal Submission form":



to "Review & collaboration phase" and "Review 1":



This change shows that your proposal has been safely submitted.

**Note:** The "Review & collaboration phase" and "Review 1" links that appear after submission are for internal IODP<sup>3</sup> Science Office use only and will generate a "Permission Denied!" error if clicked by a user.

All SPARC proposals submitted prior to the annual deadline will subsequently be assigned a formal IODP<sup>3</sup> proposal number on the IODP<sup>3</sup> Gateway system after the deadline that will be used in all related correspondence from the IODP<sup>3</sup> Science Office. SPARC proposal numbers will have the form "nnnn-S" where "nnnn" is a 4-digit number and "S" identifies the proposal as a SPARC submission.

Submission of a SPARC proposal indicates that the full proponent team agrees to have the IODP³ Proposal Cover Sheet made available to the scientific ocean drilling research community via the IODP³ website shortly after the deadline passes. The IODP³ Proponent Cover Sheet does not include information on the names of members of the proponent team or any other personal information. Members of the research community who wish to discuss with proponents any of the active proposals listed on the IODP³ website therefore need to email the IODP³ Science Office on proposals@iodp3.org, who will contact the Lead Proponent to seek permission to pass on their contact details to the enquirer.

# 4. SPARC Proposal Evaluation

# 4.1. Proposal Confidentiality

All SPARC proposals are confidential documents throughout the evaluation process. Individuals who receive and review SPARC proposals must agree not to disclose or disseminate proposal contents and not to discuss the proposal outside the context of their roles within IODP<sup>3</sup>. Unless a proponent requests otherwise, information in the proposal Cover Sheet will be publicly accessible on the IODP<sup>3</sup> website upon acceptance of the proposal for consideration.

Please read the Standard IODP<sup>3</sup> Confidentiality Policy, available at http://www.iodp3.org.

# 4.2. Review of SPARC Proposals by the SEP

# 4.2.1. SPARC Proposal Evaluation

Proposals submitted to the SPARC initiative will be evaluated by the IODP<sup>3</sup> SEP at their first meeting following the submission deadline. The SEP Co-Chairs will assign reviewers from within the SEP membership to examine and present each SPARC proposal to the panel. The review team will normally consist of three scientists tasked with assessing the scientific proposal and an additional representative from the Core Repositories (for SPARCs that require access to cores and/or involve sample requests).

The SEP will assess each SPARC proposal in terms of its relevance to the 2050 Science Framework, the suitability of the legacy assets for addressing the proposed scientific objectives, and whether the achievement of those objectives would likely result in scientific advances. Some examples of factors that the SEP may consider, based on input from the review team, are:

- Will the proposal produce science that significantly advances one or more ambitions of the 2050 Science Framework?
- How well-qualified is the proponent team to lead and engage in the proposed activity?
- Does the proponent team have appropriate diversity in terms of scientific expertise, affiliation, IODP<sup>3</sup> member nations, gender and career stages?
- Does the proposal adopt a interdisciplinary approach to addressing the scientific objectives that is novel, well-reasoned/organised, and based on a sound rationale?
- Is the suite of targeted legacy resources (cores, samples, and/or data) identified in the proposal suitable for effectively addressing the objectives of the SPARC and has use of these resources been appropriately justified?

- How effective is the combination of analytical techniques planned to be used in the SPARC likely to be in achieving the scientific aims of the project, and are plans to access associated research facilities realistic?
- Have the proponents presented a realistic set of outcomes and deliverables, with appropriate milestones and success criteria, that will facilitate completion of the work in a timely manner?

#### 4.2.2. SPARC Proposal Decisions

Following SEP evaluation, proponents will receive a written summary of the SEP review, which will include one of the following two decisions:

- **Endorsed:** If the SEP endorses the proposal, it will be forwarded to the MSP-FB, along with SEP nominations for two SPARC Co-Chief Scientists drawn from the proponent team. The SEP may recommend modifications to a SPARC proposal that they endorse. These recommendations must be taken into account when preparing the SPARC Scientific Prospectus for submission, if the SPARC is selected for implementation by the MSP-FB and approved by the ExB.
- **Declined:** If the proposal is declined by the SEP, it will not be forwarded to the MSP-FB and will no longer be active in the system. Proponents may consider the SEP comments and reenter the system through the submission of a new SPARC proposal to a future annual round.

Reasons that a proposal might be declined include:

- The proponent team is insufficiently diverse regarding scientific expertise, affiliation, nationalities, gender, and career stage (as outlined in **Section 1.1**)
- The science outlined in the proposal does not meet the scope and ambition of the SPARC initiative, and/or could readily be achieved via one or more standard sample requests.
- The science objectives are not described well or are not compelling.
- The strategy for using legacy assets does not adequately support the science questions.
- The project is not feasible because the necessary legacy assets are not available or because the research approaches are unlikely to be successful.
- The proposal has scientific objectives that conform poorly with the overall ambitions of the 2050 Science Framework or that do not bring sufficient added value to warrant support.

#### 4.3. Consideration by the MSP Facility Board

Once the SEP has forwarded a SPARC Proposal to the MSP-FB, the MSP-FB will then be responsible for selecting projects to fund for implementation in each annual round and for notifying proponents of the status of their proposal. Selection may take into account a number of factors, including (but not limited to): the available budget for SPARCs in the year of submission; whether a SPARC proposal complements the science associated with MSP proposals residing at the MSP-FB and/or planned/recently implemented drilling/coring expeditions; and the diversity of science being funded by the SPARC scheme.

Selection for funding will trigger the start of the implementation of the SPARC via the procedures outlined in **Sections 1.2** to **1.4** above, with funding being released upon receipt of a satisfactory SPARC Implementation Plan, Indicative Budget Statement and Overhead Waiver Letter by the MSP-FB Co-Chairs (see **Section 1.3**) and the signing of a contract between the financial host institution and the CNRS.

SPARC proposals that are not selected for immediate implementation will be held at the MSP-FB and considered for implementation in subsequent rounds. Note that there is no guarantee that all SPARC

proposals forwarded to the MSP-FB will be implemented within the timeframe of IODP<sup>3</sup>, as the number of proposals that can be funded each year will depend on available programmatic budgets.

# **5. Enquiries About SPARC Proposals**

All enquiries about submission processes for SPARC proposals or the IODP<sup>3</sup> Gateway system should be emailed to the IODP<sup>3</sup> Science Office Proposal and Meetings Manager, Dr Chiara Amadori, at: proposals@iodp3.org.

Enquiries about the availability of legacy core materials (see **Section 1.4**) should directed to the Curators of the Core Repositories, at the following email addresses:

Bremen Core Repository - bcr@marum.de

Gulf Coast Repository - curator@iodp.tamu.edu

Kochi Core Center - curator@jamstec.go.jp

Use the map of the core distribution scheme provided in **Section 1.4** to identify which repositories to contact regarding your SPARC proposal.