HELMHOLTZ Incubator Software Award

Call 2023

funded by the President of the Helmholtz Association through the Incubator Initiative „Information and Data Science“

1. Aim of the Award

Software is one of the most important tools of modern science, and the development of research software is often a prerequisite for cutting-edge research. At the same time, software is an important outcome of research itself, but does not yet receive the necessary attention and reputation in the scientific community. Better attention and recognition also increase the motivation for subsequent use and opens up new opportunities for technology transfer.

There are countless software projects in the Helmholtz Association, many of which produce outstanding research achievements. The Helmholz Incubator Software Award aims to promote the development of professional and high-quality research software and to recognize the commitment to software as the basis of modern Data Science. The award will put the spotlight on sustainable development and operation of research software, collaboration between software developers and will help making research software available for re-use.

2. Target Group

The Helmholtz Incubator Software Award is granted to Helmholz scientists, engineers and teams (including PhD students) developing outstanding software solutions that meet the following conditions:

- Helmholz has a substantial share in the project
- at least one of the PI (or maintainer) responsible for the software is employed by or affiliated with the Helmholtz Association
- The research software is actively used by a community of practice.
3. Scope and object of the funding

Software applications and scientific communities are very diverse, so a single award cannot cover all the diversity. To ensure that this potential is fully exploited different aspects of research software development can be recognized, the prize can/will be awarded in up to three categories:

1. Scientific Originality
   This prize is awarded for the innovation contribution and the scientific results achieved with the software.

2. Sustainability
   This prize is given for software that is sustainable in the sense of software engineering according to the FAIR principles and for an extensive support and participation of the scientific community.

3. Newcomer
   This prize is awarded for young software with great potential and a visible growth rate in its application. It can be particularly interesting for doctoral students or junior research groups.

The winners receive a one-time prize money, which they can use for their own purposes. 5,000 € are earmarked for the Scientific Originality, 3,000 € for the Sustainability and 2,000 € for the Newcomer prize.

Which software is eligible for participation in the competition?

- Helmholtz has a substantial share in the project (Helmholtz as a leading partner)
- the software is already demonstrably in use in a community
- the software is cited in at least one scientific publication
- the software must meet the conditions of professional software development according to the FAIR criteria.
- the software is registered in the Helmholtz Research Software Directory (RSD)

Evidence that these criteria are met is provided in the application documents as well as the information in the Helmholtz Research Software Directory (see section 4).

4. Application

Each Helmholtz centre may nominate a maximum of three suitable candidates to this call. These candidates with software name and contact persons must be submitted by the Centre’s Management via e-mail to open-science@helmholtz.de by nomination deadline (see section 6). Preferably, the Helmholtz Data Science Incubator representatives are involved in the selection process.

The candidates selected by their centre will then be invited by the organizing committee of the Helmholtz Incubator Software Award to provide documentation pertaining to their bid via
the proposal management platform ProMeta-IVF (ivf.helmholtz.de) by submission deadline (see section 6).

The proposal must include the following documents:

- **Cover sheet with the following information**
  - Name of the software and contact details of the main contact person of the team
  - Helmholtz centre(s), institute(s)
  - Classification in the 6 Helmholtz research fields
  - Keywords

- **Reference to the related entry in the Helmholtz Research Software Directory (helmholtz.software)**

- **The following attributes are mandatory:**
  - Software DOI
  - Citations in peer reviewed journals (as mentions as category “journal article”)
  - All contributing organisations must be referenced
  - Description
  - Contact person in the RSD must be the contact person for the award

- **Letter of motivation from the applicant showing the potential and prospects of the SW (max. 3000 characters, font Arial, size 10, spacing 1.5). Please address all of the following topics in the letter of motivation:**
  - What is the benefit of the software for research, i.e. what concrete challenges can it solve or which use cases does it serve?
  - In what context was the software created (group, person etc.) and what role did Helmholtz play in that process?
  - How sustainable is the development and engineering of the software (FAIRness)?
  - What is the main task that can be fulfilled with the software?
  - Who is the target group for the software?
  - Which specific users or customers are already using the software in their research (or otherwise)?
  - What are the strengths of the project in relation to the three award categories (scientific originality, sustainability, and newcomer)?

- **List of publications citing the software (max. 5 most important) or reference such a list in the RSD.**

Note: Read access to the SW Repository must be possible for the review panel.

5. **Decision-making procedure**
After submission deadline, the acceptance is checked according to the criteria:

- The applicant is employed by or affiliated with the Helmholtz Association
- The applicant was nominated as a candidate by her or his centre.
- The documents and required information are complete and meet the formal criteria
- An entry in the Helmholtz-RSD with the essential information is available (basis is the status at the time of the submission deadline)

The selection of the award winners will be based on the evaluation by an external review panel.

A personal presentation of the candidates is not foreseen.

6. Application deadline and timetable

01.07.2023    publication of the call
07.07.2023    public announcement in the framework of the XIII Incubator Workshop
30.09.2023    application deadline
Spring 2024   Presentation of the Helmholtz Incubator Software Award by the President of the Helmholtz Association, the place and time of the award ceremony will be announced in good time.