

Call for Proposals

No. 83

28 October 2022

New Major Instrumentation Initiative: “HALO-Instruments – the Expansion of the Scientific Instrumentation of the High Altitude and Long Range Research Aircraft HALO”

With this call the Deutsche Forschungsgemeinschaft (DFG, German Research Foundation) launches a new Major Instrumentation Initiative that invites proposals from universities for the implementation of novel scientific instrumentation on the HALO Research Aircraft. The initiative aims at funding advanced scientific instruments to be installed aboard HALO for dedicated use in future research missions such as those addressed in the calls for the Priority Programme “Atmospheric and Earth System Research with the High Altitude and Long Range Research Aircraft (HALO)” (SPP 1294).

HALO enables forefront earth system science and allows for innovative atmospheric and geophysical measurements with a high-ceiling altitude of up to 15 km and a range of about 10,000 km. HALO-based research is supposed to help understand the interaction of processes within the earth system and human activities. For satellite missions, HALO provides unique possibilities to combine and validate space-borne data with measurements of the atmosphere that were performed in situ and near the ground.

This call aims at pushing the limits of the scientific instrumentation of HALO to allow addressing an even wider range of parameters to be observed during the flight missions. The novel instrumentation should provide a substantial and lasting qualitative step forward in the instrumentation of HALO.

The installation of the requested instruments at the HALO Research Aircraft can be planned within the framework of its wing pod (“HALO Large Wing Pod”), which has not yet been approved for flight operations, but will be made available by this Major Instrumentation Initiative. It is expected that the instruments will be operational within two years after their approval. Therefore, the project plan must explicitly consider the schedule of the HALO missions. The implementation of new instruments in an aircraft is challenging especially in terms of design, technical testing, consideration of specific safety regulations as well as certification. These special requirements must be considered in close consultation with the relevant bodies and responsible organisations during project planning and cost calculation.

Major Instrumentation Initiatives address universities as applicant institutions. The university must appoint only one responsible spokesperson for the application. Applications must demonstrate the necessary scientific and technical expertise for the successful operation of the equipment

and for the proposed research using it. Future research which will benefit from the new instrumentation should be concisely described; however, funding for the actual scientific (HALO-)research itself is not in the scope of this infrastructure-oriented call. It should be explained in the proposal how the operation and use of the new instrumentation is to be managed in a scientifically and methodologically efficient manner. In case of funding, corresponding rules for operation of and access to the equipment must be submitted to the DFG.

Adequate support for the operation and the maintenance of the new instrument needs to be provided. This essential aspect including the institutional support need to be explicitly addressed within the proposal. It is possible to apply (as part of the proposal) for staff and direct costs dedicated to the specific aims of this Major Instrumentation Initiative for a period of up to five years, e. g. for assembling the components, validation and calibration work and/or for supporting users of the instrumentation. Exceptionally, costs for the certification process may be included.

The DFG offers a webinar on formal and procedural aspects of this call, addressing one or two responsible persons per proposal. The webinar will take place on **6 December 2022**, 13:30–16:30 hrs. Please register under the following link: <https://t1p.de/HALO-Instruments>

Universities interested in applying have to submit a binding Letter of Intent by **10 January 2023** using the template provided (see Further Information). This is a mandatory prerequisite for submitting an application. The designated spokesperson responsible for the application may please refer to our online portal elan (see link below). Under the heading “Proposal Submission” you can select “Draft Proposal”. At the end of this website you will find the online form to upload your Letter of Intent.

Proposal Submission

Proposals must be submitted to the DFG by **1 May 2023**.

Please note that proposals can only be submitted via elan, the DFG’s electronic proposal processing system. To submit a proposal in response to this call, go to “Proposal Submission – New Project/Draft Proposal – Scientific Instrumentation and Information Technology – Major Instrumentation Initiative”, start the proposal procedure and select in the submission dialogue “HALO-Instruments” from the list of calls.

Proposals must be prepared using the project description template (form 53.101) and following the programme guidelines (form 21.7 Section I and III). These forms can either be downloaded from our website or accessed through the elan portal.

All documents need to be in English language, DFG’s rules for publication lists (form 1.91, version 2020) apply.

The spokesperson must be registered in elan prior to submitting a proposal to the DFG. If you are using the elan portal for the first time, please note that you must set up an elan account at latest by **24 March 2023** to submit a proposal under this call; registration requests received after this time may not be processed in time for proposal submission. Please make sure to select the correct Major Instrumentation Initiative call “HALO-Instruments” during both the registration and submission of the proposal.

Further Information

Template for the Letter of Intent HALO-Instruments:

www.dfg.de/download/pdf/foerderung/programme/wgi/halo_instruments_loi.rtf

The elan system can be accessed at:

<https://elan.dfg.de/en>

DFG-Form 21.7 Guidelines Major Instrumentation Initiative [09/19] (German or English):

www.dfg.de/formulare/21_7

DFG-Form 53.101 Project Description – Major Instrumentation Initiative call [12/17] (English only):

www.dfg.de/formulare/53_101_elan

Information on the programme and on other Major Instrumentation Initiatives:

www.dfg.de/wgi

Questions on this specific Major Instrumentation Initiative can be directed to:

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