**Instrument Persistent Identifiers for GSI/FAIR**

The purpose creating a persistent identifier and accompanying documentation for research infrastructure (e.g. experimental instruments) is to ensure information about a device are made available in the long term, and are citable. The documentation can be a short technical description outlining the device at a given time. Persistent identifiers are used for journal articles, data and software publications enabling citability, and guaranteeing long term access. Examples of PIDs are Digital Object Identifiers (DOIs), International Standard Serial Number (ISSN), and ORCID iD.

Instrumentation documents placed in the GSI JOIN2 publications repository will be assigned a DOI. They can be placed my submitting a document under the Submit -> Physical Object option. Ideally, this would be in the form of an html file and accompanying images, however a pdf (also in additional) would also be suitable.

Assigning PID to instruments offers several benefits for example:

* *Informing users*: PIDs can act as a reference point giving insights into technical specifications and capabilities. This also aid discoverability of the device
* *Providing traceability*: ensuring that the devices can be traceable and distinguishable for effective monitoring.
* *Direct citation*: not replacing any technical articles on instruments, but acting as a reference point that can be updated as needed.
* *Version control*: keep updates and modifications reported;
* *Long-term accessibility* *and knowledge retention*: PIDs ensure the long-term accessibility of information related to the instrument.

If you wish to publish an instrument please contact open-science@gsi.de for further details and steps.

A table is given on some possible information to include. An example is then given for a detector system. The document’s length does not need to exceed 2-3 pages.

An example can be found here: <http://dx.doi.org/10.15120/GSI-2024-00534>

***Summary Table***

|  |  |
| --- | --- |
| **Field** | **Notes** |
| ***Name of Instrument*** |  |
| ***Author(s)*** |  |
| ***Collaboration***  |  |
| ***Host Laboratory/Laboratories*** |  |
| ***Responsible Department(s)*** |  |
| ***Years active*** |  |
| ***Diagram/Photo/CAD*** |   |
| ***Stations(s) of device during primary usage*** |  |
| ***Linked infrastructure*** |  |
| ***Device URL/Webpage*** |  |
| ***References*** |  |
| ***3rd Party Funding*** |  |
| **Additional Notes** |   |

**Name of Instrument**

***Author:***

John Smith [ORCID (XXXX-XXXX-XXXX-XXXX]

***Collaboration:***

My collaboration

***Departments:***

GSI-Department

***Host Laboratory/Laboratories:***

GSI Helmholtz Centre for Heavy Ion Research [ROR: <https://ror.org/02k8cbn47>]

***Years active***:

2010 – present

***Station(s) of device during primary usage:***

***Diagram/Photo/CAD:***

***Linked infrastructure:***

e.g. SIS18, FRS

***Description:***

*Can include:*

*What the setup can do/measure, capabilities*

*Functional overview -> e.g. Brief possible science outputs from measurements*

*Brief description of the setup -> e.g. Description of the configuration(s) and options*

*Technical specifications -> e.g. Dimensions, performance*

*Data Acquisition*

***References:***