*Use this template to write your NSLS-II Block Allocation Group (BAG) Proposal and then copy/paste the information online into the PASS system. Do not upload this document as a MS Word or PDF file.*

**Guidance for Block Allocation Groups (BAGs) Proposals**

Block Allocation Groups (BAGs) are a mode of beam time access at NSLS-II intended for groups of researchers that want to combine their short beam time requests into a single proposal in order to permit greater flexibility in beam time allocation and scheduling. BAG proposals may be motivated by shared scientific interest, geographical location, affiliation, common experimental setup, or other synergistic reasons. Combining the beam time of individual groups permits greater flexibility in the choice of projects and samples during a given allocation period and offers the individuals in the BAGs the benefit of access to more regular allocation of beam time. The term of a BAG proposal is 2 years (6 beam time cycles). Up to five beamlines may be requested for a BAG proposal. New BAG proposals are rigorously reviewed by the NSLS-II Proposal Review Panel (PRP). If a BAG proposal scores well, this results in an initial beam time allocation. For beam time requests (BTR) in future cycles, BAGs will be required to submit a report reviewing their past work and a shift estimate for the next cycle. The reports are reviewed at the PRP meeting and an allocation for the next cycle will be considered. All users submitting a BAG proposal are required to contact the beamline staff prior to submission. All BAG proposals and BTRs should be submitted through the web-based Proposal Allocation, Safety, and Scheduling System (PASS) system.

Currently, BAG proposals are being accepted for the following beamlines: 8-ID (ISS), 11-BM (CMS), 16-ID (LiX), 17-BM (XFP), 17-ID-1 (AMX), 17-ID-2 (FMX), 19-ID (NYX), 28-ID-1 (PDF), and 28-ID-2 (XPD). Only measurements based on existing, standard setups available at these beamlines will be considered for the BAG beam time. For more information on BAG proposals, please read the [BAG policy and procedure](https://www.bnl.gov/nsls2/docs/pdf/bag-policy-and-procedure.pdf) (.pdf).

**TITLE TAB**

**Title**:

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**EXPERIMENTERS TAB**

*To associate someone with this proposal (including the PI, Co-PI, collaborators, etc.) first search for the person using the search bar below. If they are not found, click the "Add New Person" button below and you will be prompted to enter their name and email. Once the person is found (or entered), click the radio-button next to their name and then click the "Add Experimenter" button (which appears after clicking the radio-button) at the bottom of the search results list. The name chosen will be added to the list of experimenters above.*

*The status of each experimenter listed can be assigned by clicking the "Edit" button next to each name.*

*Important:*

* *Be sure to include yourself on the experimenters’ list (if applicable).*
* *Be sure to set the user access type for all experimenters.*
* *The PI or co-PI should be the lead individual responsible for the research performed. This is normally the holder of the grant that funds this work. Except in exceptional circumstances reflecting independent work, a student or postdoc should not be identified as the PI on a proposal.*

*Definitions of User Access type:*

* *On Site: a user physically present at a user facility during experiment*
* *Remote Access: a user actively participating in the experiments via video conferencing, beamline remote control, etc.*
* *Mail-In: a user that sent samples but will not be participating in data collection on site or remotely*
* *Off Site: A collaborator that is not participating in synchrotron experiments*

**RESEARCH TAB**

**Is this proposal a continuation of a prior BAG proposal(s) that has expired? If yes, please provide the proposal number, PI, and affiliation for the expired proposal. Note that a progress report is required and will be requested as a separate document.** *(limit: 1000 characters including spaces)*

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**Executive Summary:**

Provide a concise summary of the research program emphasizing the scientific impact. This section may be used for funding agency reporting purposes; this information and the proposal title may become public information. *(limit 1000 characters including spaces)*

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**Projects:**

Briefly describe the projects of each Principal Investigator involved in this BAG: List the Principal Investigators that are a part of this BAG and their affiliations. For each Principal Investigator, provide (1) a short description of the project(s) that will be executed as part of this BAG, (2) an estimate of the number of samples and 8-hour shifts needed to complete each project over the 2-year lifetime of the proposal, and (3) the source of funding for the project(s) including grant number(s). *(limit 15000 characters including spaces)*

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**Scientific Importance and Synergy of this BAG project:** Describe how the Principal Investigators contribute synergistically to this BAG proposal. *(limit 1000 characters including spaces)*

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**Research Plan:** List the beamline(s) that are needed for the proposed experiments and provide an overview how each requested beamline is needed for this project. If this proposal requests more than one beamline, discuss briefly if/how this project is enhanced by using multiple beamlines and (2) whether there are any special considerations on the multimodal aspects of this proposal for beam time allocation and scheduling. Note that additional beamline-specific details will be entered under the Time Request tab. *(limit 1000 characters including spaces)*

Beamline choices (https://www.bnl.gov/ps/beamlines/):

* 8-ID: Inner-Shell Spectroscopy (ISS)
* 11-BM: Complex Materials Scattering (CMS)
* 16-ID: Life Science X-Ray Scattering (LiX)
* 17-ID-1: Highly Automated Macromolecular Crystallography (AMX)
* 17-ID-2: Frontier Microfocusing Macromolecular Crystallography (FMX)
* 17-BM: Biological X-Ray Footprinting and Spectroscopy (XFP)
* 19-ID: Biological Microdiffraction Facility (NYX)
* 28-ID-1: Pair Distribution Function (PDF)
* 28-ID-2: X-ray Powder Diffraction (XPD)

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**Beamline Staff Consulted:** Prior to submitting a BAG proposal, beamline staff must be consulted. List staff member name and beamline (repeat for each beamline requested in the proposal*.)
(limit 1000 characters including spaces)*

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Please list any unavailable dates for your beam time. (Please note that these dates may not be able to be accommodated.) *(limit 500 characters including spaces)*

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**Research Screening Questions:**The Proposal Principal Investigator (PI), the person who is responsible for setting the direction for the funding, is required to answer the following research screening questions. These questions apply to the research in the upcoming proposal beamtime or instrument experiment time at the National Synchrotron Light Source II (NSLS-II) at Brookhaven National Laboratory, including all samples to be measured and ancillary equipment brought to NSLS-II.

By answering these research screening questions, you certify that your answers are complete and accurate, and that you understand that Brookhaven Science Associates will rely on the answers you provide to screen the research. If you are unsure how to answer the questions, you should contact your home institution’s Export Control Office.

Each time experiment conditions are modified (e.g., new samples/specimens not measured previously or new equipment / software), you are required to resubmit these Research Screening Questions.

The following points-of-contact for the proposal research screening questions are Lacy Jones (ljones2@bnl.gov) or Teresa Daniels (teresa@bnl.gov).

**Research Screening Question #1**

Are there any restrictions, contractually or otherwise, on public dissemination of the work (e.g., research, experiment) described in this proposal? Public dissemination includes presenting at conferences or open meetings, publications, or web source information.

* Yes
* No

**Research Screening Question #2**

Are you bringing any items (including specimens/samples), technical data, software, or services owned or funded by a nuclear, defense, military, space, intelligence agency, or a defense contractor of the United States or of another country?

* Yes
* No

**Research Screening Question #3**

For work (e.g., research, experiment) conducted at the user facility, are any items, technical data, software or services designed, developed, or modified exclusively for military applications, military training, spacecraft, launch vehicles, or national security or intelligence collection and analysis?

* Yes
* No

**Research Screening Question #4**

Would the research results be directly useful for- or would the research involve- a nuclear reactor application (e.g., commercial nuclear fuel, molten salts or other nuclear reactors, nuclear grade graphite, uranium enrichment)?

* Yes
* No

**Research Screening Question #5**

Are you bringing any items (including specimens/samples), technical data, or software to the user facility that requires access controls?

* Yes
* No

**Research Screening Question #6**

If the PI or co-PI (grant holder) of this beam time proposal is an employee of a DOE national laboratory, please affirm that your research has been screened by your National Lab against the DOE “Science and Technology Risk Matrix" critical and emerging research areas and technologies. The User Facility must be consulted if any research restrictions are required so that it can be determined if research restrictions can be accommodated.

**Note:** If you answered "No" or are unsure, you should contact your home institution's office responsible for screening research for the DOE S&T Risk Matrix.

**Reference:** Memorandum for Heads of Departmental Elements, Dan Brouillette, Science and Technology Risk Matrix Guidance, 12/13/2019.

* Yes
* No
* N/A

**Research Screening Question #7**

If you answered "Yes" to any of the research screening questions, but the "Yes" only applies to certain projects in this BAG proposal, please list those specific projects here (PI, Project Title).

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**REQUIRED INFORMATION TAB**

*Indicate the primary field of research for this proposal and the funding source(s).*

TIME REQUEST TAB

*In this section, please list all beamlines needed for the lifetime of the proposal. Once the proposal is submitted, you may not add beamlines in future time requests.*

*Notes:*

* *You may request up to 5 beamlines.*
* *The need for each beamline must be justified separately.*
* *Do not add “equivalent” or “alternate” beamlines. If you would like to suggest an “equivalent” or “alternate” beamline for allocation, mention it in the beam time justification below.*
* ***Shifts Requested (Lifetime)****: For each beamline requested, enter the number of shifts (1 shift = 8 hours) required for the 2-year lifetime of the proposal.*
* ***Shifts Requested (This Cycle)****: For each beamline requested, enter the number of shifts needed for this cycle. If you do not want beam time on a particular beamline this cycle, enter 0 (zero) shifts.*

Instructions:

To select a beamline or lab, click "Add Resource" and a pop-up window will open where you will enter:

**Beamline 1**

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| Resource (beamline) name: |  |
| Technique: |  |
| Shifts Requested (Lifetime):  |  |
| Shifts Requested (This Cycle):*(enter 0 if no shifts requested this cycle)* |  |

**Describe the experiments you will perform on this beamline for the 2-year lifetime of this proposal, including sample preparation, beamline requirements, data collection, and analysis.** *(limit 2500 characters including spaces)* Note: question not required for some beamlines.

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**Justify the need for this beamline's capabilities, including justifying why you need the 2-year lifetime shifts requested.** *(limit 1500 characters including spaces)*Note: question not required for some beamlines.

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*Be sure to click "Save" in the pop-up window.*

**Beamline 2 (if applicable)**

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| Resource (beamline) name: |  |
| Technique: |  |
| Shifts Requested (Lifetime):  |  |
| Shifts Requested (This Cycle):*(enter 0 if no shifts requested this cycle)* |  |

**Describe the experiments you will perform on this beamline for the 2-year lifetime of this proposal, including sample preparation, beamline requirements, data collection, and analysis.** *(limit 2500 characters including spaces)* Note: question not required for some beamlines.

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**Justify the need for this beamline's capabilities, including justifying why you need the 2-year lifetime shifts requested.** *(limit 1500 characters including spaces)*Note: question not required for some beamlines.

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*Be sure to click "Save" in the pop-up window.*

**Beamline 3 (if applicable)**

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| Resource (beamline) name: |  |
| Technique: |  |
| Shifts Requested (Lifetime):  |  |
| Shifts Requested (This Cycle):*(enter 0 if no shifts requested this cycle)* |  |

**Describe the experiments you will perform on this beamline for the 2-year lifetime of this proposal, including sample preparation, beamline requirements, data collection, and analysis.** *(limit 2500 characters including spaces)* Note: question not required for some beamlines.

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**Justify the need for this beamline's capabilities, including justifying why you need the 2-year lifetime shifts requested.** *(limit 1500 characters including spaces)*Note: question not required for some beamlines.

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*Be sure to click "Save" in the pop-up window.*

**Beamline 4 (if applicable)**

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| Resource (beamline) name: |  |
| Technique: |  |
| Shifts Requested (Lifetime):  |  |
| Shifts Requested (This Cycle):*(enter 0 if no shifts requested this cycle)* |  |

**Describe the experiments you will perform on this beamline for the 2-year lifetime of this proposal, including sample preparation, beamline requirements, data collection, and analysis.** *(limit 2500 characters including spaces)* Note: question not required for some beamlines.

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**Justify the need for this beamline's capabilities, including justifying why you need the 2-year lifetime shifts requested.** *(limit 1500 characters including spaces)*Note: question not required for some beamlines.

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*Be sure to click "Save" in the pop-up window.*

**Beamline 5 (if applicable)**

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| Resource (beamline) name: |  |
| Technique: |  |
| Shifts Requested (Lifetime):  |  |
| Shifts Requested (This Cycle):*(enter 0 if no shifts requested this cycle)* |  |

**Describe the experiments you will perform on this beamline for the 2-year lifetime of this proposal, including sample preparation, beamline requirements, data collection, and analysis.** *(limit 2500 characters including spaces)* Note: question not required for some beamlines.

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**Justify the need for this beamline's capabilities, including justifying why you need the 2-year lifetime shifts requested.** *(limit 1500 characters including spaces)*Note: question not required for some beamlines.

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*Be sure to click "Save" in the pop-up window.*

**PROGRESS REPORT TAB**

*All 2-year BAG proposals require answers to the following questions at the mid-term of the proposal. If you have questions about whether you have a Progress Report due, please email:* *nsls2pass@bnl.gov**.*

**Comments on Shifts** (too many/few? productive/unproductive? If shifts allocated are different from shifts used, please explain.) *(limit 2500 characters including spaces)*

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**BAG Principle Investigators**

List current BAG PIs that had beam time (name, affiliation)
*(limit 2000 characters including spaces)*

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List current BAG PIs that did not have beam time (name, affiliation)
*(limit 2000 characters including spaces)*

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List new BAG PIs since the original proposal submission that had beam time (name, affiliation)
*(limit 2000 characters including spaces)*

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List new BAG PIs since the original proposal submission that did not have beam time (name, affiliation)
*(limit 2000 characters including spaces)*

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List BAG PIs that are no longer active members (name, affiliation)
*(limit 2000 characters including spaces)*

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**From data collected at NSLS-II**

List PI grants supported by research done at NSLS-II (PI, funding agency, grant number)
*(limit 2000 characters including spaces)*

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List PDB deposits involving research done at NSLS-II
*(limit 2000 characters including spaces)*

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List publications involving research done at NSLS-II (DOI or full citation)
*(limit 2000 characters including spaces)*

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Summary of results during the past year (~ 1 paragraph per project)
*(limit 10000 characters including spaces)*

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Comment on the beamline performance during the past year*(limit 10000 characters including spaces)*

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