Reset Form

0000

CINS CANADIAN INSTITUTE FOR NEUTRON SCATTERING | ICDN INSTITUT CANADIEN DE LA DIFFUSION DES NEUTRONS

Proposal for Access to the Canadian Neutron Beam Centre (CNBC) for Research in the Public Domain

Key Instructions

1. Discuss this application with a CNBC scientific local contact who will work with you throughout the experiment. If you are unsure who to speak to, you may email the CNBC directly (cnbc@cnl.ca) with a request for assistance, or consult the listing of CNBC expertise.

LOCAL CONTACT:

2. Email the completed form to: John.Root@cnl.ca.

Declarations

I understand that:

- ☐ My proposal will be peer-reviewed for scientific merit.
- ☐ I am responsible to publish the results in the public domain, whether by way of publishing them in a journal or otherwise, with co-authorship of your scientific contact at CNBC and to notify the CNBC of each publications by email to cnbc@cnl.ca.
- ☐ Funds may be available from the Canadian Institute of Neutron Scattering toward travel for graduate students and post-doctoral fellows who participate in the proposed research (http://cins.ca/get-beam-time/travel-grants/).

Additional Declarations (only required if a portion of the research is proprietary)

I understand that:

- ☐ I will be charged fees for services. The business framework must be arranged in advance through an separate agreement with CNL.
- ☐ I must clearly indicate the breakdown between proprietary and public domain aspects, if any, in the body of this proposal.

To be completed by CNBC office

PROPOSAL NUMBER: 0000

DATE RECEIVED:

SUBJECT AREA:

Form Last Updated: Jan 5, 2018

Primary Applicant (e.g. Principal Investigator)

Attending Salutation First Name Last Name Initial Citizenship Business Phone Extension

Position Department Organization Email Address

Address City Province or State Country Postal/Zip Code

Check here to become a member of CINS, a non-profit organization that represents the Canadian scientific community of neutron beam users and promotes scientific research using neutron beams (www.cins.ca). By checking here, you consent to receive email communications from CINS. You may unsubscribe and resign your membership at any time.

Additional Applicants (e.g. co-proposers)

Attending Salutation First Name Last Name Initial Citizenship Business Phone Extension

Position Department Organization Email Address

Address City Province or State Country Postal/Zip Code

Check here to become a member of CINS, a non-profit organization that represents the Canadian scientific community of neutron beam users and promotes scientific research using neutron beams (www.cins.ca). By checking here, you consent to receive email communications from CINS. You may unsubscribe and resign your membership at any time.

Attending Salutation First Name Last Name Initial Citizenship Business Phone Extension

Position Department Organization Email Address

Address City Province or State Country Postal/Zip Code

Check here to become a member of CINS, a non-profit organization that represents the Canadian scientific community of neutron beam users and promotes scientific research using neutron beams (www.cins.ca). By checking here, you consent to receive email communications from CINS. You may unsubscribe and resign your membership at any time.

Attending Salutation First Name Last Name Initial Citizenship Business Phone Extension

Position Department Organization Email Address

Address City Province or State Country Postal/Zip Code

Check here to become a member of CINS, a non-profit organization that represents the Canadian scientific community of neutron beam users and promotes scientific research using neutron beams (www.cins.ca). By checking here, you consent to receive email communications from CINS. You may unsubscribe and resign your membership at any time.

Attending Salutation First Name Last Name Initial Citizenship Business Phone Extension

Position Department Organization Email Address

Address City Province or State Country Postal/Zip Code

Check here to become a member of CINS, a non-profit organization that represents the Canadian scientific community of neutron beam users and promotes scientific research using neutron beams (www.cins.ca). By checking here, you consent to receive email communications from CINS. You may unsubscribe and resign your membership at any time.

Attending Salutation First Name Last Name Initial Citizenship Business Phone Extension

Position Department Organization Email Address

Address City Province or State Country Postal/Zip Code

Check here to become a member of CINS, a non-profit organization that represents the Canadian scientific community of neutron beam users and promotes scientific research using neutron beams (www.cins.ca). By checking here, you consent to receive email communications from CINS. You may unsubscribe and resign your membership at any time.

If there are more than 6 applicants please indicate and "attach a file as a comment" with the required information for each additional proposer.

PROPOSAL DETAILS

EXPERIMENT TITLE:

INSTRUMENT PREFERRED:

Select Instrument

DESIRED DATES FOR BEAM TIME:

ESTIMATED MEASURING TIME (Days):

IMPOSSIBLE DATES FOR BEAM TIME:

DESCRIPTION OF SAMPLE:

NAMES AND FORMULAE:

NUMBER OF SAMPLES:

VOLUME: **N/A for thin films**

WEIGHT: **N/A for thin films**

DIMENSIONS: **(or substrate size)**

SAMPLE IS:

- ☐ Liquid
- ☐ Amorphous
- ☐ Powder
- ☐ Single Crystal
- ☐ Thin Film
- ☐ Polycrystalline
- ☐ Other (specify) specify

SAMPLE DISPOSITION:

- ◯ CNBC arranges for safe disposal
- ◯ CNBC stores specimen until Click here for dates
- ◯ CNBC returns specimen to user

SAMPLE ENVIRONMENT:

SAMPLE MOUNT/CONTAINER TO BE SUPPLIED BY CNBC? (Preferred containers are of aluminum or vanadium) ☐

SPECIMEN ENVIRONMENT

- ☐ Closed Cycle
- ☐ Cryostat
- ☐ Furnace
- ☐ Water Bath
- ☐ Horizontal Field
- ☐ Vertical Field
- ☐ 3 He Stick/CCR
- ☐ Ice Cell (Peltier)
- ☐ Other

SPECIMEN ORIENTATION

- ☐ Goniometer
- ☐ Eulerian Cradle
- ☐ C - Cradle
- ☐ Rotary Table
- ☐ XYZ Translation
- ☐ Other

SPECTROMETER ACCESSORIES

- ☐ Multidetector
- ☐ Neutron Velocity Selector
- ☐ Polarized Beam
- ☐ Stress Rig
- ☐ Other

TEMPERATURE RANGE:

MAGNETIC FIELD STRENGTH:

RANGE IN ENERGY OR WAVELENGTH:

ENVIRONMENT SUPPLIED BY USER:
(more details may be requested)

SPECIAL REQUIREMENTS:
(cryogrinding, pressure cell, etc.)

☐ I will require the assistance of a CNBC staff member to fully complete this application. I have completed the form to the best of my ability at this time.

SCIENCE OR ENGINEERING CASE 0000

DESCRIPTION OF PROPOSED RESEARCH

You must attach the description of your proposed research to this form. To attach a document in Adobe Reader, use the "**Attach a file as a comment**" command to attach a Word and PDF file. **PDF format is preferred.**

A good proposal that can be reviewed easily by external reviewers will include information to address each of these 6 items below:

1). Provide the scientific or engineering case for the proposed work. For example, what is the context of the work and how will it advance the subject. Include the latest references to the open literature.

2). Describe prior or related work for this project (yours or that of others) and explain why you wish to use neutron scattering. For example, you could provide relevant computer modeling, theory or other experimental work.

3). Propose an experimental plan, including such facts as number of samples, history of samples, rationale for selection of experimental parameters (e.g. temperature, field, stress). Objectives should be related to the background presented in parts 1 and 2.

4). Estimate the beam time requirements and identify any technical/scientific support that needs to be provided by CNBC.

5). To the extent you are able, please also indicate the full range of conditions (energies wavelengths, stresses, pressures, or temperatures) that you may require.

6). Other points to be considered.

List publications, including conference proceedings and theses, within the last 3 years arising from neutron scattering experiments performed by you or your group at Chalk River, using full reference details: Journal, Volume (Year), Pages.

NOTES:

1. We have to perform a safety assessment for each experiment. If you fully describe all the variables in your proposal, in most cases we will only have to do this once per proposal, irrespective of the number of continuations. If you do not do this, and wish to expand the range of compositions or physical variables at a later date, we will have to perform additional safety assessments that may slow down your access.

2. Certain samples require special permission before they can be brought or shipped to Chalk River Laboratories. These include:
   - · fissile materials or any form of uranium (even depleted U)
   - · radioactive material
   - · heavy water or salt solutions made from heavy water

Please ask your CNBC Local Contact for help to arrange shipping of these materials to our lab.

☐ I will require the assistance of a CNBC staff member in fully completing this application. I have completed the form to the best of my ability at this time.

Safety Information and Declaration

SAFETY

We need to be aware of hazards for our safety, your safety, and that of others surrounding the experiment.

Sample Hazards

Materials Safety Data Sheet (MSDS)

◯ There are pre-existing MSDSs for some or all of my materials, and I am attaching all relevent MSDSs.*

◯ There are no pre-existing MSDSs.

*To attach the MSDS, use the method described on the previous page for attaching the description of your proposed research.

Are you aware of any foreseeable hazards related to the sample(s)? If yes, you must place an "**X**" in the boxes that describe hazards that are associated with the sample irrespective of whether you include an MSDS, and you must place an "**X**" in at least one box in order that the proposal be given further consideration.

◯ No. I know of no hazards related to the sample.

◯ Yes. Hazards related to my sample exist.

Sample(s) are or may be:

☐ Radioactive ☐ Bioactive ☐ Toxic ☐ Flammable ☐ Explosive ☐ Corrosive ☐ Other

Please give further details if any hazard is identified above. For example, if it is corrosive, is it basic or acidic? Is it incompatible with certain metals? Is it an oxidizer? If you selected "other," please specify the hazard.

Enter details

What precautions should be taken handling or storing your sample(s) in our laboratory?

Enter details

Sample Environment Hazards

Are there dangers with your sample(s) if they are subjected to the conditions you propose? Is there any foreseeable danger if the sample environment fails, e.g. large temperature excursion, vacuum failure, sudden compression, or are there known eutectics between your sample and common furnace materials (Al, Cu, V, Mo, steel)?
If yes, there must be an "X" placed in at least one box in order that the proposal be given further consideration.

◯ No. I know of no hazards related to the sample environment or the conditions the sample may experience.

◯ Yes. Hazards may exist:

☐ When the sample(s) are subjected to the conditions I propose. ☐ If the sample environment fails.

Please specify any hazards you have identified with the sample environment described above:

Specify hazard

RECORD OF REVIEW (To be completed by CNBC)

0000

LOCAL CONTACT

- ◯ Approved for Review of Scientific Merit, because the project is technically feasible with existing CNBC equipment and there are no abnormal hazards.
- ◯ Approved for Safety Review because abnormal hazards are expected, and the project is technically feasible with existing CNBC equipment.
- ◯ Rejected, because the project is not technically feasible with existing CNBC equipment, or is unacceptably hazardous in the view of the local contact.

Local Contact:

Signature

SAFETY AUTHORITY (if applicable)

- ◯ Approved for Review of Scientific Merit because the hazard mitigation plan is adequate.
- ◯ Rejected because the hazards cannot be mitigated adequately.

Describe any special procedures or work permits that must be applied in practice:

Special Procedures

Indicate supplementary documentation to attach prior to scheduling (check all that apply):

- ☐ Note of approval by NRU operations, to be attached by the Safety Authority.
- ☐ Radiological Work Assessment (RWA), to be attached by the Local Contact.

CNBC Safety Authority:

Dimitry Sediako, P. Eng.
(or designate)

Signature

REVIEW ADMINISTRATOR

- ◯ Approved by scientific peer review for access to CNBC beam time.
- ◯ Rejected by scientific peer review.

Review Administrator:

Nicole Schrie
(or designate)

Signature

DIRECTOR

Project is approved for up to ☐ beam days.

CNBC Director:

John Root
(or designate)

Signature