Guidelines for Scientific Reviewers in the ANSTO Research Portal (ARP)

ANSTO Australian Centre for Neutron Scattering (ACNS) and National Deuteration Facility (NDF)

October 2022

Background to Portals for ACNS and NDF proposals

Certain functionality from the long-term ACNS Customer Portal (https://neutron.ansto.gov.au) has been transferred to the ANSTO Research Portal (ARP) (https://portal.ansto.gov.au). All ACNS & NDF (Normal and Program) proposal applications:

- Neutron,
- Deuteration/Neutron and
- Deuteration

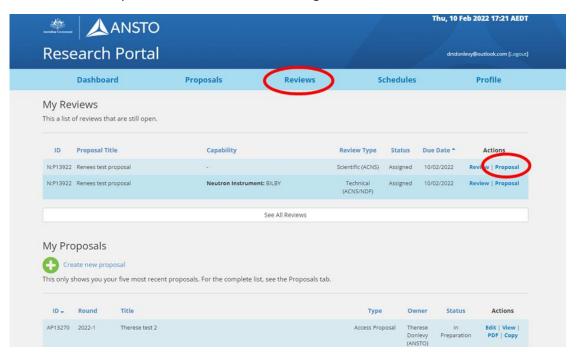
will be received on this platform and all scientific reviews will be recorded in the ARP.

Actions for Scientific Reviewers to complete in ANSTO Research Portal (ARP):

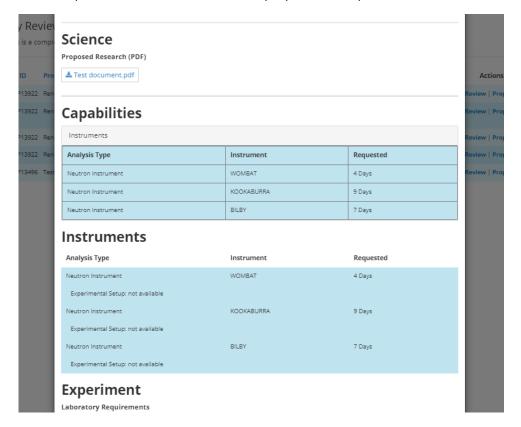
- All Scientific reviewers need an ARP account. If you don't have an account in ARP already, a
 basic account has been created using your ACNS Customer Portal email in order for you to be
 assigned reviews.
- The User Office recommends that you always use your institutional email rather than a personal email. This allows us to validate your organisational details.
- On first login to ARP you will need to create a password using the 'Forgot your password?'
 feature. If you have any difficulties with this, please contact the User Office NSW
 (user.office.nsw@ansto.gov.au)
- Please check and complete your personal details in the 'Profile' tab once you are logged in.
- Once logged into the ARP, your dashboard will list some of your review assignments (and proposals for which you are a PI or co-proposer if relevant).

How to access a proposal for review in ARP

- Go to the 'Reviews' tab on the top menu or select the 'See All Reviews' tab to see all proposals that you have been assigned for review.
- Select 'Proposal' under 'Actions' in the assignment table as shown below.

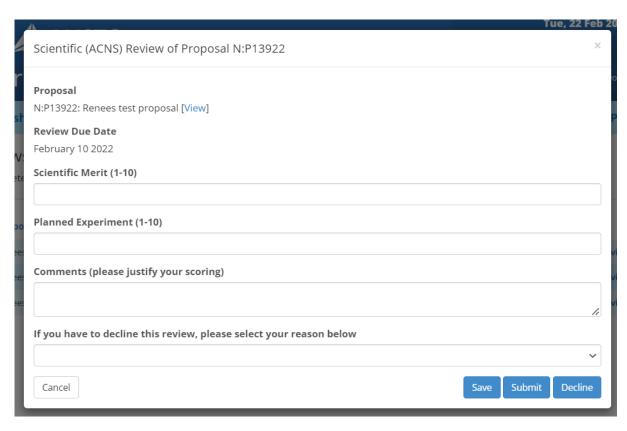


• The proposal available to view also includes the uploaded proposal 'Science' PDF link, instrument and capability request/s, and experiment details. Clicking on the embedded PDF will open the 'Science' section of the proposal in a separate window for review.



How to complete a proposal Scientific Review in ARP

 Select 'Review' under 'Actions' in the assignment table. The screen below will show for the proposal you are reviewing.



• Note: you can also select 'View' in the proposal section of the technical review window above to view the proposal – an alternative to viewing in the review assignment table section.

Scoring

Please score each proposal for the quality of the science and the quality of the planned experiment and include comments supporting your score.

Scientific Merit

- This is concerned with the relevance of the science to the field and the importance of the proposed research. Refer to the table below for guidelines.
- For NDF proposals, the focus is usually on the science to be undertaken using the deuterated molecule (not the deuteration process) and the value of the outcomes assuming experiments using the deuterated molecule are successful. It is a requirement that the NDF proposals have defined experiments (e.g., access to instruments or research infrastructure) to ensure the use of the deuterated products (within the Deuteration/Neutron proposals for ACNS instruments and Deuteration proposals for non-neutron applications and use at overseas facilities).
- Score out of 10; contributes 65% to the overall score.

Score	Recommendation	Publication prospects, if experiment works	Comments
10	Must do as soon as possible	Potential for Nature/Science	Could feature in a media release or ministerial brief if successful; would win a major prize if successful. Scientific or technical breakthrough; high profile, exciting broader impact; a major step forward to a scientific question. A strong justification is required from the reviewer when giving this score.
9	Must do	Headed for a leading discipline-specific journal (with JIF>6) e.g. Phys. Rev. Letter, JACS, Angewandte Chemie; potential for significant intellectual property or commercial opportunities for ANSTO	Will result in invited talks or feature in a major museum, trade, or other exhibit if successful; a reasonable incremental step forward; good solid science. A reasonable justification is required from the reviewer when giving this score.
8	Should do	Headed for a well-regarded discipline-specific journal with JIF>3 e.g. Phys. Rev. Langmuir, Macromolecules, J. Molec. Biol, Biochemistry	Worth giving a high-quality seminar about it if successful; an incremental step forward; good solid science. A reasonable justification should be given by the reviewer when assigning this score.
7	Should do	Immediately publishable	Worthwhile data collecting. Impactful.
6	Might do	Publishable	Data collection but without significant impact.
5	Might do	Publishable	Might be interesting, but unfocussed.
4	Possibly do	Publishable	Worthwhile but routine; could be done if time allows.
3	Strengthen scientific case and reapply in next round	Unlikely to be publishable	Marginal; questionable whether it's worth doing.
2	Do not give time	No prospect	Not worth doing, difficult to understand what they want to do.
1	Do not give time	No prospect	Not worth doing, unintelligible.
0	Investigation and/or reporting required	None	Evidence of plagiarism, fraud or other academic or ethical misconduct in the submission.

Planned Experiment

- Reflects, for example, if the use of the technique is appropriate and adequate? Does the proposal suggest an efficient use of samples(s) and sample environment? This includes consideration of use of requested deuterated products for the described experimental technique/s in NDF proposals. Have preliminary measurements been carried out and details provided?
- Score out of 10; contributes 35% to the overall score.

Comments

Your comments are essential to justify your scores and will be shared with users to assist them with future proposals if unsuccessful. We welcome comments on, but not limited to:

- Expanding on the reasons for your score (this is essential for very high or very low scores).
- If you consider a different instrument or technique would be more suitable.
- If you think the beam time or deuteration request is excessive or inadequate.
- If there are safety issues that have been overlooked in the proposal.

Additional notes on ACNS & NDF program proposals

ACNS & NDF program proposals are intended to enable a coherent program of research requiring a commitment of multiple time allocations or provision of multiple deuterated molecules/materials over a three-year period. Up to 25% of an ACNS instrument's beam time can be devoted to programs.

As well as the quality of science and quality of planned series of experiments, consider:

- Does the planned research fit the program category? Does it justify merit program status rather than a series of normal proposals?
- An indicative experimental plan only is requested for the three-year program. Detailed plans for each beam time allocation and/or deuteration product requests will be requested separately if a program proposal is approved.
- Will the participants quickly become sufficiently experienced to provide round-the-clock experimental support on the ACNS instruments for the whole program, with minimal support from ACNS staff?

Note: Unsuccessful program proposals will not be reconsidered as a normal single visit proposal for the coming schedule period.

Any problems or questions?

Reach out to the User Office – user.office.nsw@ansto.gov.au for technical issues in the ARP.