National Deuteration Facility

Access and proposal submission

The chemical deuteration laboratories offer a variety of Access to the NDF is merit-based, however in some cases NDF can provide deuterated material at commercial full cost rate. For chemical and biodeuteration of materials for subsequent application in neutron scattering and non-neutron based techniques, calls for applications close in March and September of each year. For proposals involving ANSTO's neutron-based techniques, applications are submitted via the Australian Centre for Neutron Scattering Application Portal.

Outside the proposal scheme and for some molecules, NDF can provide deuterated materials at commercial full cost, where full cost recovery of materials and labor are involved. Enquiries and quotes can be obtained via ndf-enquiries@ansto.gov.au

Proposal submission process

It is recommended that scientists contact the relevant NDF staff to discuss their requests for the deuterated materials. NDF can provide help in the proposals' submission process. Technical feasibility assessment and safety review will be performed by facility staff, prior to scientific review.

For successful proposals, NDF will synthesize and provide the requested deuterated molecules and materials, provide chemical and biological advice and provide the appropriate analyses for the produced deuterated material (e.g., certificate of analysis).

Co-authorship

Co-authorship is expected on results published for studies where deuterated materials have been provided using NDF developed protocols.

Potential cost recovery

Proposals from applicants in countries other than Australia will be subject to a cost recovery fee unless the molecules are for use in experiments in Australia (for example at the Australian Centre for Neutron Scattering) which are exempt.

Requests for multiply-labelled proteins (e.g. with ^{2}H plus ^{13}C and/or ^{15}N) will involve a fee to recover 50% of the cost of isotopic materials used in production.

Large mass or number of deuterated molecules is by negotiation