**Manchester Institute of Biotechnology - Risk Assessment**

TUOM_4COL

| **Date:**  04/03/2016 | **Assessed by**:  Matthew Cliff | **Validated by**: | **Location**: MIB | **Review date:**  2017 |
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| **Task**:  Screening of bioactive small molecules for interactions with proteins, by NMR. |
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| **Activity** | **Hazard** | **Person(s) in danger** | **Existing measures to control risk** | **Risk rating** | **Result** |
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| Recording NMR spectra | Exposure to bioactive compounds through tube breakage | User, others in lab. | Clear signage to indicate unauthorised users should not remove sample from spectrometer.  Samples to be placed within tube liners to contain them in case of tube breakage.  Loss of sample lock to be taken as indication of sample leakage, if lock signal cannot be regained. In this case, decontamination procedures should follow COSSH form for the compound. | Low | A |
| Transporting samples between fume cupboard and spectrometer | Exposure to bioactive compounds through tube breakage | User, others in lab, corridors. | Secondary storage to be used at all times:  Samples to be placed within tube liners to contain them in case of tube breakage. | Low | A |
| Addition of bioactive compound to NMR samples | Exposure to bioactive compounds | User | **Refer to the COSHH assessment for each hazardous substance, and ensure all control measures are followed.** All manipulations of bio-active compounds must be within a fume cupboard.  The following items of PPE must be worn: Howie-style laboratory coat, BS EN3-74 compliant gloves (nitrile) and BS EN166 compliant eye protection (chemical splash proof safety glasses). A selection of safety glasses and goggles are available from MIB Stores; users are advised to visit Stores and select eye protection which fits well and is comfortable to use. Regular lab inspections monitor the wearing of PPE; users found not to be wearing PPE when the risk assessment states that it must be worn will be subject to the MIB compliance policy.  All disposable plasticware, glassware and tissues etc should be disposed of according to COSSH form description, in most case via incineration bin. | Low | A |

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| **Authorisation by PI**  **I confirm that I have considered and understand the experiment and the associated hazards. I am satisfied that all of the hazards have been identified and that the control measures to be followed will reduce the risks to acceptable levels.**  **Print name: Signed:**  **Date:** |

**Declaration by researcher**

**I confirm that I have read this Risk Assessment and that I understand the hazards and risks involved and will follow all of the safety procedures stated. Where PPE has been identified as a control measure, I will ensure that it is worn.**

**Declaration by PI**

**I confirm that the researcher who has signed below is competent to undertake the work. My counter-signature indicates that I am happy for the work to proceed.**

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| **Name (please print)** | **signed** | **PI countersignature** | **date** |
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