

Instrument Training for HFIR Users

INSTRUMENT	
	CG-1A DEV BEAM
	CG-1B Alignment
	CG-1D IMAGING
	CG-2 GP-SANS
	CG-3 BIO-SANS
	CG-4C CTAX
	CG-4D IMAGINE
	HB-1 PTAX
	HB-1A FIE-TAX
	HB-2A POWDER
	HB-2B NRSF2
	HB-2C WAND
	HB-2D Development
	HB-3 TAX
	HB-3A FOUR-CIRCLE
INSTRUMENT AREA ORIENTATION	
	Normal access to instrument area (doors, path, swing gates, parking, etc)
	General Instrument area layout; nearby instruments (potential interactions)
	Identification and location of instrument documents
	Closest location of exits and safety equipment (fire pull boxes, safety glasses, other PPE, etc.)
	Posted requirements/controls: <ul style="list-style-type: none"> • Radiological area postings • Other hazard signage as applicable to the instrument: chemical, cryogenic, thermal, pressure, vacuum, lasers, magnets, motorized or unguarded equipment (pinch points).
INSTRUMENT OPERATIONS	
	Steps to permit neutron beam: <ul style="list-style-type: none"> • Access sample area • Demonstrate proximity alarms or sweep procedure • Open and close the instrument shutter
*	Sample handling at the instrument <ul style="list-style-type: none"> • Changing a sample • Location of RadEye™G • Local response to RadEye™G alarm • Sample storage location • Detection of and response to sample container breach • Restrictions on opening sample containers
*	SAMPLE MANAGEMENT
	Requirements for sample check-in with Sample Management Staff prior to beam exposure
	Sample disposition following experiment (checkout process)
	Restrictions on removal of samples and/or equipment from ORNL
RESPONSE TO ABNORMAL CONDITIONS AND ALARMS	
	Location of radiological monitors in area and response to alarms
	Location of Oxygen Deficiency Hazard (ODH) monitors in area and response to alarms
*	EXPERIMENT REVIEW
	Review of Experiment Safety Summary (ESS)—hazards, controls and required personal protective equipment
	Review of Sample Environment (SE) equipment--operation, hazards, controls, and contacts for problems
	Review data collection system operation (brief overview – detailed training will occur once experiment begins)
	Electrical safety (Users may not perform electrical work; user electrical equipment must be ORNL EEI approved)
	Verify need for Laboratory access – (review sample transport between lab and instrument, JHAs, and training)

CONTACTS	
	Radiological Control Technicians
	Local Contact
	Instrument Scientists
	Scientific Associates
	Central Control Room
	Laboratory Shift Superintendent

✓ or NA

RECORD OF COMPLETION		
<p><i>The User(s) named on this record has received instruction for safe, technical operation of the identified instrument, including orientation to the instrument area, statements of permissions and restrictions, discussion of expectations for sample management, review of response to abnormal conditions and alarms, and communication of hazards and controls.</i></p>		
Instrument Scientist/Staff Signature:	Badge:	Date:
<p><i>Following instruction delivered by Instrument Staff, I understand expectations for safe use of the identified instrument. Instrument Staff have responded to my questions and requests for clarification.</i></p>		
User Name (Print):	User Signature:	
First time use of instrument? YES / NO	User Badge:	Date:
User Name (Print):	User Signature:	
First time use of instrument? YES / NO	User Badge:	Date:
User Name (Print):	User Signature:	
First time use of instrument? YES / NO	User Badge:	Date:
User Name (Print):	User Signature:	
First time use of instrument? YES / NO	User Badge:	Date:
User Name (Print):	User Signature:	
First time use of instrument? YES / NO	User Badge:	Date:

The User(s) named above is conducting experimental work managed as IPTS proposal tracking #:

This checklist of topics to be included in User instruction is to be implemented with an instrument-specific *Quick Reference Guide for Users*, which provides detail of the content of instruction and remains with the User to be used as a job aid.

Instrument Staff may assess User knowledge of these topics retained from previous use of the instrument and tailor delivery of training to address knowledge deficiencies. Those topics that are marked with an asterisk, however, are included in training prior to each experiment.