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Supporting information for article:

**Upgrade of the small-angle neutron scattering diffractometer
SANS-J at JRR-3**

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SANS MEASUREMENT SYSTEM

General User
 Administrator

Proposal No. 20230801 Mode Normal Sample Changer Main (Temp. Cth) Send List

Sample Remarks: 1-12 (empty)

Main Sample Stage Alignment:

Rotation (deg)	0.0
Z (Front Rear) (mm)	0.0
X (mm)	-3.0
TR (deg)	0.0

Temperature Controller:

Designated	Default
P	0.0
I	3.0
D	0.1
Set	Set

Customize:

HS 4m	HS 4m	HS 7m	HS 10m	PMAT 10m
BS X (mm)	-418.0	-418.5	-422.0	-420.5
BS Y (mm)	8.0	5.0	2.5	12.0
Offset (mm)	1.0	Set		

Monitor:

Velocity Selector	Rev 1 (p.p.m.)	Rev 2 (p.p.m.)	Temp 1 (deg)	Temp 2 (deg)	Temp 3 (deg)	Vacuum Right (deg)	Coil (deg)	Nuclnet Temp. (deg)
Present Val.	484	0	0.4	29.1	31.1	-115.6	0.0	32.7
Warning	5000	5000	1.5	40.0	40.0	30.0	30.0	40.0
Emergency	6000	6000	2.0	50.0	50.0	40.0	40.0	60.0

Incident Count: 1

Main Detector: BS, B, PMAT | Front Detector and Wavelength | Analyzer | Sample Changer | Near SR | Flipper 2 | Flipper 1 | Far SR | Aberrator | Sub-Shutter | V. Selector | Main Shutter

Status: 10 | with Beam Stopper | 6.0 | Out | -90.0 | Out | 7 | Wide | Lens | Empty | 20 | Control | Control | Control

Measure:

Run No.	Sample	Comp.	Temp. (deg)	Measure Time (s)	Magnetic Field (T)	Main Detector (m)	Detector	Wavelength (deg)	Analyzer	Front Detector (deg)	Near SR	Downstream	Flipper	Upstream 1	Upstream 2	Far SR	Aberrator	Sub-Shutter	V. Selector	Main Shutter	Incident Count
0177	0m0.01.0, 1mm 1	Select	-20 to 160	30	0.00	0 to 1	W5 / W0B5 / PMAT	-35 / -30		30.3 / 30	Wide / Narrow	Emp. / Lens / Poles	On / Off	Emp. / Super / Pol.	3. 20 or Option						0
0178	0m0.01.0, 1mm 1	Select	20.0	30	0.00	0	with Beam Stopper			6.0	Wide	Emp. / Lens / Poles	On / Off	Emp. / Super / Pol.	3. 20 or Option						0

(a) (b) (c) (d) (e)

Figure S1 The display screen of measurement system. General operation procedure using tables in the lower part is as follows: (a) choose a sample in a sample changer; (b) select the standard layout from the pop-up selection list that appears by clicking the select button; (c) set temperature; (d) input measurement time; (e) customize each device layout if needed. Block diagram in the middle part shows the status of the device layout with the path of direct neutron beam (blue line). Only administrators control parameters in the cyan boxes for fundamental beam alignment.