



# ISSE Workshop 2022 Nasu Program

Updated: 24 August

**Registration**            15:00 - Sunday, August 28

**Welcome dinner**        18:30- Sunday, August 28

Resort Hotel Laforet Nasu

# Monday, August 29

**8:45**                      **Opening and announce**

Stefan Carlson, Toshiya Otomo, and Seiko Ohira-Kawamura

**9:20 – 10:20**            **Facility reports 1**

O-1 (online)	S. Carlson (MAX-IV)	The MAX-IV laboratory facility report
O-2 (online)	Y. Hernandez (NIST)	NIST Center for Neutron Research (NCNR) Updates!
O-3 (online)	X. Tong (CSNS)	Latest status of sample environment at CSNS

**10:20 – 10:50**            **Coffee break**

**10:50 – 12:10**            **Facility reports 2**

O-4	R. White (ANSTO)	Sample environment developments from the Australian Centre for Neutron Scattering (ACNS, ANSTO)
O-5	J. Peters (MLZ)	SE @ MLZ: What is the news?
O-6	M. Bartkowiak (PSI)	Facility news from PSI
O-7	C. Redmon (ORNL)	Sample environment at Oak Ridge National Laboratory's Spallation Neutron Source & High Flux Isotope Reactor

**12:10-13:40**            **Lunch**

**13:40 – 14:40**            **Facility reports 3**

O-8	O. Kirichek (ISIS)	Current status of sample environment for neutron scattering and muon spectroscopy experiments at ISIS
O-9	C. Curfs (ESS)	ESS facility updates
O-10	S. Gautrot (LLB)	The sample environments at LLB

**14:40 – 15:10**            **Coffee break**

**15:10 – 16:30 Facility reports 4**

O-11	K. Kiefer (HZB)	Sample environment at BESSY II
O-12	Y. Watier (ESRF)	Facility report – ESRF – News from the sample environment unit
O-13 (online)	J. Schulz (EuXFEL)	Strategies for fast sample delivery at European XFEL
O-14 (online)	E. Lelièvre-Berna (ILL)	SANE – Services for advanced neutron environment at the ILL

**16:30 – 16:50 Coffee break**

**16:50 – 18:30 Poster Session A (Odd numbers)**

**18:30–20:30 Dinner**

**20:30- ISSE board meeting (onsite & online)**

# Tuesday, August 30

## 9:10 – 10:10 Facility reports 5, He recovery

O-15	K. Kaneko (JRR-3)	Updates on facility and sample environment from JRR-3
O-16	Y. Sakaguchi (J-PARC)	Sample environment at MLF J-PARC
O-17	R. Down (ISIS, He recovery)	ISIS helium recovery highlights 2022

## 10:10-10:40 Coffee break

## 10:40 – 12:00 Session 1 : Extreme conditions 1 (Low T+)

O-18	C. Lawson (ISIS)	Neutron imaging of an operational dilution refrigerator
O-19	A. Jones (ISIS)	New enhancements for ultra-low temperature sample environment at ISIS neutron and muon source
O-20	R. Floyd (Lake Shore)	Closed-cycle refrigerator system with sample in exchange gas to >600 K and automated sample changer
O-21	S. Shamoto (CROSS)	Ultrasonic wave as an external field for neutron scattering

## 12:00 – 13:40 Photo and Lunch

## 13:40 – 15:00 Session 2 : Extreme conditions 2 (High H, high P)

O-22	Y. Matsuda (U. Tokyo)	Synchrotron X-ray experiments in strong magnetic fields
O-23	M. Watanabe (J-PARC)	Development of pulsed magnet system at MLF in J-PARC
O-24	P. Naumov (PSI)	Development of new high-pressure equipment for PSI and ILL
O-25	K. Munakata (CROSS)	Development and application of techniques for low-temperature and high-pressure single crystal neutron diffraction

## 15:00-15:30 Coffee break

**15:30 – 16:10      Session 3 : Extreme conditions 3 (High P, high T)**

O-26                  T. Hattori (J-PARC)                  PLANET: High-pressure beamline in J-PARC

O-27    Cancel

O-28                  Y. Sakaguchi (CROSS)                  High temperature furnace for small- and wide-angle neutron scattering instrument at J-PARC

**16:10 – 16:50      Coffee break**

**16:50 – 18:30      Poster Session B (Even numbers)**

**18:30–20:30      Dinner**

**20:30-                  Committee meetings (onsite & online)**

# Wednesday, August 31

9:20 – 10:40      Session 4 : Complex conditions and automation

O-29

Cancel

O-30

T. Tominaga (CROSS)

IoT devices development at BL02 in J-PARC MLF

O-31

A. Church (ISIS)

Current status of soft matter equipment at ISIS, including equipment, people, projects, infrastructure

O-32

C. Goodway (ISIS)

Sample environment developments in gas handling and high temperature

O-33

O. Yamamuro (U. Tokyo)

Cryostat for preparing vapor-deposited glasses and in-situ neutron and X-ray scattering experiments

11:10--19:00

Excursion

19:00 – 20:30

Dinner

20:30 –

Plenary meeting (onsite & onlie)

# Thursday, September 1

9:20 – 10:20 Virtual facility tour (J-PARC, JRR-3)

10:20 – 10:50 Coffee break

10:50 – 11:50 Virtual facility tour (Photon Factory, SPring-8)

11:50 – 13:20 Lunch

## 13:20 – 14:20 Session 5 : In-situ

O-34 D. Wallacher (HZB) In operando sample environment dedicated to studies in gas- and electro-catalytic processes using X-ray spectroscopy

O-35 H. Arima-Osonoi (CROSS) Mixing D<sub>2</sub>O/H<sub>2</sub>O vapor generator for contrast-variation neutron scattering

O-36 C. Baldwin (ANSTO) In-situ laser metal deposition sample environment on neutron instruments

14:20 – 14:50 Coffee break

## 14:50 – 16:30 Session 6: Discussion

Automation and remote experiments

Closing

16:30-18:30 Free time

18:30 – Banquet

# Poster presentations

All posters will be displayed from 15:00 on Sunday until 18:30 on Tuesday. Please be prepared to display your poster during registration on Sunday and remove them on Tuesday after the session.

Sessions for poster presentations are:

Poster session A (Odd Numbers): 16:50 – 18:30 Monday, August 29,  
Poster session B (Even numbers): 16:50 – 18:30 Tuesday, August 30.

No.	Last name	First name	Title of the presentation
P-1	Allum	Keith	ISIS Universal cryostat - Automated temperature controller
P-2	Baldwin	Chris	In-house design and domestic fabrication of cryofurnace and induction furnace at ANSTO
P-3	Bartkowiak	Marek	Frappy a python implementation of SECoP
P-4	Church	Andy	Recent soft matter in-house developments
P-5	Down	Richard	Carbon footprint of the helium recovery system at the ISIS facility
P-6	Fujiwara	Kosuke	Installation of a multi-purpose 4-circle diffractometer for synchrotron m Mössbauer source in BL11XU
P-7	Hasemi	Hiroyuki	Application of control software framework to sample environment equipment in J-PARC MLF
P-8	Holmes	Alexander	A wide aperture high field asymmetric magnet for diffraction at ESS
P-9	Ishikado	Motoyuki	Maintenance, commissioning and user support of BL-common low-temperature sample environment equipment in J-PARC MLF
P-10	Kaneko	Koji	New standard for low temperature sample environment at JAEA/JRR-3
P-11	Kawamura	Yukihiko	Development of laser heating system for SANS under high magnetic field and high temperature
P-12	Kawamura	Yukihiko	Development of polarization analysis at TAIKAN under magnetic field at low temperature



No.	Last name	First name	Title of the presentation
P-13	Kiefer	Klaus	SECoP and metadata - The Sample Environment Communication Protocol
P-14	Kiefer	Klaus	Digital LEAPS STARS - Survey on automated sample handling
P-15	Kiefer	Klaus	Helium management: characterization of helium level probes
P-16	Klemke	Bastian	Field homogeneity study on a Dy booster insert for additional magnetic field of up to 2.6 T in cryomagnets for neutron scattering
P-17	Munakata	Koji	Sample stick with $\phi$ -rotation axis for top-loading cryostat using in TOF single-crystal neutron diffractometer SENJU
P-18	Nakamura	Jumpei	Sample environment for low temperature $\mu$ SR experiments at MLF, J-PARC
P-19	Neeb	Matthias	Generation and simulation of flat liquid jets for X-ray absorption and photoelectron spectroscopy
P-20	Nutter	Jamie	ISIS electronic user support group - Variety of work
P-21	Ohira-Kawamura	Seiko	Neutron scattering measurement under pressure using a piston cylinder cell at chopper spectrometer AMATERAS
P-22	Ohshita	Hidetoshi	Neutron efficiency of a GEM-based detector
P-23	Oku	Takayuki	Magnetic field environment for polarized neutron experiments
P-24	Robillard	Thomas	Wave, a 3-dimensional vector magnet for neutron scattering
P-25	Robillard	Thomas	Sharp at ILL, a LLB development
P-26	Rubanskyi	Valentyn	JCNS sample environment at MLZ
P-27	Schastny	Maksim	ISIS in-situ illumination capability
P-28	Sugiura	Ryosuke	Sample environments shared with universities at JRR-3
P-29	Takada	Shusuke	Study of magnetic environment for neutron spin filters using polarized helium-3 at J-PARC and JRR-3

No.	Last name	First name	Title of the presentation
P-30	Thiel	Hermann	Development of automated sample environment at HZB
P-31	Ueta	Daichi	Sample environment of the HRC spectrometer at J-PARC
P-32	Wallacher	Dirk	Software based humidity and flow control setup with new type of H-T-P sensors for laboratory and in situ measurements
P-33	Watanabe	Takeshi	Grazing incidence X-ray diffraction for the air/liquid interface
P-34	Yamauchi	Sara	Precise temperature control in top-loading cryostat
P-35	Yokoo	Tetsuya	Magnetic fields for realizing polarization experiment in POLANO
P-36	Zhang	Shuoyuan	Advanced biaxial tensile state evaluation method using neutron Bragg-edge imaging