Title: NSRRC (TLS, TPS & SP8) 2019-3 cycle call for proposals is open. The deadline for this call is May 31, 2019 at 24:00.

National Synchrotron Radiation Research Center (NSRRC) is accepting new single-period/multi-period/continued proposals from scientists who wish to conduct research at the Taiwan Photon Source (TPS), Taiwan Light Source (TLS) and Taiwan Contract Beamlines at SPring-8 in the 2019-3 cycle. Please submit online applications before the deadline on May 31, 2019 at 24:00. Please note any late applications will not be accepted.

*NSRRC 2019-3 beamline schedules:
TLS/SP8: September 1st, 2019 ~ December 31st, 2019
TPS: September 1st, 2019 ~ December 31st, 2019

For Project Investigator whose multi-period proposal has been approved in the previous cycle (shifts have been approved as well): The beamtime will be allocated in the 2019-3 cycle. But not including the "review-reserved proposal" (the proposal is approved but the shift has not been approved yet).

For New Project Investigator:
Users are reminded that they need to have an NSRRC User Portal account to submit proposals. Please register as our users at http://portal.nsrrc.org.tw first.

How to Apply for a Proposal:
If you have registered as our users, please sign in with the username and the password of NSRRC user portal at http://tpsportal.nsrrc.org.tw first, and then choose the "Apply for Proposal" item to start the proposal application processes.

Proposal applicants (principal investigators) must have qualified for one of the following:

1. Refer to the regulations of "Principal Investigator Qualification" from Ministry of Science and Technology Grant Proposal.
   1.1 Public and private universities/colleges:
      1.1.1 Assistant professor or above.
      1.1.2 Four years of instructor experience and having research publications in academic journal or patent technical report.
      1.1.3 Full-time teaching or research fellow with PhD degree, who has engaged in related fields for more than one year and has published research results in academic journals.
      1.1.4 Medicine related person who has been a doctor in charge at a teaching hospital for more than 2 years or who has done research work for more than 4 years holding a master degree, and has published research results in domestic and overseas academic journal.

   1.2 Public and private research institutions:
      1.2.1 Associate research fellow or above.
      1.2.2 Full-time teaching or research fellow with PhD degree, who has engaged in related fields for more than one year and has published research results in academic journals.
      1.2.3 Medicine related person who has been a doctor in charge at a teaching hospital for more than 2 years or who has done research work for more than 4 years holding a master degree, and has published research results in domestic and overseas academic journal.
2. Principal investigators of foreign affiliations must be qualified to meet the provisions of the preceding subparagraph.

Proposal Lifetime:

There are three modes of user access to beamtime at NSRRC: single-period proposal, multi-period proposal and continued proposal. It's acceptable for each proposal to request beamtime on different beamlines to meet users' experimental needs.

1. Single-period proposal: Applying for the user access to beamtime in a specific run cycle.

2. Multi-period proposal: Applying for the user access to beamtime up to 2 years (6 run cycles). Each multi-period proposal application must clearly state the necessity to request beamtime in multiple run cycles and the shifts needed in every run cycle as well. Based on the proposal review results and the available user shifts, NSRRC will assign the user access to beamtime in multiple run cycles or only in a specific run cycle.

3. Continued proposal: If the experiment has not completed after the single-period proposal or multi-period proposal had ended, it's acceptable for users to submit a continued proposal up to one run cycle. Before the submission of a continued proposal, it's required to hand in the experiment report of the previous proposal.

Please confirm the proposal completion before submitting your application. Late, ineligible, or incomplete applications will not be processed.

Taiwan Photon Source (TPS) beamline 05A1, 09A1, 21A1, 23A1, 25A1, 44A1 and 45A are open to users:

Beamline No.	Beamline Name	Beamline Ext.	Current Capabilities
05A1	Protein Microcrystallography (蛋白質微結晶學)	2051	● 80% beamtime for users, 20% beamtime for commissioning ● Protein crystallography, beam size = 5-50 um selectable. ● MAD/SAD phasing, energy range = 5.7-20 keV selectable.
09A1	Temporally Coherent X-ray Diffraction (時間同調 X 光繞射)	2091	● 60% beamtime for users, 40% beamtime for commissioning ● High resolution powder X-ray diffraction (PXRD) using MYTHEN detector ● Thin film and general X-ray scattering using 9-circle diffractometer (2 eV resolution at 12 KeV) ● Ultra-high energy resolution X-ray diffraction/scattering (1 meV resolution at 14.4 KeV)
21A1	X-ray Nanodiffraction (X 光奈米繞射)	2211	● 60% beam time for users, 40% beam time for commissioning. ● Current Spatial Resolution: ~70 nm; VT-stage of sample: 140-700 K ● 2D X-ray Laue Diffraction Mapping ● 2D Nano-XRF Mapping ● 2D Nano-XANES Mapping ● 2D X-ray Excited Optical Luminescence (XEOL) Mapping ● 2D Projection X-ray Microscopy Mapping (Absorption Contrast)
23A1	X-ray Nanoprobe (X 光奈米探測)	2231	● 50% beamtime for users, 50% beamtime for commissioning ● 2D XANES (spatial resolution < 100 nm) ● 2D XEOL (spatial resolution < 100 nm)
25A1	Coherent X-ray Scattering (同調 X 光散射)	2251	● 60% beamtime for users, 40% beamtime for commissioning ● Beam size: 5 x 5 μm^2 ● Endstation: SAXS/GI-SAXS/XPCS with time resolution of 10 millisecond ptychography with spatial resolution about 50 nm

44A1	Quick-scanning X-ray Absorption Spectroscopy (快速掃描 X 光吸收光譜)	2441	● 75% beamtime for users, 25% beamtime for commissioning ● Beam size: 200 x 600 μm^2 ● QEXAFS (1 keV EXAFS spectrum of 10 Hz)
45A1/ 45A2	Submicron Soft X-ray Spectroscopy (次微米軟 X 光能譜)	2451	Soft X-ray angle-resolved photoemission spectroscopy & polarization-dependent soft X-ray absorption spectroscopy ● 10% beamtime for users, 90% beamtime for commissioning ● Incident X-ray energy range: 400 to 1200 eV ● Beam spot-size on sample: 3 x 2 (H x V) microns ● Energy resolution E/DE = 10000 at an incident photon energy E = 800 eV. ● Incident beam polarization : Linear (horizontal and vertical), Circular > 90 % ● Sample preparation chamber includes sample cleaver, Argon ion sputtering and sample annealing.

※ For Taiwan Photon Source (TPS) light source schedule & staff contact information, please visit http://tpsportal.nsrrc.org.tw/Default.aspx.

How to Prepare a Proposal:

It's required to apply for proposals (including the proposal title) in "English". Applying for different beamlines in one proposal is acceptable. Please confirm the completion before submitting your application. Applicants must follow the following steps to finish the application processes.

Step 1: Background Information
- A. Background
- B. Significance, objective, and expected outcomes of the proposal
- C. Reason for the need of synchrotron radiation and proposed experiment
- D. Estimate of the number of shifts required and the reason for using the beamline
- E. List of publications relevant to NSRRC beamlines during the preceding years
  1. publications / outcomes
  2. abstract title for NSRRC users' meeting
- F. List of publications / outcomes relevant to synchrotron radiation within past five years

Step 2: Proposal Member
Step 3: Equipment and Materials
Step 4: Beamline
Step 5: Confirmation

We will endeavor to resolve any problems as they arise – please contact the user office as soon as possible if you are having difficulty.

Sincerely,

User Administration & Promotion Office,
National Synchrotron Radiation Research Center, Taiwan