



VR: ESS- J-PARC Mobility Programme 2020

“SAKURA” 2nd call for proposal

Introduction

[Vetenskapsrådet](#) (VR) together with four other Swedish public research funding agencies¹ have decided to strengthen the agencies' international activities in a funding collaboration called Intsam. One of the activities funded by Intsam is a mobility programme between Sweden and Japan, to be administered and implemented by the [European Spallation Source ERIC](#) (ESS).

ESS on behalf of VR are launching a funding programme to strengthen scientific collaboration between Sweden and Japan, focusing in particular on neutron research and activities of ESS and the [Japan Proton Accelerator Research Complex](#) (J-PARC). The idea of the programme was born in connection to the 150th anniversary of diplomatic relations between the two countries, which was celebrated last year.

The spallation source at J-PARC has long served as a benchmark for ESS, and the two facilities have been collaborating from the early days of the ESS design phase. A Memorandum of Collaboration was renewed in a ceremony in Stockholm in July 2017 that included the prime ministers of both Japan and Sweden. To this day, the memorandum provides a fruitful framework fostering research and development of pulsed neutron technology and its scientific exploration in both countries.

Scope

The mobility programme shall enable researchers affiliated to Swedish Universities and research institutes, researchers and/or personnel working at ESS to travel and stay in Japan, as well as researchers affiliated to a Japanese university or research institute closely collaborating with J-PARC to travel and stay in Sweden. The mobility period is up to six months with a minimum stay of one week, and should take place during the year 2020. Beneficiaries from Japan will be able to go to the ESS in Sweden, and Swedish beneficiaries to J-PARC in Japan. Visits to universities or institutions with legal cooperative agreement with J-PARC or ESS can be considered as a secondary purpose, but will need to be duly justified. This programme is aimed to facilitate an exchange of knowledge, best practice methods, and build capacity using pulsed neutron scattering techniques between ESS and J-PARC.

Funding and Exchange Period

The exchange period will be for a period of up to six months with a minimum stay of one week during the year of 2020. Candidates may divide their participation into two travels to Japan or Sweden during the year of 2020, but only for mobilities with a total period over three weeks. During the exchange period, the salary of the grantee will continue to be paid by their employing institution.

¹ Formas (Swedish Research Council for Sustainable Development), Forte (Swedish Research Council for Health, Working Life and Welfare), Energimyndigheten (Swedish Energy Agency) and Vinnova (Sweden's Innovation Agency)



The grant cannot be used to support cost associated with salary, participation at conferences, publication in journals, consumables or equipment.

The grant is aimed to cover the cost of the stay abroad which include:

- Travel (return flights, visa, insurance) and
- Daily Subsistence (food allowance, room, local costs and boarding).

The grant amount is calculated per day and varies depending on the period of stay. The size of the grant is as follow:

Group	Items	SEK/month	SEK/day
Subsistence	Food Allowance, Room, Local Costs and Boarding	38,310	1,277
Travel	Return Flights, Visa, Insurance – up to two travels	16,460 (One off per trip)	

**Calculations are based on Utlandstraktamenten for 2020 from Skatteverket.*

Technical Scope

The main objective of the grant is to support and strengthen the creation and development of new or existing research that in the longer perspective may develop into long-term collaborations.

During the exchange period the researchers and/or personnel must conduct strategic research within one or more of the topics listed below;

<p>Accelerator and Target Technology</p> <ul style="list-style-type: none"> > Beam Physics > Moderator Technology > Target Technology > RF technology > Control software technology 	<p>Shielding and Safety</p> <ul style="list-style-type: none"> > Radiation safety > Waste handling > Neutronics and shielding > Active sampling handling
<p>Neutron Instrumentation</p> <ul style="list-style-type: none"> > Instrument concept & technology > Instrument operation techniques > Science using pulsed neutron instrumentation 	<p>User, Sample and Computation Services</p> <ul style="list-style-type: none"> > Deuteration services > User Program Strategy (Academia & Industry) > Sample environment technology > Sample preparation synthesis and characterization techniques > Scientific computing, software modelling & data handling



Eligibility Criteria

The following conditions must be fulfilled in order to be eligible for funding:

- The applicant(s) must be employed at the start of and throughout the grant period by one of the following;
 - I. A Swedish University and/or Swedish Research Institute, including RISE,
 - II. The European Spallation Source ERIC,
 - III. The Japan Proton Accelerator Research Complex (J-PARC) Centre,
 - IV. A Japanese University or Research Centre collaborating with J-PARC. The University or the Research Centre should, in principle, have a legal cooperative agreement with J-PARC.
- The applicant(s) must hold a Swedish doctoral degree or a corresponding foreign degree, awarded no later than 1st April 2020 and/or be a technical/admin staff working at a facility/university/institute.
- The proposal(s) must address one of the four areas of science listed in the Technical Scope: Accelerator and Target; Neutron Instrumentation; Shielding and Safety; as well as User, Sample and Computation Services.
- All proposals must be written in English and follow the structure set out in the application form enclosed in this document.
- The applicant(s) must indicate their desired duration of stay(s) for the exchange period.
- All Proposals must be submitted electronically to sakura@ess.se by the call deadline.
- The applicant(s) must provide a signed Letter of Commitment from their institution confirming their willingness and ability to participate in the programme.
- A Letter of support from the counterpart institution confirming willingness to host the participant for the specified period mentioned in the application.
- Group proposals with multiple investigators from the same organisation are allowed only if the proposed mobility period has a minimum stay of 3 weeks, and when duly justified.

Applications

The proposals will be prepared using the enclosed template and sent to sakura@ess.se **15:00 (CEST) the latest on 31st March 2020.**

All proposals must be written in English and follow the structure set out in the application form enclosed in this document. The application must include the following:

- Curriculum Vitae (Max 2 Pages)
- Publications List (From the last 8 years, Max 5 pages)
- Abstract & Summary
- Scientific and Methodological motivation
- Expected Outcome
- Collaborative Aspects
- Interest for Facility
- Practical Details
- Declaration of Intent (Letter of commitment & Letter of support)



Evaluation/ Assessment Criteria

An Evaluation Committee comprising on members from ESS, J-PARC and SNSS will analyse all eligible applications. The committee will assess the relevance of applications using the criteria below;

Proposer, Facility Contacts

- Have collaboration partners been identified?
- Do they have adequate qualifications / competences for successfully executing and later dissemination for sustained collaboration?

Topic

- Does the topic selected match and reflect the core interest of the partners?

Scientific or Methodological motivation

- Is the project scientifically / methodologically sound and relevant?
- Is this collaboration mutually beneficial?

Expected Outcome (Milestones and Deliverables)

- Does the project contribute to new knowledge and provide innovative solutions to the partners' challenges?

Collaborative Aspects

- Does the project raise the project value and strengthen on-going research & education?
- Is it mutually beneficial?
- Will the project lead to a sustained partnership?
- Does it include training activities for young researchers?

Interest for ESS facility

- Are the ESS interests well expressed and valid?

Interest for JPARC facility

- Are the JPARC interests well expressed and valid?

Practical Details (Planning and Support)

- Is the project plan sound (specific, cost-efficient, realistic, ethical) considering balanced funding from the partners?

**All questions should be directed to the Sakura Team at European Spallation Source.
sakura@ess.eu**