National Astronomical Research Institute of Thailand (Public Organization)

Announcement

Recruitment of a Contract Employee

National Astronomical Research Institute of Thailand (NARIT, Public Organization) is the leading research organization in Thailand that operates the world-class observing facilities: Thai National Observatory (TNO) with the 2.4 m Thai National Telescope (TNT), Thai Southern Hemisphere Telescope (TST), Thai Robotic Telescope Network (TRT), Regional Observatories for the Public, and **Thai National Radio Astronomy Observatory (TNRO)**. One of radio telescopes at TNRO site is **the 40 m Thai National Radio Telescope (TNRT)**, which is the largest radio telescope in South-East Asia and the 1st Call for Proposals in cycle 0 with the L-band receiver was achieved in Oct-Nov 2023 at the end (https://indico.narit.or.th/event/197/).

In this Job Opportunity Announcement, we are recruiting a scientist who will be in charge of

1) General engineering and science commissioning of the 40 m TNRT through its planning and performance evaluations,
2) High-cadence flux monitoring of maser emissions with the 40 m TNRT in L/C/Ku/K-bands for high-mass star formation and the evolution of high-mass protostars research,

Which is affiliated with **Research Group**.

1. Qualifications and responsibilities are as an annex attached

2. Date and time of application and application process

2.1 Applicant can apply within 19 January 2024(Fri), 16:59 UT by one of the following channels via;

Email; personnel@narit.or.th, koichiro@narit.or.th, koichiro.sugiyama.th@gmail.com

Post; addressed to

Human Resource Management Department (please refer to Job Application)

National Astronomical Research Institute of Thailand (Public Organization)

260 Moo 4, Donkaew, Maerim, Chiangmai, 50180 – Thailand

a CV Short-listed applicants might be asked for an online interview (e.g. via Skype or Zoom)

2.2 Interview (online) : If necessary, in 22-26 January 2024

2.3 Due of selection announcement : 31 January 2024 (Wed)

2.4 Offer starting date : As early as possible in March 2024, negotiable

3. Required document

3.1 Cover letter with the foreseen starting date and the contact

3.2 Curriculum vitae; including skills/experiences as well

3.3 Certificate of Ph.D.

3.4 1 recommendation letter

3.5 Copy of passport

4. Employment period

The contract is valid for one fiscal year and is extendible on a yearly basis.

Announce on : December 15, 2023

Saran Poshyachinda, Ph.D.
NARIT Executive Director

Annex of National Astronomical Research Institute
of Thailand (Public Organization) Announcement
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Position title: Postdoc Scientist

Affiliation: Research Group in NARIT
Employment period: from start date until 30 September 2024, and will be extendible
Salary: 40,000 Bath/month (potentially to be raised at the beginning of each fiscal year)
Work location: NARIT headquarter, Chiangmai, Thailand

Job Description and Key Responsibilities

The experience scientist will be a member of the NARIT Research Group and mainly contribute to develop one of the national flagship project for radio astronomy and geodesy with the 40 m TNRT in collaboration with the Division for Radio Observatories Operations and Engineering (CROE). For this, he/she will be in charge of

1) General engineering and science commissioning of the 40 m TNRT through its planning and performance evaluations,
2) High-cadence flux monitoring of maser emissions with the 40 m TNRT in L/C/Ku/K-bands to address one of key sciences with the 40 m TNRT: high-mass star formation and the evolution of high-mass protostars research.

The duties of the proposed position are listed below:

1. To achieve performance evaluations of each commissioning item. In the 1st fiscal year, he/she will be in charge of commissioning for the K-band receiver (18-26.5 GHz) on the 40 m TNRT: e.g., beam-pattern measurement, dynamic pointing tuning, estimation of aperture efficiency with its EL dependence, skyline bird's-eye view mapping, preparation of water vapor radiometer, etc.
2. To cooperate assembly of C/X/Ku-bands system that is on-going installation on the 40 m TNRT.
3. To communicate with the operators, engineers, mechanicians, and science evaluators for planning the commissioning and discussing the results actively. It is sometimes required to hold a meeting in person for the discussion as necessary.
4. To report the progress with evaluation results of the commissioning to the Chief

Scientist of TNRO in person regularly/constantly.

5. To document evaluation results of each commissioning item.
6. To lead high-cadence flux monitoring of maser emissions with the 40 m TNRT in L/K-bands for high-mass star-forming regions.
7. To modify and adjust the software for pipelines of the 40 m TNRT spectral data calibrations.
8. To participate in domestic/international meetings/workshops/conferences to present the progresses of the commissioning.
9. To carry out research work through literature reviews, data gathering, and data mining to support the task mentioned above.
10. (If necessary, depending on an opportunity) to contribute to education for university students and youths in radio astronomy and geodesy.

Skills/Qualifications

The candidates are to have the following qualifications in possession;

1. Ph.D. degree of Science (Physics, Astronomy, Astrophysics, etc.).
2. Minimum 3 years of experience in radio astronomy or geodesy observations.
3. Minimum 3 years of experience in high-mass star formation research.
4. (Not required, but desirable if you have),
   4.1 experience in commissioning / performance evaluations of a radio telescope
   4.2 experience in observations with Very-Long-Baseline-Interferometry (VLBI)
   4.3 experience in coding with python.
5. English skills sufficient for communication fluently and documentation.
6. Unwavering passion to develop our own radio telescope as a national facility.
7. Strong motivation to work in an intercultural environment.
8. Citizens of any country are invited to apply, without discrimination for gender, race or religion.