



National Astronomical Research Institute of Thailand (Public Organization)

Announcement

Recruitment of a Contract Employee

National Astronomical Research Institute of Thailand (Public Organization) is recruiting a contract employee. The positions are affiliated with the Optics and Photonics Centre. Position and application details are as follows:

- | | |
|--|------------|
| 1. Engineer (laser science and technology) | 1 position |
| 2. Engineer (optical system) | 1 position |

1. Qualifications and responsibilities are as an annex attached

2. Date and time of application and application process

Applicant can apply **within 31 January 2021** by one of the following channels via;

1. Email; personnel@narit.or.th

2. 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)

3. Required document

3.1 Cover letter with the foreseen starting date

3.2 Curriculum vitae

3.3 Transcript of study program completion or the degree certificate

3.4 3 recommendation letters

4. Employment period

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

Announce on : November 2, 2020

(Saran Poshychinda, Ph.D.)

NARIT Executive Director

Annex of National Astronomical Research Institute
of Thailand (Public Organization) Announcement
Recruitment of a Contract Employee

Position title : Engineer (laser science and technology)

Affiliation : Optics and Photonics Centre

Employment period : from start date until September 30, 2021

Salary rate : 58,000 baht

Duty station : NARIT headquarter, Chiang Mai and NARIT Regional Observatory of Songhkla,
Thailand

Responsibilities

The experience Laser engineer will be a member of the NARIT Optics & Photonics laboratory and he/she will report to the Director of the Centre. He/She will setup a team of engineer, researchers and technicians with the objective to develop lasers for research, industry and civil applications

The duties of the proposed position are listed hereafter:

1. To prepare the 10 years roadmap for laser science and technology development in Thailand: to identify the needs in laser technology in South-East Asia, to propose the most promising projects and to estimate the requested budget and human resources.
2. To establish some collaborations with international research institutes in laser science and technology.
3. To define the specifications and the design on the laser laboratory. To follow-up the construction of the laboratory and to verify that the performance are compliant to the specifications.
4. To identify and procure the equipment and the tools needed to construct, optimize, test and characterize lasers at NARIT.
5. To identify and procure the equipment for laser safety and to organize training to educate the staff to laser safety and good practices.
6. To setup a team of engineers, researchers and technicians to develop state-of-art lasers in Thailand.
7. To initiate and lead projects linked to the design and the development of lasers.
8. To organize workshops and to give classes in laser science and technology to train the Thai students, researchers, engineers and entrepreneurs.

9. To communicate the results of the work in refereed journals and international conference.
10. To organize local and international workshops to teach the methods to design and develop optical instruments preferentially to the Thai and ASEAN community.

Qualifications

1. Master in Engineering, Optics, Instrumentation for Physics or related fields
2. PhD in laser science and/or technology.
3. Minimum 5 years of experience in developing and characterizing lasers.
4. Proven capability to work with mechanical and system engineers.
5. More than 3 publications in refereed journals related to laser science and technology or more than 3 patents in laser technology.
6. Fluent in written and spoken English.
7. Strong motivation for the development of astronomical and space instruments.
8. Strong motivation to work in an intercultural environment
9. Citizens of any country are invited to apply, without discrimination for gender, race or religion.

Annex of National Astronomical Research Institute
of Thailand (Public Organization) Announcement
Recruitment of a Contract Employee

Position title : Engineer (optical system)

Affiliation : Optics and Photonics Centre

Employment period : from start date until September 30, 2021

Salary rate : 58,000 baht

Duty station : NARIT headquarter, Chiang Mai, Thailand

Responsibilities

The experience engineer will be a member of the NARIT Optics & Photonics laboratory and he/she will report to the Director of the Optics & Photonics Centre. He/She will act as the project manager of the future NARIT instrumental projects for astronomical applications. In particular, he/she will work with the NARIT astronomers to design and develop i) the second generation of instrument for the TNT, ii) the instruments for the medium-size telescope of NARIT regional observatories and iii) the massive instruments for large telescopes that NARTI will access in the future via our international collaborations. That will include for the NARIT telescope the development of Low and High resolution spectrographs and well as time-resolved cameras.

The duties of the proposed position are listed hereafter:

1. To set regular meetings with the NARIT astronomers and scientists to define the specifications of the future astronomical and space instruments.
2. To manage the instrumental development projects, to prepare and verify the progress of the planning and the budget.
3. To report the progress of the project to the Director of NARIT Optics & Photonics Centre.
4. To organize the reviews, prepare the presentations and deliver the progress reports.
5. To perform the bibliographic report to identify the most promising state-of-art designs and to define the concepts.
6. To establish the trade-off analyses to select the most promising solutions.
7. To lead a team of optical and mechanical engineers to design the instrument, to estimate the performance in operational conditions.
8. To establish the instrument performance budget and the status of compliance.
9. To work with the NARIT High precision workshop to specify, manufacture and accept the mechanical parts.

10. To work with the NARIT mechatronic team to specify, develop and accept the control systems.
11. To lead a team of engineers to prepare and perform the Assembly, Integration & Test or Verification (AIT & AIV) activities
12. To deliver the instrument to the scientific community and to participate to the commissioning activities.
13. To communicate the results of the work in refereed journals and international conference.
14. To organize local and international workshops to teach the methods to design and develop optical instruments preferentially to the Thai and ASEAN community.

Qualifications

1. Master in Engineering, Mechanics, Optics, Instrumentation for Physics or related fields
2. PhD in optical instrumentation, technology or related fields.
3. Minimum 5 years of experience in practicing optical design software (ZEMAX, Code V, etc.)
4. Proven capability to work with mechanical and system engineers.
5. Experience in developing state-of-art optical instruments or advanced setups for astronomical and space applications mandatory.
6. More than 3 publications in refereed journals related to optical instrumentation or more than 3 patents in optical instrumentation.
7. Experience in active/adaptive optics or freeform optics or hyperspectral imaging would be an asset.
8. Good knowledge of the constraints linked to the design of astronomical instruments is preferred.
9. Fluent in written and spoken English.
10. Strong motivation for the development of astronomical and space instruments.
11. Strong motivation to work in an intercultural environment
12. Citizens of any country are invited to apply, without discrimination for gender, race or religion.