



## **ISAAC NEWTON GROUP OF TELESCOPES**

### **LA PALMA, CANARY ISLANDS**

### **Optical Engineer**

**Ref: LSR02\_12**

**Closing date: 30-9-2012**

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As part of a programme of developments, the Isaac Newton Group of Telescopes (ING) invites applications for the post of Optical Engineer. We are seeking a motivated engineer who will contribute to the development of new, ambitious facility instrumentation and will contribute to the optical maintenance of ING's telescopes and instruments.

The ING (<http://www.ing.iac.es>) operates the 4.2-m William Herschel Telescope (WHT), the 2.5-m Isaac Newton Telescope (INT) and the 1.0-m Jacobus Kapteyn Telescope (JKT), on behalf of UK's Science and Technology Facilities Council (STFC), the *Nederlandse Organisatie voor Wetenschappelijk Onderzoek* (NWO) of the Netherlands, and the *Instituto de Astrofísica de Canarias* (IAC) of Spain. The telescopes are located on the Observatorio del Roque de los Muchachos, one of the best astronomical sites in the world, at an altitude of 2400m on La Palma, Spain. The telescopes are equipped with world-class imaging and spectroscopic instruments and are in operation 365 nights of the year.

Featuring prominently in the observatory strategy for the coming decade is the provision of WEAVE, a wide-field multi-fibre spectrograph at the WHT. WEAVE and its associated prime focus 2-degree optical corrector are being developed by a consortium of European institutes within which the ING has a significant involvement.

We are seeking an engineer to join the Telescopes and Instrumentation Group and contribute to the development of WEAVE as well as to the maintenance of optical systems. This post is ideally suited to an optical engineer who is looking for opportunities to grow in a challenging, operational environment and who is capable of contributing creative design and development abilities.

## **Activities**

The successful candidate will work as part of a dedicated team managing the optical aspects of ING's instrumentation projects and providing hands-on optical support for the organisation. He/she will be involved in:

- providing optics advise on the design, manufacturing, integration and commissioning issues for new instrumentation
- identifying and correcting optics-related operational faults
- carrying out optical alignment, designing and leading the construction of alignment tools
- preparing astronomical instrumentation for observations
- maintaining optical components and, where appropriate, characterising the performance of these devices
- cleaning and re-aluminising telescope mirrors

## **Qualifications, knowledge and experience**

- Preferred candidates will possess a degree in a relevant optical engineering discipline or a degree in a physics-related discipline.
- Knowledge or experience in astronomical telescopes, instrumentation or related scientific area will be advantageous.

## **Skills**

### **Essential**

The successful candidate will:

- Be able to provide hands-on optical support, such as that needed to identify and correct optical related faults, perform alignment work and prepare instruments for observations.
- Have a working knowledge of the Zemax ray tracing optical design tool or a demonstrable ability to develop this knowledge.
- Be able to write complete and accurate documentation in English.
- Have well-developed IT skills, including a knowledge of the Windows and/or UNIX operating systems.
- Have a demonstrable analytical approach to solving problems.
- Be able to demonstrate good teamwork skills.
- Possess good time management and organisational skills.
- Demonstrate an open and flexible approach to the work environment.
- Be capable of providing authoritative advice and guidance, in optics-related issues, to other individuals as part of a project or operational team.

### **Desirable**

For this appointment, the following skills will also be taken into consideration:

- Mechanical or opto-mechanical knowledge

- Practical knowledge regarding optical fibres
- A practical approach to the effective management of projects
- Ability to communicate in Spanish
- Ability to prepare good quality reports and relevant documentation

### **Contractual information**

This is a permanent position. The appointment will be at grade D or E depending on the qualifications and experience of the successful candidate. The starting gross annual salary will be 36065 Euros (grade D) or 41470 Euros (grade E). After the first year the salary will rise to 37960 Euros (grade D) or 43655 Euros (grade E). The salary is subject to ~26% Spanish income tax and social-security payments.

Medical cover under the Spanish National Health Service will be available to the appointee, spouse and accompanying children. ING will assist those coming from abroad in registering with the Social Security and Health Service. A relocation package is available, and we offer financial support for Spanish lessons.

Applicants from outside the EU need to be in possession of both residence and work permits which are valid in Spain.

### **Applications**

To apply, please send a completed application form, available at <http://www.ing.iac.es/About-ING/Vacancies/vacancies1.html> by email to [recruit@ing.iac.es](mailto:recruit@ing.iac.es).

The closing date for applications is 30 September 2012.

Information related to the terms and conditions of this post is available from the Head of ING's Administration, Mr Juan Martinez. Tel: + 34 922 425414 or email: [juan@ing.iac.es](mailto:juan@ing.iac.es)

### **Further information**

Further information on this position is available from ING's Head of Telescope and Instrument Engineering Group, Mr Diego Cano Tel: + 34 922 425404 or email [dcano@ing.iac.es](mailto:dcano@ing.iac.es)

The ING is fully committed to equality of opportunity in the workplace.