

## Training Opportunity for Irish Trainees

Reference	Title	Duty Station
TEC-MMO	Optical Performance Analysis	ESTEC
<p><b><u>Overview of the unit's mission:</u></b></p> <p>The Optics Section provides functional support to ESA projects and carries out technological research (R&amp;D) in the field(s) of passive optics encompassing optical component technology, micro-optics, passive integrated optics, x-ray optics, optical instrumentation, such as spectro-radiometric imaging instruments in the visible and infrared interferometers; testing, calibration and performance verification of optical systems.</p>		
<p><b><u>Overview of the field of activity proposed:</u></b></p> <p>One of the activities of the Optics section is the design and performance analysis of (novel) optical systems. The trainee will get acquainted with the principles of optical performance analysis tasks. He will be able to perform optical system analyses using optical software tools such as Zemax, Code-V, ASAP or FRED and to explore their functionalities to develop add-ons to automate the analysis process.</p> <p>In a further step, he will be involved in assessing/establishing a process suitable to perform STOP-analyses – a coherent way to link structural, thermal, optical and performance analyses for complex systems. Such kind of analysis is typically performed to explore the performance impact of a system to different environmental conditions. He will be able to assess existing tools that provide the link between the different analysis disciplines and propose/develop additional tools simplifying the data exchange between them.</p> <p>In addition, the trainee will have the opportunity to review the design of novel instruments and to get insight in the day-to-day activities of the Optics section including hands-on experience in the optical laboratory.</p>		
<p><b><u>Required education:</u></b></p> <p>A Master's degree or equivalent qualification in optical engineering or applied physics is required. Knowledge of optical design and analysis tools is an asset.</p>		