

WHYTLAW-GRAY STUDENTSHIP

The Aerosol Society intends to award a studentship to allow the recipient University Department to provide financial support to a new graduate undertaking a course of study leading to a Doctorate at a United Kingdom or Irish University. It is hoped that the availability of this Scholarship will encourage a young science graduate to undertake postgraduate training in the field of aerosol science, and at the same time gain some experience in the presentation of work to a scientific audience

The studentship is named after Robert Whytlaw-Gray who was one of the pioneers of Aerosol Science in the United Kingdom. He is perhaps best known for his investigations into the properties of smoke clouds. Additionally he modified Smoluchowski's theory concerning the rate of coagulation of homogeneous sols so that it would apply rigorously to gaseous systems. He was also interested in the structure of coagulating particles and examined the effects of electrification and photophoresis. There was hardly any aspect of the physical behaviour of aerosols, which Whytlaw-Gray did not examine during the years he devoted to these studies. His techniques were invariably ingenious, yet simple and elegant, and at least one device now in use, the thermal precipitator, was invented and patented by Whytlaw-Gray. A full account of his work on aerosols and related topics up to about 1931 is given in the book he published jointly with Patterson under the title 'Smoke'.

Value of award

The Aerosol Society will provide a stipend of £6000 per year for three years. Any annual increment will be at the discretion of the Aerosol Society. Applicants must show evidence that they can provide sufficient funds to cover additional expenses (such as fees, research costs) over and above this figure.

Who can apply

Permanent academic members of staff at universities in the United Kingdom or Republic of Ireland may apply.

How to apply

Applicants should provide a one-page description of the proposed project detailing the aims, objectives and methodology. They should also provide a one-page summary addressing the training environment (see below). The closing date for applications is 31st January 2010 and a decision will be made by 28th February 2010. It is the responsibility of the successful applicant to appoint a suitable student. There are no nationality restrictions on the award of the studentship but it must be borne in mind that the Whytlaw-Gray studentship doesn't include fees. Please send your application to the Aerosol Society at the above address.

Projects

Any project, which falls within the areas of interest of the Aerosol Society, will be considered. These are broad and encompass airborne particles or droplets in relation to aerobiology, agriculture, atmospherics, coagulation, condensation, deposition, diffusion, dynamics, electrostatics, evaporation, filtration, generation techniques, industrial processes, inhalation, instrumentation, light scattering, manufacture, occupational hygiene, radioactivity, respiratory disease, resuspension, sampling, shape, standards, therapy and thermodynamics. Projects may be directed at the exploration of basic problems, or may be of a more applied nature.

Training environment

An important consideration for the allocation of this studentship is the quality and range of research opportunities and the training environment and facilities offered. Applicants should clearly demonstrate the quality of the training environment on offer and the training content of the proposed research projects. The review panel will be looking for evidence of the following specific features of a high quality training environment:

- *Mechanisms for assessing students' progress*
- *Exposure to high quality science in an intellectually stimulating and active environment*
- *Opportunities to mix with other students and post-doctoral researchers working on related topics both within the institution and outside*
- *Availability of the proposed supervisor*
- *Availability of subject-specific and generic research training*
- *Availability of transferable skills training*

Assessment Method

Applications will be assessed by an International Review Panel, who in their appraisal will consider the following:

- Training aspects
- Are the objectives expressed clearly and can they be achieved using the selected methodologies
- Are the objectives realistic and achievable within a three year period
- Is the project intellectually challenging for the student