Position Title:	Physicist / Mathematical Modeller
Position Reference Number:	PDLD005
Division	Land Division
Position Classification:	S&T 3-4 Above
Position Location:	DST Fishermans Bend, Victoria
Security Level:	Neg Vet 1
Minimum Academic Qualification:	PhD or equivalent (physics/mathematics) in a field related to atmospheric turbulent dispersion or sensor/data fusion.
Enquiries:	Mr Mike Roberts, michael.roberts16@defence.gov.au (03)9626 7531

Academic Disciplines

	Aerospace/ Aeronautical Engineering, Naval Architecture		Chemical, Radiological, Biological,		Materials Science
	Computer Sciences, IT, Software Engineering, Telecommunications	■	Mathematics and physics		Psychology and Social Sciences, Food sciences
	Mechanical and Mechatronic Engineering (including robotics)		Electronic/ Electrical Engineering		Other

Position Overview

The Physicist / Mathematical Modeller will work as part of the Chemical, Biological, Radiological and Nuclear Effects (CBRNfx) science team. This team provides support, training, advice and R&D for the ADF and National Security agencies relating to the plume dispersion of hazardous CBRN materials. CBRNfx provides operational support to the ADF when it is in an environment that may be affected by CBRN or other hazardous materials. This science team also provides training in atmospheric plume dispersion to specialised units of the ADF, and support to Defence acquisition programs. The CBRNfx R&D program is focused on improving current plume modelling capabilities, including development of high resolution models for atmospheric dispersion predictions in urban environments and fusing sensor data from fixed location or mobile autonomous sensors to improve modelling predictions.

Position Duties

Under guidance, the Physicist / Mathematical Modeller will:

- Contribute to R&D in developing the CBRNfx plume dispersion modelling capabilities.
- Work with other science team members and Defence clients to shape the CBRNfx R&D program.
- Contribute to the CBRNfx client program including the provision of support, training and advice to ADF and National Security clients.

Other Requirements

Appointees will be initially be engaged on a **BASELINE** security clearance with an upgrade to a **Negative Vetting 1 (NV1) Security Clearance** required upon commencement.

Demonstrated ability to conduct high quality R&D in the mathematical modelling of physical systems, or in sensor/data fusion.

Demonstrated ability to shape and execute an R&D program in support of client outcomes.

Knowledge of atmospheric turbulent dispersion.

Knowledge of computational fluid dynamics and/or fluid mechanics