

EMpower

Environmental Masters Programme Of Work Experience through Research

Supported by the Nuclear Decommissioning Authority, Health & Safety Executive – Nuclear Installations Inspectorate, Environment Agency, Cogent, British Energy and AWE, Aldermaston

Project Placement Titles 2009 Second Announcement

Host Organisation - AWE Ltd

Collation and correlation of radionuclide data from two high volume air sampling units, RIMNET and Meteorology (Code: AWE0901)

Industry best practice for balancing implementation costs for renewables/sustainable aspects of construction, with long-term financial savings: Research on contemporary methodologies for valuing resources such as groundwater (Code: AWE0902)

Host Organisation – NNL Ltd

Improving GIS based estimates of the volume of contaminated land (Code: NNL0901)

Modelling of flows through a near-surface repository in response to varying boundary conditions and barrier degradation (Code: NNL0902)

Use of WEPP (Water Erosion Predictions Project) model to investigate potential impact of future climate scenarios on cap performance (Code: NNL0903)

Under which conditions are colloids transported in groundwater? (Code: NNL0904)

Bitumen as an alternative to cement in encapsulating waste for geological disposal (Code: NNL0905) ****NEW****

Host Organisation - SELLAFIELD Ltd

The application of the Waste Management Hierarchy within the nuclear industry (Code: SEL0901)

Host Organisation – ENVIRONMENT AGENCY

Review and update of historic radioactive discharge information for water reactors (Code: EA0901) *****NEW*****

Review baseline environmental monitoring data around 3 existing nuclear sites prior to potential construction of new nuclear power stations - Identify any gaps in baseline environmental monitoring data. (Code: EA0902)

Assess total impact to members of the public from multiple authorised discharges of radioactive substances in two Environment Agency regions. (Code: EA0903)

Review guidance and standards on monitoring of authorised radioactive substance emissions to air and water to enable the Environment Agency to update its guidance. (Code: EA0904)

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Assess the impact of authorised emissions to air and water on wildlife in designated European protected sites (Natura 2000 sites) in England and Wales using the EU funded ERICA assessment tool. (Code: EA0905)

Nuclear hazard qualification methodologies (Code: EA0906)

Investigate the approach taken to groundwater management on and around nuclear sites, with specific focus on Sellafield, for robustness to climate change impacts. (Code: EA0907)

Determine the main factors affecting the long term (100+ year) viability of locating new nuclear facilities on coastal sites (Code: EA0908)

Assess the types and quantities of solid radioactive waste arising from the operation of discharge abatement plant on water reactors (Code: EA0909) *****NEW*****

Host Organisation – MAGNOX NORTH

Review industry best practice to evaluate established waste management practices within Magnox North, against the Best Available Techniques (formerly called the Best Practicable Environmental Option) (Code MN0901). *****NEW*****

Establish a process based methodology for undertaking preliminary flood risk assessments at Magnox North sites (Code: MN0902). *****NEW*****

Evaluate the USEPA 7 step DQO methodology as a means for determining clearance of an area in preparation for 'de-licensing' (Code: MN0903). *****NEW*****

Host Organisation - BRITISH ENERGY

Organically bound tritium discharges from British Energy reactors *****NEW*****

Use of the Waste Management Hierarchy within British Energy *****NEW*****

Applications are welcomed from students attending Environmental and Earth Science masters courses which have a project dissertation component of greater than three months duration and which will run between April and September 2009.

Please submit a CV and any supporting statement (Max 2 pages A4), include your full name, postal address, e-mail, telephone contact number, course title and details of your nationality. You may apply for up to **THREE** projects.

Applications should be sent by post or e-mail to

EMpower 2009, Viridian Partnership, PO Box 746, Woking, Surrey, GU24 0AZ
e-mail: viridian.tc@virgin.net

DEADLINE FOR RECEIPT OF APPLICATION 23rd JANUARY 2009
