

Cleaning of metals contaminated with historic pesticide residues which are hazardous to health

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Introduction

Dr Lynda Skipper (lecturer and MA programme leader) was delighted to be awarded UROS funding in 2012. UROS provides a bursary to allow a continuing undergraduate student to work under the supervision of an academic member of staff on a project over the summer holidays.

In this case, Christina Ireland (now BA3) received the bursary to enable her to work on a project studying a number of historic pesticides and household chemicals from the National Trust property, Mr Straws House in Worksop, Nottinghamshire.

Together with Mathieu Elie, Senior Technician in Analytical Chemistry in the School of Life Sciences, the project meant trying a number of different chemical techniques to try and identify the chemicals, some labelled and some unlabelled, and gain a better understanding of the hazards posed. Examples included the highly toxic Calomel, a mercury-containing product that had historically been used to treat vegetables for pests!

After understanding the contents of the containers, all of them were assessed for their possible dangers, and a decision was made about whether the containers could be conserved, or should be disposed of due to their toxicity. Christina carried out the conservation treatments, and the majority of the containers could then be safely returned to display at Mr Straws House.

Christina says: 'This project was a great opportunity for me to gain experience working with a range of objects, materials and hazards found in the collection. It's been really exciting to be involved in the research process and apply all I learnt to my 3rd year studies.'



Figure 1: Christina Ireland conserving a historic paint tin.

Publications from Research

IRELAND, C & SKIPPER, L. (2013). Cleaning of metals contaminated with historic pesticide residues which are hazardous to health. *Institute of Conservation: Positive Futures in an Uncertain World*. 10-12th April 2013, Glasgow.

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