## News story: GC and Queen's University Belfast chart life of Monier-Williams

Awarded a Military Cross for his work combating chemical warfare in the first World War, Gordon Wickham Monier-Williams went on to make comprehensive contributions to improvements in public health via analytical chemistry.

Monier-Williams is a well known name in the history of food safety in the UK, owing to his eponymous method for the determination of sulphites in food. Sulphites are very useful additives but can cause severe, even life threatening asthmatic reactions in sensitive subjects. Thus their detection and control is vital. The method Monier-Williams published in 1927 remains the reference method for their determination in food.

But Monier-Williams did much more — the breadth of his investigations in food chemistry and toxicology was wide including:

- metallic contaminants in food aluminium, Al, Arsenic, As, Lead, Pb, and antimony, Sb, including from glazes and enamels used in cooking utensils
- additives such as preservatives and colours
- foreign matter, e.g. glass, in food
- chemical reactions ('blowing') in canned food
- the detection of added water in milk
- natural and artificial bleaching of flour

Aside from food he studied the eradication of bed-bugs, and presciently, the use of alcohol as a fuel.

Dr Michael Walker from the Government Chemist said:

Having applied his method in the lab many times it was fascinating to find out more about Monier-Williams' life and work, especially in the trenches. This was an unexpected resonance with our <a href="colleagues">colleagues</a>' work identifying previously unknown remains of soldiers from WW I.

Professor Duncan Thorburn Burns, from Queen's University Belfast, said:

Gordon Wickham Monier-Williams is well known to analytical chemists for his eponymous method and it was a pleasure to unveil his contributions to the improvement in both quality and purity of foodstuffs.

Read the full extent of his influential work in the open access <u>Journal of</u> the Association of <u>Public Analysts</u>.

A <u>scan</u> of Monier-Williams' 1927 report on the determination of sulphite is also available.

To know more about the work of the Government Chemist please contact