

# Oxford Seminar in the History of Chemistry

Seminar Series

Trinity Term 2021

SHAC and Maison Française d'Oxford

Conveners: Judith Rainhorn (MFO) and John Christie (Oxford)



• Thursday 20<sup>th</sup> May, 3:30-4:45

[https://zoom.us/meeting/register/tjMscuGopz0iHtPYL\\_0c0dVziJ100opKg\\_m7](https://zoom.us/meeting/register/tjMscuGopz0iHtPYL_0c0dVziJ100opKg_m7)

## The role of chemists in the development of First World War respirators

**Shelley Castle** (Centre of the History of Science, Medicine and Technology, Oxford/Sommerville College)

Chemical weapons are one of the most well-known weapons of the First World War, immortalised in the poetry of the time and many publications. But, to date, little has been said about the complexities of how this weapon was fought with the creation of the respirator and the role that chemists played. Nor has it fully explored the limitations of this process and the tactical implications of the respirator. The details, successes and limitations of this risky, experimental and innovative process will be shared with you as part of this paper.

• Friday 4<sup>th</sup> June, 4-5:15

**The Politics of Chemistry: Science and Power in Twentieth-Century Spain**

<https://zoom.us/meeting/register/tJAuceusrD4uHte0CJA2jZyhdFrgrRY1nZTQ>

**Agustí Nieto-Galan** - Institut d'Història de la Ciència, Universitat Autònoma de Barcelona

As a result of the book *The Politics of Chemistry* (Cambridge University Press, 2019), the paper approaches the community of Spanish chemists in the twentieth century, and the way in which they shaped cosmopolitan, republican, totalitarian, autarchic, technocratic and liberal values. Spanish chemists took their side in every regime in which they lived, even in war, for instance, their reaction to the cruelties of the Spanish Civil War (1936-39) being particularly heart-breaking.

Beyond the constraints of a specific national context, I will provide a broader reflection on the way in which chemists 'co-constructed' different political regimes and became powerful ideological agents throughout the century. Often under the banner of a rhetoric of neutrality, they created strong links with industrial and military projects, and became involved in national rivalries and international endeavours, which deserve a more careful examination.

• Thursday 10<sup>th</sup> June, 4-5:15

<https://zoom.us/meeting/register/tJwtfuqvjlrHNPNsCAVx0g1JPINnYOqhGuu>

**Alison McManus** (Princeton University)

**Restricted Priority: Debating the Invention of Agent Orange in the Aftermath of War**

During the Second World War, researchers on both sides of the Atlantic developed novel chemical herbicides from synthetic plant growth hormones, especially the chlorinated phenoxyacetic acids. To some, these compounds had clear military significance as tactical defoliants and agents of crop destruction. Both the United States and the British governments investigated these compounds to that end. Although neither nation used these herbicides during the Second World War itself, both nations did so later: the British during the Malay wars of decolonization and the Americans during the Vietnam War. Nevertheless, the secrecy regimes that surrounded these

herbicides were highly porous and inconsistent, varying substantially by institution and national context. This paper examines these uneven disclosures and traces their impact on postwar priority disputes, which played out in the international scientific literature as well as American courtrooms. It argues that censorship and classification, though billed as wartime necessities, did not merely exist to preserve national security. Even as government workers prepared these herbicides for military use, censors relied on classification regimes to constitute and deny scientific priority.