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HIST**Seth Rasmussen****Sunday, August 10, 2014****1 - HIST Tutorial: Impact of World War I on chemistry, physics, and astronomy**

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World War II has been called "The Physicists' War," meaning radar, rockets, and atomic bombs. WWI was, somewhat similarly, "The chemists' war," and we meet nearly on the centenary of the Guns of August. Sadly, perhaps, most people will think first of poison gases, and indeed Fritz Haber was the one German scientist whom Lord Rutherford never forgave and never spoke to again. But they caused less than 1% of the deaths, and other chemistry was probably more important. Both sides had to learn to fix nitrogen, for fertilizers as well as for explosives, to replace guano shipped from South America. The Brits and other allies were used to relying on German dyestuffs and optical glass, while the Germans had to replace most of the petroleum they had been importing. Large scale production of synthetic rubber, anti-microbials, and other products of the chemists' art also received major boosts. And, like the bomb, it was not possible for humanity to forget how to make all these once they had learned how. I will also say something about the Great War's effects on physics and astronomy. Whether WWII will be the biologists' war or the information technologists' war is not clear, though we all surely hope not in the lifetimes of anyone here.

Sunday, August 10, 2014 08:30 AM

[HIST Tutorial and General Papers \(08:30 AM - 11:55 AM\)](#)

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Room: Twin Peaks

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