

On April 22, 1915, the German military released 167 tons of chlorine gas at Ypres, Belgium. Carried by a long-awaited wind, the chlorine cloud passed within a few minutes through the British and French trenches, leaving behind at least 1,000 dead and 4,000 injured. This chemical attack, which amounted to the first use of a weapon of mass destruction, marks a turning point in world history. The preparation as well as the execution of the gas attack was orchestrated by Fritz Haber, the director of the Kaiser Wilhelm Institute for Physical Chemistry and Electrochemistry in Berlin-Dahlem. During World War I, Haber transformed his research institute into a center for the development of chemical weapons (and of the means of protection against them).

The Fritz Haber Institute of the Max Planck Society (the successor institution of Haber's institute) together with the Max Planck Institute for the History of Science have organised an international symposium to commemorate the centenary of the infamous chemical attack. The symposium will examine key aspects of chemical warfare from the first research on and deployment of chemical weapons in WWI to the development and use of chemical warfare during the century hence. The focus will be on ethical, legal, and political issues of chemical weapons research and deployment – including the issue of dual use – as well as the ongoing effort to control the possession of chemical weapons and to ultimately achieve their elimination.

The symposium will culminate in a Public Event that will include a Minute of Silence as well as a lecture on attempts to build a world free of chemical and other weapons.

#### Organizing Committee:

**Bretislav Friedrich and Martin Wolf**  
(Fritz Haber Institute of the Max Planck Society)

**Dieter Hoffmann, Jürgen Renn, and Florian Schmaltz**  
(Max Planck Institute for the History of Science)



Die Teilnahme an dem Symposium ist kostenlos,  
eine Registrierung erforderlich über

[www.100-Jahre-Giftgaskrieg.de](http://www.100-Jahre-Giftgaskrieg.de)

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# 100 JAHRE GIFT GAS KRIEG

Forschung, Einsatz, Folgen  
chemischer Massenvernichtungswaffen

SYMPOSIUM  
21. und 22. April 2015  
Harnack-Haus

Veranstalter:  
Fritz-Haber-Institut der MPG  
MPI für Wissenschaftsgeschichte



# 100 YEARS OF CHEMICAL WARFARE

## Research, Deployment, Consequences

April 21 – 22, 2015, Harnack House, Berlin

### April 21, 2015

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#### Welcome

9:15 – 9:40

- ▶ **Martin Wolf** (*Fritz Haber Institute of the Max Planck Society*)
- ▶ **Ferdi Schüth** (*Vice President of the Max Planck Society*)

#### (A) Research on and deployment of chemical weapons in World War I

9:40 – 11:00

- ▶ **Margit Szöllösi-Janze** (*Ludwig-Maximilians-Universität München*):  
The Scientist as Expert. Fritz Haber and German Chemical Warfare during the First World War and Beyond
- ▶ **Jeremiah James** (*Ludwig-Maximilians-Universität München*):  
Chemical Weapons Research in Dahlem: 'Big Science' but in what Form

11:00 – 11:20 Coffee Break

11:20 – 12:40

- ▶ **Olivier Lepick** (*Sogeti Paris*):  
France's Political and Military Reaction in the Aftermath of the First German Chemical Offensive in April 1915: the Road to Retaliation in Kind
- ▶ **Jeffrey Johnson** (*Villanova University*):  
Military-Industrial Interactions in the Development of Chemical Warfare, 1914–1918: Comparing National Cases within the Technological System of the Great War

12:40 – 14:00 Lunch

#### (B) Contexts and consequences of chemical weapons

14:00 – 16:00

- ▶ **Edward Spiers** (*University of Leeds*):  
The Gas War 1915–18: If not a War-Winner, hardly a Failure
- ▶ **Doris Kaufmann** (*Universität Bremen*):  
Der Gaskrieg in Literatur und Kunst im Europa der Zwischenkriegszeit

- ▶ **Milos Vec** (*Universität Wien*):  
Kriegsräson über Völkerrecht? Entstehung, Auslegung und Reform des Giftverbots in Art. 23 lit. a der Haager Landkriegsordnung

16:00 – 16:30 Coffee Break

16:30 – 18:30

- ▶ **Roy MacLeod** (*University of Sydney*):  
'The Genie and the Bottle': Postwar Preparedness and the Chemical Weapons Debate in the United States, 1918–1928
- ▶ **Jeanne Guillemin** (*Massachusetts Institute of Technology*):  
The 1925 Geneva Protocol and International Reactions to the Use of Chemical Weapons in War
- ▶ **Walter Grunden** (*Bowling Green State University*):  
No Retaliation in Kind: Japanese Chemical Weapons Policy in China and the Pacific

### April 22, 2015

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9:00 – 11:00

- ▶ **Wolfgang Eckart** (*Universität Heidelberg*):  
Soldatenkörper im Gaskrieg: Trauma, Siechtum, Rentennot, 1915–1933
- ▶ **Florian Schmaltz** (*Max Planck Institute for the History of Science*):  
Chemical Weapons Research in Nazi Germany on Soldiers and Concentration Camp Inmates
- ▶ **Ulf Schmidt** (*University of Kent*):  
Justifying Chemical Warfare: The Origins and Ethics of Britain's Chemical Warfare Program, 1915–1945

11:00 – 11:20 Coffee Break

#### (C) Dual use, storage and disposal of chemical weapons today

11:20 – 12:40

- ▶ **Götz Neuneck** (*Universität Hamburg*):  
The Dual-Use-Problem and Weapons of Mass Destruction: A Comparative Analysis of Ways and Instruments to Control their Spread and Possession or Ban their Use
- ▶ **Johannes Preuß** (*Universität Mainz*):  
Rekonstruktion von Anlagen zur Produktion und Lagerung von Kampfstoffen und chemischen Waffen beider Weltkriege im Rahmen der Beurteilung von Rüstungsaltsstandorten

12:40 – 14:00 Lunch

14:00 – 15:20

- ▶ **Matthew Meselson** (*Harvard University*):  
Anti-plant Chemical Warfare: from Charles Darwin to Richard Nixon
- ▶ **Karin Mlodoč** (*Zentrum Moderner Orient, Berlin*):  
The Indelible Smell of Apples – Kurdish Poison Gas Survivors in Halabja between Trauma and Struggle for Acknowledgment

15:20 – 15:40 Coffee Break

15:40 – 17:00

- ▶ **Hans Christof Graf von Sponeck** (*Universität Marburg; formerly United Nations*):  
Iraqi Weapons of Mass Destruction and the UN Policies: The Gap Between Mandate and Implementation
- ▶ **Ralf Trapp** (*International disarmament consultant, Geneva*):  
The Use of Chemical Weapons in Syria, its Consequences, and some Lessons for the Future

17:00 – 18:00 Break

#### Public Event – Gedenkveranstaltung

18:00 – 20:30

- ▶ Opening (**Martin Wolf**)
- ▶ Music composed by **Thomas Hennig**, to the words of 'Dulce et Decorum est' by Wilfred Owen
- ▶ Address by **Ghislain D'hoop** (*Ambassador of Belgium*)
- ▶ **Gerhard Ertl** (*Fritz Haber Institute of the Max Planck Society*):  
Fritz Habers Institute and Chemical Warfare
- ▶ **Jürgen Renn** (*Max Planck Institute for the History of Science*):  
Summary of the Symposiums Talks and Discussions
- ▶ Minute of Silence
- ▶ Excerpts from Benjamin Britten's War Requiem
- ▶ **Paul Walker** (*Green Cross, Washington, DC*):  
A Century of Chemical Warfare: Building a World Free of Chemical Weapons

20:30 Reception in the Winter Garden

endorsed by:



Gesellschaft Deutscher Chemiker