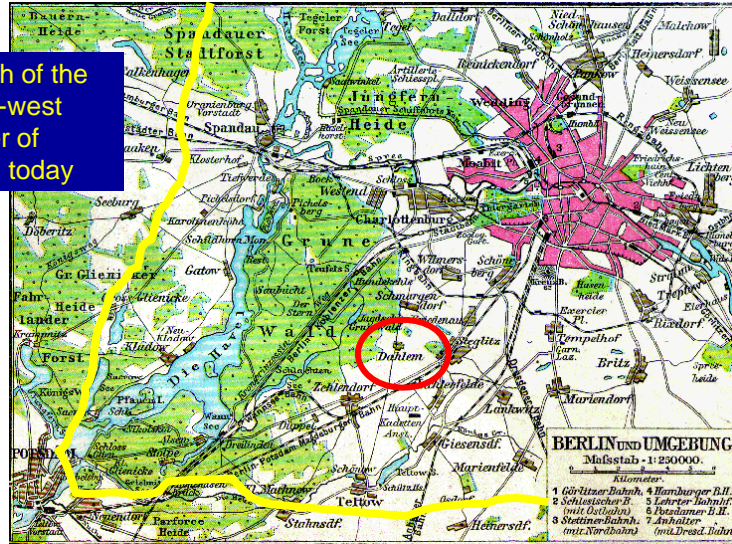


One hundred years of science in Dahlem: History of the FHI and of the MPG

Sketch of the
south-west
border of
Berlin today

Berlin
1885



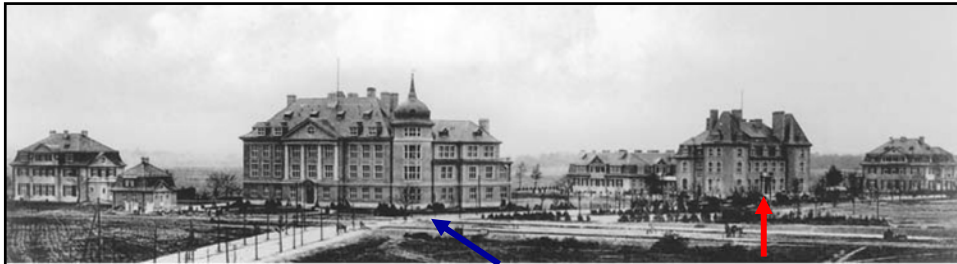
1908 Starting from a comparison of sciences in Prussia with that in France, England, and USA, Adolf von Harnack (a protestant theologian) suggested to the Kaiser to found research institutes named "Kaiser Wilhelm Institutes for Scientific Research".

The Kaiser liked the idea and was fully supportive:

1910 *"... We need institutions that exceed the boundaries of the universities and are unimpaird by the objectives of education, but in close association with academia and universities, serving only the purpose of research ... it is my desire to establish under my protectorate and under my name a society whose task it is to establish and maintain such institutes"*

1911 Foundation of the "KWI for Chemistry" and the "KWI for Physical Chemistry and Electrochemistry" (first director: Fritz Haber)

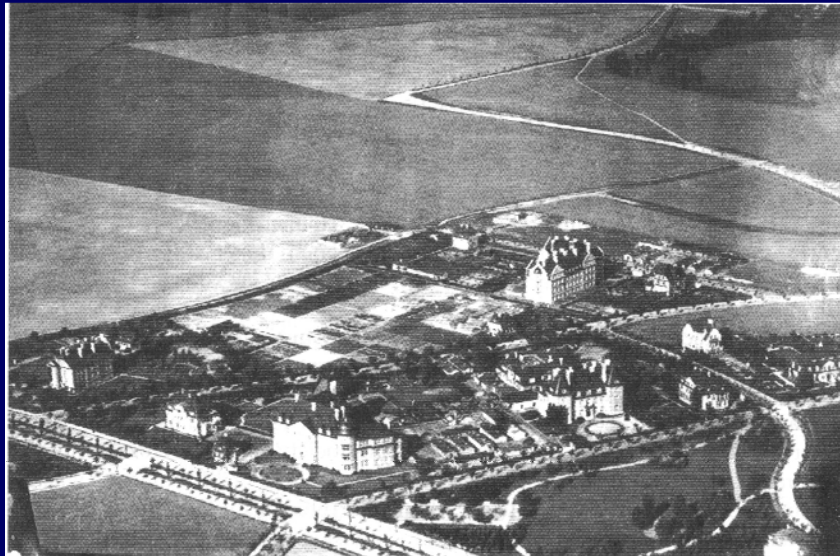
.... about 10 more institutes were founded during the coming 10 years.



1912 Kaiser Wilhelm Institute for **Chemistry** and for **Physical-Chemistry and Electrochemistry** -- Most right: Villa of Fritz Haber.



Kaiser Wilhelm II, Adolf von Harnack, followed by Emil Fischer and Fritz Haber walking to the opening ceremony of the first two KWG institutes October 1912

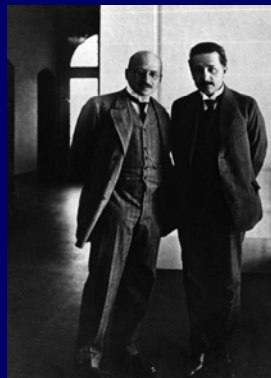


Aerial view of the Kaiser Wilhelm Institutes for "Chemistry" and for "Physical-Chemistry and Electrochemistry" -- around 1918

A glimpse at the history of the Fritz-Haber-Institute of the Max-Planck-Gesellschaft

- 1911 Foundation of the Kaiser Wilhelm Institute for Physical Chemistry and Electrochemistry (first director: Fritz Haber)
- 1914-1918 Research and production of chemical weapons (mustard gas, etc.)
- 1918 Haber received the Nobel prize for the development of the ammonia synthesis
- 1933 Haber leaves Germany

(see also FHI- web pages: history and two brief PBS reports.)



Fritz Haber and Albert Einstein at the "FHI" -- 1915

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Clara Immerwahr
* 21. Juni 1870 in Breslau;
† 2. Mai 1915 in Berlin-Dahlem

Walter Grotrian, Wilhelm Westphal, Otto von Baeyer, Peter Pringsheim, Gustav Hertz



Hertha Sponer, Ingrid Franck, Lise Meitner,
Albert Einstein, James Franck, Fritz Haber, Otto Hahn

Farewell party for James Franck, Dahlem 1920.

A glimpse at the history of the Fritz-Haber-Institute of the Max-Planck-Gesellschaft

- 1911 Foundation of the Kaiser Wilhelm Institute for Physical Chemistry and Electrochemistry (1. director: F. Haber)
- 1914 Research and production
- 1918 of chemical weapons (mustard gas, etc.)
- 1918 Haber received the Nobel prize for the development of the ammonia synthesis
- 1933 Haber leaves Germany; he dies 1934 in Basel.**

After World-War II

- The Kaiser Wilhelm Society was renamed into Max Planck Society
- 1953 Our institute was renamed into Fritz-Haber-Institut der Max-Planck-Gesellschaft.

Fritz-Haber-Institut

- present structure and research area -

The institute is lead by the "board of directors" with one of them acting as the "chief institute director" ("Geschäftsführenden Direktor").

Research areas:

Basic research on catalysis and chemical and physical properties of surfaces, interfaces, molecules, clusters and nanostructures.

5 Departments:

- Theory *(Matthias Scheffler, since 1988)*
- Inorganic Chemistry *(Robert Schlögl, since 1994)*
- Chemical Physics *(Hajo Freund, since 1996)*
- Molecular Physics *(Gerard Meijer, since 2003)*
- Physical Chemistry *(Martin Wolf, since 2008)*

- Emeriti: *Elmar Zeitler, Alex Bradshaw, Gerhard Ertl*

- *And several independent junior research groups (ERC, DFG, MPG)*

Nobel prize laureates who worked or work at the "FHI"

Max von Laue (1914), Fritz Haber (1918), James Franck (1924), Heinrich Wieland (1927), Eugene Wigner (1963), Ernst Ruska (1986), Gerhard Ertl (2007)

	Year of award and whereabouts	Work done at	Zeit am KWI PChE/FHI-MPG	Capacity
Max von Laue (1879-1960)	1914, Munich (LMU)	Munich (LMU)	1951-1959	Direktor
Fritz Haber (1868-1934)	1918, Berlin (PChE)	Technische Hochschule Karlsruhe	1911-1933	Gründungsdirektor
James Franck (1882-1964)	1924, Göttingen (GAU)	Berlin (FWU)	1918-1920	Abteilungsleiter
Heinrich Wieland (1877-1957)	1927, Munich (LMU)	Freiburg (ALU), Munich (LMU)	1917-1918	Mitarbeiter/Offizier
Eugene Wigner (1902-1995)	1963, Princeton	Berlin (PChE, TUB), Princeton	1923-1932	Doktorand, Mitarbeiter
Ernst Ruska (1906-1988)	1986, Berlin (FHI)	Berlin (TUB, Siemens, FHI)	1949-1974	Direktor IFE
Gerhard Ertl (*1936)	2007, Berlin (FHI)	Munich (LMU), Berlin (FHI)	1986-2004	Direktor

ALU Albrecht-Ludwig-Universität Freiburg
 FWU/HU Friedrich-Wilhelms-Universität/Humboldt-Universität zu Berlin
 GAU Georg-August-Universität Göttingen
 KWI-PChE/FHI-MPG KWI für Physikalische Chemie und Elektrochemie/Fritz-Haber-Institut der MPG
 LMU Ludwig-Maximilians-Universität München
 THCh/TUB Technische Hochschule Charlottenburg/Technische Universität Berlin
 THK Technische Hochschule Karlsruhe

A glimpse at the history of the Harnack House

- 1926 Letter by Adolf von Harnack to Gustav Stresemann (Foreign Minister) on the need to establish an institute to bring foreign scientists to Berlin to an "institute for guest scientists".
- 7.5.1929 Formal opening (79. birthday of Harnack) ... everyone we know from this time was here and gave talks, e.g. Einstein, Debye, Heisenberg, Hahn, Laue, ...

Harnack House -- continued

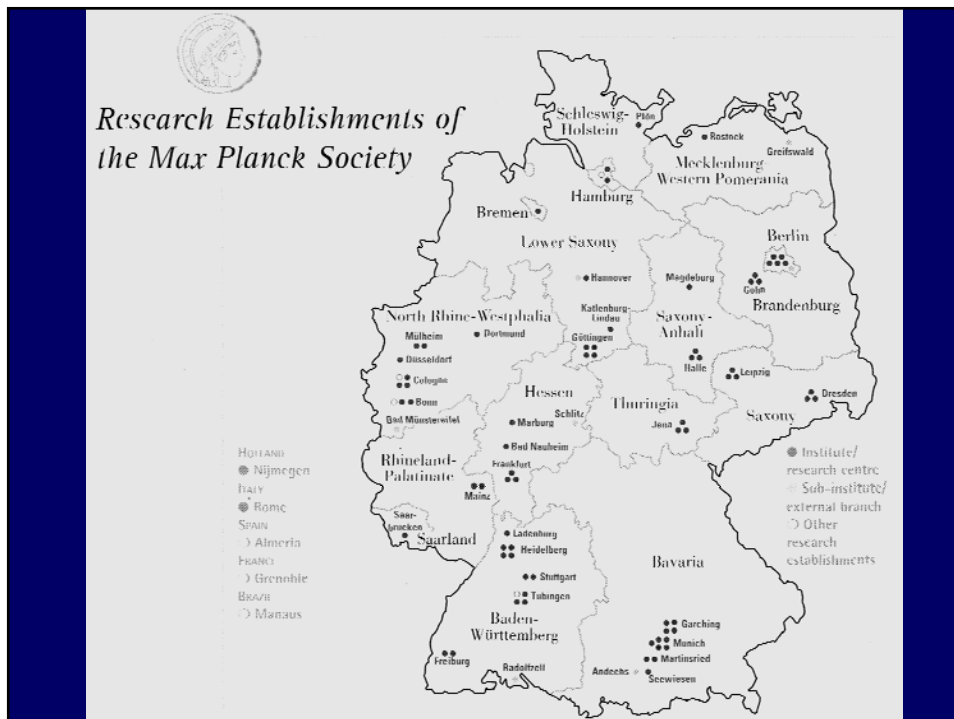
Harnack's great idea of the function of the Harnack House only worked for a short period of time. Since about 1933 there were lectures by the "KWI for Anthropology and Eugenics" on "clean race" and "race hygienic".

- 1935 Commemoration ceremony for Fritz Haber who had died Jan. 1934 (organized by M. Planck and O. Hahn).
- 1941 Lecture by M. Planck on the dangers of nuclear fission.
- 1942 Albert Speer (Minister for Arming and Ammunition) invites generals and nuclear scientists, Heisenberg talks about *The military use of nuclear energy*. Q: How big would be an atomic bomb to destroy a city, e.g. as big as London? Heisenberg: About the size of a pineapple. Q: How long does it take to build one? Heisenberg: about 3-4 years.

Harnack House -- continued

- 25.4.45 Russian troops take Berlin
- 14.7.45 The US army takes the Harnack House and turned it into an officers club.
- Aug. 1994 The US army leaves Dahlem and returns the Harnack House to the MPG.
- Oct. 1994 Our first Workshop on DFT computations...
- 1998/99 Major renovations; the Harnack House became a conference center.

*(Further workshops on DFT computations:
1996, 1999, 2001, 2003, 2005, 2009, 2011)*



A conference in October

100 YEARS OF PHYSICAL
CHEMISTRY IN BERLIN-DAHLEM

Fritz Haber Institute of the Max Planck Society
Centenary Celebration

26 - 28 October 2011

Take

*“A walking tour of the Berlin institutes of the Kaiser Wilhelm /
Max Planck Society in the ‘German Oxford’”*

as described in the booklet *“Dahlem – Domain of Science”*