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## **HIST 17 Gerhard Herzberg: Physicist, chemist and astronomer**

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Herzberg began his career studying at the Technische Hochschule in Darmstadt, Germany. Following postdoctoral appointments at Göttingen and Bristol, he returned to Darmstadt. However, life under the Nazi authorities became more and more difficult because his wife, Luise, was Jewish. Consequently, in 1936, he accepted a position at the University of Saskatchewan in Canada. There, with Alex Douglas, he showed that  $\text{CH}^+$  was the origin of three unidentified interstellar absorption lines. Herzberg also completed both German and English editions of *Atomic Spectra and Atomic Structure* and *Spectra of Diatomic Molecules* with translations by John Spinks. In 1945 he moved to the Yerkes Observatory of the University of Chicago, where he measured the quadrupole lines of  $\text{H}_2$  in an absorption cell. He returned to Canada in 1948 to the National Research Council in Ottawa. There his research included free radicals, which were mentioned specifically in his 1971 Nobel Prize citation.