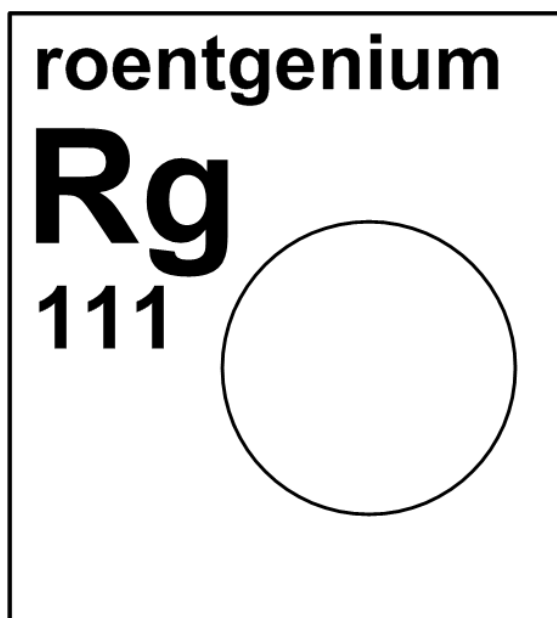


## 4.111 roentgenium



Stable isotope	Relative atomic mass	Mole fraction
(none)		

Half-life of radioactive isotope

Less than 1 hour 

<b>272</b> Rg	<b>274</b> Rg	<b>278</b> Rg	<b>279</b> Rg	<b>280</b> Rg	<b>281</b> Rg	<b>282</b> Rg
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Roentgenium does not occur naturally in the Earth's crust. Roentgenium was first synthesized by an international team of scientists from the GSI in Darmstadt, Germany, the Joint Institute for Nuclear Research (JINR) in Dubna, Russia, the Comenius University in Bratislava, Slovakia and the University of Jyväskylä, Finland at the GSI Helmholtz Center for Heavy Ion Research in Darmstadt, Germany in 1994, using the nuclear reaction  $^{209}\text{Bi} (^{64}\text{Ni}, n) ^{272}\text{Rg}$ . The credit for the first synthesis was confirmed in 2003. The **element** was named after Wilhelm Conrad Roentgen (Figure 4.111.1), who discovered **X-rays** in 1895 [657-659]. Roentgenium has no known isotopic applications aside from scientific research.

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**Fig. 4.111.1:** Wilhelm Conrad Roentgen, discoverer of **X-rays**, after whom roentgenium was named. (Photo Source: NASA Goddard Space Flight Center).