Johann-Wilhelm-Ritter Award
for Innovative Skin Imaging

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When he was just 24 years old, Johann Wilhelm Ritter discovered the ultraviolet radiation in 1801. Becoming increasingly in the crossfire of critical opinions, he lost his reputation as a genius of physics and electrochemistry and died aged 33 as a poor man.

Johann Wilhelm Ritter was born in Samitz, Silesia (now Zamienice, Poland) on Dec 16, 1776. When he was 14 years old, he became an apprentice to an apothecary in Liegnitz (Legnica). Six years later, he started to study medicine at the University of Jena but focused more on self-experiments on galvanic phenomena which he interpreted correct as electricity generated by chemical reactions. Soon later he became the pioneer of scientific electrochemistry.

Ritter learned to know Goethe, Humboldt, Herder, Brentano. Schelling and Ørsted and became part of the German Romantic movement, in particular the "Naturphilosophie" movement. Influenced by its philosophy of "polarities and symmetries in nature" and after hearing about the discovery of "heat rays" (infrared radiation) by Herschel in 1800, Ritter started to search for opposite rays beyond the violet. Using a prism to obtain a white light spectrum, he discovered in 1801 that silver chloride was transformed into black when it was placed beyond the violet end of the visible part. This was the discovery of "chemical rays", later on called ultraviolet radiation.

The university of Jena gave him the permission to give lectures on galvanism but did not provide him with a regular income. Therefore he moved in 1804 to Munich where he became a member of the Bavarian Academy of Science and got married. However, suffering from financial difficulties and weak health likely due his self-experimentation on galvanism, he died as father of four young children too young on Jan 23, 1810.

Reference
Karsten König. Johann Wilhelm Ritter – der Entdecker der ultravioletten Strahlung. Dermatol. Mon.schr. 174(1988)493-497.

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