The Photoelectric Effect

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The emission of high energy electrons by metals caused by the absorption of light of appropriate wavelengths.

Advancement of quantum theory:

Planck was chastized in the science community for his proposal that energy was quantized. This was unlike anything they have seen up to that point in science, so the idea was not readily accepted. Many new radical theories are met with similar opposition. Even though Planck's proposal followed the correspondence principle which says that the quantum approach should not only explain what has already been explained, but it must prove to be better than past theories. Typically, radical ideas must be supported by other scientists and be proven experimentally for these theories to start to gain momentum in the scientific community.

This is where Einstein comes into play. Einstein used quantization to explain the photoelectric effect. This was the first time another scientist had used what Planck proposed. Because of Einstein's contributions, Planck's theory started to gain attention and support.

References: