

²²³Ra

In the 1905 article “A new radio-active product from actinium,” Godlewski from McGill University reported the discovery of a new activity in the natural actinium decay chain which was later identified as ²²³Ra (1905Go01). The activity of actinium samples were measured following chemical separation. “Taking into consideration the similarity of actinium and thorium, both as regards their chemical and radioactive properties, I resolved to try if the method used by Rutherford and Soddy for the separation of ThX would not serve also to separate an analogous product from actinium. The experiments were at once successful... This substance, which is so similar in properties to ThX [²²⁴Ra], will be called actinium X (AcX) [²²³Ra]. The product AcX, immediately after its separation, weight for weight, was more than a hundred times more active than the original actinium. The activity increased in the first day after removal to about 15 per cent. of its original value, and then decayed with the time according to an exponential law, falling to half value in about ten days.” A year earlier Giesel had reported a new substance separated from emanium (actinium) (1904Gi01) without any measurements (1905Go02).

Adapted from reference (2013Fr09)

- 1904Gi01 F. Giesel, Ber. Dtsch. Chem. Ges. **37**, 3963 (1904).
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