

# Scandium

**Scandium** is a [chemical element](#) with the [symbol](#) **Sc** and [atomic number](#) 21. A silvery-white metallic [d-block element](#), it has historically been classified as a [rare-earth element](#),<sup>[6]</sup> together with [yttrium](#) and the [lanthanides](#). It was discovered in 1879 by spectral analysis of the [minerals euxenite](#) and [gadolinite](#) from [Scandinavia](#).

Scandium is present in most of the deposits of rare-earth and [uranium](#) compounds, but it is extracted from these ores in only a few mines worldwide. Because of the low availability and the difficulties in the preparation of metallic scandium, which was first done in 1937, applications for scandium were not developed until the 1970s, when the positive effects of scandium on [aluminium alloys](#) were discovered, and its use in such alloys remains its only major application. The global trade of scandium oxide is 15–20 [tonnes](#) per year.<sup>[7]</sup>

The properties of scandium compounds are intermediate between those of [aluminium](#) and [yttrium](#). A [diagonal relationship](#) exists between the behavior of [magnesium](#) and scandium, just as there is between [beryllium](#) and aluminium. In the chemical compounds of the elements in group 3, the predominant [oxidation state](#) is +3.