1.27: Crystallographic orbit

In mathematics , an *orbit* is a general group-theoretical term describing any set of objects that are mapped onto each other by the action of a group. In crystallography, the concept of orbit is used to indicate a point configuration in association with its generating group.

From any point of the three-dimensional Euclidean space the symmetry operations of a given space group *G* generate an infinite set of points, called a **crystallographic orbit**. The space group *G* is called the **generating space group** of the orbit. Two crystallographic orbits are said configuration-equivalent if and only if their sets of points are identical.