Let us first define the natural species set ,

For example, to the n-propane combustion mechanism at low temperature (650K-900K),

shall have a number of distinct subsets. But not all the subsets out of is of chemical kinetic interest. Naturally one can choose to study subsets to which all elements contain the same atom, such as O atom, H atom or He atom etc. For example,

Notice , and differ one another in the number of Oxygen atom each element can have. In another word