

## Rydberg state

An electronic state that arises by the excitation of a valence electron to a diffuse atomic-like orbital. For instance, the lowest lying Rydberg state ( $n, 3S$ ) of  $\text{NH}_3$  can be described as resulting from the excitation of a non-bonding orbital to a  $3S$  Rydberg orbital.

**Source:**

PAC, 1999, 71, 1919 (*Glossary of terms used in theoretical organic chemistry*) on page 1961