

Calculation of Microstates in a particular Electronic Configuration

The overall arrangements of electronic clouds around the nucleus for a particular configuration are not the same as far as energy and angular momentum are concerned. These different electronic arrangements can be classified on the basis of overall spin orbital or total angular momentum.

The term microstates may be defined as overall electronic arrangements of a particular electronic configuration, which can be differentiated in terms of energy or angular momentum.

There are two types of electronic configurations for which the microstate calculation has to be carried out

- 1) when unpaired electrons are present in the same subshell: — eg:—
p¹ configuration, — we arrange the no. of ways in which a single electron can be filled in any p sub-shell.