

## chemical ionization

*in mass spectrometry*

This concerns the process whereby new ionization species are formed when gaseous molecules interact with ions. The process may involve transfer of an electron, proton or other charged species between the reactants. When a positive ion results from chemical ionization, the term may be used without qualification. When a negative ion is involved, the term negative ion chemical ionization should be used; note that negative ion formation by attachment of a free electron does not fall within this definition. Chemical ionization and chemi-ionization are two terms which should not be used interchangeably.

**See:** electron attachment

**See also:** chemi-ionization

**Source:**

PAC, 1991, 63, 1541 (*Recommendations for nomenclature and symbolism for mass spectroscopy (including an appendix of terms used in vacuum technology). (Recommendations 1991)*) on page 1547

Orange Book, p. 204

PAC, 1990, 62, 2167 (*Glossary of atmospheric chemistry terms (Recommendations 1990)*) on page 2179