

10.3.4 Spectrochemical techniques

The classification of methods and instruments and their terminology are summarised in Table 10.8. The terms *optical emission spectroscopy* and *optical emission spectrometry*, OES, were originally applied mainly to arc- and spark-emission techniques and this usage has partly been followed for more recent emission spectroscopic methods using flame and inductively coupled plasma sources, with the justification that this terminology avoided confusion with *Auger electron spectroscopy*, AES. Current usage has tended to employ the term *atomic emission spectroscopy/spectrometry*, AES and both terminologies, OES and AES have been advocated in IUPAC documents. It is recommended that the historical use of OES be now abandoned and the AES terminology be adopted, as in Table 10.8, for flame techniques as well as for inductively coupled plasma (ICPAES) and other excitation sources. Atomic in this sense is inclusive of ionic emission. It is felt that in most cases the context will avoid confusion with Auger electronic spectroscopy.