separated flame Also contains definition of: shielded flame *in flame spectroscopy*

in flame spectroscopy

In a premix burner, sometimes provision is made to screen the observed portion of the flame gases from direct contact with the surrounding air. This may be done either mechanically by placing a tube on top of the burner around the flame, which produces a zonal separation (separated flame), or aerodynamically by surrounding the flame with a sheath of inert gas that emerges from openings at the rim of the burner top (shielded flame).

Source:

Orange Book, p. 166