

## **Template: Instrumental Descriptions for GC-EI-MS**

(Advanced Practicals)

Gas chromatography electron ionization mass spectrometry (GC-EI-MS): *Trace 1300 GC* (*ThermoFisher Scientific*, Milano, Italy) connected to a *Thermo Scientific ISQ EI-MS* (*Walnut Creek, CA, USA*); injection of 1  $\mu\text{L}$  sample ( $c = 80\text{--}120 \mu\text{g mL}^{-1}$  in the indicated solvent); split injector at 250 °C; He (carrier gas) at 1  $\text{mL min}^{-1}$ ; *Zebron ZB-5ms* capillary column (*Phenomenex*, USA), 15 m length, 0.25 mm i.d., 0.25  $\mu\text{m}$  film thickness;\* gradient 20 °C  $\text{min}^{-1}$  from 60–200 °C, 50 °C  $\text{min}^{-1}$  from 200–250 °C, then isothermal for 3 min;\* EI at 70 eV; single stage quadrupole mass analyzer; mass range 50–600  $m/z$  at 2 scans  $\text{s}^{-1}$ ; data given in  $m/z$  (rel.%).

\* check for effectively used GC column and temperature profile.