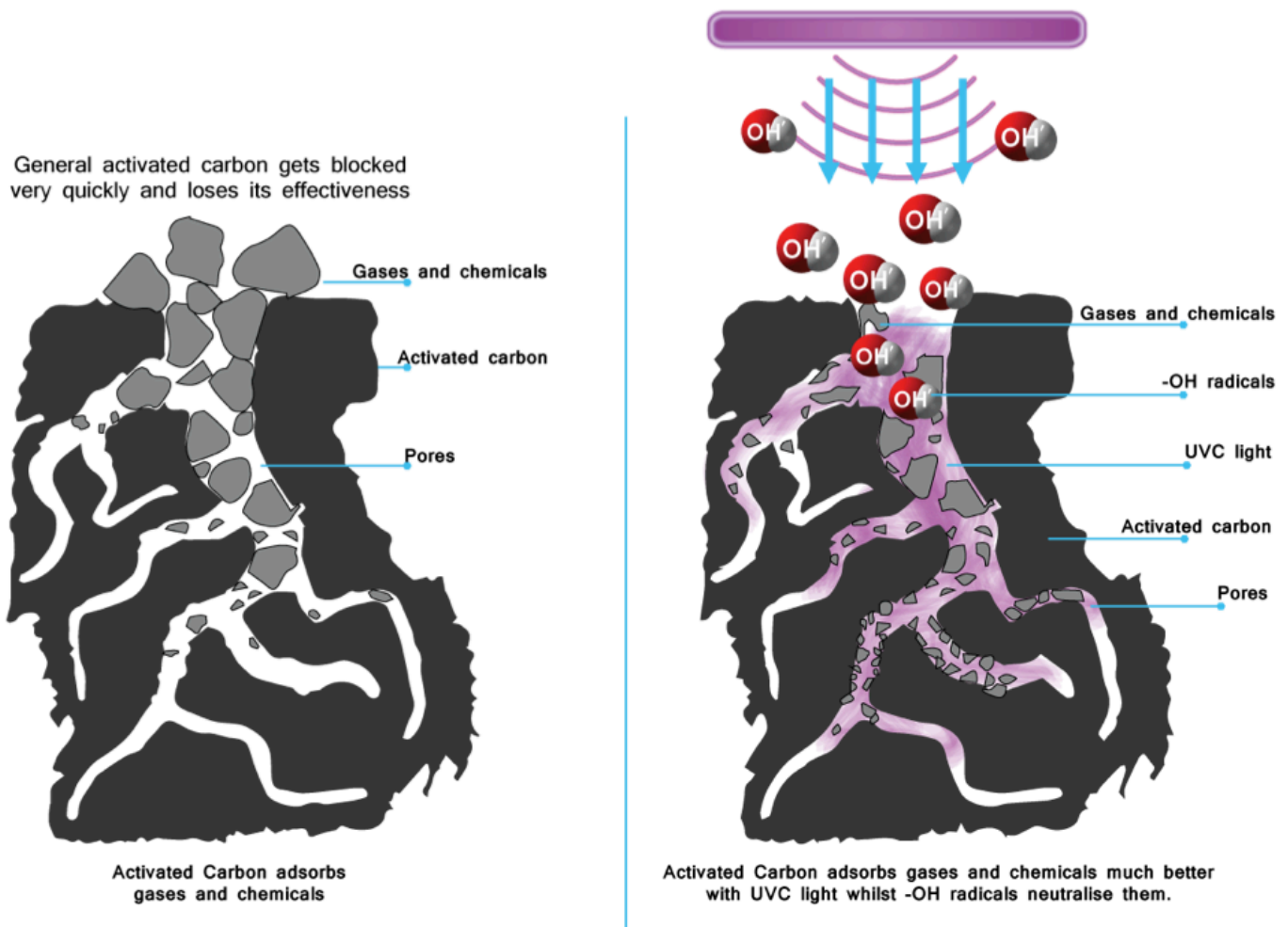


Based On The Langmuir Adsorption Model:

General activated carbon can not adsorb at a stable equilibrium.

In the presence of UVC + PCO and unstable equilibrium is achieved

Most air purification manufacturers increase the volume of activated carbon in their filters in order to try and get better results and will **qualify their statements** based on tables of what activated carbon is supposed to adsorb – *we do not class these as accurate test results*



The diagram above on the left displays how the activated carbon pores very quickly become blocked, this happens in a very short space of time.

The diagram above on the right shows how activated carbon works with UV light and PCO. The activated carbon traps the gases and chemicals giving the UV and -OH radicals resonance time in order to neutralize them, in turn keeping the carbon pores clear.