**proton affinity**

The negative of the enthalpy change in the gas phase reaction (real or hypothetical) between a proton (more appropriately hydron) and the chemical species concerned, usually an electrically neutral species to give the conjugate acid of that species. Proton affinity is often, but unofficially, abbreviated as PA.

*See also:* gas phase basicity

**Source:**
PAC, 1994, 66, 1077 (*Glossary of terms used in physical organic chemistry (IUPAC Recommendations 1994)*) on page 1153