

## List of symbols

Symbols (incl. sub- and superscripts)	Description
*	Incorrect expression
<i>A</i>	Atom
<b>abs</b>	Absolute
<b>app</b>	Applied
$\alpha$	Flux ratio
<i>b</i>	Balance
$\beta$	Dilution ratio
<b>chem</b>	Chemical
<b>conv</b>	Converted
<b>corr</b>	Corrected
<b>des</b>	Desired
<b>DF</b>	Dissociation fraction
$\Delta H^\circ$	Standard reaction enthalpy (kJ mol <sup>-1</sup> )
<i>E</i>	Energy (kJ <sup>-1</sup> , eV)
<b>EC</b>	Energy cost (kJ mol <sup>-1</sup> , kJ L <sup>-1</sup> , eV molecule <sup>-1</sup> )
<b>eff</b>	Effective
<b>EY</b>	Energy yield (mol kJ <sup>-1</sup> , L kJ <sup>-1</sup> , molecule eV <sup>-1</sup> )
<b>fin</b>	Final
$H_f$	Formation enthalpy (kJ mol <sup>-1</sup> )
<i>i</i>	Reactant
<b>in</b>	At reactor inlet/before reactor
<b>init</b>	Initial
<i>j</i>	(Gaseous) product
<i>k</i>	Condensed/deposited product
<b>LHV</b>	Lower heating value (kJ mol <sup>-1</sup> )
<b>meas</b>	Measured
$\mu$	Stoichiometric coefficient
$\dot{n}$	Molar flow (mol min <sup>-1</sup> )
$N_A$	Avogadro's constant (molecule mol <sup>-1</sup> )
$\eta$	Energy efficiency
<b>out</b>	At reactor outlet/after reactor
<i>p</i>	Pressure (bar, atm)
<i>P</i>	Power (kW)
<b>RE</b>	Relative error
<b>reac</b>	Reaction
<b>rep</b>	Reported
<i>s</i>	Diluting agent/standard component
<i>S</i>	Selectivity
<b>SEI</b>	Specific energy input (kJ mol <sup>-1</sup> , kJ L <sup>-1</sup> , eV molecule <sup>-1</sup> )
<i>T</i>	Temperature (K, °C)
<b>tot</b>	Total

$\dot{V}$	Volume flow (L min <sup>-1</sup> )
$V_m$	Molar volume (L mol <sup>-1</sup> )
$\chi$	Conversion
$y$	Molar/volume fraction
$Y$	Product yield