→ CO2 + * <-> CO2* → H2 + 2 * <-> 2 H* → CO2* + * <-> CO* + O* --- CO2* + H* <-> HCOO* + * --- CO2* + OH* <-> COOH* + O* --- CO2* + H2O* <-> COOH* + OH* --- CO2* + H2O* <-> HCOO* + OH* → COOH* + * <-> CO* + OH* → COOH* + * <-> COH* + O* ★ HCOO* + * <-> O* + HCO* * CO* + * <-> C* + O* * HCO* + * <-> CO* + H* * HCO* + * <-> CH* + O* --- COH* + * <-> CO* + H* --- COH* + * <-> C* + OH* --- C* + H* <-> CH* + * --- CH* + H* <-> CH2* + * --- CH2* + H* <-> CH3* + * --- HCO* + H* <-> CH2O* + * --- HCO* + H* <-> HCOH* + * --- COH* + H* <-> HCOH* + * --- HCOH* + * <-> CH* + OH* --- HCOH* + H* <-> CH2OH* + * --- CH2OH* + * <-> CH2* + OH* --- CH2O* + H* <-> CH2OH* + * --- CH2O* + * <-> CH2* + O* --- CH2O* + H* <-> CH3O* + * --- CH3O* + H* <-> CH3OH* + * --- CH3OH* + * <-> CH3* + OH* --- O* + H* <-> OH* + * --- OH* + H* <-> H2O* + * --- OH* + OH* <-> O* + H2O* --- H2O + * <-> H2O* --- CH4 + 2 * <-> CH3* + H* --- CH3OH + * <-> CH3OH* --- CH2O + * <-> CH2O*