

Methane (CH₄), n-hexane (C₆H₁₄, a model for gasoline) and coal (mostly graphite) can be used as fuels. Write the combustion reactions (reaction with O₂). What is the reaction enthalpy and Gibbs energy. Explain what you compute. Are these reactions spontaneous? Which produces most heat per CO₂ molecule. (You can equal heat with the enthalpy change.) Natural gas (mostly methane) is considered “ecologically” (or CO₂) friendly. Do you agree with this and why?

