ENERGY CONVERSION - THE EBOOK by Kenneth C. Weston

http://www.personal.utulsa.edu/ kenneth-weston/

Dedication and Prefaces

- 1. Fundamentals of Energy Conversion
- 2. Fundamentals of Steam Power
- 3. Fuels and Combustion
- 4. Aspects of Steam Power Plant Design
- 5. Gas Turbines and Jet Engines
- 6. Reciprocating Internal Combustion Engines
- 7. The Wankel Rotary Engine
- 8. Refrigeration and Air Conditioning
- 9. Advanced Systems: combined cycles, IGCC, cogeneration, turbofan engines, energy storage, and steam injected gas turbines
- 10. Nuclear Power Plants
- 11. Energy System Alternatives:
 - Part 1. Electromagnetic Principles, Batteries and Fuel Cells
 - Part 2. MHD, Solar Energy, a Hydrogen Economy, Concluding Remarks

Appendices

- A. Physical Constants and Conversion Factors
- **B.** Properties of Steam (English units)
- C. Table of Properties of Saturated Steam (SI units) Graphs of Properties of Steam (SI units)
- D. Enthalpy of Selected Substances
- E. Properties of Selected Coals
- F. Thermodynamic Properties of Refrigerants
- G. Psychrometric Chart for Moist Air at Sea Level
- H. Properties of the 1976 U.S. Standard Atmosphere
- I. Blackbody Spectral distribution Functions