

### **Self-study topics**

1. The concept of exergy. The physical meaning and field of application. Exergy analysis of processes and cycles.
2. The concept of moist air. Parameters of moist air. Determination of parameters of moist air. Hd-chart of moist air.
3. Joule-Thompson effect. Inversion of temperatures during throttling. Application area.
4. Carnot cycle on water vapor. History, physical meaning, scope.
5. NPP cycles on dissociating gases. Concept, features, prospects.
6. Concepts of high-temperature nuclear reactors. Features, prospects, scope.