

ТЕМЫ СРС КУРСА ФИЗПРОЦЕСС

Lecture 1. The mathematical modeling physical processes. Introduction.
Lecture 2. Mathematical modeling of atmospheric processes
Lecture 3. Mathematical modeling of pollution of oceans and seas.
Lecture 4. Mathematical modeling of short-term weather forecast.
Lecture 5. Mathematical modeling of tropical cyclones (tornadoes).
Lecture 6. Mathematical modeling of near space.
Lecture 7. Mathematical modeling of the hydrodynamics of aluminum electrolyzers
Lecture 8. Modeling the dynamics of ionospheric plasma
Lecture 9. Mathematical modeling of internal flows.
Lecture 10. Mathematical modeling of chemical processes in a confined space
Lecture 11. Fractional-Step Methods for three-dimensional parabolic equation.
Lecture 12. Fourier method for the three-dimensional pressure equation.
Lecture 13. RANS for nonstationare physical processes
Lecture 14. A Reynolds stress model for velocity and scalar fields.
Lecture 15. LES for physical processes.