

Advanced Plasma Engineering

2 units (selection)

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Target) The purpose of the lecture is to give an introduction to the behavior of plasmas and its treatment.

Outline) The elements of plasma physics and chemistry are introduced in this lecture.

Style) Lecture and exercise

Keyword) *plasma, nuclear fusion*

Goal)

1. Understanding on properties of plasmas
2. Understanding on an introduction to theories of plasma physics

Schedule)

1. Single-particle motions (1)
2. Single-particle motions (2)
3. Single-particle motions (3)
4. Plasma as fluids (1)
5. Plasma as fluids (2)
6. Waves in plasmas (1)
7. Waves in plasmas (2)
8. Waves in plasmas (3)
9. Diffusion and resistivity (1)
10. Diffusion and resistivity (2)
11. Equilibrium and stability (1)
12. Equilibrium and stability (2)
13. Introduction to controlled nuclear fusion (1)
14. Introduction to controlled nuclear fusion (2)
15. Introduction to controlled nuclear fusion (3)
16. Conclusions and future problems

Contents) <http://cms.db.tokushima-u.ac.jp/cgi-bin/toURL?EID=216870>

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