

Title Physics of Dielectrics (Fizyka dielektryków)	Code 1010402211010430661
Field Fizyka Techniczna	Year / Semester 1 / 1
Specjalty -	Course core
Hours Lectures: 2 Classes: - Laboratory: - Projects / seminars: -	Number of credits 3
	Language polish

Lecturer:

dr hab. Eryk Wolarz, prof. nadzw. PP
Katedra Spektroskopii Optycznej
ul. Nieszawska 13a
61-021 Poznań
tel. 61 6653164
eryk.wolarz@put.poznan.pl

Faculty:

Faculty of Technical Physics
ul. Nieszawska 13A
60-965 Poznań
tel. (061) 665-3160, fax. (061) 665-3201
e-mail: office_dtpf@put.poznan.pl

Status of the course in the study program:

Core course of the study for Technical Physics, Faculty of Technical Physics.

Assumptions and objectives of the course:

-Student will obtain knowledge about basic properties and applications of dielectrics.

Contents of the course (course description):

-Dielectric in the static electric field. Molecular description of the dielectric polarization. Local fields. Dielectric relaxation and its utilization. Phenomena of molecular orientation in dielectrics. Ferroelectrics, pyroelectrics and piezoelectrics and their application. Production, properties and application of electrets.

Introductory courses and the required pre-knowledge:

-Fundamental knowledge of electricity and condensed matter physics.

Courses form and teaching methods:

-Lectures supported by transparencies. The part of lectures is prepared as multimedial presentation.

Form and terms of complete the course - requirements and assessment methods:

-Written examination in form of several (up 10) questions, being introduction to oral examination.

Basic Bibliography:

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Additional Bibliography:

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