

# MARMARA UNIVERSITY

## PHYSICS DEPARTMENT

Main objective and goal of Physics Department, commenced education in 1992, are to improve thinking and reasoning potentials of the attending students, to direct towards scientific research and to bring up physicists of the future by providing the best level of education. In the field of physics, to gain and to research scientific knowledge are critical important both in terms of their values, and mental and intellectual satisfaction. Our department continues to provide training and research in Positronium, Nanodevices, Nanotechnology, Spectroscopy, Atmospheric and Biophysics Research Laboratories together with undergraduate Physics and Electronic Laboratories. Theoretical and applied courses are given in the department throughout Undergraduate Study of 4 years.

The objective of our department is to raise elite and equipped physicists, who have internalized professional knowledge, generate solutions for problems, pay importance on ethical and social values as well as to update our training-education and research programs via technological and scientific advancements, in the guidance of the teaching staff, who are equipped with the knowledge, experience and background as required by the era.

Our aim is to have qualified academic members, who do not make concessions on any matter and in any way in the national and international platforms and who act in accordance with scientific ethics, to acquire infrastructure

and equipment that are necessary to make advanced technological researches, and to use these facilities in the solution of the prior problems of our country. We also aim to ensure that the graduated students, who are raised in an environment where advanced researches are performed, are included in the list of most preferred graduates, and to ensure that our department occupies the leading position in Turkey as well as a reputable position in the international platform.



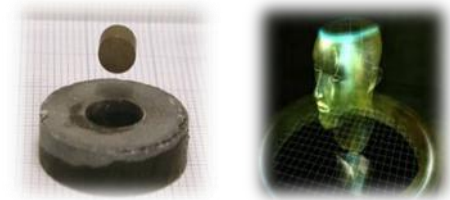
### Why Physics?

- ✓ An academic staff that has solid international experience
- ✓ 30% Weighted English Training
- ✓ First and long-established University, located at Anatolian side of the city
- ✓ one to one relationship between student and faculty
- ✓ Up-to-date and world standard curriculum
- ✓ education opportunity via widespread Erasmus network
- ✓ Double Major and Minor programs (Chemistry, Mathematics, Environment Engineering, Material Engineering, Computer Engineering)
- ✓ Social and Cultural Activities (Student Club Activities; Student Seminars; Seminars or Panels of Company CEO's and Senior Executives of Universities; TÜBİTAK, Çekmece Nuclear Research Centre, Technopark Visits)

- ✓ Sportive Activities (Basketball; Volleyball; Football; Mountaineering; Far East Sports; Folk Dancing; ... etc.)
- ✓ Scholarships (Rectorship; Health Culture Food Scholarship; TEV; Presidency; TÜBİTAK; ... etc.)
- ✓ Monday Physics Seminars (Sharing Info on the Scientific Activities of Leading Turkish and Foreign Academic Members)
- ✓ Being a preferred employee after graduation

### Skills Provided by Physics Department

- ✓ Analytical thinking skill
- ✓ Mathematical expression skill
- ✓ Learning to teach skill
- ✓ Philosophical approach
- ✓ Research and learning skills
- ✓ Scientific project development skill
- ✓ Predisposition towards team work
- ✓ Management techniques
- ✓ Expressive-impressive communication skills
- ✓ Professional behaviour and ethical approach



**Superconductivity and Laser Holography**

### Sectoral Study Fields



- ✓ Research & Development Institutions / Departments (CERN, TÜBİTAK, TAEK, ASELSAN)
- ✓ Technological Consultancy and Implementation Companies (Siemens, Vestel, Arçelik)
- ✓ Training Consultancy Department
- ✓ Government Agencies – Research Technologies Department (Ministry of Energy)
- ✓ Technological Infrastructure Companies
- ✓ Thanks to Double Principal Branch programs; Software Development Companies
- Financial Institutions (Banks)
- Package Software Distributors and Practitioners
- Chemical and Pharmaceutical Industry
- National Meteorology Institution



### Graduate Education Fields

In the Institutes of Pure and Applied Sciences (Physics, Chemistry, Mathematics, Environmental, Material Science, Geophysics, ... etc.)

In the Institute of Energy (Renewable and Nuclear Energy)

In the Institute of Nanotechnology Research and Applications

In the Institutes of Health Science ( In the Field of Medical and Biophysics)

In the Institute of Social Science (Management, ... etc.)



General View of the Positronium Laboratory

### Main Courses Taken in Physics Department

#### Compulsory Courses :

General Physics, Modern Physics, Solid State Physics, Quantum Mechanics, Mechanics, Statistical Mechanics, Mathematical Methods in Physics, Computer-based Courses, Electronic-based Courses.

#### Elective courses:

Laser Physics, Spectroscopic Methods, Atmospheric Physics, Semiconductor Devices, Superconductivity, Medical Physics, Special and General Theory of Relativity, .. etc.

#### For further information ..

Head of Physics Department: Prof. Dr. Uğur YAHŞI

uyahsi@marmara.edu.tr

www.marmara.edu.tr

Marmara University  
Faculty of Arts and Sciences  
Physics Department  
Göztepe Campus, PK: 34722  
Kadıköy / İstanbul  
Tel: +90 216 348 77 59  
Fax: +90 216 347 8783  
MARMARA UNIVERSITY  
FACULTY OF ARTS AND SCIENCES  
<http://fef.marmara.edu.tr>