


2L-04 INORGANIC MATERIALS SYNTHESIS AND RESEARCH LABORATORY

Department	Department of Chemistry	
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General Information	Research and development studies are being carried out in the fields such as molecular sensor, phosphazene chemistry, carbon nanotubes, stereochemistry, dyes (BODIPY, Pyrene, Phthalocyanine), inorganic polymers, dendrimers, OLED applications, and molecular spectroscopy.	
Laboratory Photo		
Applications	<ul style="list-style-type: none">○ Spectroscopic measurements (UV-Vis, fluorescence, lifetime, quantum yield, singlet oxygen yield etc.), Electrochemical measurements○ Thermal analyzes○ Synthesis of new inorganic materials for chemical sensor, OLED and similar applications	
Equipment	<ul style="list-style-type: none">○ Rotary Evaporator (Heidolph)○ Heated magnetic stirrers (Heidolph, Corning, etc.)○ Mettler Toledo micropipettes○ Etüv (Binder)○ Analytical and normal scales (Presica)○ UV-Fluorescent Lamp○ Pure water / ultrapure water device○ Ice machine○ Heater○ Heating magnetic stirrer with contact thermometer (Heidolph)	
Projects	<ul style="list-style-type: none">○ Tübitak, Ardeb 1001, 2015-2017, Investigation of Synthesis and Properties of Phosphazene Nuclear (II) Ion Selective Fluorescence Sensors, 214Z069.	

- Tübitak, Ardeb COST, 2015-2017, Preparation of Polyphosphazene Based Cathode Materials and Investigation of Usability Potentials in Rechargeable Batteries, 114Z762.
- Tübitak, Ardeb COST, 2014-2017, Investigation of Synthesis, Characterization and Redox Properties of Phosphazene Compounds Containing Stable Nitrogen-Oxides Radicals for Paint Sensitized Photovoltaic Cells, 114Z454.
- Tübitak, Ardeb 1001, 2010-2013, Investigation of Synthesis, Thermal, Photophysical and Electroluminescence Properties of Dendrimeric Piren Derivatives Containing Ring Phosphazene Nuclei, 110T142, 174.000,00
- Tübitak, Ardeb 1001, 2007-2009, Synthesis of Chiral
- Cyclophosphazene Compounds, Separation of Enantiomers and Determination of Absolute Configurations, 157.000,00, 106M539.
- Tübitak, Ardeb 1001, 2011-2013, Synthesis, Photophysical and Photochemical Properties of New Type Photosensitizers for Photodynamic Therapy, 111T066, 167.440.00.
- Tübitak, Ardeb 1001, 2011-2013, Analysis of Synthesis, Construct, Anisochronic and Stereogenic Properties of Phosphazene Compounds with N / O Ringed Phosphazene Compounds, 106T503, 176.625.000.
- Tübitak, Ardeb 1001, 2012-2014, A Different Look at Phosphazene Chemistry: Synthesis and Applications of Phosphazene-based New Type Ion Sensors, 112T278, 205.000.
- Tübitak, Ardeb COST, 2013-2015, Synthesis, characterization, investigation of surface and electrical conductivity properties of polyphenylene, polypyrrole and polyaniline grafted polyphosphazenes, 113Z314, 253.000.
- GTU, BAP, 2013-2015, Synthesis and Investigation of Photophysical Properties of Dendrimeric Conjugated Piren Derived Phosphazenes, 2013-A-015, 8.300.000
- Preparation and Characterization of Nanocomposites of
- Carboxylic Acid Functional Multilayered Carbon Nanotube / poly[{{4-pyridinoxy} {2- (2-methoxyethoxy) ethanoxy}}] Phosphazene Nanocomposites, 2012-A-08, 8.000.00 .
- GTU, BAP, 2011-2013, Investigation of Synthesis and
- Characterization of Boridazane Derived Cyclophosphazene Compounds, 2011-A-12, 8.300.000.
- GTU, BAP, 2010-2012, Preparation and Characterization of Multilayer Carbon Nanotube / Polyphosphazene Nanocomposite, 2010-A-05, 7.380.00.
- GTU, BAP, 2009-2011, Investigation of Synthesis Thermal and Photophysical Properties of Dendrimeric Phosphazene, 2009-A08, 6.500.00.
- GTÜ, BAP, 2007-2009, Investigation of Synthesis and
- Stereochemical Properties of Chiral Phosphazene Compounds, 2007-A-05, 5.500,00