


2L-02 BIOINORGANIC SYNTHESIS AND BIOLOGICAL ACTIVITY LABORATORY

Department	Department of Chemistry	
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General Information	<p>Inorganic Chemistry, Phosphazenes Chemistry.</p> <p>The design, synthesis and characterization of new inorganic and organic compounds which may show biological activity properties.</p> <p>Synthesis studies of phosphazenes with spermin, kumarin, BODIPY, paraben, thiazole and anthraquinone derivatives and investigation of their biologic activity properties.</p>	
Applications	<ul style="list-style-type: none">○ FT-IR, Mass, NMR, and X-Ray analysis○ UV-Visible and Fluorescence measurements○ Biological activity applications	
Laboratory Photograph		
Equipment	<ul style="list-style-type: none">○ Rotating Evaporator (Heidolph)○ Magnetic stirrer with hot plate (Heidolph, Corning etc.)○ Analytical and normal balances (Presica and Kern)○ UV-Fluorescent Lamp (Camag)	
Projects	<ul style="list-style-type: none">○ TÜBİTAK, Ardeb 1001, 108T355, (2008-2010) “The Synthesis of New Type Cyclophosphazatriene Derivatives of Spermine, Characterization and The investigation of Biological Activity”, 135.000 TL.○ GYTE Araştırma Fonu Projesi, Proje No:2004-A-2, (2004-2006), “The Reactions of Hexachlorocyclotriphosphazatriene Derivatives of Spermine with 2,2-dimetil-1,3-propanediol and Pyrolidine ”, 5.990 TL.	

- GYTE Bilimsel Araştırma Projesi, Proje No:2008-A-02, (2008-2010), “The Reactions of 2,2-(N-Methyl-1',3'-diaminopropan)-4,4,6,6-tetraklorosiklotrifosfazatriene with Alcohols”, 7.420 TL.
- GYTE Bilimsel Araştırma Projesi, Proje No: 2011-A-04, (2011-2012), “The Synthesis of New Type Full Substituted Spermine Bridged Cyclophosphazene which is Potential Biologically Active Molecules”4.790 TL.
- TÜBİTAK, Ardeb 1001, 111T085, (2011-2014), “The Synthesis of Fluorenylidene- Bridged Cyclophosphazenes, Characterization and The Investigation of Fluorescence and Biological Activity”, 233.000 TL.
- GYTE Bilimsel Araştırma Projesi, Proje No: 2013-A-013, (2013-2014) “The investigation of the reaction of Cyclophosphazene with Parabens” , 8.675 TL.
- TÜBİTAK, Ardeb, 1002, 114Z641 (2014-2015), “The reactions of single / double fluoren bridged cyclotriphosphazene compounds with parabens, The investigation of antimicrobial and DNA-binding activity of the reaction products”, 30.000 TL.
- GYTE Bilimsel Araştırma Projesi, Proje No: 2014-A-02, (2014-2015), “Structural and Fluorescence Properties of The Derivatives of Thiazole and Thiadizole Cyclotriphosphazenes”, 7.740 TL.
- GTU Bilimsel Araştırma Projesi, Proje No: 2015 A-07, (2015-2016), “The investigation of Biological and Fluorescence Properties of The Derivatives of 1,1'-methylene-bis(2-naphthol) Cyclotriphosphazenes”, 13.025 TL.
- TÜBİTAK, Ardeb 1001, 114Z445, (2014-2016), “The Synthesis of BODIPY Substitute Cyclotriphosphazene Compounds as a Photosensitizer Candidate for Treating Cancer, Characterization, the Investigation of Fluorescence and Singlet Oxygen Generation Properties”, 295.000 TL.