**Lalehan Özalp, Ph.D.**

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***Date and place of birth:*** *2 February, 1987, İstanbul*

***E-mail:***[*lalehanozalp@marun.edu.tr*](mailto:lalehanozalp@marun.edu.tr)

* **Ph.D., *Institute of Pure and Applied Sciences, (Biochemistry), Marmara* University, İstanbul, Turkey**

February 2017 – April 2022

Thesis: Investigation of the effects of novel azole compounds on the activity of mPGES-1 enzyme

Supervisor: Prof. Ayşe Ogan

Co-Supervisor: Prof. İlkay Küçükgüzel

* **M.Sc*., Institute of Pure and Applied Sciences, (Biochemistry), Marmara* University, İstanbul, Turkey**

**Education**

September 2014 – December 2016

Thesis: *Investigation of phthalocyanine-DNA binding with in silico methods*

Supervisor: Professor Safiye Erdem

Co-Supervisor: Assist. Prof. Başak Yüce-Dursun

* **Bs., Chemistry Education, Yıldız Technical University, İstanbul, Turkey**

September 2004 – June 2010

* **Bs., Erasmus Exchange Student, Chemistry Department, Aarhus University, Aarhus, Denmark**

August 2008 – February 2009

* **Uskudar High School of Science, İstanbul, Turkey** September 2001-June2004

**Internship**

* **Department of Rheumatology, Karolinska Institutet, Solna, Stockholm**

August 2019 – September 2019

*Lab Experience (Biochemistry Laboratory)*

**Enzyme (mPGES-1) activity assay**

Supervisor: Prof. Per-Johan Jakobsson

* Extraction of membrane fractions from plasmid and performing activity assays.
* **Department of Chemistry, Yıldız Technical University, Istanbul**

June 2008- July 2008

*Lab Experience (Biochemistry Laboratory)*

**Purification and activity assay of pectinase enzyme**

Supervisor: Prof. İnci Arısan

* Cell (Trichoderma reesei) proliferation assay, induction of pectinase enzyme in medium containing various glycerin concentrations.
* YÖK 100/2000 Doctorate Fellowship (March 2017 – March 2021)

**Awards & Scholarships**

* TUBİTAK 2211/C National PhD Scholarship Program in the Priority Fields in Science and Technology (March 2020 – April 2022)

**Instrumental**

**Skills**

**Software Skills & Languages**

* Gel Electrophesis, UV-VIS Spectroscopy, Chromatographic methods, ELISA, Solid Phase Extraction
* Gaussian, Spartan, PyMol, Glide (Schrödinger), Autodock Tools, Autodock Vina, Molegro, Discovery Studio, MolSoft, VMD, GROMACS, NAMD, Chimera, Dragon, ChemDraw, QtGrace
* Python (Intermediate level)
* English: Advanced(YOKDIL = 96.25/100)

**Languages**

* Turkish: Native
* ***Research Articles***

**Publications**

1. Yuce-Dursun, B., Danış, Ö., Ozalp L., Sahin E., Demir, S., Erdem, S.S., Ogan, A. (2022). *In vitro* and *in silico* investigation of inhibitory activities of 3-arylcoumarins and 3- phenylazo-4-hydroxycoumarin on MAO isoenzymes. Structural Chemistry, 1-15.
2. Ali, H.E.A., Ozalp, L., Danış, Ö., Odabaş, Z. (2022). Synthesis and human monoamine oxidase inhibitory activity of novel C2-, C3- and C4-substituted phthalonitriles. Bioorganic & Medicinal Chemistry Letters, 74, 128917.
3. Ozalp, L., Küçükgüzel, İ., & Ogan, A. (2022). *In silico* discovery of potential azole-containing mPGES-1 inhibitors by virtual screening, pharmacophore modeling and molecular dynamics simulations. Structural Chemistry, 33(4), 1157-1175.
4. Ozalp, L., Danış, Ö., Yuce‐Dursun, B., Demir, S., Gündüz, C., & Ogan, A. (2020). Investigation of HMG‐CoA reductase inhibitory and antioxidant effects of various hydroxycoumarin derivatives. Archiv Der Pharmazie, 353(10), 1900378.
5. Ozalp, L., Erdem, S. S., Yüce-Dursun, B., Mutlu, Ö., & Özbil, M. (2018). Computational insight into the phthalocyanine-DNA binding via docking and molecular dynamics simulations. Computational Biology and Chemistry, 77, 87-96.

* ***Oral presentations***

**Professional Meetings and Activities**

1. Ozalp, L., Erdem, S.S., Ozbil, M. “The Effect of Substituents on Phthalocyanine-DNA Binding: Molecular Dynamics and Docking Studies”, International conference on applied mathematics, modeling and Life Sciences. 03-05 October 2018, Istanbul- Turkey.
2. Ozalp, L., Erdem, S.S., Yuce-Dursun, B. “In Silico Modelling of DNA and Zn-Phthalocyanine Binding”, BIOVIA Users Meeting with International Participation, 06 May 2016, Istanbul- Turkey.
3. Investigation of concentration effect on pectinase induction, Yıldız Technical University, 2010, Istanbul.
4. FRET and Green Fluorescent Proteins, Aarhus University, 2009, Aarhus.

* ***Poster Presentations***

1. Ozalp, L., Küçükgüzel, İ., Ogan, A. In silico discovery of potential azole-containing mPGES-1 inhibitors by virtual screening, pharmacophore modeling and molecular dynamics simulations, BAU 8th Drug Design Congress, 15-17 December 2022, Istanbul-Turkey.
2. Alamin Ali, H. E., Ozalp., L., Danıs, Ö., Odabaş, Z. Synthesis and human monoamine oxidase inhibitory activity of novel C2-, C3- and C4-substituted phthalonitriles, BAU 8th Drug Design Congress, 15-17 December 2022, Istanbul-Turkey.
3. Ozalp L., Danis O., Yuce-Dursun, B., Demir, S., Gunduz C., Ogan A. *In vitro* and *in silico* investigation of antioxidative and HMG-CoA reductase inhibitory effects of various coumarin derivatives, International Congress of Molecular Medicine, 5-7 September 2019, Istanbul-Turkey.
4. Ozalp L., Erdem, S. S., Yuce-Dursun, B., Mutlu, O., Ozbil, M.Computational insight into the phthalocyanine - DNA binding via docking and molecular dynamics simulations, BAU 6th Drug Design Congress, 13-15 December 2018, Istanbul-Turkey.
5. Ozalp L., Erdem S.S., Ozbil M. Molecular dynamics and docking studies on the interactions of DNA with quaternary metallo-phthalocyanines. Chemistry Via Computation, 30 October 2017, Istanbul- Turkey.
6. Ozalp L., Erdem S.S., Yuce-Dursun B. In silico modelling of DNA - Quaternized metallophthalocyanine binding (M= Zn, Ni, Cu)BAU 4th Drug Design Congress, 13 October 2016, Istanbul- Turkey.
7. Ozalp L, Erdem S. S., Yuce-Dursun B.Investigation of phthalocyanine-DNA binding with in silico methods. 4th Drug Chemistry Congress, 17-20 March 2016, Kuşadası-Turkey.

* ***Workshops***

1. “Molecular dynamics simulations of transmembrane proteins”, held by the Computational Biochemistry Laboratory of Gebze Technical University, 13 May, 2022, Istanbul – Turkey.
2. Schrödinger Glide. Workshops held by BAU Drug Design Congress, 12 December, 2018, Istanbul-Turkey.
3. MetaCore/MetaDrug. Workshops held by BAU Drug Design Congress, 12 December, 2018, Istanbul-Turkey.
4. HADDOCK. Biophysics Summer School, 25-29 June 2018, Istanbul-Turkey.

**Teaching**

* Biochemistry Laboratory Experiments (2020 January - March)

**Interests**

* **Academic**: Enzyme inhibition, drug-enzyme interactions, drug design: QSAR, virtual screening, drug repurposing, DNA-small molecule interactions, Molecular Dynamics simulations, molecular docking, data science.
* **Non-Academic**: Reading, trekking.

**References**

* Prof. Ayşe Ogan

Department of Chemistry, Marmara University, İstanbul, Turkey.

E-mail: [aogan@marmara.edu.tr](mailto:aogan@marmara.edu.tr)

* Prof. Safiye Sağ Erdem

Department of Chemistry, Marmara University, İstanbul, Turkey.

E-mail: [erdem@marmara.edu.tr](mailto:erdem@marmara.edu.tr)