


Curriculum vitae

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|  | Name, academic position and degree |
| | Iva Vangelova Valkova, PhD Head assistant professor |
| Affiliation – research organization, department | |
| Medical University-Sofia Faculty of Pharmacy, Department of Chemistry Dunav str. 2, 1000 Sofia, Bulgaria e-mail: ivalkova@pharmfac.mu-sofia.bg | |
| Education | |
| 1995 Master Degree in Pharmacy, Medical University-Sofia, Faculty of Pharmacy | |
| Academic positions in the last five years | |
| Head Assistant Professor of Physical chemistry, Faculty of Pharmacy, Medical University- Sofia | |
| Main research area and subareas | |
| <ul style="list-style-type: none"> Hits and Leads identification and optimisation by <i>in silico</i> ligand- and structure-based approaches - QSAR, Molecular docking <i>in vitro</i> analysis of GIT, BBB and skin permeability of compounds <i>in vitrol</i> investigations of intermolecular interactions and binding by Isothermal titration calorimetry (ITC) and Surface plasmon resonance (SPR) | |
| Additional research areas and subareas | |
| <ul style="list-style-type: none"> Bioinformatics | |
| Specializations abroad and international collaborations | |
| 2013 On-line course Statistics: Making Sense of Data, University of Toronto, Toronto(Canada) 2005 ECB Training Course on (Q)SAR, European Commission, Directorate General JRC and Institute for Health and Consumer Protection European Chemicals Bureau 2003 Visiting scientist at National institute of chemistry, Ljubljana, Slovenia, Project IMAGETOX, Project title: Neural networks investigation of structure-mutagenicity relationships | |
| Scientific awards and membership in scientific societies | |
| Bulgarian Pharmaceutical Society | |
| Scientific publications in the field of the research project | |

Kondeva-Burdina M, Mitkov J, Valkova I, Peikova L, Georgieva M, Zlatkov A. Quantitative Structure-Neurotoxicity Assessment and In Vitro Evaluation of Neuroprotective and MAO-B Inhibitory Activities of Series N'-substituted 3-(1,3,7-trimethyl-xanthin-8-ylthio)propanehydrazides. *Molecules*. 2022 Aug 20;27(16):5321

Simeonova R, Vitcheva V, Kostadinova I, Valkova I, Philipova I, Stavrakov G, Danchev N, Doytchinova I. Biochemical studies on a novel potent acetylcholinesterase inhibitor with dual-site binding for treatment of Alzheimer's disease. *C. R. Acad. Bulg. Sci.* 74, 219-225, 2021.

Simeonova R, Zheleva D, Valkova I, Stavrakov G, Philipova I, Atanasova M, Doytchinova I. A novel galantamine-curcumin hybrid as a potential multi-target agent against neurodegenerative disorders. *Molecules* 26, 1865, 2021.

Simeonova R, Vitcheva V, Kostadinova I, Valkova I, Philipova I, Stavrakov G, Danchev N, Doytchinova I. In Vivo Studies on Novel Potent Acetylcholinesterase Inhibitors with Dual-site Binding for Treatment of Alzheimer's Disease. *C. R. Acad. Bulg. Sci.* 74, 906-913, 2021.

M. Kondeva-Burdina, I. Valkova, L. Andonova, M. Georgieva, V. Tzankova, Al. Zlatkov. Quantitative structure-hepatotoxicity assessment of series arylpiperazine-n1-substituted theobromine derivatives. *Farmacia*, 2020, 68(1): 56-64

Andonova L, Valkova I, Zheleva-Dimitrova D, Georgieva M, Momekov G, Zlatkov A. Synthesis of New N1Arylpiperazine Substituted Xanthine Derivatives and Evaluation of their Antioxidant and Cytotoxic Effects. *Anticancer Agents Med Chem.* 2019;19(4):528-537

Doytchinova I, Atanasova M, Valkova I, Stavrakov G, Philipova I, Zhivkova Z, Zheleva-Dimitrova D, Konstantinov S, Dimitrov I. Novel hits for acetylcholinesterase inhibition derived by docking-based screening on ZINC database. *J. Enz. Inh. Med. Chem*, 33, 768-776, 2018

Hristova M, Atanasova M, Valkova I, Andonova L, Doytchinova I, Zlatkov A. Molecular docking study on 1-(3-(4-benzylpiperazin-1-yl)propyl)-3,7-dimethyl-1H-purine-2,6(3H,7H)-dione as an acetylcholinesterase inhibitor. *CBU International Conference on Innovations in Science and Education*, Prague, March 21-23, 2018

Stavrakov G, Philipova I, Lukarski A, Valkova I, Atanasova M, Dimitrov I, Konstantinov S, Doytchinova I. Acetylcholinesterase inhibitors selected by docking-based screening - proof-of-concept study. *Bulg. Chem. Commun.* 50, Special Issue J, 40-48, 2018

Participation in projects supported by BNSF in the last five years

Competition (type and year):

Number and date of the contract:

Title:

Project coordinator:

Status of the project: (running, with intermediate or final report under review, completed)

Evaluation of the project implementation (for completed projects):

Participation in projects supported by other sources in the last five years

Financing organization: Medical Science Council of the Medical University-Sofia

Type of the competition and year: Competition GRANT 2019

Number or acronym of the project: Contract Nr. D-85/23.04.2019

Title: „In silico and in vitro investigation of xanthine derivatives as inhibitors of MAOB enzyme”

Project coordinator: Head assist. prof. Iva Valkova, PhD

Status of the project: completed