

## DR. ALEXEY YU. FEDOROV

<b>UNIVERSITY</b>	National Research Lobachevsky State University of Nizhny Novgorod
<b>PROFICIENCY IN ENGLISH</b>	Advanced
<b>MAJOR OF PH.D. PROGRAMME</b>	Chemical Science
<b>CODE OF PH.D. PROGRAMME</b>	04.06.01
<b>RESEARCH PROJECTS OF PROSPECTIVE SCIENTIFIC SUPERVISOR</b>	<b>RESEARCH PROJECT TEAM PARTICIPANT:</b> Grants of RFFFR, RSF in organic chemistry, 2018-2020
<b>TOPICS FOR PROSPECTIVE PH.D. RESEARCH</b>	<ul style="list-style-type: none"><li>• Medicinal Chemistry</li><li>• Colchicine Alkaloids and Synthetic Analogues</li></ul>
 <p>Research supervisor: <b>DR. ALEXEY YU. FEDOROV,</b> Professor of the Russian Academy of Science, Doctor of Science in Chemistry.</p>	<b>RESEARCH AREA:</b> Organic Chemistry
	<b>SUPERVISOR'S RESEARCH INTERESTS:</b> <ul style="list-style-type: none"><li>• organic synthesis,</li><li>• catalysis,</li><li>• medicinal chemistry</li></ul>
	<b>RESEARCH HIGHLIGHTS:</b> <ul style="list-style-type: none"><li>• Highly-equipped labs &amp; research environment.</li><li>• Grant project involvement.</li></ul>
	<b>SUPERVISOR'S SPECIFIC REQUIREMENTS:</b> <ul style="list-style-type: none"><li>• <i>Background knowledge in Organic Chemistry, Organic Synthesis, Biochemistry, Spectroscopy and Chromatography (NMR, mass-spectrometry, HPLC), Retrosynthesis</i></li></ul>
	<b>SUPERVISOR'S PUBLICATIONS:</b> <ol style="list-style-type: none"><li>1. Iu.A. Gracheva, E.S. Shchegravina, H.-G. Schmalz, I.P. Beletskaya, A.Yu. Fedorov. Colchicine Alkaloids and Synthetic Analogues: Current Progress and Perspectives. <i>J. Med. Chem.</i>, 2020, 10.1021/acs.jmedchem.0c00222</li><li>2. V.F. Otvagin, N.S. Kuzmina, L.V. Krylova, A.B. Volovetsky, A.V. Nyuchev, A.E. Gavryushin, I.N. Meshkov, Y.G. Gorbunova, Y.V. Romanenko, O.I. Koifman, I.V. Balalaeva, A.Y. Fedorov. Water-Soluble Chlorin/Arylaminoquinazoline Conjugate for Photodynamic and Targeted Therapy. <i>J. Med. Chem.</i>, 2019, 62, 24, 11182–11193.</li><li>3. N.S. Sitnikov, Yu.B. Malysheva, A.Yu. Fedorov, H.-G. Schmalz. Design and Synthesis of New Protease-Triggered CO-Releasing Molecules. <i>Eur. J. Org. Chem.</i> 2019, 40, 6830–6837.</li><li>4. E.S. Shchegravina, D.S. Tretiakova, A.S. Alekseeva, T.R. Galimzyanov, Y.N. Utkin, Y.A. Ermakov, E.V. Svirshchevskaya, V.V. Negrebetsky, N.Yu. Karpechenko, V.P. Chernikov, N.R. Onishchenko, E.L. Vodovozova, A.Yu. Fedorov, I.A. Boldyrev. Phospholipidic Colchicinoids as Promising Prodrugs Incorporated into Enzyme-Responsive Liposomes: Chemical, Biophysical, and Enzymological Aspects. <i>Bioconjugate Chem.</i>, 2019, 30 (4), 1098-1113.</li><li>5. V.F. Otvagin, A.V. Nyuchev, N.S. Kuzmina, I.D. Grishin, A.E. Gavryushin, Yu.V. Romanenko, O.I. Koifman, D.V. Belykh, N.N. Peskova, N.Yu. Shilyagina, I.V. Balalaeva, A.Yu. Fedorov. Synthesis and biological evaluation of new water-soluble photoactive chlorin conjugate for targeted delivery. <i>Eur. J. Med. Chem.</i>, 2018, 144, 740–750.</li></ol>