**ALEXANDER V. NYUCHEV**

| | |
|---|---|
| University | Lobachevsky state university of Nizhny Novgorod |
| Level of English proficiency | C1 |
| Educational program and field of the educational program for which the applicant will be accepted | 1.4. Chemical Sciences<br>1.4.3. Organic chemistry |
| List of research projects of the potential supervisor (participation/leadership) | 1. Ministry for Science of Russia, FSWR-2024-0002 "Development of effective methods for obtaining biocompatible compounds with physiological activity, study of their physicochemical and biological properties", 2024–2026, grant leader.<br>2. Russian Scientific Foundation 21-73-10230, "Cascade prodrug for photodynamic and targeted therapy of tumor diseases", 2021–2024, grant leader.<br>3. Ministry for Science of Russia, FSWR-2021-014 "Synthesis of biologically active compounds with antitumor, antiinflammatory, antifibrous and antiviral properties, study of their physical-chemical and biological properties", 2021–2023, grant leader.<br>4. Russian Foundation for Basic Research, "Elaboration of targeted photoactivated conjugates based on natural and synthetic porphyrins for combined antitumor therapy", 2018–2020, grant leader. |
| List of the topics offered for the prospective scientific research | • Synthetic organic chemistry in continuous-flow<br>• Development of green organic synthesis methodology in continuous-flow<br>• Application of continuous-flow technology for industrial application<br>• Gas/liquid reactions in continuous-flow<br>• Photoredox catalysis in continuous-flow<br>• Green synthetic photochemistry<br>• Development of methodology for synthesis fluorine-containing compounds |
|  <br>Research supervisor:<br>Alexander V. Nyuchev<br>PhD (Lobachevsky state university of Nizhny Novgorod) | **Chemistry and Materials Sciences** |
| | **Supervisor's research interests**<br>• Synthetic organic chemistry<br>• Synthetic photochemistry<br>• Flow chemistry |
| | **Research highlights**<br>Actual research field in organic chemistry |
| | **Supervisor's specific requirements**<br>• Knowledge of organic chemistry<br>• Knowledge of analytical methods for organic chemistry (NMR, IR, UV and mass spectrometry, methods of gas, liquid and preparative column chromatography)<br>• Good command of English |
| | **Last 5 years**:<br>23 papers, all in *Web of Science, Scopus, RSCI* |

| | |
|---|---|
| | *ResearcherID:* ***B-8686-2013***<br>*Scopus AuthorID:* ***41661885100***<br>*ORCID:* ***0000-0002-0460-0543***<br><br>1. E.N. Boronin, M.M. Svetlakova, I.I. Vorobyov, Y.B. Malysheva, Y.V. Polushtaytsev, S.N. Mensov, A.V. Vorotyntsev, A.Yu. Fedorov, T. Noël, **A.V. Nyuchev**. Photochemical organocatalytic heteroarylation of anilines and secondary alicyclic amines in continuous-flow. *Reaction Chemistry & Engineering* **2024**, *9*, 1877−1882.<br><br>2. T. Wan, L. Capaldo, G. Laudadio, **A.V. Nyuchev**, J.A. Rincón, P. García-Losada, C. Mateos, M.O. Frederick, M. Nuño, T. Noël. Decatungstate-mediated C(sp3)–H Heteroarylation via Radical-Polar Crossover in Batch and Flow. *Angewandte Chemie International Edition,* **2021**, *60 (33)*, 17893–17897.<br><br>3. **A.V. Nyuchev**, T. Wan, B. Cendón, C. Sambiagio, J.J.C. Struijs, M. Ho, M. Gulías, Y. Wang, T. Noël. Photocatalytic trifluoromethoxylation of arenes and heteroarenes in continuous-flow. *Beilstein Journal of Organic Chemistry,* **2020,** *16,* 1305–1312.<br><br>4. S. Govaerts, **A. Nyuchev**, T. Noel. Pushing the boundaries of C-H bond functionalization chemistry using flow technology. *Journal of Flow Chemistry*, **2020**, *10*, 1, 13–71.<br><br>5. N.S. Kuzmina, V.F. Otvagin, A.A. Maleev, M.A. Urazaeva, **A.V. Nyuchev**, S.K. Ignatov, A.E. Gavryushin, A.Yu. Fedorov. Development of novel porphyrin/combretastatin A-4 conjugates for bimodal chemo and photodynamic therapy: synthesis, photophysical and TDDFT computational studies. *Journal of Photochemistry and Photobiology A: Chemistry,* **2022**, *433*, 114138. |