

**Plan  
research work of the Department of Physics for the 2024-2025 academic year**

No	. Name of the work	Deadlines Completion dates	Performers	Perform ers of
1	the Mark on completion 1 R & D implementation: Initiative topics: 1.1 Spatial structure and conformational characteristics of alkaloid derivatives 1.2 Computer simulation of electro-optical measurements of pre-breakdown electric fields in water 1.3 Energy transformations in crystals and complex organic molecules	01.09.2024- 30.06.2025 30.06.2025	Turdybekov D. M.  Yasinsky V. B.  Mazhenov N. A.	
2	Participation in competitions for state budget financing: - "Spatial structure and stereochemistry of derivatives of quinolysin alkaloids and sesquiterpenoids of the guaiane series"– - "Computer modeling of electro-optical measurements of pre-breakdown electric fields in liquids"	01.09.2024- 30.06.2025. 30.06.2025	Turdybekov D. M.  Kuznetsova Yu. A.	
3	Publications of research results: 3.1 Prepare 8 articles, including 4 in journals included in <a href="#">the Web of Science and Scopus databases: COXNVO – 4</a> 3.2 Take part in conferences: international – 5; republican-5.01.09.2024-	30.06.2025 30.06.2025	PPS	
4	Inventive activity: 4.1 Submission of applications for IC-5 01.09.2024-	30.06.2025 PPP	Teaching staff	
6	International cooperation: 6.1 Cooperation with the Novosibirsk Institute of Organic Chemistry. Vorozhtsova street. 6.1. Continue cooperation with the Faculty of Power Engineering (PHE) of Novosibirsk State Technical University (NSTU) and the Department of Energy Physics. Conduct joint research in the field of studying pre-breakdown processes in liquids by electro-optical methods and computer modeling methods. 6.2. Continue cooperation with the Department of Solid State Optics of St. Petersburg State University. Invite Professor M. B. Smirnov to conduct scientific seminars, lectures and presentations in the field of modeling the dynamics of complex crystal lattices for teaching staff, undergraduates, undergraduates and doctoral students.	01.09.2024- 30.06.2025 30.06.2025	Turdybekov D. M. Mazhenov N. A. Kuznetsova Yu.A.	

**Head of the Department of Physics  
Turdybekov**

**D. M.**