

## Review of the scientific supervisor

on the final qualification work of Ivan Shershnev

"The use of diazobutyrolactone in the Büchner-Curtius-Schlotterbeck reaction  
of cyclic ketones»

The chemistry of diazo compounds, despite its sesquicentennial history, still remains a dynamically developing field of organic chemistry. The goal of Ivan Shershnev's final qualification work was to study the possibility of involving cyclic  $\alpha$ -diazocarbonyl compounds in the reaction of formal insertion of diazo compounds in the carbon-carbon bond of cyclic ketones to produce spirocyclic compounds. The graduate student independently performed all the experimental work, including the synthesis of the necessary initial compounds, optimization of the target reaction conditions, and isolation of new compounds in pure form. All the tasks assigned to the graduate student have been completely solved. Ivan showed interest and hard work in the implementation of synthetic work, thoughtfulness in writing the text of the final qualification work. He mastered the basic techniques of organic synthesis, isolation, purification of reaction products, as well as methods of structure and composition determination. Based on the results of the final qualification work, an article was published in the journal Tetrahedron Letters.

I believe that Ivan Shershnev's final qualification work deserves an excellent rating.

*An important remark.* While uploading the text of the final qualification work to the BlackBoard system, it turned out that the title of the work indicated on the title page did not correspond to the previously stated one (the error was an extra letter " $\alpha$ "). After the file with the corrected name was re-uploaded, the system checking for borrowings gave a result of 0-1%, since it took into account the match with the original version. I confirm that the text of the final qualification work was written by the graduate student independently, and attach a file with an assessment of the original version's originality (99%).

Scientific supervisor



Associate professor, Dr. A. S. Pankova

## Справка о проверке на наличие заимствований

Имя файла: Диплом\_Шершнеv.docx  
Автор: (st055675) Шершнеv Иван Алексеевич  
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### Результат проверки

Оценка оригинальности документа: **99%**

Оригинальные фрагменты: 99,31%

Обнаруженные заимствования: 0,69%

Цитирование: 0,00%

99%

0%

Работу проверил: *Не указано*

Дата:

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