

OPINION



From: Associate Professor, PhD. Eng. Metodi Kirilov Mladenov, University of Chemical Technology and Metallurgy, Sofia, 1756, "St. Kliment Ohridski", No. 8, phone: 02/8163 262.

Subject: Competition for obtaining an educational and scientific degree "doctor" in a professional direction 5.10. "Chemical technologies", in the doctoral program "Technology of natural and synthetic fuels".

Information about the contest

I participate as a member of the scientific jury for the competition according to the Order of the Rector of the University "Prof. D-r. Asen Zlatarov", Burgas – No. УД-255/15.07.2024.

1. Fulfillment of the requirements for awarding the educational and scientific degree doctor

A total of 5 publications, in which the doctoral student is an author/co-author, are presented in the competition. No citations to the applicant's works have been reported.

Doctoral student Ivan Atanasov Ilchev has fulfilled the minimum national requirements and the requirements of the Regulations for the terms and conditions for acquiring scientific degrees and academic positions at the University "Prof. D-r. Asen Zlatarov"-Burgas (Art. 43, Paragraph 3, Item 4), as follows:

- Grup A, indicator 1 – 50 points;
- Grup B, indicator 2 – not required;
- Grup B, indicator 3 or 4 – not required;
- Grup Г, sum of indicators from 5 to 11 – 46,1 points;
- The other indicator groups are not required.

2. Brief description of the dissertation work and the presented scientific works/publications

Ivan Ilchev's dissertation is related to research on the process of hydrocracking of tar in the enterprise "Lukoil Neftohim Burgas" AD and the possibilities for improving the technological parameters. The results presented in the experimental part are new and contribute to increasing the utilization rate of secondary raw materials in the road bitumen production process in the aforementioned petrochemical plant.

The candidate presents four publications in refereed and indexed journals that reflect the main results of the dissertation work. The candidate also has one publication in a specialized scientific journal, in which he is an independent author. No data has been provided for the presentation of the scientific results included in the dissertation at scientific forums. However, the candidate fully satisfies the requirements regarding the minimum number of points for indicators from group Г, namely he has 46.1 points with the minimum required – 30 points.

3. Brief evaluation of the main scientific and scientific-applied contributions of the candidate

The candidate's contributions reflected in his works have a scientific and scientific-applied nature. They give an idea of his professional knowledge, skills and expertise in the field of technologies for processing oil and obtaining synthetic products based on oil and oil derivatives. The request for the implementation of two schematic solutions for the addition of oxidized and non-oxidized VTB in the production of road bitumen is impressive.

4. Notes and recommendations

In the dissertation submitted to me, numerous spelling and punctuation errors and ambiguities in the statement are noticeable. Ex:

1. Two independent abbreviations are indicated, respectively ЛНБ (LNB) and ЛНХБ (LNHB), to describe the name of the enterprise „Лукойл Нефтохим Бургас” АД ("Lukoil Neftohim Burgas" AD) – see description of the abbreviations;

2. ...комплекси на предходни метали.... – стр. 18; - In Cyrillic – it is untranslatable!

3. Literary sources are not cited in a consistent order in the text – after source 52, does not follow 53 – page 27;

4. There is repetition of parts of the text – on pages 27 and 28 the same working system is described twice;

5. After figure 18 (page 41), comes again figure 18 (page 45).

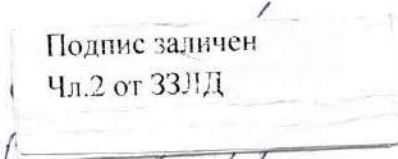
I recommend that Mr. Ilchev, in future developments, pay more attention to the way of writing and shaping the works presented by him, making a greater effort to clean up errors similar to the examples given above.

5. Conclusion

Irrespective of the found critical comments regarding the way of writing the text, based on the experimental studies performed and the obtained results, my overall assessment of the data presented by engineer Ivan Atanasov Ilchev is **POSITIVE**. The candidate presents substantiated scientific and scientific-applied contributions to science and practice, and fully meets the requirements specified in the Law on the Development of the Academic Staff in the Republic of Bulgaria for awarding the scientific-educational degree "**doctor**" (**doctor of Philosophy**).

Based on the above, I propose to the respected Scientific Jury to award the educational and scientific degree "Doctor" (doctor of Philosophy) to Eng. Ivan Atanasov Ilchev.

08.10.2024
Sofia

Signature: 
/assoc. prof. PhD eng. Metodi K. Mladenov/