



## EVALUATION OF THE DIPLOMA THESIS SUPERVISOR

**Name and Surname of the Student:** Marta Tomillo Amoróz

**Topic of Diploma Thesis:** Incorporation of hydrophilic/hydrophobic drug into biodegradable nanofibrous materials as drug delivery systems

<b>Statement of whether the thesis meets the objectives of the assignment</b>
The thesis fully meets all the requirements outlined in the assignment. It comprehensively addresses the necessary points and successfully demonstrates the implementation of curcumin into a biodegradable nanofiber layer.
<b>Evaluation of the content and formal aspects of the thesis</b>
The thesis begins with a review on the electrospinning of curcumin and drug delivery systems. The articles cited are current and focused on the relevant issues. In the theoretical section, the student focused on the material aspect, polymers, and the classification of drug delivery systems and their incorporation. Fiber production parameters and information on material analysis and sterilization are presented. The experiments focus on producing materials using two nanofiber production technologies, DC and AC spinning. I commend the inclusion of production sheets and data evaluation. The final layers are thoroughly analyzed using DSC and TGA analyses. Comparisons and evaluations of results are presented in the discussion and conclusion. The work is compact and precise.
<b>Evaluation of the student's approach to the work</b>
The student proved excellent communication skills and a high degree of independence. All experiments were conducted precisely according to the plan and required careful coordination with the equipment and analytical methods. Overall, the student's involvement in the work can be evaluated very positively.
<b>Result of checking whether there has been a deliberate unauthorised use of another person's work in flagrant violation of legislation governing the protection of intellectual property</b>



The plagiarism check was performed in the Theses program. A total of 20 similar documents were found, and the highest similarity rate was 5%, which I consider to be completely normal.

The submitted thesis **FULFILLS** requirements for the award of **Ing. degree**.

**I RECOMMEND** the thesis for defence, and I evaluate it with the classification grade **EXCELLENT**.

**Name and surname of the Thesis Supervisor: doc. Ing. Jiří Chvojka Ph.D.**

**Date:9.12.2024**

**Signature:**