Department of Nonwovens and Nanofibrous Materials | Studentská 1402/2 | 461 17 Liberec 1



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## **EVALUTATION OF DIPLOMA THESIS**

Student's name: Vikash Neelakandan, B.Tech.

Title of thesis: The study of changes in surface energy of fibre layers

Thesis supervisor: Ing. Radek Jirkovec

## 1. Evaluation of diploma thesis

Evaluation	Α	A-	В	B-	С	F
Fulfillment of aim and the assignment of work			X			
Choice of keywords	X					
Quality of the research part				х		
Methodology of the work			х			
Evaluation of the typographic level of the work. Correct division into subchapters		х				
Evaluation of the stylistic level of the work			х			
Consistency in explaining the meaning of abbreviations and symbols				Х		
Correct quotation of the sources				X		

Mark correct grade by using  $\mathbf{x}$  in the corresponding cell.

The final evaluation of the supervisor of the diploma thesis is given by the overall subjective evaluation.

The classification of work in point 5 is given verbally, not numerically, or by letter.

## 2. Comments and remarks on the diploma thesis

Student Vikash Neelakandan in his diploma thesis addresses the surface energy of nanofiber layers, which affects the properties of materials, especially their wetting. The student in the theoretical part describes electrostatic spinning, its parameters and the use of nanofiber layers. The theoretical part then describes the importance of surface energy, its possible modification and its importance for various applications.

Due to the situation of COVID-19, the experimental part is processed on a theoretical level. The experimental part describes the exact process of production of nanofiber layers and their subsequent testing. In the discussion, the student introduces hypothesized how material and process parameters will affect the resulting wetting of nanofiber layers. This hypothesis gives the assumption that by adjusting the parameters of electrospinning, either wettable or non-wettable materials can be achieved.

For further research, I recommend experimentally verifying the hypothesis.

## 3. Statement of the supervisor of the diploma thesis on the result of the inspection performed by the antiplagiarism program in the STAG system

The evaluation control of plagiarism in STAG system was performed with a result of 0%.





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4. Classification of the diploma thesis supervisor "very good"
In Liberec, on 6.9.2021
Ing. Radek Jirkovec

