

Brno, February 1<sup>st</sup>, 2021

### **Supervisor's Assessment of the Dissertation of Ing. Lukáš Kormoš**

The Ph.D. thesis by Lukáš Kormoš is written in classical style with an extended introduction and a thorough presentation of experimental results. In this context, the text provides the knowledge in a broader context than published papers. His original work comprises the study of structure and properties of 4,4' biphenyl-dicarboxylic acid (BDA) on metal surfaces, preparation of molecular phases, and metal-organic networks on graphene grown on Ir(111) substrate, and synthesis on unidirectional graphene nanoribbons at Au(16 14 15) surface. These works are detailed below.

During his Ph.D. Lukáš has shown the ability to independently conduct the experiments, solve scientific and technical issues he encountered, and a deep understanding of the topic. He became a valuable researcher in our group as he carried out his experiments and took care of experimental equipment and the education of his younger colleagues.

In his scientific work, he contributed to several discoveries in our group (4 publications); besides, he coauthored two publications with prof. Šikola's group, two publications with groups hosting him during his internships, and two publications in cooperation of our group with our external partners. Concerning the publications summarized in the thesis, Lukáš is the first author of two publications, one in Nature Communications and one in J. Physical Chemistry C. In addition, he is one of the principal authors of the ACS Nano paper. The high-profile publications support his ability to perform independent scientific work.

In summary, considering his scientific output and my very positive personal experience, I assess his work as excellent and fully support Lukáš Kormoš for successfully finishing his studies and awarding him with a Ph.D. title.

Doc. Ing. Jan Čechal, Ph.D.