



Prague, 13.05.2024

### Evaluation of the Doctoral Thesis by the Supervisor

**Author of the thesis: M.Sc. Ang Li**

**Title: Rational synthesis of zeolitic materials and their characterization by advanced electron microscopy methods**

As the supervisor of M.Sc. Ang Li throughout his doctoral research, I am pleased to provide an evaluation of his thesis. From the outset, Mr. Li demonstrated a profound understanding of the fundamental principles underlying the synthesis of zeolitic materials. His innovative approach to developing new synthesis methodologies has led to the creation of novel materials with unique properties. He has effectively utilized state-of-the-art methods such as high-resolution transmission electron microscopy, including in-situ heating investigations. He has shown independence in his research, while also being an excellent collaborator, often engaging with peers and contributing to the broader scientific community. During his studies he visited our collaborators in Krakow, Poland, for a 3-months internship, where he gained new experience, especially in the field of exfoliation and functionalization of layered zeolites. He also gave multiple talks at international scientific conferences, mostly about his work on synthesis of zeolites, functionalization of them with metal nanoparticles, and utilization of these materials as catalysts. The thesis of Mr. Li was written based on several publications, first-authored Angewandte Chemie paper among others. During his PhD study he co-authored several further papers, that were not directly related to his topic, providing important insights as the experienced synthetic chemist and electron microscopy specialist. Moreover, his further results are being processed in preparation of two more scientific publications that we plan to submit soon. It has been a privilege to supervise such a talented and dedicated researcher. I have no doubt that his work will have a lasting impact on the field and will serve as a solid foundation for their future scientific endeavours.

#### **Comment on the result of the Turnitin check**

The work was written independently. The check in the Turnitin system confirmed the originality of the work (33%, standard amount of similarity). The highlighted parts of the text include mainly the description of characterization methods, experimental section, and bibliography. Moreover, it mainly consists of established phrases and expressions that inevitably recur in various academic papers.

#### **Final remarks**

Presented doctoral thesis is complete and fulfilled the formal requirements for the acceptance. It was based on the research conducted by M.Sc. Ang Li that brought novel insights to the field of material chemistry. It showed that Mr. Li is an independent researcher. Overall, I recommend accepting presented thesis without further changes and I grade it as excellent.

Mgr. Michal Mazur, Ph.D.