



Univerzita
Pardubice
Fakulta
chemicko-technologická

July 30th, 2018

Subj.: Supervisor's opinion on Ph. D. student, Mr. Ahmed Hussein, M.Sc.

Mr. Ahmed Khaled Hussein, M.Sc. (born 1984) was accepted by our Institute of Energetic Materials in October 2015 as a Ph.D. student on the basis of a requisite selection procedure and subsequently of MOU between the Egyptian Armament Authority (EAA) and the Faculty of Chemical Technology, University of Pardubice about the gratuitous implementation of the three-year Ph.D. study appointed on the subject "*Study of Energetic Compositions Based on Explosive Mixtures and Cocrystals*". As a supervisor-specialist Assoc. Prof. Ahmed Elbeih was appointed (a head of the Dept. of Explosives & Rockets Propellants at MTC in Cairo).

Immediately after entering the study he began intensively dealing with all the necessary research activities, mainly preparation of pure energetic materials and attempts in the area of co-crystals. However, this start was affected by the worsening international situation (here cooperation with Czech industry) and partially financial problems of Institute. After solving of these problems relatively close cooperation with colleagues in the Explosia Co. was established based on the preparation of a bigger series of plastic bonded explosives (PBXs). These explosives were tested partially in cooperation with colleagues in the Explosia Co., partially with persons of our Institute at our testing area.

When overcoming difficulties and mainly in solution of the set topic, he showed great toughness. Separately, he acceded to his own solution, using all the available technics and information resources of our institute.

Academic potential of Mr. Ahmed Hussein, M.Sc. might be given by his publication activity and its public acceptance. Now I have found in the Scopus base his 15 co-authored papers (from 2016-2018) cited 22 times – 10 from these papers are directly connected with topic of his dissertation, and to this enumeration it is needed to add the five presentations at international scientific conferences; from his last participation at the 4th Int. Conf. Engineering, Appl. Sciences & Technol., ICEAST 2018 in Thailand on July 4-7, he has been awarded *the best oral presentation in this conference*. In the internal evaluation system of Ph.D. students at the Faculty of Chemical Technology he has received 15.5 points for the first two years of his study.

From the point of view of a successful passing of his Doctoral State Exam (on April 4th, 2018) and excellent publishing activities, Mr. Ahmed Hussein, M.Sc. meets the conditions for the defense of his dissertation. Therefore, as his supervisor I strongly recommend this defense.

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