

**PETROLEUM AND GAS UNIVERSITY OF PLOIESTI
DOCTORAL SCHOOL**

To

**Ha Noi University of Business and Technology
Faculty of Electric-Electronics**

LETTER OF RECOMMENDATION

**on the professional qualities of the gentleman
Dr. Eng. Nguyen Hoang Viet**

The undersigned NICOLAE PARASCHIV, professor at the *Petroleum-Gas University of Ploiești*, in the *Automation Department Computers and Electronics* and the *Doctoral School*. I am writing this Letter of Recommendation as Doctoral Supervisor of Mr. Nguyen Hoang Viet between 2016-2020.

After the entrance exam in 2016 for doctoral studies in the field of *Systems Engineering* - Mr. Nguyen Hoang Viet took exams in the disciplines of the *Advanced university study program: Digital automation equipments, Real-time control systems, Advanced regulation techniques, Technological process engineering, Analytical modeling and process identification*. The specialized commissions gave at all the exams marks that correspond to the grade *Very good*. Also during this period the doctoral student participated in several courses in the field of *Systems Engineering*.

The second part of the doctoral studies was represented by the *Scientific Research Program* in which the doctoral student made and presented the following research reports: *Current asynchronous machine automation solutions, Research on the use of static frequency converters for asynchronous machine control, Research on advanced automation of asynchronous machine*. The research reports were evaluated with grades corresponding to the grade *Very good*. Also during the research program (2017), Mr. Nguyen Hoang Viet participated in a research internship (Research Internship) at S.C. *ASTI Automation S.R.L. Bucharest* (<https://www.astiautomation.ro>), in the field of *Asynchronous Machine Control*. Following this internship, 4 scientific papers were published.

The scientific research program was completed with the doctoral thesis ***RESEARCH REGARDING THE PREDICTIVE VECTORIAL CONTROL OF THE ASYNCHRONOUS MACHINE***. The doctoral thesis makes significant contributions in the field of asynchronous machine control, among which the most important are those relating to ***Proposals for systems for predictive control of the torque of an asynchronous machine with switching table***. Following the public support before the Specialized Commission, on 24.09.2020 the doctoral thesis made by Mr. Nguyen Hoang Viet, in the field of *Systems Engineering*, was appreciated with the grade *Very good*, also being awarded the distinction ***MAGNA CUM LAUDAE***.

For the way he carried out the theoretical investigations, he substantiated the structure proposals and developed the implementation supports in the doctoral thesis for achieving the proposed objectives, Mr. Nguyen Hoang Viet, presents himself as a successful researcher, with important availability in terms of involvement in scientific projects of high complexity. The doctoral thesis is a work of special significance in the field, being a reference for the development of research initiated in this field.

In the 4 years I collaborated with Mr. Nguyen Hoang Viet, I found a special openness to a scientific activity of quality, proving a high capacity for adaptation imposed by the demands of doctoral studies in Romania.

Based on these arguments, I believe that Mr. Nguyen Hoang Viet has the skills to carry out a activity of quality in the field of university.

Therefore, I recommend that *HaNoi University of Business and Technology - Faculty of Electric-Electronics* offer Mr. Nguyen Hoang Viet a position that corresponds to the skills acquired and demonstrated during the Doctoral Internship.

Emeritus University Professor

Dr. Eng. DHC. NICOLAE PARASCHIV

Doctoral Coordinator in domain Systems Engineering

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