

*Ha Noi, June 21, 2017*

Dear Professors, Scientists and my Old Polish Friends,

First of all I would like to express my thanks to Prof. S. Kanas and Organizing and Scientific Committees of the conference “Vestiges of women in mathematics – on the 100th anniversary of the birth of Professor Helena Rasiowa” for giving me the opportunity to express my deep gratitude to her for leading me to the research of the algebraic logics field.

I am grateful and honored to have three and half years of studying with Prof. H. Rasiowa as her PhD-student in a world-well-known university, University of Warsaw. Her scientific work motivated me to study and with her guidance and encouragement, in 1971 I successfully defended my doctoral thesis in the field of algebraic logics, which was then published in *Dessertationes Mathematicae*.

I came from a war and undeveloped country and, hence, I always keep in mind that I owe my success to her guidance and support.

With this success I yearned to work with her but unfortunately, when I came back to my country, I had to work in The Electronic Data Processing Department of Ministry of Public Security. However, in the last 1980's and early 1990's I had the opportunity to collaborate with her and published joined papers related to Post algebras and fuzzy logics.

Thanks to Prof. H. Rasiowa, in Faculty of Mathematics, Informatics and Mechanics of University of Warsaw, I gained fundamental knowledge in the field of the algebraic logic which was of paramount importance as it built a strong foundation for my career and further research. With such precious knowledge, in the late 1980's I and Prof. Wolfgang Wechler, from TU-Dresden, Germany, found a novel theory, named the theory of hedge algebras. This theory aims for the first time to formalize the semantic order-based structures of word-domains of linguistic variables and forms a formal basis to connect the real-world semantics of linguistic word expressions, viewed as a symbolic ones, with their computational semantics including their fuzzy-set-based semantics. It might be said that a methodology to simulate human capabilities in immediately handling words of natural languages, which is not to be developed based on a mathematical formalization of the word-domains of linguistic variable, would be difficult to simulate human capabilities properly. This theory has begun to be applied to effectively solve problems of classification, regression, control, image contrast enhancement ... in terms of linguistic fuzzy systems.

I strongly believe that if I had no algebraic-logic foundation during the time I studied in University of Warsaw under the guidance of Prof. Helena Rasiowa, I would not have the opportunity to discover the semantic-algebraic structure of the word-domains of linguistic variables and to find the theory of hedge algebras. As result of that I always consider that my researches in the following years have been significantly influenced by the traditional Polish algebraic logic school, of which she was an outstanding scientific representative.

Therefore, from the bottom of my hard, I would like express my deep gratitude to Prof. Helena Rasiowa. I would like to thank University of Warsaw and Polish Government who gave me a chance to study in the environment of one of the world-well-known Polish algebraic-logic school.

Cat Ho Nguyen,

Her old PhD-student