## On the 100th Anniversary of Lecturing Electrical Engineering in Belgrade

Written on the occasion of the 100th anniversary of lecturing electrical engineering at the University of Belgrade, this contribution is dedicated to the memory of Professor Stevan K. Marković, D. Phil., the first lecturer of electrical engineering at the Grand School and later the University of Belgrade.



To start with, I shall repeat the text often quoted on past anniversaries of the School of Electrical Engineering, so that it could be also remembered by younger generation of lecturers, associates and students. The following extract comes from the magazine of Delo, Vol. 4, p. 529, 1894.

"This year the elected professor of physics and electrical engineering, Mr. Stevan Marković, has started lecturing at the Grand School. On this occasion, the Rector of the Grand School, on behalf of the Council of Professors, sent telegrams to

renowned electrical engineers of the Serbian origin living and working abroad: Nikola Tesla, Mihajlo Pupin, Professor at the University in New York and Vojislav Marinković in Paris, informing them on the official opening of the Electrical Engineering Department at the Grand School, which is the third of the kind in Europe. A response came from Mr. Pupin, written in the Serbian language, full of delight and sincere congratulations."

A few years later, Prof. Stevan Marković founded the Institute of Electrical Engineering and the Grand School became the University in 1905. Upon the official announcement of the University, all the lecturers of the Grand School were put "at disposal". The Minister of Education appointed eight professors as a committee to elect other lecturers and to submit their suggestions to the Ministry for approval. Conditions for election were very strict for the time all professors and associate professors as well as assistant professors, excepting those lecturing technical engineering, had to have doctorates. Many lecturers were conferred titles of lower degree than those they used to have at the Grand School. School of Electrical Engineering had 5 professors, 6 associate professors, Mr. Stevan Marković being among them, and 3 honorary associate professors.

The Commemorative Volume on proclamation of the University (p. 145, 1906) quotes the following about Prof. Stevan Marković:

"Dr. Stevan Marković, associate professor, was born at Ljuljaci (District of Kragujevac) on 22 September,

1860 to his father Krsta, the local farmer, and mother Jelena. He finished primary school at Žabari, District of Kragujevac, and Grammar School in Kragujevac in Scientific the 1882. Having graduated from Department of the Faculty of Philosophy in Belgrade in 1886, as an excellent graduate, he was appointed a teaching fellow of physics at the Grand School and occupied the position for another two years. He won Government scholarship to the University of Vienna for the postgraduate studies of physics. In 1992 he received his doctorate degree in physics, mathematics and psychology and was proclaimed a Doctor of Philosophy. In 1893 he was sent again by the Government to study electrical engineering at Institute of Montfleur in Liege, France. In 1894 he was elected and appointed a professor of technical physics and electrical engineering at the Grand School in Belgrade. In 1903 he was awarded the decoration of St. Sava. By the University Act of 1905 the Grand School became the University and he was elected and appointed the associate professor of electrical engineering at the School of Electrical Engineering of the University. In 1895 he married Sultana, who was of the Greek origin, and by the grace of God they got three sons: Ivan, Milan and Miloš."

(Descendants of Prof. Marković are his granddaughter, Mrs. Ivanka Marković-Milutinović and grandson, Mr. Stevan Marković, who is an electrical engineer and now lives in Germany.)

The Commemorative Volume then quotes a list of 16 references with details on his educational and professional work until 1905. It is notable that Prof. Marković, apart from his other duties, regularly gave a considerable number of lectures. He lectured on

Basic Electrical Engineering, Electrical Engineering, Thermo-Dynamics as well as Theoretical Physics for the students of both School of Electrical Engineering and Faculty of Philosophy. The average number of lectures was 15 a week, each semester, which today is considered to be a very large number of lectures a university professor should give on a regular basis.

Fields of interest of Professor Stevan Marković were various: telephony, electrical systems, driving-power and electrical machines. He spent much of his time and money on development of the laboratory equipment at the Institute of Electrical Engineering, which was situated at the basement of the Kapetan Miša's Palace (later building of the University of Belgrade) on the Students' Square. Professor Marković was also a generous donor: he spent 2,000 dinars he received as a reward from the Ministry of Education for his translation of a wellknown book "Electricity" by E. Gerard, which was a large amount of money at the time, on buying equipment for the Institute of Electrical Engineering.

(The Institute - laboratories and equipment - was destroyed upon American bombardment of Belgrade in 1944.)

At the beginning of the First World War, Prof. Marković was 54 so that he was not able to join the army. However, together with his teenage sons he went through the hardships of the Serbian Army retreat through the Albanian mountains and was sent to France. After the war, Prof. Marković continued his work at the University in Belgrade. He retired in 1926.

Memories of his granddaughter Ivanka offer the best description of Prof. Marković's life in retirement:

"My grandfather, Dr. Stevan Marković, Professor at the Grand School in Belgrade, although born in a well-to-do farming family of the Serbian heartland village of Ljuljaci, was a very modest and hardworking man. When he married my grandmother, they lived in the house of his father-in-law in Balkanska street, no. 10, in Belgrade. His study was a very large room with a view towards a beautiful garden full of flowers and trees. As he enjoyed nature very much, which is common to all country born children, in 1902 he purchased a three-acre estate, where he had a vineyard and various fruit-trees planted and a vineyard house built. The house and the vineyard are still standing in Tolstojeva street, no. 9, in the most desirable residential part of Belgrade today. He brought a Lebanese cedar from abroad and planted it on the mentioned piece of land, which is still standing there as the only sample in Belgrade. Upon my visits to my grandparents' house, I often found Grandfather among his books although at that time he had been already retired. In his study, there were piles of books, a large photograph of Nikola Tesla and a photograph of Tesla's birthplace in the village of Smiljane as well as a photograph of my grandfather standing near a glacier in Switzerland. Besides the writing table, there was also a sofa on which Grandfather used to rest. Grandfather never visited pubs, he never drank, smoked, drank coffee nor did he understand people who enjoyed drinking and smoking. He spent summers in the vineyard in Tolstojeva street. Dr. Mihajlo Petrović, Mika Alas (the fisherman), the famous nickname meaning mathematician, often visited him there. He was a close friend and his son's and my father's best man at wedding (person highly respected in Serbia). Mika Alas lived in the neighbourhood of the vineyard, in Lackovićeva street and he often invited Grandfather and the whole family for meals made of fish he himself prepared. He kept showing surprise at Grandfather drinking water with fish and not wine. Many friends came to visit Grandfather, mainly professors at the Grand School. In his old age, Grandfather often visited the spa of Vrnjačka Banja and Paris. During the First World War, the family took refuge in Nice, France, where Grandfather took a job in a local factory and his sons, Ivan and Milan, attended the Serbian School. After the war was over, Grandfather came back to Belgrade decorated with the French Legion of Honour and continued his work at the University, buying many study facilities with his own money. He bequeathed his collection of books to the University. Unfortunately, the library was burned down in bombardment of Belgrade in 1944. He died at home, in the circle of his family, on 31 December, 1945."

## What else to say?

The picture of Professor Stevan Marković, along with the pictures of Tesla and Pupin, occupies a special place on the wall of the Dean's study at the School of Electrical Engineering in Belgrade. All past and present students should keep the memory of this modest man, generous donor, hardworking and competent expert and the first lecturer of electrical engineering at the University of Belgrade - Dr. Stevan K. Marković, whose work remains worth of mention and everlasting fame!

Belgrade, 10 Dec. 1994 Professor George Paunović, D. Sc.

(Translated and adapted by Nevena Španović, Secretary of the YuMTT-S Chapter)