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THE LIFE AND WORK OF PROFESSOR ENDRE VINCZE

József Túri
University of Miskolc
jozsef.turi@uni-miskolc.hu

Abstract

In this paper, we pay tribute to the work of Endre Vincze, a former professor at the University of Miskolc. Endre Vincze, a former professor at the University of Miskolc, was not only an outstanding educator but also an internationally recognized researcher and an excellent colleague. His research areas were functional equations and differential equations; he made lasting contributions in these fields.*

1 Introduction

Many outstanding professors worked at the University of Miskolc and its legal predecessor. Endre Vincze was one such outstanding professor at the university; we present him on these few pages. We aim to present the professor in as comprehensive a manner as possible, since gaining a deep understanding of an individual also involves, for instance, looking at the nature of their relationships with colleagues.

2 Early life, studies

Endre Vincze was born on October 5, 1931 and died on August 15, 2009 at the age of 78.

He came from a rural family: his father worked as a farm teacher in Szabolcs County, his mother was a housewife [1].

Endre Vincze studied at the Reformed College in Debrecen for three years, then graduated with honors in Nyíregyháza in 1950. After graduating, he immediately started working, working as a wagon unloader for three months.

Although he applied to the university in Debrecen to study mathematics and physics, he was unable to begin his studies there because the authorities directed him to the Budapest University of

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Technology. However, after his successful admission, he was directed to Miskolc, where as a university student he actively participated in the scientific student club's work and won various prizes and awards. Between 1952 and 1954, he worked as a demonstrator, and in 1955 he obtained a degree in mechanical engineering [1].

3 First steps toward a scientific career

His scientific activity was already evident in the late 1950s and early 1960s; even then, he was delivering presentations at both domestic and international events [2].

In 1963, he earned a doctoral degree from the Faculty of Mechanical Engineering at the technical university. In 1965, he became a Candidate of Mathematical Sciences (he submitted and defended his dissertation 16 months ahead of the deadline!).

In their book [3], Kornél Terplán and László Tóth share an anecdote explaining why Endre Vincze—despite being a mechanical engineer—became a mathematician:

"On March 22, 1972, the Department of Machine Elements and the Department of Mathematics were gathered together for a meal. After the formal speeches, the atmosphere had become more lighthearted when Professor Endre Vincze stood up and asked:

'Do you know why I became a mathematician?'

'???'

'Because when I was a first-year mechanical engineering student, Imre Lévai—who was an assistant lecturer at the time—was my instructor for the Machine Drawing course. He spent a long time looking at one of my drawings, then remarked:

"You would be much better off becoming a mathematician!" [3]

After earning his degree in mechanical engineering, he taught mathematics at the university in Miskolc, primarily to mechanical engineering students [1]. He worked first in the university's Department of Mathematics, and subsequently in its successor, the Institute of Mathematics. His teaching and research career spanned several decades: he served as an assistant lecturer (1954–1961), an assistant professor (1961–1965), an associate professor (1965–1971), and a full university professor (1971–2001), before becoming a professor emeritus in 2002.

He carried out a wide range of teaching activities: he taught at all three technical faculties of the university in the I-VII. semesters, he played a prominent role in the development and teaching of mathematics material for the GAM branch, he compiled and partly taught the mathematics subject materials for the Systems Planning and Production Systems departments of the Faculty of Mechanical Engineering. Between 1985 and 2002, he gave lectures on applied mathematics as an invited second-tenure visiting professor at the KLTE Mathematics-Informatics Institute in Debrecen [4].

In addition to his teaching and research activities, he also took an active role in the management of the University of Miskolc: between 1971 and 1974 he worked as a scientific deputy dean at the Faculty of Mechanical Engineering, between 1974 and 1975 he organized the Computer Science Laboratory as the acting head of the rector. Between 1975 and 1983 he was the founding director of the Institute of Mathematics, between 1975 and 1978 he was the founding head of the Department of Computer Science, and between 1978 and 1988 he was the head of the Department of Analysis [5].

He contributed to the publication of the Foreign and Hungarian Language Bulletins of the University of Miskolc. From 1964 to 1970 he was a member of the Editorial Board, and between 1970 and 1980 he was the head of the Editorial Department of the Bulletins. Between 1970 and 1985, he worked as the editor-in-chief of the Foreign and Hungarian-language series entitled Natural Sciences.



Figure 1: Dr. Endre Vincze. [1]

His main areas of expertise were the theory and applications of functional equations, as well as ordinary differential equations. He wrote his publications in German and Hungarian [1].

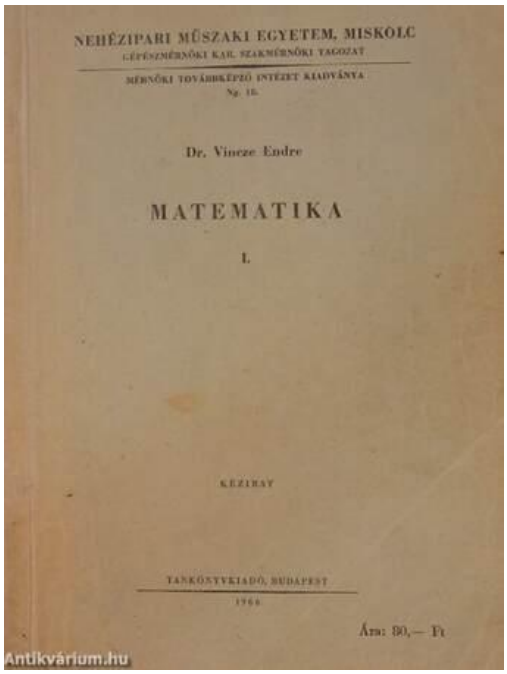
His professional work proved to be influential at an international level, especially in terms of his results related to functional equations. He mainly dealt with the characterization of multivariable associative functions, the determinant method developed for solving linear functional equations, alternative functional equations, and the characterization of economics and productivity with functional equations [4]. His results were published in more than two dozen professional books (primarily written by foreign authors). The number of foreign-language references to his scientific articles is more than 500. He gave about 40 lectures at international mathematical conferences [4].

He worked with prominent mathematicians of his time, such as academician Zoltán Daróczy or outstanding researcher Zoltán Aczél.

Outside the university, he received numerous professional assignments and was an active member of professional public life: between 1967 and 1973, he was a member of the Mathematics Committee of the Hungarian Academy of Sciences, between 1979 and 1989, a member of the Mechanical Engineering Committee of the Hungarian Academy of Sciences, between 1980 and 1991, a member of the Mathematics-Physics Committee of the Hungarian Academy of Sciences, between 1980 and 1990, vice-chairman of the Mathematics Applications Department of the Hungarian Academy of Sciences from 1975 to 1985, its chairman from 1985 to 1990, chairman of the committee awarding the Gyula Farkas Memorial Prize of the Hungarian Academy of Sciences from 1985 to 1989, and a member of the presidency of the Hungarian Academy of Sciences from 1985 to 1990 [4].

He received numerous professional awards, the most notable of which was the "Grünwald Géza Memorial Award" of the János Bolyai Mathematical Society, which he received in 1961. He received several state awards: in 1975 he was the "Outstanding Employee of Education", in 1979 he received the "Excellent Work" award (NIM). He also received student recognition: "Honorary Fellow" and "Lecturer of the Lecturers" awards several times, "Honorary Chemist" award (KLTE, TTK). He also received university recognition: in 1995 the "Memorial Medal of the Faculty of Mechanical Engineering" and in 1999 the "Jubilee University Memorial Medal" [4].

Professor Endre Vincze was a key figure in the research of functional equations. In addition to conducting theoretical research, he also carried out extensive educational activities, developed the mathematical curriculum of engineering education, and was also active in leadership activities.



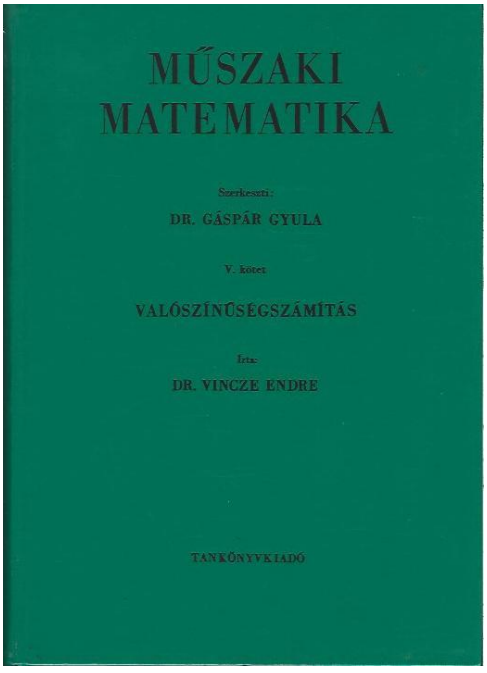


Figure 2: Some books by Dr. Endre Vincze.

It should be noted that, in addition to research and education, Professor Vincze always took time to maintain good relations with his colleagues, which can be called team-building training in the modern sense: he always participated in university, institute, and department events.



Figure 3: Dr. Endre Vincze among his colleagues.



Figure 4: Dr. Endre Vincze among his colleagues.



Figure 5: Dr. Endre Vincze among his colleagues.

Major publications by Dr. Endre Vincze:

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