Dr. István Németh

EDUCATION: The City University of New York, USA Ph.D. in Physics 2002

Title of dissertation Coherently Pumped Micromasers

EXPERIENCE: Vice Dean for Research, Kandó Kálmán Faculty of Electrical Engineering 2024 – Rector's Commissioner, Directorate of Education

Óbuda University, Budapest

In 2024, I was appointed by the Rector of Óbuda University as Rector's Commissioner within the Directorate of Education, where I was responsible for developing a modular strategic plan for the region of Kaposvár. My work aimed to ensure the university's long-term sustainable operation in the Southern Transdanubia region through an education-focused regional development.

Since 2025, I have been serving as Vice Dean for Research at the Kandó Kálmán Faculty of Electrical Engineering, coordinating faculty-level research, international collaboration, grant activity, and the development of scientific publication performance. I also oversee the organization of student research activities and strategic initiatives related to science policy at the faculty level.

Vice-Rector for Strategic Affairs, Director General of the Zalaegerszeg University Center

2020 - 2023

University of Pannonia – Zalaegerszeg University Center, Zalaegerszeg, Hungary

I led the merger in which the University of Pannonia integrated the campus and the Faculty of the Budapest Business School at Zalaegerszeg. In line with the objectives, in December 2020 we established the new University Center in a matrix organization form. During the integration human resources were assessed and the job functions were reviewed and reorganized.

Under my leadership, a complex plan was forged for the University Center with the main objective of making it a key player in the region's economic development. The result was that out of the 71 major development projects Zalaegerszeg planned in the succeeding 5 years, 6 were linked to the University Center for execution and in another 6 projects it played a key role. The implementation of the projects planned to generate HUF 5 billion in revenues for the University Center.

Under my guidance, we established the University Center's combined infrastructure and faculty development program which was integrated into the University's development plans. The implementation of this program projected to bring HUF 12 billion progress to the University Center.

We remodeled the range of courses offered at the University Center, creating three groups of majors: engineering, IT, and economics, with specializations relevant to the region. We developed a project-based, cooperative learning environment for the engineering group of majors and the standard for linking our educational environment to industrial projects and to other higher education institutions. In September 2022, we launched our BSc in Test Engineering in this project-based education framework.

Vice-Rector for Coordinating Affairs at Savaria University Center

2017 - 2020

Eötvös Loránd University – Savaria University Center, Szombathely, Hungary

As a Vice-Rector of the Eötvös Loránd University, my most important task was to guarantee the successful integration of the Savaria University Center formerly part of the University of West Hungary consisting of 3 Faculties. The Savaria University Center became the first non-Budapest based academic campus of the prestigious Eötvös Loránd University. Success was achieved by developing a long-term sustainable training portfolio for the University Center and by making the necessary adjustments to its organizational and operational structure.

During integration I also oversaw the professional and infrastructural development programs totaling HUF 3 billion, which laid the foundations for the success. As a result of my work a new self-governing unit of the Eötvös Loránd University, the Berzsenyi Dániel Teacher Training Centre was established in August 2018, offering the complete portfolio of teacher training programs. By 2020 the number of students at the Savaria University Center has increased to over 2,000 from 1,400 before the integration.

I was awarded the "Knight's Cross of the Hungarian Order of Merit" in 2018 in recognition of my work promoting the economic growth of the region and the human resources development of small and medium-sized enterprises by flexible and forward-looking training systems.

Vice Rector 2015 – 2017

University of West Hungary – Savaria University Center, Szombathely, Hungary

As the Vice-Rector of the University of West Hungary I directed and supervised the work of the 3 Faculties in Szombathely. The problem was rapidly decreasing student numbers and no coherent vision for the future of the Faculties. The work I started was based on cooperation, the common thinking of all Faculties and it was designed to embed the academic and research activities of the Faculties into the local economic fabric, to underpin and guarantee the high quality of teaching and research. We set up working groups with specific tasks, and key local experts from industry and the public sector were included.

The conclusion of this work was supposed to provide direct input to the development plan of the University. However, one of the key findings was the need to establish a stable and supportive environment for the development of the Center, which was not guaranteed in the framework of the University of West Hungary. With full authorization of the 3 Faculties, I led the process that ended on 1 February 2017 with the result that the Faculties of the Savaria University Center were separated from the University of West Hungary and integrated into the Eötvös Loránd University.

Vice Dean for Research and Finance

2009 - 2016

Faculty of Natural and Technical Sciences, University of West Hungary – Savaria Campus, Szombathely, Hungary

As the Vice Dean for Research and Finance and an elected member of the University Senate, I participated in the development of the Faculty's forward-looking education and research strategy, in the rationalization of the use of our existing resources, and in the management of our human and financial resources. I have coordinated and managed several research, development and education programs and have been part of the management of several University-wide research and development programs.

I coordinated its implementation and actively participated in the development of the bold academic plan that introduced engineering—a new academic field without precedence in Szombathely—into the educational portfolio of the Faculty. The new mechanical engineering BSc program was realized in the dual education system in strong cooperation with the major employers of the region (BPW, Delphi, iQor, LUK, Opel, and TDK) to serve their future growth. In recognition of my work in introducing the mechanical engineering BSc program in the region I was awarded the "Medal for the Economy of Vas County" in 2015 and became the "Man of the Year of Vas County" in 2016.

Associate Professor, Department Chair

2007 - 2017

Department of Physics, University of West Hungary – Savaria Campus, Szombathely, Hungary

I directed the Physics department, lectured advanced physics courses to students majoring in physics. I promoted the academic programs and research activities of the Faculty. As a member of the organizing committee, I supervised the operation of the Physics section of the XXIX. National Conference of Scientific Students' Associations. I organized free educational programs and seminars to strengthen community ties. In 2015, I was awarded the "Berzsenyi Dániel Memorial Prize" of the University in recognition of my work.

Assistant Professor, Course Coordinator

2003 - 2006

Department of Physics and Astronomy, Hunter College of The City University of New York, New York, USA

I developed, coordinated, and lectured the introductory astronomy program, which was accessible to students of all backgrounds. To achieve the success what the program had—around 600 students and roughly \$500,000 gross income per semester—the curriculum had to be revised, a new laboratory manual written, and the graduate students teaching the laboratories directed and supervised.

Visiting Assistant Professor

2002 - 2003

Department of Physics, Manhattan College, Riverdale, USA

I served as an advisor to first-year students majoring in physics. I lectured conceptual physics course about today's pressing environmental issues and sustainable resource use to non-science majors, and advanced physics courses to students majoring in engineering and physics.

Research Associate, Lecturer

Department of Physics and Astronomy, Hunter College of The City University of New York, New York, USA

I performed original scientific research in the field of theoretical quantum optics and quantum information theory. Working on the theory of the coherently pumped micomaser I developed a new analytical method, which provides the solution to a highly non-linear and previously unsolved problem in quantum optics. I developed complex programs to simulate electromagnetic fields inside cavities, built and maintained a high-performance computational cluster.

I lectured graduate course in Electromagnetic Theory and advanced physics classes to undergraduate students. Received "Excellence in Teaching Award" for resolute and outstanding teaching.