

Hungarian Universities Space Technology Research Forum

28th March 2024

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University of Győr*

Activities

- *Education*
- *UniSpace*
- *Collage for Advanced Studies (SZESAT)*
- *Radio Amateur Club József Honfy*
- *Gyerekegyetem (Mobilis)*

Győr – 1976 Technical College – Traffic and Telecommunication



Győr – 1976 Technical College – Traffic and Telecommunication
from about 1992 – economy, law, nurse, music, ...
2002 – Széchenyi István University

Since 1987, space communication is taught at the initiative of József Honfy. Both the theoretical and practical aspects of this.
Analog TV Broadcast, DVB-S, DVB-S2

At the initiative of the Ministry of Foreign Affairs and Trade 17 universities have joined forces to launch a joint interdisciplinary space science program.

The subjects we teach in Győr are:

- Spacelaw Dr. Gábor Sulyok
- Rocket Science Dr. Dániel Feszty
- Space Communications Dr. Péter Vári

the training is considered successful

Education-Spacelaw

Providing outstanding performance, the team of the Deák Ferenc Faculty of Law at Széchenyi István University competed against students from the continent's most reputable law schools offering courses in law for outer space in the "Manfred Lachs Space Law Moot Court Competition", which is an international competition on giving oral arguments in the field of space law. The University of Győr has been successfully performing at this prestigious competition for years.

The "Manfred Lachs Space Law Moot Court Competition" was established in 1992. In 2010, the European Regional Round was hosted by the Faculty of Law of Széchenyi István University. Each year, the International Space Law Institute's competition simulates a fictional legal dispute between two imaginary states. Traditionally, the complex legal problem to be solved is based on the current and open regulatory issues of space law.

SZESAT Collage for Advanced Studies



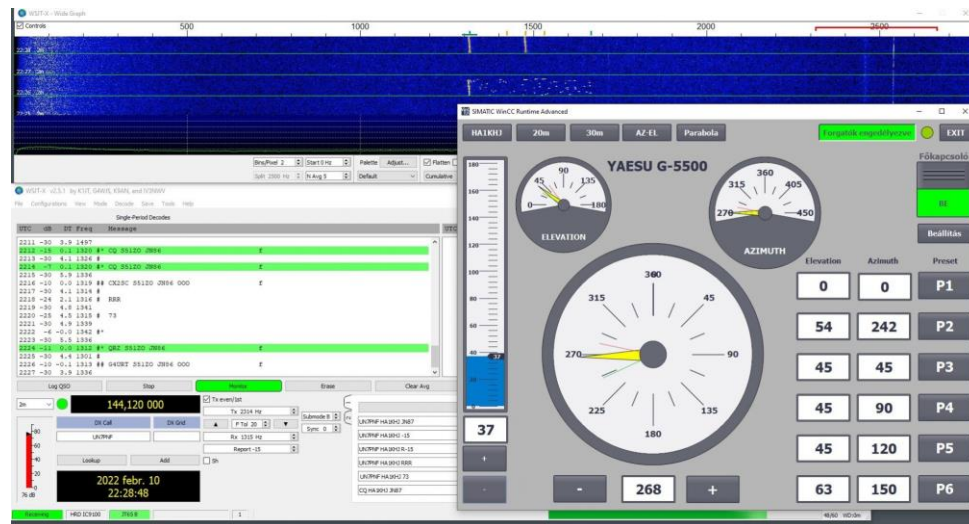
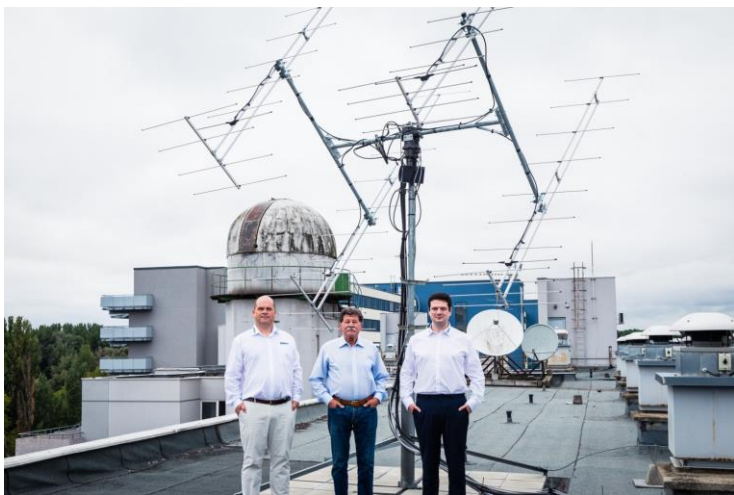
SZESAT is an interdisciplinary college for students interested in space-related scientific fields and innovative solutions.

It now has a total of

- 20 electrical engineering students and
- 16 students from other areas of the university, such as lawyers, logisticians, economists, mechanical and mechatronic engineering students

home page: <https://sat.sze.hu/en/index.html>

Zoltán Bay's Earth-Moon-Earth (EME) experiment was repeated 2 times by the SZESAT team in both 2021 and 2022.



Missions of SZESAT



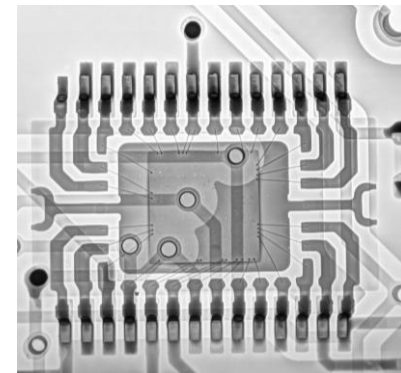
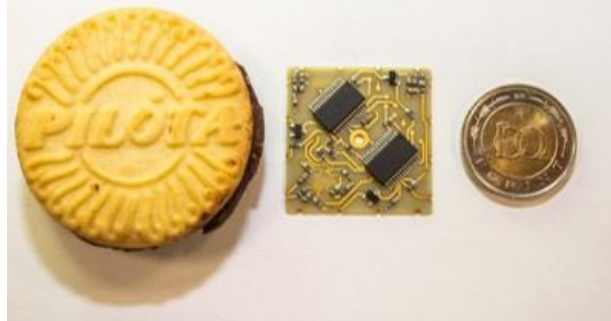
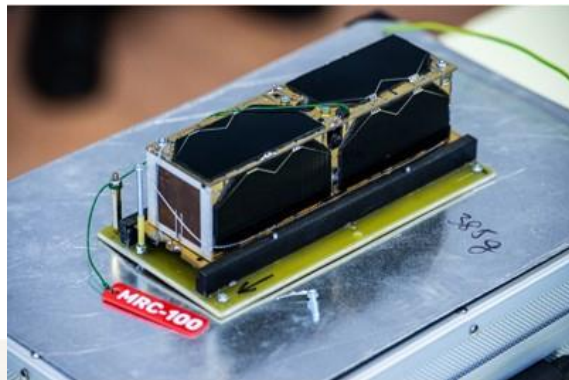
In cooperation with BTU, Budapest Technical University:

We are grateful – warm thanks

MRC 100 stand-alone module (launched 12 June 2023) still in good working order

Mission objective: build the first module capable of operating in space, develop and build a ground station to receive satellite and telemetry messages

Module MRC-100



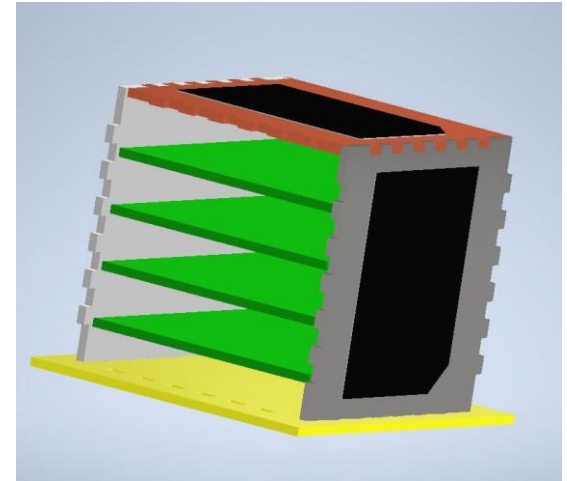
Missions of SZESAT



In cooperation with BTU:

NMHH-1 twin satellite (3PQ) design

Mission objective:
build own satellite (1PQ),
further development of ground station TTC

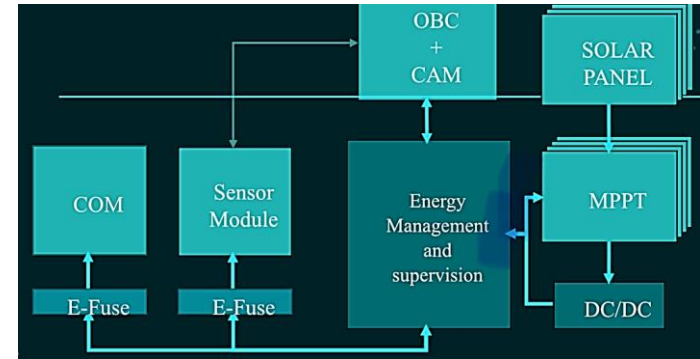


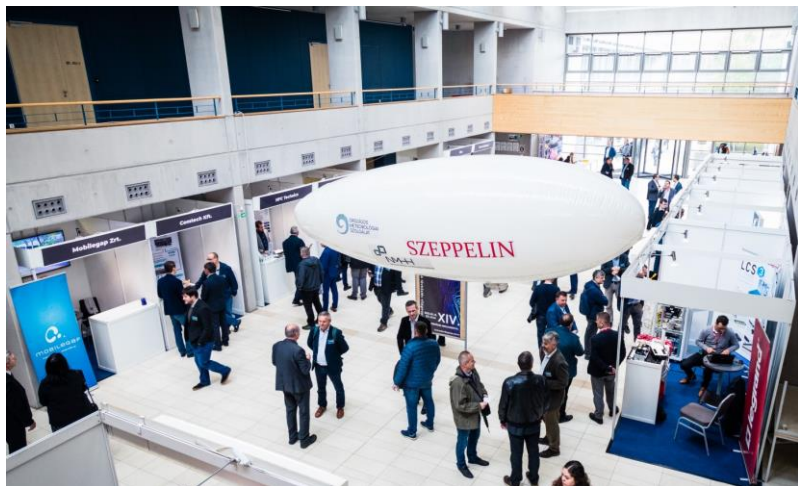
ESA - Fly Your Satellite 4 participation
26-28 February 2024, ESA ESTEC, Noordwijk, Netherland

Design of own satellite (1PQ)

Mission objective:

- construction of own satellite (1PQ),
- further development of ground station (TTC),
- testing of radio frequency and optical communication





16. May 2024.
University of Győr

- Space communication
- Quantum communication

home page: <https://tavkozlesvilagnap.sze.hu/2024/>

Our events for children



Researchers' night



Children's *University*
satellite presentation

Our events for children

Now we have joined the Road to Higher Education programme to bring the world of space closer to secondary school students.



Distribution of amateur radio via satellite

ISS communication



Our plans for the future

- Improving our training
- Continuing UniSpace training
- Development of satellites
- Development of laser communication
- Participation in national and ESA projects
- Support for students participating in the CanSat competition
- ...

not least - training engineers, lawyers, economists etc.
who will become skilled in space sciences

University of Győr



Thank you for your attention