Technische Universität Berlin

New study program in space systems and communications engineering / SPACECOM

Kick-Off Meeting

March 4th, 2020

Tashkent University of Information Technology (TUIT)

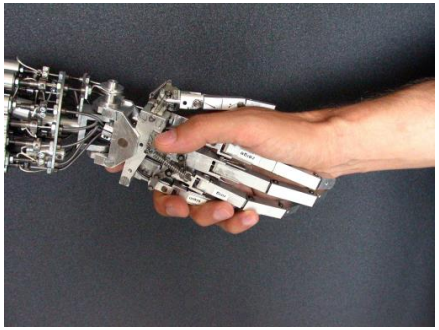
SPACECOM

Co-funded by the Erasmus+ Programme of the European Union

University Profile

Technische Universität Berlin, a university with international reputation in Germany‘s capital:

- 3rd largest University of Technology in Germany
- research and teaching ranging from engineering and natural sciences to humanities and social sciences
- intensive cooperation between science and industry
- joint research projects with numerous non-university research institutes
- alliance between technology and humanities to meet the challenges of the future



Facts and Figures

Technische Universität Berlin

- Humanities
- Mathematics and Natural Sciences
- Process Sciences
- Electrical Engineering and Computer Science
- Mechanical Engineering and Transport Systems
- Planning - Building – Environment
- Economics and Management

Students (2019)	**35.570**
Female	11.995
International	9.443
Degree programs	**139**
Bachelor	44
Master	93
Professors and other academic staff	792
Scientific and other staff	7.570
Budget:	
From government	approx. 330 Mio. €
Additional (third party) funds	approx. 180 Mio. €

Prominent scholars

Chemistry

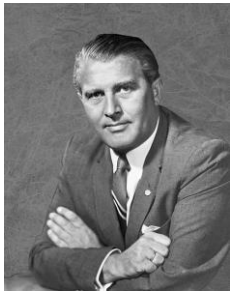
Carl Bosch
Fritz Haber
Gerhard Ertl

Physics

Gustav Hertz
Wolfgang Paul
Dennis Gabor
Eugene Paul Wigner
George de Hevesy
Ernst Ruska

Aerospace researchers

Wernher von Braun (1912-1977)
Heinz-Hermann Koelle (1925-2011)
Henri Marie Coandă (1886–1972)
Walter Dornberger (1895–1980)
Krafft Arnold Ehricke (1917–1984)
Wigbert Fehse (born 1937)
Klaus Riedel (1907–1944)
Arthur Rudolph (1906–1996)
Ernst Stuhlinger (1913–2008)

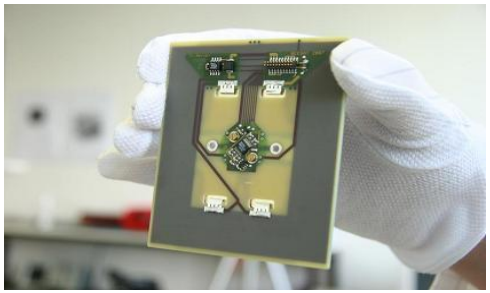


Our focus

Technische Universität Berlin

Chair of Space Technology

Curricula in Space Technology



Space Technology Research

Theoretical and Hands-on Education in Satellite Technology

Theoretical and Hands-on Education in Rocket Technology

Technische Universität Berlin

More than 60 years of history of satellite production and launches make Institute of Aero- and Astronautics of TU Berlin the global leader in satellite research among educational institutions

We have the biggest satellite fleet on the orbit – 12 launches in the last two decades

Project Team

Technische Universität Berlin

Dmitriy Ostroverkhov

Prof. Klaus Brieß

Elena Eyngorn

Kristina Monchenko

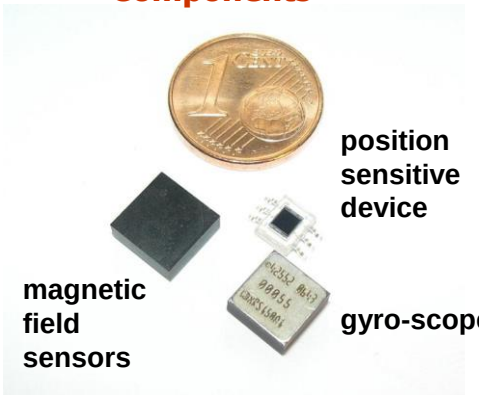
Avazbek Ergashev

Ekaterina Chikhun

Technische Universität Berlin

Small Satellite Technologies on the Ground and in Space

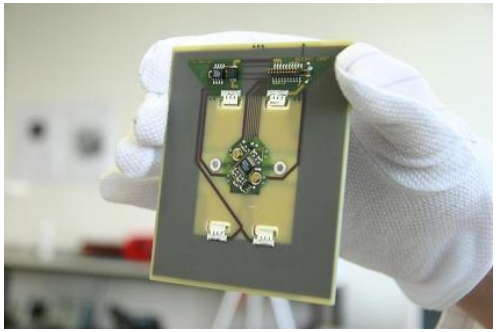
Components



position sensitive device

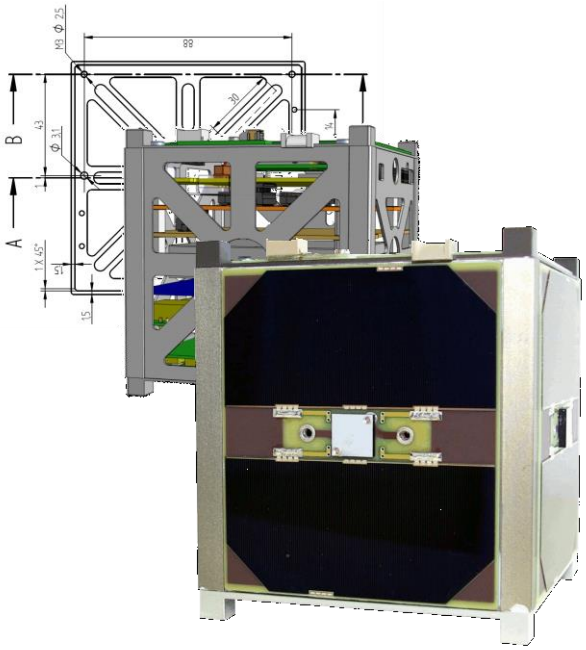
magnetic field sensors

gyro-scopes

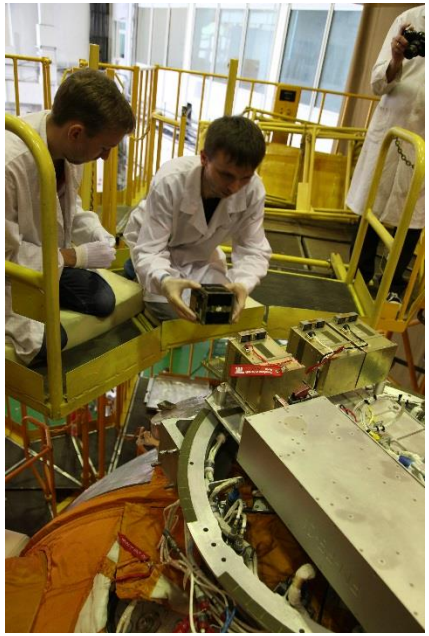


Solar array with integrated Sun Sensor and magnetic coil

Processing



Operation



Technische Universität Berlin

Role in SPACECOM

Core Curricula:

- ”Satellite communication”
- “Satellite Technologies”
- “Applied Project Management for Space System”
- “Remote sensing and earth observation”
- “Soft skills for engineers/Start-up initiatives for engineers”

Development

- To organize a training course at developed curricula in Berlin;
- To assist the purchase of equipment (with support of Uzbek Partners and Coordinator)

Dissemination:

- Developing the project Web site on the server of TU-Berlin,
- Dissemination of project results to the German HEIs and business partners, and to the partner institutions of TUB

TUB leads the workgroup on need analysis and will organise a meeting for e-learning evaluation and exploitation agreement in Berlin.

Thank you for your attention!

Technische Universität Berlin

Department of Aeronautics and Astronautics,

Chair of Space Technology

Marchstr. 12, 10587 Berlin

MBA Elena Eyngorn

elena.eyngron@tu-berlin.de

Dipl.- Ing. Dmitriy Ostroverkhov

ostroverkhov@tu-berlin.de