



**Warsaw University  
of Technology**

## **WUT's roadmap to a wider participation in the Framework Programme**

**Rajmund Bacewicz**

Conference of Rectors and Presidents of European  
Universities of Technology, Budapest 2019



**31 000  
students  
(35% women)**

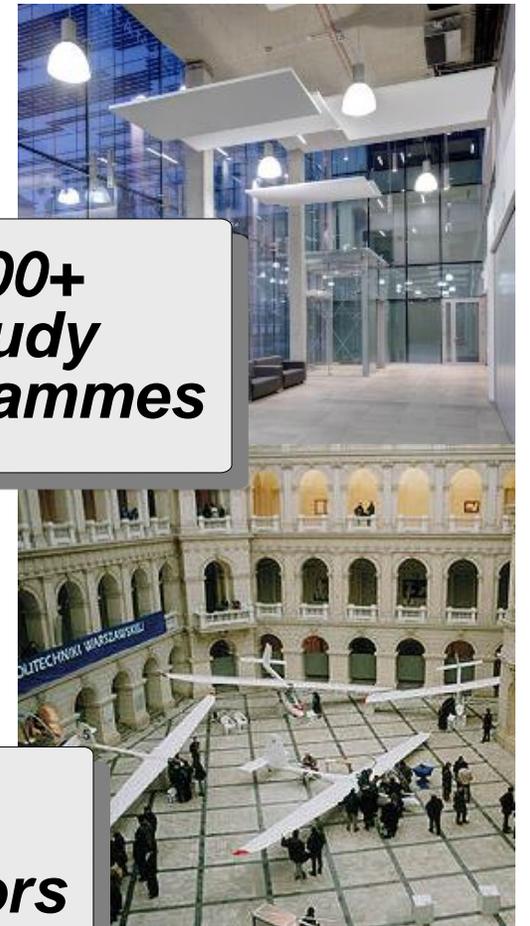
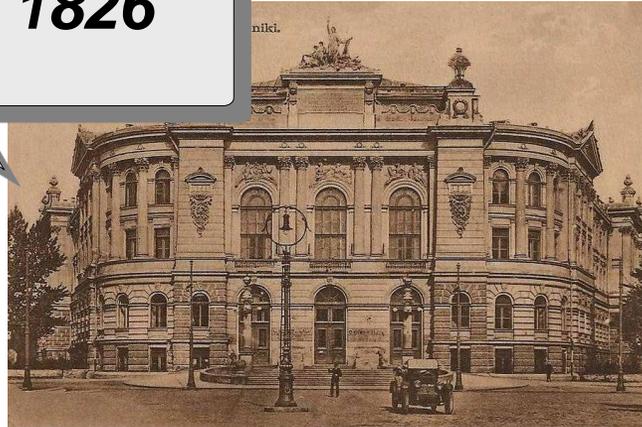
# Warsaw University of Technology

**The oldest and the  
largest technical  
university in Poland**

**100+  
study  
programmes**

**Founded  
in 1826**

**537  
professors  
(20% women)**





- Ranked **No. 1** in Poland among 21 universities of technology, **No. 3** among all Polish universities
- QS World University Rankings 521-539 rank
- Classified in 10 subjects of QS Ranking (Civil Engineering: rank 151-200, engineering & technology, Materials Science, Mechanical Engineering, Electrical&Electronic Engineering 201-250)

Circa **10% of CEO's and Presidents** of the largest enterprises in Poland are graduates of WUT!

# Strong Research Areas



**Aerospace  
Engineering  
and Aviation**



**5G Networks and  
Internet of Things**

**Photonic Technologies**  
**Artificial Intelligence & Robotics**  
**Cybersecurity & Data Science**  
**Biotechnology  
& Biomedical Engineering**  
**Materials Technologies**  
**High Energy Physics  
& Experimental Techniques**  
**Energy Conversion & Storage**



**Infrastructure  
Engineering**



**Circular  
Economy**



**Transport Engineering  
and Logistics**

# Innovation and Technology Transfer

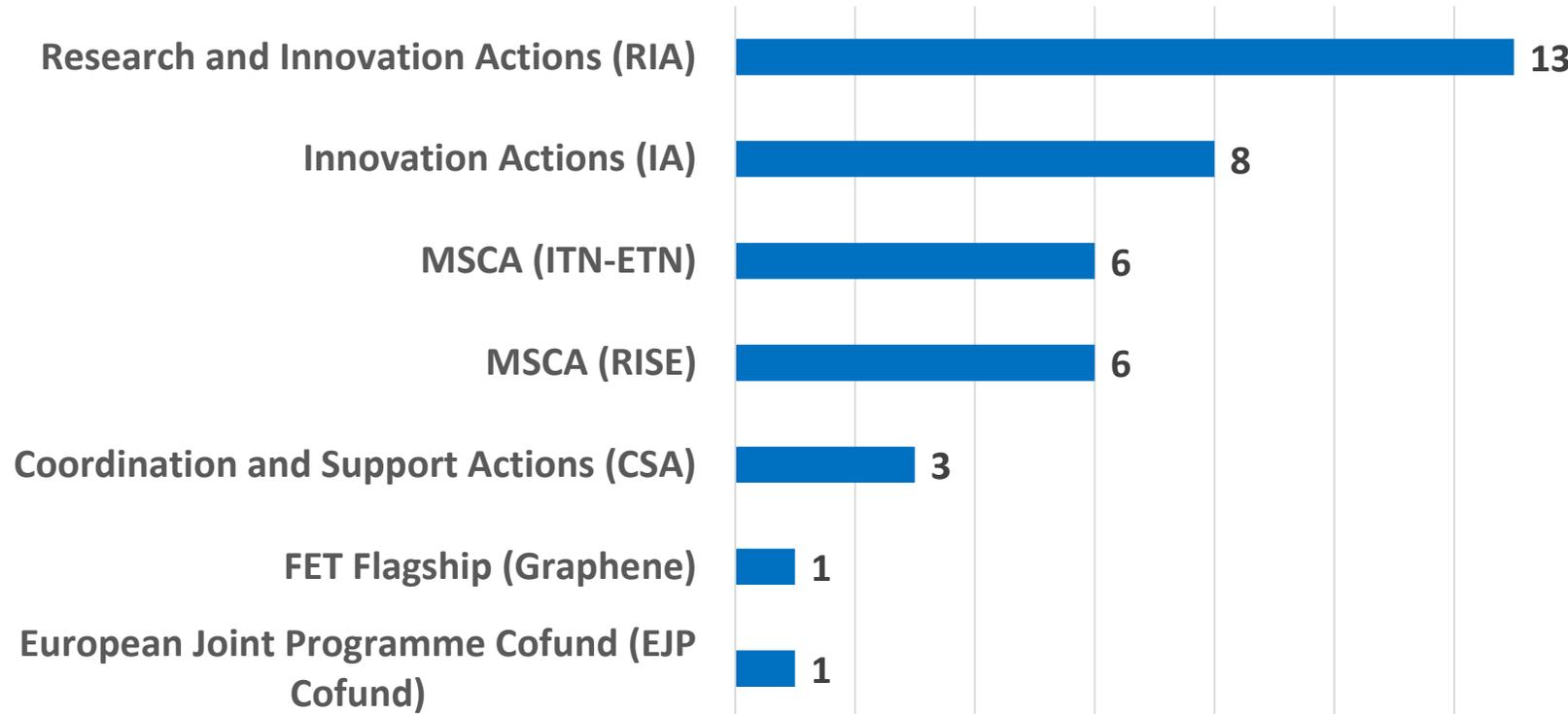


- 24 spin-off companies created
- 100 R&D projects in cooperation with industry, worth 14 Million EUR,
- Over 550 active protection right (Patents)
- 58 Intellectual Property commercial agreements, (one of these worth more than 120 000 EURO)
- 2,5 Million EUR invested in one spin-off company by Polish Industrial Investor

# H2020 projects at WUT

H2020 - 40 projects (FP7 – 79)

Success rate ca. 10%



WUT 10 M EUR, 2nd among technical universities

# H2020 projects at WUT - examples



## STEM4youth

BRINGING TEENAGERS CLOSER  
TO SCIENCE & TECHNOLOGY

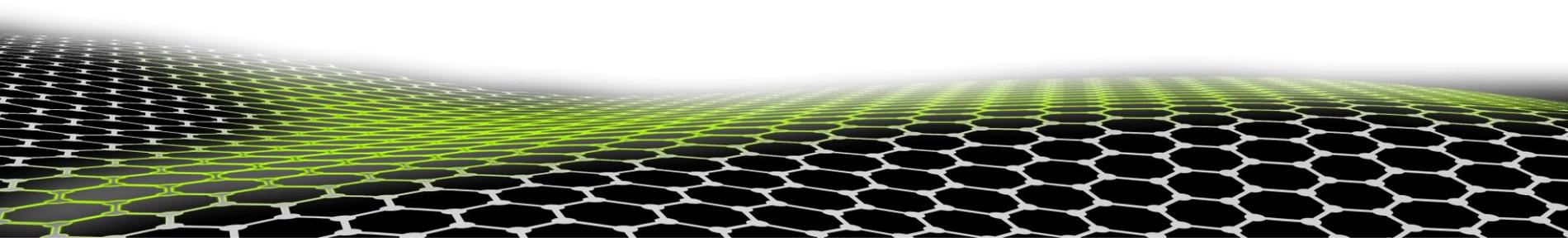


## microMole

SEWAGE MONITORING SYSTEM FOR TRACKING  
SYNTHETIC DRUG LABORATORIES

## WUT in FET Flagship Graphene

- research on crystallization, characterization, applications of graphene and other two-dimensional materials,
- fabrication of devices,
- studies of properties and applications of graphene-related materials



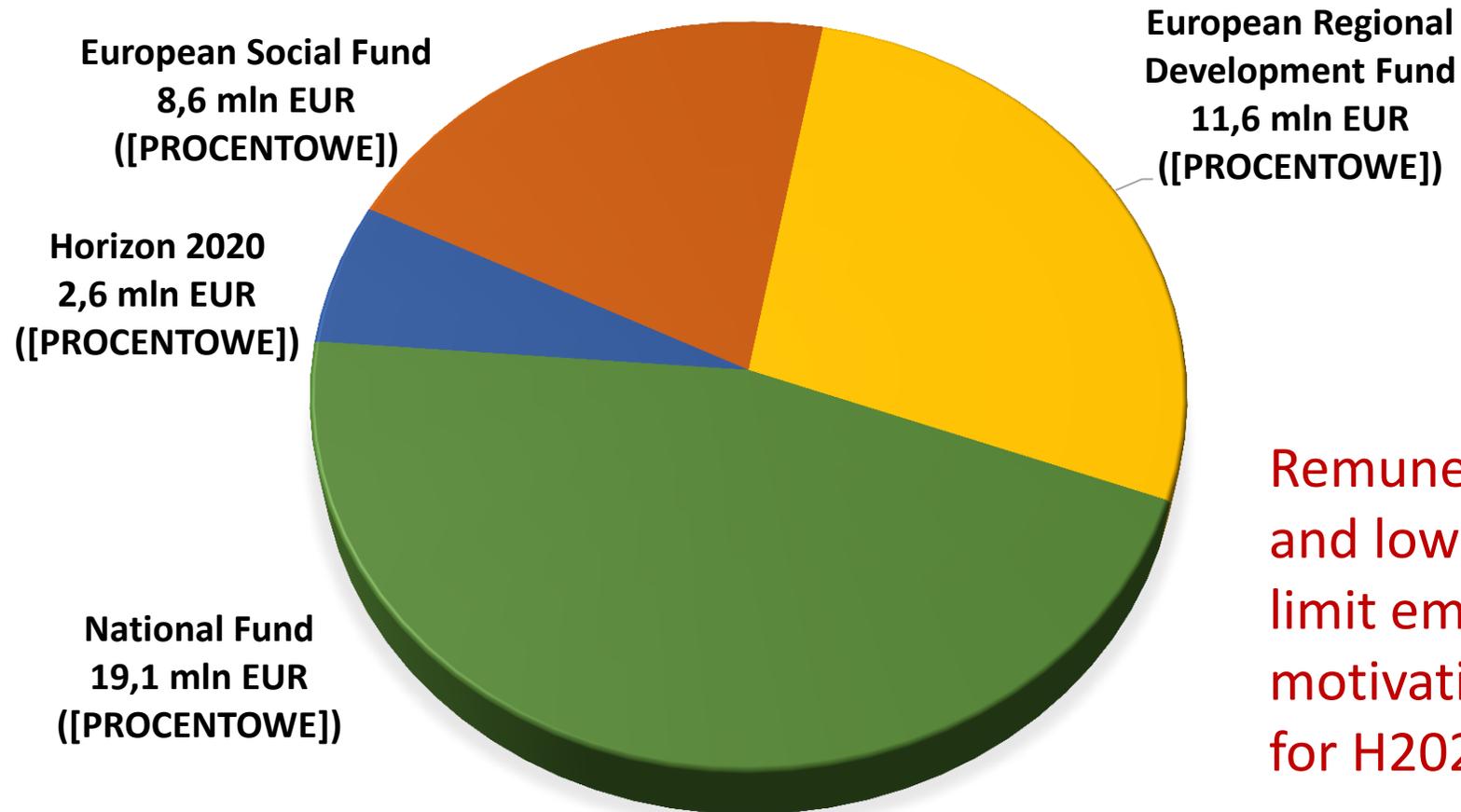
# H2020 – problem: remuneration scheme

## **Higher education remuneration system in Poland:**

- Low salaries and additional remuneration paid from research projects
- H2020 remuneration regulations are non-compatible with national project's funding rules and getting H2020 remuneration is practically impossible

**Only a few HE institutions in new member states have managed to introduce the new remuneration model**

# Awarded Research Funding in 2018



Remuneration problems and low success rate limit employees' motivation to apply for H2020 projects

# Framework Programme essential for realizing WUT's institutional development strategy



- Stimulates to deliver highest scientific excellence
- Contributes to tackling societal challenges across borders
- Breeding ground for innovators and breakthrough technologies
- Boosts our attractiveness worldwide

**We are determined to increase our participation**



## WUT - university in change

In Poland Higher Education reform is underway - New Higher Education and Science Law (Act 2.0) since Oct. 2018

- Puts emphasis on research quality
- Introduces dedicated funding schemes to support excellence initiatives and emerging world-class universities
- Gives greater organisational and financial autonomy
- Stimulates activity in obtaining funds from non-budgetary sources and better use of EU funds.



## WUT in change - Polish Excellence Initiative

Warsaw University of Technology is applying in the Excellence Initiative competition

In our quest for excellence we created plan aimed in enhancing research and education quality, with overarching need for internationalization

# Improving research performance



- Promotion of the quality culture
- Creating incentives to intensify research staff activity
- Introducing a new academic staff appraisal system
- Focusing research into priority research areas
- Investing in attracting international students and professors

# Innovative WUT Programme



- Facilitating technology transfer processes
- Establishment of an accelerator fund for spin-offs
- Study visits within WUT Best Innovators Program
- Taping on experience of of Polish diaspora – WUT graduates in the best universities in the world

# Enhancing quality of education



- Shifting to innovative teaching and learning (project based learning, research-based education)
- Individually designed learning paths for particularly gifted students
- Pro-quality grants for doctoral candidates

# Horizon Europe plans and expectations

We count on proposed changes in Horizon Europe rules:

- Simpler and more transparent
- More flexibility
- Defining broad areas allowing mission driven research and innovation
- Full coverage of real costs taking differences between countries into account
- Single set of rules principle

# Horizon Europe plans and expectations

- We expect right balance between basic and applied research funding
- We hope the **Horizon Europe** will strengthen the role of universities in disruptive innovation
- We count on Widening actions to reduce disparity between the new member states and the old EU.

**Wider participation in Horizon Europe is a key goal  
on our road to internationally recognized research  
University**

Thank you