

Employment opportunities for researchers with state funding 900 EUR a month until 31st August this year

No	Number of scientists	Research areas	Faculty, institute and contact person
1.	1	Differential equations (theoretical studies, numerical solutions)	Faculty of Computer Science and Information Technology, Institute of Applied Mathematics
2.	2	1. Embedded systems (microcontrollers), 2. Machine learning, 3. Image processing, 4. Prototyping (Solidworks).	Faculty of Computer Science and Information Technology, Institute of Smart Computer Technologies
3.	4-5	Priority areas: <ul style="list-style-type: none"> • RF circuit design; • Integrated circuit design and production (see EU Chips act); • Space electronics (Space Laboratory Initiative). Other areas: <ul style="list-style-type: none"> • Radioelectronics and signal processing; • Chaotic communications; • Nonlinear dynamics of electronic systems; • Acoustics (for our acoustics lab.). 	Faculty of Electronics and Telecommunications, Institute of Radioelectronics
4.	3-5	Organic synthesis, analysis of organic substances, synthesis technologies of pharmaceutical products, isolation and analysis of natural products Also general chemical technology, general chemical engineering	Faculty of Materials Science and Applied Chemistry, Institute of Technology of Organic Chemistry
5.	2-4	Polymer composite materials	Faculty of Materials Science and Applied Chemistry, Institute of Polymer Materials
6.	5-8	Surface coatings, unmanned airplanes, avionics, satellites, processing of remote sensing data	Faculty of Mechanical Engineering, Transport and Aeronautics, Institute of Transport and Aeronautics
7.	1-2	Metrology, tribology	Faculty of Mechanical Engineering, Transport and Aeronautics, Institute of Mechanics and Mechanical Engineering

8.	2-3 (including PhD students)	<p>Mechanics of Composite Materials and Structures</p> <p>Particular attention is focused on the following problems:</p> <ul style="list-style-type: none"> • failure, fatigue, and long-term strength • methods of optimum design of materials and structures • nondestructive testing • composites in civil engineering and infrastructure • mechanics of nanocomposites • mechanics of biocomposites 	Faculty of Civil Engineering, Institute of Materials and Constructions
9.	1	<ul style="list-style-type: none"> • Foam ceramic • Ecological thermal insulation materials • HPC impact concrete • Hemp concrete (betons) 	Faculty of Civil Engineering, Department of building materials and construction products
10.	1-2	<p>Department of Geomatics:</p> <ul style="list-style-type: none"> • Modelling and practical applications of the Earth's gravity field in the economy • Use a Gravitational Field for the realisation of an exact coordinate system • Local coordinate links and attachments in the performance of cosmic geodesy tasks • Rational use of GNSS/GPS for geo-information acquisition, GNSS development • Acquisition of geo-information by modern techniques, including laser-scanning and unmanned equipment, GIS systems • Remote survey methods, satellite data extraction and processing, SAR applications • Urban digital twins and smart cities 	Faculty of Civil Engineering, Department of building materials and construction products, Institute of Transport Facilities

11.	1-2	<p>Department of Road and Bridge Constructions:</p> <ul style="list-style-type: none"> • Development of road spatial design methods • Bridge durability and performance studies • Innovative solutions for ensuring the durability of the asphalt-concrete road pavement • Road embankment stress studies • Studies on the dynamic characteristics of bridges 	<p>Faculty of Civil Engineering, Department of building materials and construction products, Institute of Transport Facilities</p>
12.	2	<p>Thermal engineering</p>	<p>Faculty of Civil Engineering, Department of Thermal Engineering and Technology</p>
13.	1	<ul style="list-style-type: none"> • 3D printing of concrete • 3D printing using natural building materials with reduced environmental impact • Recycling and use of wood production waste in high value-added products 	<p>Faculty of Civil Engineering, 3D concrete printing scientific laboratory</p>
14.	1-2	<p>Some of the topics (but not limited to these):</p> <ul style="list-style-type: none"> • sewage treatment and sludge management; • environmental biotechnology; • microbiology and biomolecules. 	<p>Faculty of Civil Engineering, Institute of Water Systems and Biotechnology</p>