



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



Erasmus+ project “Improvement of master level education in the field of physical sciences in Belarusian universities” – Acronym “Physics”

561525-EPP-1-2015-1-LV-EPPKA2-CBHE-JP – ERASMUS+
CBHE

Student's mobility and training event

Riga Technical University 12/1, Azenes Street Riga, Latvia
25 September – 6 October 2017



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



Schedule	Activity	Responsible contact
Sunday 24 th of September	Arrival at student home Kipsala Dormitory, Azenes iela 6, Riga, LV-1048	Project manager Arta Legzdina
Monday 25 th of September 9.00 – 12.00	General welcome Overview schedule + main goals of mobility program Short campus tour	Prof. N.Kunicina Dr. A.Zabasta Head of laboratories A.Avotins
Monday September 25 th 13.00 – 16.00	Scientific projects management Laboratory demonstrations: solar energy, wind energy, fuel cells A walk around Old Riga	Prof. N.Kunicina Prof. A. Ziravecka Head of laboratories A.Avotins
Tuesday, September 26 th 9.00 – 16.00	Prototype development Latvenergo laboratory	Prof. I. Galkins
Wednesday September 27 th 9.00 – 16.00	Prototype development Latvenergo laboratory	Prof. I. Galkins
Thursday September 28 th 9.00 – 16.00	Prototype development -EMC laboratory	Senior researcher G.Asmanis
Friday September 29 th 9.00 – 16.00	Prototype development -EMC laboratory	Senior researcher G.Asmanis
Monday October 2 nd 9.00 – 16.00	Introduction to applied physics disciplines photonics and nanomaterials	BSU and BPS
Tuesday October 3 rd 9.00 – 16.00	Scientific – visit To Riga co - generation station Getlini	Project manager Arta Legzdina, Dr. A.Zabasta, Prof. N.Kunicina
Wednesday October 4 th 9.00 – 16.00	Lecture elements of automation Scientific –technical training	Prof. N.Kunicina Prof. A. Ziravecka
Thursday October 5 th 9.00 – 16.00	Scientific travel to Latvenergo power generation station – Riga HES	Dr. A.Zabasta Prof. N.Kunicina
Friday October 6	Presentation of prototype The end of the seminar	Prof. N.Kunicina Prof. A. Ziravecka



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



		Dr. A.Zabasta
Saturday 7 th of October	Return to Belarus	Project manager Arta Legzdina



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



Information about local organizer

The training will be hosted by the Institute of Industrial Electronics and Electrical Engineering, Faculty of Power and Electrical Engineering of Riga Technical University (www.rtu.lv) that is the largest public university in Latvia.

The training will be held in the building of the [**Faculty of Power and Electrical Engineering**](#) of [**Riga Technical University**](#): Latvia, Riga, Azenes str. 12, building 1

The local organizing committee:

Project coordinator, Dr. Anatolijs
Zabashta
GSM: +371 29232872
Anatolijs.Zabasta@rtu.lv

Professor Nadezhda Kunicina
GSM: +371 26162662
Nadezda.Kunicina@rtu.lv

Professor Anastasija Žiravecka
GSM: +371 29682242
Anastasija.Ziravecka@rtu.lv

Arta Legzdina
Phone: +371 67089915
Arta.Legzdina@rtu.lv



Training will be provided, using laboratories of study programme computer control of electrical technologies <http://fsd.rtu.lv/masters-studies/?lang=en#tab-id-7> is a research based educational programme. Every day research activities are an integral part of the routine work of the staff of the Institute of Industrial electronics and electrical engineering (IEEI). The study program „Computer control of electrical technologies” in the fields of industrial electronics and electrical engineering with the specializations in power electronics, adjustable electric drive, automatization of electrical technologies and electric transport, to develop scientific investigations in the field of industrial electronics and electrical engineering, realizing the program, which meets the needs of industry and the graduates of which are competitive at the world labour market.

<http://physics.rtu.lv/>

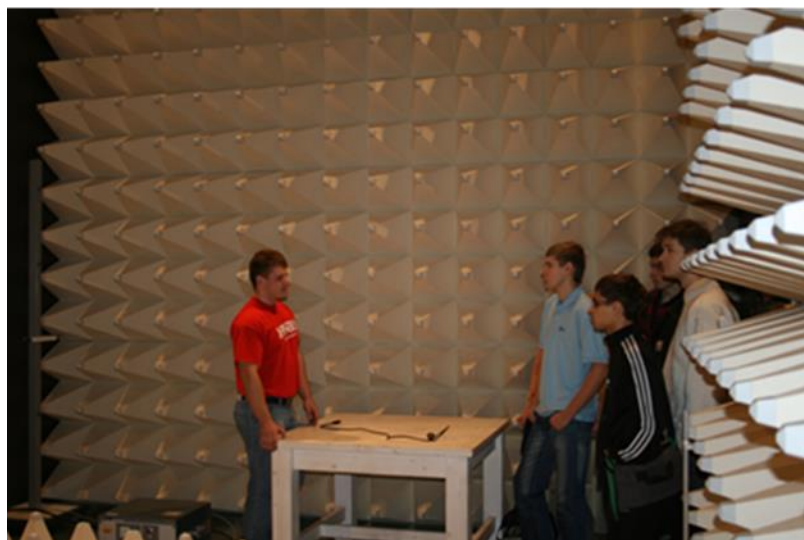
Nadezhda Kunicina
GSM + 371 26162662



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



Electromagnetic Compatibility and Electric Security Research Centre



Practical training will be provided by RTU EMC center in cooperation with Latvian Electronics equipment testing centre (LEITC) <http://www.leitc.lv> .

The center offers complex electronic and electrical equipment testing facilities in the Baltics. A strong emphasis has been given to extend cooperation with international research organisations and industry based on bilateral research agreements or collaboration within the European Commission's 7th Framework Program on EMC topic. This initiative facilitates the introduction of the industry driven approach into RTU curriculum in particularly for EMC research involving several master and PhD students and researchers to this topic.

The EMC centre equipment consists of main measurement laboratory and specific measurement equipment for low voltage devices. There is an anechoic measurement chamber (figure) with the intensity range up to 40GHz that ensures the testing results of complex electromagnetic compatibility and electric security in accordance with 28 Standards and Directives of the European Union.

Latvenergo laboratory

Latvenergo Group is a vertically integrated power supply utility operating in electricity and thermal energy generation and supply, electricity distribution services and transmission system asset management.



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



Latvenergo Group comprises the parent company Latvenergo AS and six subsidiaries. All shares of Latvenergo AS are owned by the State and they are held by the Ministry of Economics of the Republic of Latvia.

annually implements projects contributing to development of science and education in energy, promoting engineering and technology professions, and elevating graduates' qualifications.

In 2016 and 2015, Latvenergo Group supported the establishment of the Riga Technical University (RTU) Secondary School of Engineering Sciences. In 2015, the Group also assisted with enhancing the student laboratory at the RTU Faculty of Power and Electrical Engineering.





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



Venue

Riga, the capital of Latvia with a population of about seven hundred thousand inhabitants, is a modern city, which has a lot to offer both in terms of history, culture and social life, <http://www.riga.lv> was officially founded in 1201.

Riga has always been a city at the cross roads of the large markets of Western Europe and the East. For this reason, Riga is still attractive for businesses across the region because of its central location for both of these markets. Riga is also a very important point for transporting goods. The harbour in Riga, Riga's international airport, developed railroad system, and good road infrastructure are the main aspects of the transportation element which is important to the city. Considering that the infrastructure is highly developed it has transformed the city of Riga into a main industrial and business centre in the Baltic region.

In the architecture of the historic centre of Riga examples of all architectural styles characteristic for the Northern Europe, from Gothic to Modernism, are found.

Riga has unique ensemble of Art Nouveau buildings as well in some districts of Riga, for various reasons, complex wooden constructions of that time have still been preserved, and that is an amazing phenomenon in the 21st century. In 1997 the historic center of Riga due to this valued architecture was inscribed into the UNESCO World Heritage List.

Tourism information portal: <http://www.liveriga.com>

Currency – EUR

Transportation & Hotels

The airport in Latvia is **Riga airport**: <http://www.riga-airport.com/>

The national air company is **Air Baltic** <http://www.airbaltic.lv>

Transport from/to airport:

Bus No. 22 (if you choose this transport you have to change to bus 53 on one of 3 bus stops RMR; Pasts or Melnsila iela) you have to buy ticket in Narvesen kiosks 2nd floor of terminal departures hall, or in the bus from driver directly

You have to leave bus Nr 53 on stop Preses nams.





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



Riga public transport (bus, trolleybus, and tram) operates an electronic payment system, or e-ticket (e-talons). Every time, when entering a public transport vehicle, a passenger has to apply his/her e-ticket to the validator until the ticket's validity period and the number of remaining trips are displayed on the validator screen, the green signal lights up and a short signal sounds. Validators are located inside public transport vehicles, next to every door. In case of having no e-ticket, a passenger has to buy one-time ticket from the vehicle's driver.

In Riga public transport (except bus No. 22), you have also to pay for carrying luggage with the total of sizes (length, height and width) exceeding 200 cm. Luggage tickets are available from the vehicle driver.

You can buy e-tickets at press kiosks "Narvesen" public transport terminals, special ticket vending machines, customer service centres and other trade outlets marked as selling e-tickets.
www.rigassatiksm.lv

To reach venue place (or hotel Islande, please use Baltic shuttle bus or taxi)

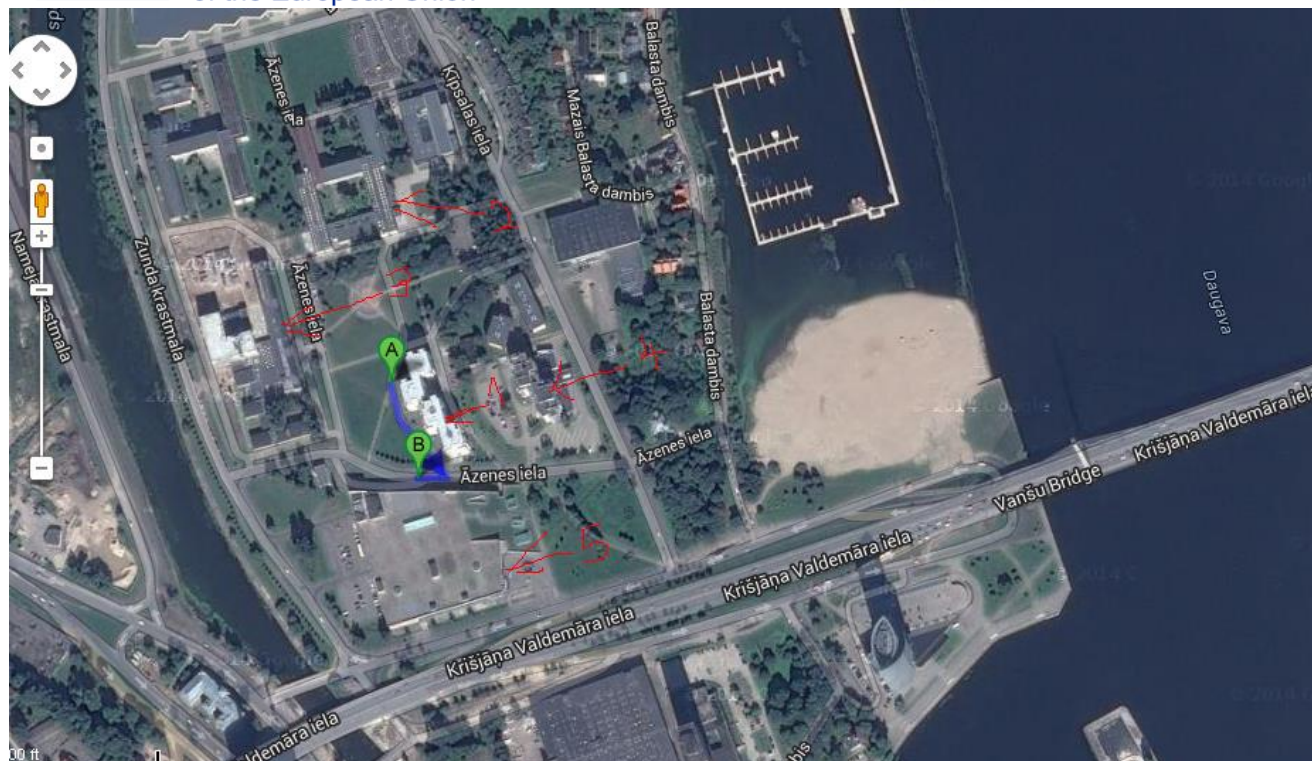
<http://saraksti.rigassatiksm.lv/index.html#bus/22/b-a/en>

Directions you have to tell taxi driver – direction "KIPSALA"

1. RTU Hostel- 6 Azenes Str., Riga phone +371 67089268; +371 26435882
3. RTU Faculty of Power and Electrical Engineering and, Azenes str. 12, building 1
4. Islande hotel; www.islandehotel.lv
5. Supermarket Olimpia, a lot of cafeterias on 2nd floor.



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



RTU Hostel Azenes 6, Riga



The trainees are welcome to use dormitory located on Kipsala campus providing students with the advantage of close by faculty buildings, city centre and a big shopping mall. The dormitory is located in 3 minutes walking distance from Faculty building.

The dormitory mainly is used for international students has a single apartments and shared student's apartments.

The dormitory building is arranged in various blocks (A, B, etc.) either with 9 or 11 floors. The rooms are arranged into apartments. Each apartment has three double shared rooms, a kitchen, bathroom, toilet and corridor.

<http://physics.rtu.lv/>

Nadezhda Kunicina
GSM + 371 26162662



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



The dormitory rent includes internet, bedding, linens and a towel. For additional fee students may use washing machines (2.50 EUR per use).

24 EUR/ night – bed in 2- 3 bed rooms

40 EUR/ night - single room

50 EUR/ night - double room

Students will receive an official cost note, mentioning: the name and address of the student, dates of stay and number of days, the amount payed in EURO, a sign and stamp by the responsible of the student hostel in Azenes 6.

It is possible to order lunch approximately 3 euro per person.

In RTU hostel you could pay cash (or bank cards) - please ask receipt.