

Higher education internationalisation beyond 2015

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ABSTRACT: Where is European higher education heading? Which of the current challenges will persist beyond 2015 or 2020? What opportunities are there in an increasingly globalised world? Since the signing of Bologna Declaration in 1999, the priorities of higher education institutions' (HEI) international activities have been rapidly changing in terms of content and geographic directions. The new forms of activities are emerging. European HEIs are facing an increasing need to create a more diverse range of international activities. During this evolution of international activities from mobility to international education hubs, universities are searching for new internationalisation tools to implement those activities more effectively in terms of finance and time. There is an obvious trend of moving from intra-European towards a global profile for HEIs. *Erasmus+* is analysed in this article as an emerging platform to boost the visibility of European HE in the global arena, to respond to the contemporary needs of European universities. The qualitative leap in the internationalisation practices of European HEIs is strengthening the ties with institutions from outside Europe and global multilateral partnerships. Within this context, the international activities of a technical university from a small European country are presented in this article.

Keywords: Bologna Process, educational mobility, Erasmus+ programme, internationalisation

INTRODUCTION

Erasmus+ is the European Commission's programme for education, training, youth and sport for the period 2014-2020. As an integrated programme, Erasmus+ offers more opportunities for the mobility of learners and staff, and cooperation across the education, training and youth sectors with simplified funding rules and structures [1].

Approximately two-thirds of the budget is allocated to learning opportunities abroad for individuals, within the EU and beyond; the remainder will support partnerships between educational institutions, youth organisations, businesses, local and regional authorities and non-governmental organisations (NGO), as well as reforms to modernise education, training and youth systems [2].

The seven year programme has a budget of €14.7 billion and shows the EU's commitment to investing in these areas. Additional funds are expected to be allocated for higher education mobility and capacity building involving non-EU countries. According to the Regulation of the Programme, the overall budget is allocated to a range of actions as follows:

- 77.5% of the funds is to be allocated to education and training, from which the following minimum allocations should be assigned: 43% to higher education, 22% to vocational education and training, representing 15% to school education and 5% to adult learning. At least 63% is to be allocated to individuals' learning mobility, 28% to cooperation for innovation and the exchange of good practices and 4.2 % to support for policy reform. International cooperation consists in exchanges of both academic staff and students. The exchange is carried out under bilateral agreements, grants and Erasmus programme.
- 10% to youth (Student Loan Guarantee Facility, Jean Monnet programme, sport, operating grants to national agencies and cover of administrative expenditures).
- Around €265 million will be allocated over seven years to contribute to developing sport, supporting grassroots projects and cross-border challenges (doping, violence, racism, match fixing) and promoting good governance, gender equality, social inclusion, physical activity for all, etc.

More than four million people will receive support to study, train, work or volunteer abroad, including two million higher education students; 650,000 vocational training students and apprentices; more than 500,000 going on youth

exchanges; 200,000 Master's degree students doing a full course in another country will benefit from loan guarantees; more than 25,000 students will receive grants for joint Master's degrees, which involve studying in at least two higher education institutions abroad; 125,000 schools, vocational education and training institutions, higher and adult education institutions, youth organisations and enterprises will receive funding to set up 25,000 *strategic partnerships* to promote the exchange of experience and links with the world of work [3].

But, how can one create an image of the future of European higher education beyond 2015? Where is European higher education heading? What will the hot issues be in the next few years, and what current challenges will persist in the next seven year period? From the start of the signing of the Bologna Declaration by 29 European countries in 1999, internationalisation has become a key element of the policy discourse in European higher education [4][5].

This had not always been so. Until the mid-1980s internationalisation was not perceived as an indispensable element of higher education, but rather was seen as interesting, if not exotic. Twenty years ago, internationalisation was almost identical with the mobility of students across country borders. Since the beginning of the current century, internationalisation has assumed many other faces.

So what is internationalisation? The most often-quoted definition comes from Knight, for whom internationalisation is: *...The process of integrating an international, intercultural, or global dimension into the purpose, functions and delivery of postsecondary education* [6]. It means that internationalisation is a process of change, from an original state of affairs where higher education institutions are basically national, to one where they gradually become international.

The *physical mobility of students across country borders* is the first, and certainly still the most frequently-cited example of internationalisation. In student mobility, there are degree and non-degree mobility, mobility between similar developed countries (*horizontal* mobility), and mobility from countries with a quantitatively or qualitatively less developed higher education system into developed systems (*vertical* mobility). An example of *horizontal* mobility is when the education a student receives is different from the education to be had in the home country, in terms of language, teaching and learning styles, cultural setting, etc, and - in the case of *vertical* mobility - also in terms of quality. The recognition across country borders of, first, degrees and other qualifications and, second, of study periods and sub-qualification entitlements (courses, modules, etc.) is generally perceived as an *international* activity.

In the Bologna context, the European Credit Transfer System (introduced in 1989) marked a major milestone, as did the Diploma Supplement and, very recently, the European Qualifications Framework (EQF). After that, the understanding of internationalisation in recognition is the same as the one in mobility. *Curricular reform* with the aim of injecting an international element into the content and delivery of programmes is a third variable of internationalisation activity. The most prominent form of curricular internationalisation is the delivery of a programme in a language other than the one of the country where this programme is offered [2]. In Lithuania, as in the vast majority of all European countries, this language is English.

INTERNATIONALISATION AND THE BOLOGNA PROCESS

It is hard to know what directions European transnational education provision will take in the coming years. The form of internationalisation currently running is a considerable expansion of the Bologna Process. The Bologna Process has ten action lines: three-cycle degree structure, recognition, mobility, quality assurance, social dimension, joint degrees, employability, lifelong learning, stocktaking, the global dimension of the European higher education area (EHEA).

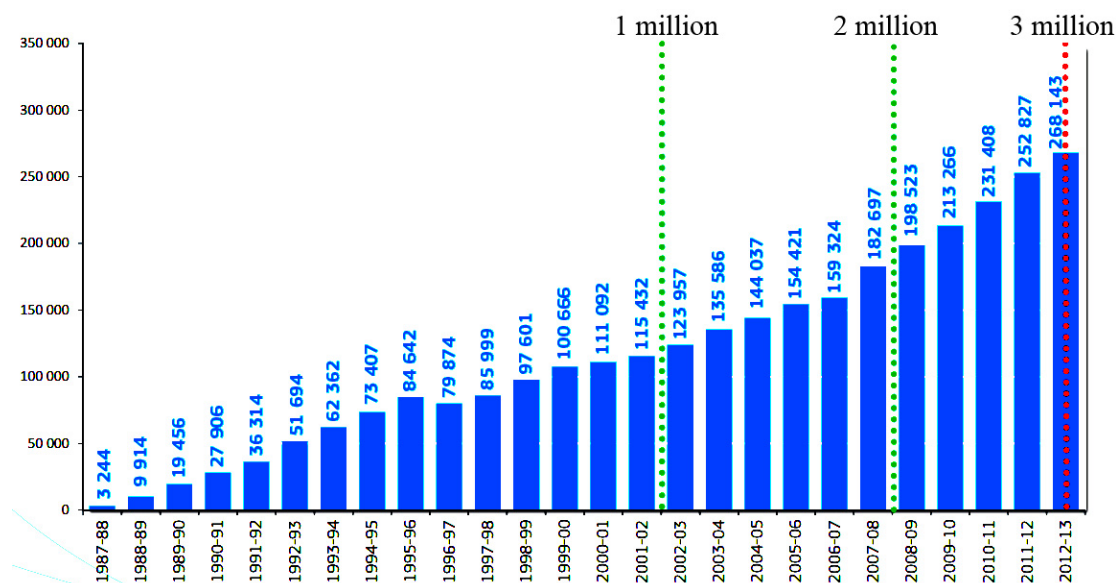


Figure1: Reaching the three million student mobility target [7].

Of the ten action lines, four (mobility, recognition, joint degrees, global dimension) could be categorised as belonging to a more traditional understanding of internationalisation. The first one, mobility, implies a physical move to another country for purposes of study (or teaching). The second one, recognition, as a set of mobility-facilitating mechanisms and tools, which reduce mobility barriers by the creation of equivalences, has the same underlying internationalisation concept. Joint degrees belong within the category of curricular internationalisation.

The *global dimension* includes the provision of information on the Bologna Process outside the EHEA; activities of marketing and promotion of European higher education in other parts of the world; a policy dialogue with higher education outside Europe; and recognition between the EHEA and the rest of the world. It is also interesting to note that until recently, internationalisation in the Bologna Process has mainly been focussed on mobility and cooperation inside the EHEA, and not much on extra-EHEA relations. Five of the remaining six action lines - quality assurance, the social dimension, employability, lifelong learning, and the three-cycle degree architecture - belong to the category of *joint system reform*. The actual motive behind the drive for increased intra-EHEA cooperation was to be able to withstand extra-European competition.

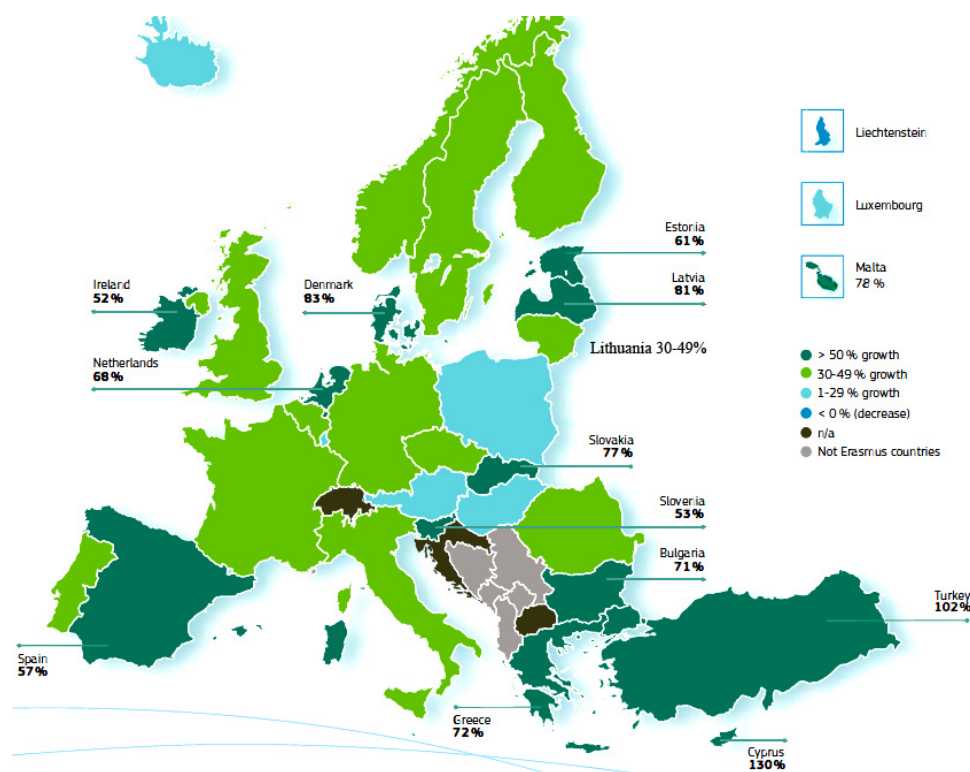


Figure 2: Outbound student mobility growth rates between 2007-2008 (start of the Lifelong Learning Programme) and 2012-2013 [7].

As some observers have commented, the Sorbonne and Bologna Declarations were sparked off by the globalisation of higher education and directed first and foremost at the non-European world. The questions of *if* and *how* the Bologna Process have furthered internationalisation in the EHEA is difficult, because it is difficult to measure the impact of the Bologna Process on internationalisation in Europe. The priorities of internationalisation, and the stages of development of it, are different in the various countries of the EHEA. Now, it is clear that the emergence of a global higher education market is at the root of some emanations of European internationalisation.

EHEA BEYOND 2015

The developments, which will affect Europe over the next 10 or 20 years will not be purely internal to Europe - they will be global, and will relate to five main areas: energy, demography, the economy and globalisation, the environment, and science and technology. First, the demographers indicate that Europe will become an older society. Because fertility rates have been falling since the 1970s, the numbers of young people ready to come into higher education are also falling. The decline in numbers of young people that one can already see in schools will have hit universities in almost all countries by 2020. At the same time, in 2020, more people will be leaving the labour market through retirement than will be coming into it. In Lithuania, the likely decline in the working age population may be as much as 30% or more, and the ratio of workers to pensioners will lead to a difficult situation.

For this reason, one will need increased skills to raise productivity, if one wants to maintain current standards of living and pay for pensions and healthcare [8-10]. For example, in 2004, enrolments in social sciences, business and law studies were 40%, and in engineering, manufacturing and construction were 18% of overall students. Today, employers will look not just at whether someone has a degree, but where they got it from. It will increase the pressure on

specialisation of universities. Employers know that scientific and technological research takes a lot of money and, thus, represent a choice not retain all current universities. In a declining workforce, a larger proportion of the population will be separated from higher education. In Lithuania, in 2004, there were 54,334 18 year-olds; in 2020, there will be 34,952, about 36% fewer. It is clear, that the large shortage of engineers is not going to go down between now and 2020. The case is somewhat different for smaller countries. The European Union has five member states with a population of between one and five million population (including Lithuania with three million). At some point, it will be necessary to consider the relationship between the size of a country and the amount of money it can afford to put into its universities [11].

Today Lithuanian higher education institutions offer more than 1,000 study programmes. At what stage does it become uneconomical for a smaller country to try and teach all disciplines itself? Taking veterinary science as an example, five years ago at one Lithuanian university, only one or two applications were received to enter this study programme. Lithuania is an agriculture based country and must also have veterinarians. However, veterinary science is not attractive for young people and is expensive for the university. Does every country need to train its own veterinarians? There are self-sufficiency issues: if you have to have veterinarians, can even a small country afford not to train them? The veterinary qualifications are already recognised across European borders and food safety legislation is directly regulated by the European Union. Of course, there are language and culture issues, but in such cases a country might ask itself what training veterinarians abroad could provide. In order to ensure there is the necessary number of students, the country could pay scholarships and tuition costs, and save money overall. Such an approach would maintain a high level of quality. In the 1980s, such an approach in Lithuania was applied for specialisations with restricted demand (railway transport, post services, printing technologies, etc). If governments want their universities to provide high-class skills, to give their graduates qualifications that will be sought on the labour market, they must choose how they are going to achieve that.

ERASMUS AND THE TECHNICAL UNIVERSITY

Since 2011, study programmes at Vilnius *Gediminas* Technical University (VGTU) have been based on the European credit transfer and accumulation system (ECTS), which provides for the alignment of learning outcomes, study methods and assessment methods with the workload of students. At the VGTU, the first and second-cycle degree students, as well as the followers of integrated studies had the option of choosing from 102 study approved study programmes. In 2012, the University provided first-cycle degrees in 47 programmes of study and 53 in second-cycle degree programmes of study along with two integrated programmes. The new studies regulations provide students with the possibility of studying according to an individual study plan. The University uses the *Moodle* integrated learning system. In 2012, nearly 2,000 courses were placed on Moodle and nearly 11,000 different users were registered in the virtual learning environment. In order to provide information about the studies and to boost the motivation to study at the University, there is cooperation with secondary schools. Lectures and discussions are organised for pupils and their parents, teachers of professional information centres, and open days are organised.

First year students who study technological and physical sciences are additionally taught mathematics, physics and chemistry, taking into account different level of knowledge acquired at secondary school and, therefore, possible knowledge gaps. Career counselling is provided by the Careers Office by engaging the University's partners, external consultants and mentors in these activities. Faculties constantly monitor the student drop-out rate and analyse its causes. Since 2007, the number of students who terminated studies due to poor performance has been shrinking from 10.16 percent of total student number in academic year the 2007-2008 to 6.24 percent in 2013-2014. Over 300 students terminate their studies every year due to personal reasons. After improvement of academic and career counselling, a large proportion of students return to continue the studies after termination. In order to improve the availability of studies, the University reimburses a part of the tuition fee taking into account students' social and economic status.

MOBILITY OF TEACHING STAFF AND STUDENTS AND ITS IMPACT ON THE ACTIVITIES OF THE UNIVERSITY

International mobility at the VGTU is facilitated by studies in English allowing for the creation of a common learning environment for local and international students, leading to improved foreign language proficiency and the development of intercultural competence. The first study programmes in English were started at the VGTU in 1994. In 2012, over 900 students studied in English study programmes. Eighteen percent of them were international students seeking to acquire a degree, 35% were international exchange students and more than 47% were local students. The important internationalisation element - foreign-language-taught programmes - does not figure in official Bologna documents, but it has a close relationship to the global re-emerging *attractiveness* and *competitiveness* of the Bologna Process and reduces the language barrier.

From 2007 to 2012, the number of international students in these programmes went up 1.6 times and around 8% of all VGTU students are taking studies in English. In 2012, the students in Master's-level studies amounted to 40% of all the international students seeking to acquire a degree at the University. In order to respond to the needs for higher education in neighbouring countries and to attract international degree students, joint MSc programmes were developed and accredited in cooperation with the partners. The *Real Estate Management* study programme was developed with the Belarusian State Technological University, the *Sustainable Real Estate Management* study programme with Kaliningrad State Technical University, *Sustainable Development of Buildings and Their Environment* with Lomonosov State

University of Moscow, and *Mechatronics* with Braunschweig University of Technology. Over the period 2007-2012, the mobility of students increased every year: the number of incoming students increased by 2.3 times and the number of outgoing students by 1.8 times from the start of the reviewed period (Figure 3). The number of incoming students (for exchange or full studies) and outgoing students (under the Erasmus lifelong learning programme and bipartite cooperation contracts) reached parity in the 2011-2012 academic year. Over 90% of all outgoing VGTU students are in the Erasmus programme.

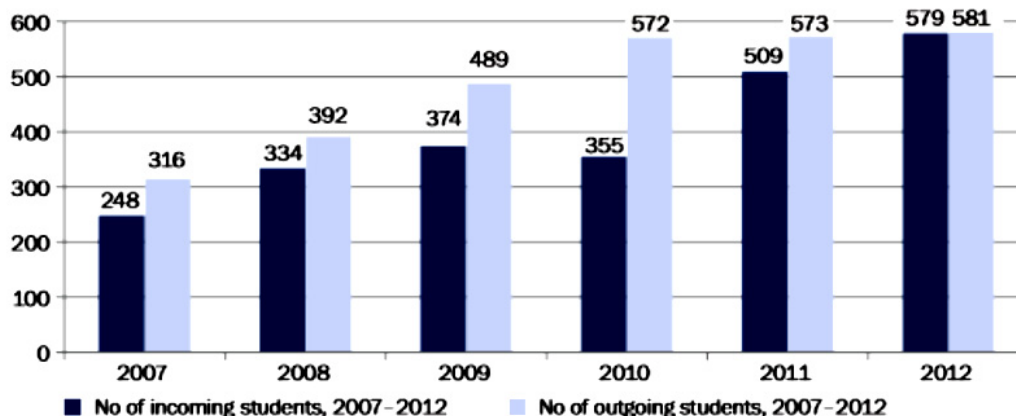


Figure 3: Student mobility (incoming and outgoing) for studies and internship abroad, 2007-2012 [12].

The mobility of Erasmus internship was the fastest growing mobility activity during the period concerned (it grew by 2.5 times) (Figure 4). In 2008, when the first student internships under LLL/Erasmus programme (life-long learning) took place, 49 VGTU students participated in the programme, and 127 in 2012.

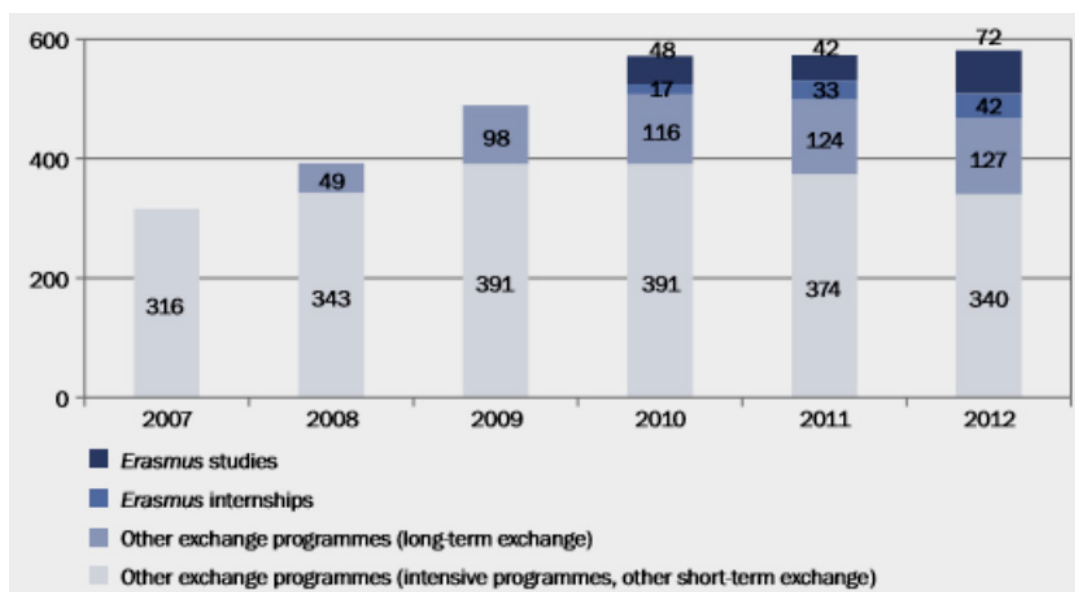


Figure 4: VGTU outgoing students for studies and internship, 2007-2012 [12].

In 2009, the VGTU established scholarships for studies in the universities of non-EU countries and in this way initiated new mobility directions in Asia and Latin America. The number of outgoing students in non-EU countries increased by 41% from 2009 to 2012; 42 students studied in partner universities in Malaysia, Taiwan, Russia, South Korea, Chile and other countries. Around 350 incoming Erasmus students are welcomed to the VGTU every year. The major mobility programme for teaching staff is also the Erasmus programme. During the entire period concerned, the University has been in the top 30 of HEIs in Europe participating in the Erasmus programme according the number of outgoing teaching staff mobility.

The *Internationalisation at Home* approach has been applied to enhance the international dimension of studies. The dissemination of international students' experience in the community, their smooth academic and social integration, which is coordinated by the mentors of Erasmus student network, is of key importance for the University. Every academic year, around 120 visiting foreign teaching staff members, including 70-80 coming under the Erasmus programme every year, deliver lectures at the VGTU. The increased contribution of visiting teaching staff to the study process is being sought: their lectures are integrated into the subjects taught by VGTU professors through joint participation in examinations, and open lectures are organised.

CONCLUSIONS

The portfolio of study programmes and the qualifications awarded are in line with the provisions of the national strategies and individual sectors of economy, as well as with inter-sectoral strategic documents, and reflect the technical profile of the higher education institution. The University's activities in relation to the development of studies, lifelong learning, improvement of the access to studies and ensuring international openness comply with the standards of the EHEA. The variety of study modes and forms guarantees the possibilities for horizontal and vertical mobility in higher education for students taking into account their needs and prior learning outcomes. The development of practical competence and internationalisation of studies is a distinguishing feature of the University. Academic, social and business partners are actively involved in the University's study process. The impact of this cooperation on the studies and lifelong learning is significant for the update of the existing study programmes and the development of the new ones. There are several major goals for further development of studies and lifelong learning:

- develop new study programmes in current and new study fields, which comply with the expectations of society and business, by prioritising interdisciplinary practical training and joint study programmes with foreign universities, and engagement of social partners in the improvement and organisation of the study process;
- improve access to studies and students' motivation;
- further enhance internationalisation of studies;
- intra-European (Erasmus-type) non-degree mobility should remain in place, because the existence of the same degree structure in different European countries makes mobility from one country to another easier, but many Lithuanian HEIs feel mobility stabilisation or *saturation*;

During the last decade Lithuanian higher education experienced a dramatic decrease of internal applicants. However, the national higher education promotion for non-European countries appears to be an attractive measure. Unfortunately, the promotional efforts have been started only recently, this activity is usually small-scale and most of it consists of the provision of information rather than marketing as such.

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BIOGRAPHY



Algirdas Vaclovas Valiulis graduated in Mechanical Engineering from the Kaunas Polytechnic Institute (Kaunas, Lithuania) in 1967, was awarded a PhD (Materials Science) from Dnepropetrovsk Ferrous Metallurgy Institute (Dnepropetrovsk, Ukraine) in 1974 and a Doctor Habilitus degree in 1997. Since 1998 he has been a professor and a full member of Lithuanian Academy of Science. A.V. Valiulis teaches fusion welding technology and equipment for ferrous and non-ferrous metals and polymers, materials science, soldering and brazing. His research interests are in arc, resistance, lasers, diffusion welding, surfacing and coating, heat treatment of ferrous metals, curriculum development of study programmes. Between 1990 and 2006, he was a Vice-Rector and Head of the Materials Science and Welding Department (2001-2011) of Vilnius *Gediminas* Technical University. Since 2006, he has been Dean of the Faculty of Mechanics of Vilnius *Gediminas* Technical University. He

has authored over 400 research, methodological, scientific and study organisation publications, including several books and textbooks, and many study guides and manuals. He has presented over 100 papers at international conferences. Currently, he is a national representative for Lithuania in the European Commission Coal and Steel Committee (COSCO) and the European Commission European Steel Technology Platform (ESTEP). Also, he is a Board Member of the Lithuanian Confederation of Industrialists.