



LIETUVOS MOKSLO TARYBA

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DĖL VILNIAUS GEDIMINO TECHNIKOS UNIVERSITETO MOKSLINIŲ TYRIMŲ IR EKSPERIMENTINĖS PLĖTROS VEIKLOS VERTINIMO REZULTATŲ

Lietuvos mokslo taryba (toliau – Taryba), atsakydama į Lietuvos Respublikos švietimo, mokslo ir sporto ministerijos 2023 m. rugsėjo 19 d. raštą Nr. SR-3488 „Dėl ekspertinės išvados“, vadovaudamasi Trumposios pakopos ir koleginių studijų programų vykdymo universitete tvarkos aprašo, patvirtinto Lietuvos Respublikos Vyriausybės 2022 m. gruodžio 21 d. nutarimu Nr. 1299 „Dėl Lietuvos Respublikos Vyriausybės 2017 m. kovo 1 d. nutarimo Nr. 149 „Dėl Lietuvos Respublikos mokslo ir studijų įstatymo įgyvendinimo“ pakeitimo“, 6.1.3–6.1.4 papunkčiais ir aukštosiose mokyklose vykdomų studijų ir mokslinių tyrimų sąsajomis, nustatytomis Studijų išorinio vertinimo ir akreditavimo tvarkos aprašo, patvirtinto Lietuvos Respublikos švietimo, mokslo ir sporto ministro 2019 m. liepos 17 d. įsakymu Nr. V-835 „Dėl studijų išorinio vertinimo ir akreditavimo tvarkos aprašo, vertinamųjų sričių ir rodiklių patvirtinimo“ (2023 m. rugpjūčio 17 d. įsakymo Nr. V-1071 redakcija), 1 priede, teikia informaciją apie Vilniaus Gedimino technikos universiteto (toliau – Vilnius TECH) vykdytą mokslinių tyrimų ir eksperimentinės plėtros (toliau – MTEP) veiklą transporto inžinerijos (T003) ir mechanikos inžinerijos (T009) mokslo kryptyse pagal Tarybos atliktų Kasmetinio universitetų ir mokslinių tyrimų institutų mokslinių tyrimų rezultatų sklaidos vienetų (mokslo darbų) vertinimo (toliau – kasmetinis vertinimas) ir Palyginamojo ekspertinio universitetų ir mokslinių tyrimų institutų MTEP vertinimo (toliau – palyginamasis ekspertinis vertinimas) rezultatus už 2018–2022 metų laikotarpį.

Kasmetinio vertinimo rezultatai

Vilnius TECH pagal kasmetinio vertinimo institucijos surinktą taškų sumą, tenkančią vienam institucijos srities mokslininkų visos darbo dienos atitikmeniui (T_i) technologijos mokslų srityje (T000) 2018 metais buvo pirmoje vietoje iš visų vertinime dalyvavusių institucijų, 2019 metais – 4 vietoje, 2020, 2021 ir 2022 metais – 3 vietoje.

Vilnius TECH kasmetiniam vertinimui mokslo darbus teikia visose (10) technologijos mokslų srities (T000) kryptyse. Už 2018–2022 metų laikotarpį Vilnius TECH įskaityta mokslo darbų, kurių taškų suma (1479,46) transporto inžinerijos (T003) ir mechanikos inžinerijos (T009) kryptyse sudaro 17,5 proc. visų institucijos gautų taškų už mokslo darbus technologijos mokslų srityje:

- transporto inžinerijos kryptyje (T003) – 8,9 proc. visų 2018–2022 metų Vilnius TECH T000 taškų;



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- mechanikos inžinerijos kryptyje (T009) – 8,6 proc. visų 2018–2022 metų Vilnius TECH T000 taškų.

Pažymėtina, kad paskutinio vertinimo metu (už 2022 m. MTEP veiklą) šiose kryptyse institucija surinko daugiausiai taškų lyginant atskirus penkerių metų laikotarpio metus:

- transporto inžinerijos kryptyje (T003) – 14,40 proc. visų 2022 metų Vilnius TECH T000 taškų;
- mechanikos inžinerijos kryptyje (T009) – 11,54 proc. visų 2022 metų Vilnius TECH T000 taškų.

Detalūs Vilnius TECH kasmetinio vertinimo rezultatai už 2018–2022 metus technologijų mokslų srityje ir transporto bei mechanikos inžinerijų kryptyse pridedami.

Palyginamojo ekspertinio vertinimo rezultatai

Vykdam 2018–2022 metų palyginamąjį ekspertinį vertinimą Vilnius TECH MTEP veiklos kokybė transporto inžinerijos (T003) ir mechanikos inžinerijos (T009) mokslo kryptyse buvo įvertinta institucijos sudaryto *Aviacijos, mechanikos ir transporto inžinerijos* (toliau – *VilniusTech_AMTE*) vertinamojo vieneto (toliau – VV) aprėptyje. Šio VV mokslininkų visos darbo dienos atitikmuo (MVDDA) – 51,03:

- transporto inžinerijos kryptyje (T003) – 17,51 MVDDA;
- mechanikos inžinerijos kryptyje (T009) – 33,52 MVDDA.

Institucijos *VilniusTech_AMTE* VV pagal visus vertinimo kriterijus, nustatytus Palyginamojo ekspertinio universitetų ir mokslinių tyrimų institutų mokslinių tyrimų ir eksperimentinės plėtros vertinimo tvarkos aprašo, patvirtinto LR švietimo, mokslo ir sporto ministro 2021 m. rugsėjo 2 d. įsakymu Nr. V-1593 „Dėl Lietuvos Respublikos Vyriausybės 2017 m. kovo 1 d. nutarimo Nr. 149 „Dėl Lietuvos Respublikos mokslo ir studijų įstatymo įgyvendinimo“ 2.2–2.6 papunkčių įgyvendinimo“ (toliau – Aprašas), 5–6 punktuose, buvo įvertintas 3,5 balo:

- VV MTEP veiklos kokybė transporto inžinerijos mokslo kryptyje (T003) – 3,5 balo;
- VV MTEP veiklos kokybė mechanikos inžinerijos mokslo kryptyje (T009) – 3,5 balo;
- VV MTEP veiklos ekonominis ir socialinis poveikis – 3,5 balo;
- VV MTEP veiklos perspektyvumas – 3,5 balo.

Nesant reglamentuotų pusinių vertinimo balų reikšmių, primename Aprašo 29 punkte nurodytas VV MTEP veiklos kokybės vertinimo 3 ir 4 balų reikšmes:

3 balai – „Gera“ – „Vertinamasis vienetas (mokslo kryptyje ar mokslo srities mokslo krypčių grupėje) yra stiprus su ribotu tarptautiniu pripažinimu. Vykdomi MTEP yra aukšto lygio ir pripažinti nacionaliniu mastu“;

4 balai – „Labai gerai“ – „Vertinamasis vienetas (mokslo kryptyje ar mokslo srities mokslo krypčių grupėje) yra stiprus tarptautiniu mastu. Vykdomi MTEP yra aukšto lygio ir pripažinti tarptautiniu mastu.“

Detali užsienio ekspertų komisijos parengta *VilniusTech_AMTE* VV vertinimo ataskaita pridedama. Palyginamasis ekspertinis vertinimas buvo vykdomas anglų kalba, tad kol kas galime pateikti ataskaitą tik originalo kalba. Visų šio vertinimo ataskaitų vertimai į lietuvių kalbą numatomi pabaigus visas reglamentuotas vertinimo procedūras. Vertinimo ataskaitos anglų ir lietuvių kalba bus paskelbtos Tarybos puslapyje.

Pastebėtina, kad iš abiejų aukščiau paminėtų Tarybos atliktų vertinimų nėra akivaizdžių įrodymų, kad Vilnius TECH vykdytų MTEP veiklą jūrų inžinerijos ir jūrų technologijų tema. Pavyzdžiui, šiemet iš 93 *VilniusTech_AMTE* VV pateiktų mokslo darbų kasmetiniam vertinimui tik vienas straipsnis (60 proc. mokslo darbo priskirta transporto inžinerijos (T003) kryptiai) publikuotas viename („*Journal of marine science and engineering*“) iš 41 žurnalo, kurie įtraukti į Clarivate Analytics Web of Science kryptines kategorijas *Engineering*, *Marine* ir *Engineering, Ocean*.

Pažymime, kad Taryba dar nėra galutinai patvirtinusi kasmetinio vertinimo už 2022 metus rezultatų, taip pat ir palyginamojo ekspertinio vertinimo rezultatų, vadovaudamasi reglamentuotomis vertinimo procedūromis, tačiau iš esmės vertinimai yra atlikti ir po paskutinių veiksmų rezultatus numatoma patvirtinti š. m. spalio mėnesį.

Papildomai atkreipiame dėmesį, kad Vilnius TECH vykdo doktorantūros studijas tiek transporto inžinerijos mokslo kryptyje (kartu su Vytauto Didžiojo universitetu, Klaipėdos universitetu, Kauno technologijos universitetu), tiek mechanikos inžinerijos mokslo kryptyje (be kitų institucijų).

PRIDEDAMA:

1. Kasmetinio vertinimo Vilnius TECH rezultatai už 2018–2022 metus, 2 lapai.
2. Palyginamojo ekspertinio vertinimo Vilnius TECH *Aviacijos, mechanikos ir transporto inžinerijos* VV vertinimo ataskaita anglų kalba, 5 lapai.

Pirmininkas

Gintaras Valinčius

Vilniaus Gedimino technikos universiteto 2018–2022 metų technologijos mokslų srities darbų kasmetinio vertinimo rezultatai pagal kryptis

Metai	VDDA _i ¹	ΣAIV ²	T _i ³	Technologijos mokslų kryptys ⁴									
				T 001		T 002		T 003		T 004		T 005	
				VDDA _i ^{k 5}	ΣAIV ^{k 6}	VDDA _i ^k	ΣAIV ^k	VDDA _i ^k	ΣAIV ^k	VDDA _i ^k	ΣAIV ^k	VDDA _i ^k	ΣAIV ^k
2018	173,180	1538,85	8,89	22,30	124,45	45,66	408,70	15,57	117,74	10,59	353,74	6,55	24,91
2019	182,92	1355,66	7,41	25,93	123,44	46,92	382,11	16,36	88,23	10,73	169,47	6,37	27,29
2020	179,24	1852,63	10,34	24,17	114,73	45,23	311,00	16,48	137,49	10,89	608,99	7,81	47,58
2021	176,810	1853,49	10,48	22,32	190,63	40,76	527,41	17,78	141,65	10,88	169,41	7,55	68,11
2022	194,203	1872,66	9,64	24,48	126,39	40,44	407,46	17,51	269,63	11,92	146,84	7,46	69,08

Metai	VDDA _i ¹	ΣAIV ²	T _i ³	Technologijos mokslų kryptys ⁴									
				T 006		T 007		T 008		T 009		T 010	
				VDDA _i ^{k 5}	ΣAIV ^{k 6}	VDDA _i ^k	ΣAIV ^k	VDDA _i ^k	ΣAIV ^k	VDDA _i ^k	ΣAIV ^k	VDDA _i ^k	ΣAIV ^k
2018	173,180	1538,85	8,89	5,08	33,53	20,94	205,48	22,49	133,19	18,58	98,37	5,42	38,74
2019	182,92	1355,66	7,41	4,42	14,35	19,43	300,63	28,43	122,13	19,47	89,06	4,87	38,96
2020	179,24	1852,63	10,34	3,82	28,26	18,19	304,77	32,13	142,52	16,94	120,11	3,58	37,18
2021	176,810	1853,49	10,48	3,29	41,17	13,81	341,04	34,12	146,20	22,74	201,03	3,55	26,84
2022	194,203	1872,66	9,64	3,72	162,40	21,70	274,41	30,56	188,53	33,52	216,15	2,88	11,77

¹ VDDA_i – institucijos srities mokslininkų visos darbo dienos atitikmuo;

² ΣAIV – svertinė taškų suma už formaliojo vertinimo mokslo (meno) darbus;

³ T_i – taškai, tenkantys vienam institucijos srities mokslininkų visos darbo dienos atitikmeniui;

⁴ krypčių kodai: T 001 – elektros ir elektronikos inžinerija, T 002 – statybos inžinerija, **T 003 – transporto inžinerija**, T 004 – aplinkos inžinerija, T 005 – chemijos inžinerija, T 006 – energetika ir termoinžinerija, T 007 – informatikos inžinerija, T 008 – medžiagų inžinerija, **T 009 – mechanikos inžinerija**, T 010 – matavimų inžinerija;

⁵ VDDA_i^k – institucijos technologijos mokslų krypties mokslininkų visos darbo dienos atitikmuo;

⁶ ΣAIV^k – svertinė technologijos mokslų srities taškų suma už formaliojo vertinimo darbus.

Vilniaus Gedimino technikos universiteto 2018–2022 metų technologijos mokslų srities darbų kasmetinio vertinimo rezultatai pagal taškų sumą, tenkančią vienam institucijos srities mokslininkų visos darbo dienos atitikmeniui, transporto inžinerijos, mechanikos inžinerijos kryptyse

Metai	VDDA _i ¹	ΣAIV ²	T _i ³	Technologijos mokslų kryptys ⁴					
				T 003			T 009		
				VDDA _i ^{k 5}	ΣAIV ^{k 6}	T _{T003}	VDDA _i ^k	ΣAIV ^k	T _{T009}
2018	173,180	1538,85	8,89	15,57	117,74	7,56	18,58	98,37	5,29
2019	182,92	1355,66	7,41	16,36	88,23	5,39	19,47	89,06	4,57
2020	179,24	1852,63	10,34	16,48	137,49	8,34	16,94	120,11	7,09
2021	176,810	1853,49	10,48	17,78	141,65	7,97	22,74	201,03	8,84
2022	194,203	1872,66	9,64	17,51	269,63	15,4	33,52	216,15	6,45

¹ VDDA_i – institucijos srities mokslininkų visos darbo dienos atitikmuo;

² ΣAIV – svertinė taškų suma už formaliojo vertinimo mokslo (meno) darbus;

³ T_i – taškai, tenkantys vienam institucijos srities mokslininkų visos darbo dienos atitikmeniui;

⁴ kryptų kodai: T 001 – elektros ir elektronikos inžinerija, T 002 – statybos inžinerija, **T 003 – transporto inžinerija**, T 004 – aplinkos inžinerija, T 005 – chemijos inžinerija, T 006 – energetika ir termoinžinerija, T 007 – informatikos inžinerija, T 008 – medžiagų inžinerija, **T 009 – mechanikos inžinerija**, T 010 – matavimų inžinerija;

⁵ VDDA_i^k – institucijos technologijos mokslų krypties mokslininkų visos darbo dienos atitikmuo;

⁶ ΣAIV^k – svertinė technologijos mokslų srities taškų suma už formaliojo vertinimo darbus.

COMPARATIVE EXPERT ASSESSMENT

Assessment Report of Unit of Assessment

Name of the institution	Vilnius Gediminas technical university
Official abbreviation of the name of the institution	VILNIUS TECH
Name of the Institution's unit of assessment (hereinafter – UoA)	Aviation, Mechanics and Transport Engineering
Abbreviation of the UoA name	VilniusTech_AMTE
The scope of the UoA (FTE(SD))	51,03
Research area(s)	T 000 - Technology

Quality of the R&D activities by research fields (groups of research fields) of the UoA

Technology

Research field	Scope (FTE(SD))	Score (points)
T 009 - Mechanical Engineering	33,52	3,5

Reasoned justification of the score

The UoA is strong at national level with appreciable international recognition. VilniusTech_AMTE regroups three entities: Antanas Gustaitis' Aviation Institute, Faculty of Mechanics and Faculty of Transport Engineering. The latter two components have been running the doctoral study programs, which provides the impetus for keeping up the level of R&D activities. In particular, Mechanical Engineering (that counts 69 active personnel with FTE(SD) equal to 33.52) has kept a steady number of doctoral students (with an average of 23 theses in progress each year, and close to 4 defended each year), with the ratio researcher-student that can apparently enable a satisfying research dynamic with good to very-good quality of R&D activities. The main R&D activities are constructed around the topics of control (robots), mechatronic systems and materials, with the push towards further integrating machine learning and biomedical engineering. The Mechanical Engineering group has a starting participation in Horizon project and several ongoing H2020 and regional projects. Research projects with industry have not been presented in detail, although the corresponding budget in that domain indicates a very strong involvement of the members in that respect. The presentation of the recruitment of young researchers (doctoral students and their integration following graduation) has received much larger care as the main focus of the strategy of this UoA for increasing their performance. The publication record is very good, with close to 20% of research papers in Q1 and 40% in Q2 journals. This was stated as the goal set for improvement from the previous evaluation, which has been achieved. Of course, this can further be improved (by inverting these numbers), which should be set as the target for the next evaluation period. This should not totally exclude (locally supported) journals that this is running, nor efforts to help the starting career phase of young researchers that is currently put in place. The members of this research field have obtained a certain number of national and regional awards and competition-based recognitions. The organization of scientific meetings is mostly at the national level (with roughly one international conference per year) and there is a steady stream of yearly meetings.

Research field	Scope (FTE(SD))	Score (points)
T 003 - Transport Engineering	17,51	3,5

Reasoned justification of the score

The UoA is strong at national level with appreciable international recognition. The research carried out in Vilnius Tech - Transport Engineering is relevant and shows good quality, and in some niches, it is even very good, contributing to the competitiveness of the EU in this field. The fragmented structure of the research topics reduces synergies. The rather low number of researchers and professors further reduces this low opportunity for synergies. Some of these niche topics of Transport Engineering are of growing relevance, and one may not expect more in a small country without a well-developed automotive, military or aircraft cluster. For instance, the research focus covers major trends like autonomous steering and other segments of intelligent transport systems, which is illustrated by a majority journal publications and conference attendance. There is a good balance of career-stage levels, which results in good continuity, yet there could be more effort to employ junior researchers. Employed researchers are rather productive.

Doctoral studies are offered. The unit has kept a steady number of doctoral students with a good ratio between researchers and PhD students, which contributes to very good research dynamics. The share of foreign staff (PhD students) is low but slowly growing. A very good program for training the new generation of researchers has been formed.

Within the past 5 years, PhD theses have become less academic and more oriented towards industrial needs, and slightly more towards societal needs. They have also moved forward considerably towards cutting-edge research, but still are written in Lithuanian. The range of addressed technological problems is fairly wide, which allows students to better gain skills and creativity, but the potential synergies stemming from this breadth were not yet well enough exploited.

What was presented as international and national awards, gives a proof of good work in many fields but not of excellence. Membership in foreign and international institutions is quite well developed.

A rather good number of reported articles was published in referenced journals. A good share of the research staff is ranked among the top 2%, showing the high research output. Only some publications provided are in high-ranking journals: more than half of the reported publishing activities refer to journals with lesser outreach and reputation. There is almost no joint publishing together with scientists of other research units. Conference presentations show a wide range of quality between good and very good. Participation in competition-based projects is high, yet the share of the UoA's contribution to these projects is not always clear.

The organization of scientific meetings has mostly remained at national level (with roughly one international conference per year) and a steady stream of yearly meetings. Communications with press and popular media appear regularly at national level.

The Faculty of Transport Engineering was rather successful in receiving EU funding from the Horizon program, and apparently has delivered good work because of follow-up funding granted. Success in European research programs cannot distract concern about underdeveloped international cooperation structures. It would be crucial to do more to attract foreign PhD students, guest researchers and lecturers and to motivate staff and students to more actively make use of Erasmus+ offerings. Interreg activities aiming at the development of the TEN-T program demonstrate that the UoA is well embedded into regional decision-making structures but are of lesser scientific importance. The quality of the research delivered in multi-party projects could be assessed just indirectly via submitted links to articles, because there was no description of the UoA-specific part (responsibilities, results achieved) in these projects. There is just moderate thematic coherence between the different projects.

Quality of research is good, in some cases even high, but the unit's own share of research carried out in multi-partner projects should have been transparently presented, even deeper collaboration with other affiliated units with suitable

specialization and equipment should have been sought to make up for the small size of the Unit, and better use of the potential for synergies in research and in projects would have been possible.

Economic and social impact of R&D activities of the UoA

Score (points)
3,5

Reasoned justification of the score

This UoA was active in seeking H2020 projects (roughly one per year), as well as inter-regional projects, which should confirm its very good reputation and recognition also outside the academic community. Apparently, the contacts with industry have touched upon many different activities (development of prototype, innovative transport, multifunctional satellite, methodologies for facial movement), which could have been presented in a more detailed manner to confirm more than very good economic and social impact of R&D activities. A rather impressive budget of industry contracts indicates an important number of consulting efforts of this Unit, but a better presentation of this potential (or large importance for economic and social impact) was somewhat hindered by a recent moving of experimental facilities to a new university building. There is no doubt that the list of research output for this Unit is very good.

The individual members of this UoA have received a number of personal recognitions, including the Lithuanian Academy memberships, presidents and secretary positions of scientific associations, members of expert groups and committees. In this respect, this UoA is already very good. In fact, the participation of researchers representing the UoA in working groups, commissions or committees is certainly among the strong points for economic and social impact of R&D of this Unit. Currently, the strong points have not been emphasized enough to fully grasp the result excellence.

The consulting activities of this UoA are ample, but they have not received much attention in presentation.

Rather large scientific meetings were organized (close to five per year) and the UoA members hold editorial duties in more than 20 journals. Finally, there is rather dynamic collaboration with companies and other economic entities to complete the spectre of the activities with economic and social impact.

The UoA carries out important research for the society and is significant partner in R&D outside the academic community.

The development potential of R&D activities of the UoA

Score (points)
3,5

Reasoned justification of the score

The strategic activities of this UoA have been selected as follows (with participating components marked in parenthesis): 1. Autonomous vehicles and robots and UAV (TF, MF, AGAI); 2. Unmanned Aerial Vehicles and Systems (AGAI); 3. Biofuels, emissions, energy efficiency, hybrid, and electric powertrains (TF, MF); 4. Vehicle dynamics, active and passive safety (light / heavy vehicles; railway transport) (TF); 5. Robotics, Machine learning, Artificial Intelligence (MF); 6. Bionics and Biomedical Engineering (MF). The vast majority of these topics either belong or can serve as the basis to the currently mainstream research. The infrastructure is already at a high level to provide the needed support for such development, but it can be improved even further in agreement with strategic plan of this UoA.

Human resources seem to be well balanced in order to provide further increase of R&D activities, given that the majority of researchers are not in the highest age bracket. The selection and funding of young researchers and doctoral students, as well as the effort in further increasing interdisciplinary research can certainly contribute to these goals.

The efforts to recruit the doctoral students are made and integrated within the previous educational stage (*e.g.* with Master students involved in paper writing). The vast majority of doctoral students are funded by scholarships and the expenses of their internships during doctoral studies are fully covered by the university resources. The final strategy of integrating young researchers is the possibility of doctoral students to obtain a faculty position (equivalent to associate professor).

The given SWOT analysis is thorough, credibly representing the strengths, weaknesses, opportunities, and threats of UoA.

Having regard to current performance, the human resources, strategy, and organisation of activities and infrastructure of the UoA will ensure, conditions for good to very good ratings in the next 5 years.

Recommendations for continuity and/or improvement of the activities of the UoA

This UoA has a (very) strong potential for further improvement, which already starts with more coordinated presentation of its activities to any potential partner in the manner where the key strength points are better communicated.

The elements of the strategy of integrating the young researchers (which is now very successful) should further be elaborated and fructified, by preparing the winning project at the level of ERC Starting Grant or ERC Consolidation Grant, with the support and help of the whole UoA.

There is a notable effort to publish in international journals with higher impact factor (roughly 20% in Q1 and 40% in Q2). This tendency should further be strengthened, if possible, to inverse these figures. Such publications could be testing ground for the original ideas that can have the potential to obtain the highest-level international projects.

More effort should be made to make this UoA more attractive to international students and young researchers.

The strategic domains for R&D activities have been selected to cover most of the currently hot research topics in the scientific area of Mechanical or Transport Engineering and Aviation. Here, the topics of special interest for the UoA should better be identified, given that these topics are of interest to top international level. Namely, the smart specialization strategy should be put in place indicating clearly what the advantage is brought for the country and region compared to the similar efforts worldwide.

More efforts should be made in targeting the interdisciplinary topics, those who have potential of federating the research coming from different components to provide the synergy of competence. This can be done at the level of more senior researchers, to provide the basis for larger industry projects and technology transfer.

This UoA has the potential of attracting senior researchers at the highest international level (given the advantage of the central location within the country). This could be done either at long-term recruitments or short-term exchange with the top European teams in the same domain.

The latter would easily be strengthened by mobility of doctoral students and by starting the double doctoral degree, which can be supported by University or numerous mobility programs in Europe. The faculty member should be consulted when deciding a doctoral student mobility, with priority given to the long-term collaborations of this kind.

Special efforts should be made when selecting the conferences to attend, as well as the kind of communications to be presented. The offers to provide invited lectures (keynote or plenary) should be the best opportunity to increase the visibility of the research in this UoA.

The conference organization for young researchers should continue and be further strengthen by combining them with international or regional meetings that this UoA should be able to organize.
