



RESEARCH AGENDA – SEA EU

Sea EU Research Agenda – WP2 Task 2.3. Cluster of researchers Subtask 2.3.3. – Preparation of joint SeaEU research agenda







TABLE OF CONTENTS:

| PUBLICATION PORTFOLIO | 3 |
|------------------------------------|----|
| SCOPUS SOURCES | 7 |
| OPEN ACCESS | 10 |
| SUBJECT AREAS | 13 |
| SOCIETAL IMPACT | 15 |
| COLLABORATION | 19 |
| RESEARCH POTENTIAL – internal tool | 25 |
| MAIN FOCUS IN THE FUTURE | |
| LIST OF FIGURES | 29 |
| LIST OF TABLES | 30 |





RESEARCH POTENTIAL ANALYSIS (SciVal 2017-2020)

PUBLICATION PORTFOLIO

The number of publications indexed in the Scopus database by scientists from universities belonging to the SEA-EU alliance is systematically growing year by year.



Between the years of 2017 and 2020 **17 482 scientists** from partner universities associated with the European University of the Seas (SEA-EU) alliance published **32 499 publications**, for which the **average Field Weighted Citation Impact was 1.45.** This index normalizes citation values by discipline, year and type of publication. This means that





the average number of citations for publications by researchers from SEA-EU is higher than the global average. The value of Field Weighted Citation Impact indicator remained relatively constant which proves a strong position of SEA-EU authors, as year by year for 4 years they were cited on average about **45% above the world average**.



Figure 3. Field-Weighted Citation Impact in SEA-EU

Despite the lowest number of publications indexed in the Scopus database **University of Split's Citations per Publication** and **Field Weighted Citation Impact index** are the highest among all the alliance partners. It shows that scientists from the University of Split put great emphasis on publishing high-quality scientific articles and have successful university science management. This applies to both field of publishing strategy and implementation of the open access policy (the latter mentioned in other part of the report).

Table 1. Scholarly Output, Citations per Publications and Field-Weighted Citation Impact in SEA-EU

| INSTITUTION | SCHOLARLY OUTPUT | CITATIONS PER PUBLICATION | FIELD-WEIGHTED CITATION IMPACT |
|------------------------------------|------------------|---------------------------|--------------------------------|
| Kiel University | 11702 | 9,2 | 1,73 |
| Université de Bretagne Occidentale | 6921 | 6,1 | 1,27 |
| University of Cádiz | 5058 | 5,2 | 1,16 |
| University of Gdańsk | 3821 | 4,5 | 0,95 |
| University of Malta | 3179 | 7 | 1,68 |
| University of Split | 1846 | 10,6 | 1,81 |





Over 70% of the publications of the partners of the SEA-EU consortium are articles in scientific journals indexed in the Scopus database (24 217). On the other hand, the share of publications in the post-conference materials and review articles is 10.9% and 6.3%. Other achievements include books and chapters, editorials, letters and notes etc. Nearly 15% of all publications by scientists from partner universities in the SEA-EU alliance were included in the 10% most cited publications worldwide. However, the value of this indicator differs significantly for individual SEA-EU universities. Cooperation in the field of research and academic exchange between the partners of the alliance, and thus joint publishing activity, gives an opportunity to use the potential in the area of the quality of scientific achievements.

| INSTITUTION | OUTPUTS IN TOP CITATION PERCENTILES [%] |
|------------------------------------|---|
| University of Split | 22 |
| Kiel University | 16.7 |
| University of Malta | 16 |
| Université de Bretagne Occidentale | 13 |
| University of Cádiz | 10.7 |
| University of Gdańsk | 7.9 |

| Table 2. Outputs in Top Citation | Percentiles | in SEA-EU |
|----------------------------------|-------------|-----------|
|----------------------------------|-------------|-----------|





As seen in the chart below, which presents **Outputs in Top Views Percentiles indicator** in the period 2017-2020, **16.9% of publications were among the 10% most read publications** in the last 3 years in the world. This indicates high probability of large number of citations of these publications in the future.



Figure 4. Outputs in Top Views Percentiles in SEA-EU

At the moment, the **Field-Weighted Views Impact** for these publications is **50% higher than the global average of 1.50**. This means that publications by scientists from universities currently belonging to the SEA-EU alliance have 50% higher number of views (screen views) than the average number of views received by similar publications indexed in the Scopus database.







SCOPUS SOURCES

When planning publishing strategies, the key is to assess the quality of scientific journals, i.e. the impact, measure of impact and prestige of the journal. Therefore, emphasis should be placed on being active in the best publication channels. In this part of the report the main focus of analysis were publications in which scientists from SEA-EU are most often published. The sources were analyzed using SciVal tool.



Figure 6. Publications by Journal quartile in SEA-EU

More than half of all publications by SEA-EU scientists were published in journals from the first quartile (Q1), i.e. in 25% of journals with the highest CiteScore index. The remaining publications were issued in less prestigious journals (Q2, Q3 and even Q4). Therefore, it is an area with great potential for increasing the value of publication quality assessment indicators. Additionally, about a third of the publications appeared in the first decile journals, i.e. the top 10% cited. In particular, one should focus on the systematic increase in "Share of publications in SEA-EU – European University of the Seas that are in the top 10% journals by CiteScore Percentile", since in the period 2017-2020 the value of the indicator did not increase and remained relatively constant (around 34%).





Figure 7. Number of Publications in the top 10% journals by CiteScore in SEA-EU



Scientists from the universities included in the alliance most often publish in 10 journals presented in the table below. They were selected on the basis of the largest number of published articles. Six titles are included in the 10% of the most cited journals in the world indexed in Scopus (i.e. in the 1st decile), based on the CiteScore index. The remaining journals in which scientists from partner universities are publishing are in the first quartile – Q1 (3 titles) and the second quartile Q2 (1 title), i.e. in 25% and 50% of journals with the highest CiteScore value in each category.

| SCOPUS SOURCE | PUBLICATIONS | CITESCORE 2019 | COMMENTS | RANK | SUBJECT AREA |
|--|--------------|----------------|---------------------------|---------|---------------------------------|
| Scientific Reports | 425 | 7,2 | Journal in top 10 percent | #8/111 | Multidisciplinary |
| Lecture Notes in Computer Science | 359 | 1,9 | Journal in 2nd quartile | #95/221 | General Computer Science |
| PLoS ONE | 275 | 5,2 | Journal in top 10 percent | #10/111 | Multidisciplinary |
| Journal of High Energy Physics | 210 | 10,2 | Journal in top 10 percent | #4/69 | Nuclear and High Energy Physics |
| Nature Communications | 151 | 18,1 | Journal in top 10 percent | #15/398 | General Chemistry |
| International Journal of Molecular Sciences | 142 | 5,3 | Journal in 1st quartile | #14/69 | Inorganic Chemistry |
| Physics Letters, Section B: Nuclear, Elementary Particle and High-Energy Physics | 139 | 9,4 | Journal in 1st quartile | #5/69 | Nuclear and High Energy Physics |
| Science of the Total Environment | 130 | 8,6 | Journal in top 10 percent | #10/132 | Environmental Engineering |
| Journal of Geophysical Research | 119 | 5,8 | Journal in top 10 percent | #2/95 | Paleontology |
| Astronomy and Astrophysics | 115 | 9,5 | Journal in 1st quartile | #11/92 | Earth and Planetary Sciences |

Table 3. SEA-EU in 10 most often published journals





When interpreting the Scopus data on the journal's rank in each of the Subject Areas to which they are assigned, it can be seen that on the second place in the table there is a journal from the second quartile (rank #95/221) in General Computer Science. This is an example proving that there are areas that require finding publication channels characterized by greater prestige and impact on the academic environment in selected Subject Areas.



OPEN ACCESS

It can be noticed that the number of open access publications is annually increasing. This is particularly important in the context of the implementation of Plan S (initiative of research funding agencies and foundations), according to which from year 2021 research financed from public sources must be published in journals or platforms with open access.

| Table 4. Number of publications in (| Open Access in SEA-EU | (by institution |
|--------------------------------------|-----------------------|-----------------|
|--------------------------------------|-----------------------|-----------------|

| INSTITUTION | NUMBER OF PUBLICATIONS (OA) |
|------------------------------------|-----------------------------|
| Kiel University | 6 025 |
| Université de Bretagne Occidentale | 3 472 |
| University of Cádiz | 2 099 |
| University of Gdańsk | 1 921 |
| University of Malta | 1 301 |
| University of Split | 1 158 |

Table 5. Number of publications in Open Access in SEA-EU (by year)

| NUMBER OF PUBLICATIONS (OA) |
|-----------------------------|
| 4 738 |
| 4 082 |
| 3 676 |
| 3 415 |
| |

Almost 50% of all publications are those published in the Open Access. Scientists from partner universities publish in open access mainly through the so-called green model (making articles available in free repositories) and the gold model (publishing articles in open journals).

Table 6. Open Access Publishing Models in SEA-EU

| OPEN ACCESS PUBLISHING MODELS | NUMBER OF PUBLICATIONS (OA) |
|-------------------------------|-----------------------------|
| All Open Access | 15 911 |
| Gold | 6 914 |
| Hybrid gold | 2 404 |
| Bronze | 2 655 |
| Green | 12 551 |





Considering the **percentage of Open Access** publications, the **University of Split** stands out among all the universities of the SEA-EU consortium (**62.7%**). On the other hand, in the case of the Universities of Cadiz and University of Malta, the value of this indicator shows that the implementation of the open access policy is an area for development that requires additional actions.

| INSTITUTION | % PUBLICATIONS (OA) | | |
|------------------------------------|---------------------|--|--|
| University of Split | 62,7 | | |
| Kiel University | 51,5 | | |
| University of Gdańsk | 50,3 | | |
| Université de Bretagne Occidentale | 50,2 | | |
| University of Cádiz | 41,5 | | |
| University of Malta | 40,9 🔻 | | |

| Table 7 | Percentage of | Onen Access | nublications i | n SEA-ELL |
|----------|----------------|-------------|----------------|-----------|
| Table /. | reiteillage ui | Open Access | publications | I JLA-LU |

It should be emphasized that **the best cited articles (over 500 citations) published by scientists from partner universities are available in open access**. This proves the wide range, prestige and impact of these publications on the academic community, thus strengthening the position of the scientific institution. Building a university's reputation and recognition significantly contributes to establishing cooperation with other institutions of the higher education sector, as well as with the socio-economic environment.

| Title | Authors | Year | Scopus Source | Citations \downarrow |
|--|--|------|---------------------------------|------------------------|
| Worldwide trends in blood pressure from 1975 to 2015: a pooled analysis of 1479 population- based measurement studies with 19.1 million participants Open Access | Zhou, B., Bentham, J., Di Cesare, M. and 759 more | 2017 | The Lancet | 732 |
| 2019 ESC Guidelines for the diagnosis and management of chronic coronary syndromes Open Access | Neumann, FJ., Sechtem, U., Banning, A.P. and 126 more | 2020 | European Heart Journal | 625 |
| Blinatumomab versus chemotherapy for advanced acute lymphoblastic leukemia Open Access | Kantarjian, H., Stein, A., Gökbuget, N. and 23 more | 2017 | New England Journal of Medicine | 614 |





| Title | Authors | Year | Scopus Source | Citations 🗸 |
|---|---|------|-----------------------------------|-------------|
| Summary of the contents and survey properties Open Access | Brown, A.G.A., Vallenari, A., Prusti, T. and 450 more | 2018 | Astronomy and Astrophysics | 1,923 |
| Worldwide trends in body-mass index, underweight, overweight, and obesity from 1975 to 2016: a pooled analysis of 2416 population-based measurement studies in 128.9 million children, adolescents, and adults Open Access | Bentham, J., Di Cesare, M., Bilano, V. and 1,020 more | 2017 | The Lancet | 1,833 |
| The PRIDE database and related tools and resources in 2019: Improving support for quantification data <i>Open Access</i> | Perez-Riverol, Y., Csordas, A., Bai, J. and 20 more | 2019 | Nucleic Acids Research | 1,557 |
| Minimal information for studies of extracellular vesicles 2018 (MISEV2018): a position statement of the International Society for Extracellular Vesicles and update of the MISEV2014 guidelines Open Access | Théry, C., Witwer, K.W., Aikawa, E. and 379 more | 2018 | Journal of Extracellular Vesicles | 1,419 |
| SciPy 1.0: fundamental algorithms for scientific computing in Python <i>Open Access</i> | Virtanen, P., Gommers, R., Oliphant, T.E. and 109 more | 2020 | Nature Methods | 1,312 |
| Molecular mechanisms of cell death: Recommendations of the Nomenclature Committee on Cell Death 2018 Open Access | Galluzzi, L., Vitale, I., Aaronson, S.A. and 166 more | 2018 | Cell Death and Differentiation | 1,132 |





SUBJECT AREAS

Bibliometric analysis based on the number of publications or citation rates have an auxiliary function in assessing the quality of scientific work. When comparing the overall values of the citation rates for individual SEA-EU universities the differences in the specificity of the disciplines of science they practice (the exception is the Field Weighted Citation Impact index) should be taken into the account. Therefore, a comparison of selected bibliometric indicators was also carried out in the context of **individual ASJC categories** in which scientists from partner universities publish most often. Share of publications in the category **bigger than 5%**.



Figure 8. Individual ASJC categories in SEA-EU



Table 8. Individual ASJC categories in SEA-EU

| SUBJECT AREA | SCHOLARLY OUTPUT | CITATIONS | AUTHORS | CITATIONS PER PUBLICATION | FIELD-WEIGHTED CITATION IMPACT |
|--|---------------------|-----------|---------|------------------------------|-----------------------------------|
| Medicine | 8172 | 74655 | 6054 | 9,1 | 1,74 |
| Engineering | 4512 | 23081 | 3659 | 5,1 | 1,22 |
| Biochemistry, Genetics and Molecular Biology | 4153 | 42833 | 4524 | 10,3 | 1,69 |
| Agricultural and Biological Sciences | 4074 | 26043 | 3646 | 6,4 | 1,39 |
| Computer Science | 3875 | 12890 | 3122 | 3,3 | 0,97 |
| Physics and Astronomy | 3752 | 35856 | 2907 | 9,6 | 1,71 |
| Earth and Planetary Sciences | 3390 | 25873 | 2296 | 7,6 | 1,59 |
| Environmental Science | 3220 | 24064 | 2977 | 7,5 | 1,46 |
| Social Sciences | 3154 | 10156 | 2855 | 3,2 | 1,19 |

It can be noticed that, except for one ASJC category (Computer Science), the **Field Weighted Citation Impact values are higher than 1**. Simply put, this means that publications in the Subject Area indicated in the table (authored by SEA-EU scientists) are cited more often in relation to the average world citation rate of all similar publications indexed in Scopus (the field, publication type and year of publication are considered).





SOCIETAL IMPACT

Scientific activity has a significant impact on the socio-economic environment. Currently a lot of emphasis is placed on the implementation of the obtained research results, with a strong emphasis on the context of the social impact of research. To evaluate the potential impact, apart from expert assessment, bibliometric indicators such as **Mass Media** or **Media Exposure** are also used. They provide detailed information on media mentions both in print and online.

PRINT

In the years 2017-2020 there were 1 339 mentions in the media in the form of print.



Figure 9. SEA-EU mentions in Mass Media in print

| | 2017 | 2018 | 2019 | 2020 | Overall |
|--|------|------|------|------|---------|
| 窗 SEA-EU - European University of the Seas | 277 | 473 | 302 | 287 | 1,339 |





Nearly 80% of the print mentions are about University of Malta – mainly published in the magazines: The Malta Independent (619) and Malta Today (342).

| INSTITUTION | PRINT MENTIONS | | |
|------------------------------------|----------------|--|--|
| University of Malta | 1062 | | |
| Kiel University | 207 | | |
| University of Cadiz | 45 | | |
| University of Split | 22 | | |
| Université de Bretagne Occidentale | 0 | | |
| University of Gdańsk | 0 🗸 | | |

The **Media Exposure indicator** shows the number of media mentions weighted by publication type, demographics and audience reach. It can be noticed that among all print mentions in the period 2017-2020, **almost 90% are nationally recognized**.



Figure 10. SEA-EU Media Exposure in print





----- ONLINE

There are almost five times more online mentions of SEA-EU partner universities.



Figure 11. SEA-EU mentions in Mass Media online

| | 2017 | 2018 | 2019 | 2020 | Overall |
|--|-------|-------|-------|-------|---------|
| SEA-EU - European University of the Seas | 1,734 | 1,383 | 1,518 | 1,593 | 6,228 |

In this case also most of them (more than half) is about the University of Malta – mostly through two magazines: Times of Malta (1616) and Malta Independent Daily (414).

| Table 10. SEA-EU online mentions | | | | | |
|------------------------------------|-----------------|--|--|--|--|
| INSTITUTION | ONLINE MENTIONS | | | | |
| University of Malta | 3520 | | | | |
| Kiel University | 2367 | | | | |
| University of Cadiz | 117 | | | | |
| Université de Bretagne Occidentale | 104 | | | | |
| University of Split | 76 | | | | |
| University of Gdańsk | 48 🔻 | | | | |

Table 10. SEA-EU online mentions





In the case of online channels, in addition to a large share of **national mentions (nearly 65%)**, there is also information about the **local (23%)** and – to a lesser extent – **regional** (6.5%) and **international (6%)** coverage. This data confirms that in the era of the growing popularity of the Internet online media are considered one of the best methods of reaching the recipient and increasing the audience reach.



Figure 12. SEA-EU Media Exposure online



COLLABORATION

The key factor influencing the increase in the number of citations of publications is primarily international cooperation. The table below shows the percentage share of joint research carried out at the international, national and institutional level.

Figure 13. Publications co-authored with institutions in SEA-EU

Publications co-authored with Institutions in other countries/regions

SEA-EU - European University of the Seas: 49.9%

| Table 11. Percentage of collaboration level in SEA-EU | |
|---|--|
| SEA-EU | |

| SEA-EU | |
|---------------------------------|------|
| International Collaboration (%) | 49.9 |
| National Collaboration (%) | 29.1 |
| Institutional Collaboration (%) | 14 |
| Single Authorship (%) | 7 |

Nearly half of the publications by scientists from universities in the consortium are the result of international cooperation and one-third of national cooperation. Single-author publications constitute a small percentage of them.

WITHIN THIS GROUP

Apart from searching for new areas of potential scientific cooperation between alliance partners, it is worth taking a closer look at the effects of the cooperation so far. Based on the data obtained it can be noticed that Kiel University represents the highest publishing activity of in terms of co-authoring publications with scientists from other partner universities. Among all the joint publications within the SEA-EU alliance (80 articles), over 70% are those in which at least one author indicated Kiel University as an affiliation. These are works published in journals that are assigned the following categories in the Scopus database: Earth and Planetary Sciences, Agricultural and Biological Sciences, Environmental Science and Medicine.







Table 12. Number of joint publications in SEA-EU

On the other hand, the lowest number of publications resulting from joint research activities with the consortium partners was recorded for the University of Split (5 articles). However, in the case of these publications, one should consider the **extremely high value of the Field Weighted Citation Impact** in relation to the other co-authors. This means that scientists from the University of Split are co-authors of a small number of articles with a very high impact on the academic community in given Subject Areas, which is also confirmed by the data on the number of citations (details below).

Overall, the total number of joint publications by scientists from SEA-EU universities published in 2017-2020 is **80**. Averaging the results, **each of the SEA EU partner universities published around 13 joint publications** (with any of the partners). However, it should be considered that none of the scientists from the University of Split is a co-author of publications affiliated with three partners: Université de Bretagne Occidentale, University of Gdańsk and University of Cádiz.

Considering the total number of all publications of the SEA-EU alliance from this period indexed in the Scopus database (32 449), the percentage share of joint publications is only 0.25%. This means that the joint research potential is not fully exploited. It is worth mentioning that most of the publications have been published in open access journals.





It is not possible to quantify the effects of scientific collaboration solely based on the number of co-authoring publications. As the bibliographic data on co-authorship is considered a reliable measure of the collaborative network, the average value of the Field Weighted Citation for every authored publication and the number of citations were also analyzed.

| Institutions | 📕 Kiel University | Université de Bretagne Occidentale | 📕 University of Malta | University of Gdańsk | University of Cádiz | TUniversity of Split |
|--------------------------------------|-------------------|------------------------------------|-----------------------|----------------------|---------------------|----------------------|
| Kiel University | | 2.47 | 2.61 | 2.45 | 2.51 | 24.41 |
| I Université de Bretagne Occidentale | 2.47 | | 2.30 | 0.91 | 3.50 | 0 |
| Terror University of Malta | 2.61 | 2.30 | | 2.03 | 1.57 | 38.39 |
| University of Gdańsk | 2.45 | 0.91 | 2.03 | | 3.56 | 0 |
| University of Cádiz | 2.51 | 3.50 | 1.57 | 3.56 | | 0 |
| University of Split | 24.41 | 0 | 38.39 | 0 | 0 | |

Table 13. Field Weighted Citation Impact for joint publications in SEA-EU

The presented data show that the joint publications of SEA-EU partners are cited more often than indicated by the average number of citations of the same publications in a given year in a given category. This is evidenced by the value of the Field Weighted Citation Impact indicator above 1. The exception are 4 joint publications of the University of Gdańsk and Université de Bretagne Occidentale in the field of Biochemistry, Genetics and Molecular Biology and Agricultural and Biological Sciences (average FWCI = 0.91).

The Field Weighted Citation Impact value is the highest for co-authored publications of the University of Malta and the University of Split being 38.39. This means that 3 joint publications are cited 38.39 times more often than the world average for similar publications. All of them are open access articles in the following areas: Medicine, Health Professions and Pharmacology, Toxicology and Pharmaceutics.





Figure 15. Examples of joint publications 1

| Title | Authors | Year | Scopus Source | Citations \downarrow |
|--|---|------|---------------------------------------|------------------------|
| Worldwide trends in blood pressure from 1975 to 2015: a pooled analysis of 1479 population- based measurement studies with 19-1 million participants Oben Access | Zhou, B., Bentham, J., Di Cesare, M. and 759 more | 2017 | The Lancet | 739 |
| Contributions of mean and shape of blood pressure distribution to worldwide trends and variations in raised blood pressure: A pooled analysis of 1018 population-based measurement studies with 88.6 million participants Open Access | Ezzati, M., Zhou, B., Bentham, J. and 845 more | 2018 | International Journal of Epidemiology | 27 |
| Scholarly publishing depends on peer reviewers Open Access | Fernandez-Llimos, F., Berti, A.D., Yeung, D. and 146 more | 2018 | Pharmacy Practice | 5 |

It is worth to mention 2 publications resulting from the collaboration of scientists from Kiel University and the University of Split, for which the average value of the FWCI index is 24.41. These are articles also published in open access journals presenting research results in the fields of Biochemistry, Genetics and Molecular Biology and Multidisciplinary.

Figure 16. Examples of joint publications 2

| Title | Authors | Year | Scopus Source | Citations \downarrow |
|---|--|------|-----------------|------------------------|
| Analysis of shared heritability in common disorders of the brain | Anttila, V., Bulik-Sullivan, B., Finucane, H.K. and 569 more | 2018 | Science | 495 |
| Open Access | | | | |
| Protein-altering variants associated with body mass index implicate pathways that control energy intake and expenditure in obesity Open Access | Turcot, V., Lu, Y., Highland, H.M. and 396 more | 2018 | Nature Genetics | 117 |





Data on the number of citations of joint articles in the period 2017-2020 coincide with the values of the FWCI indicator. The highest number of citations was recorded for the publications of authors from **University of Split** in cooperation with scientists from **Kiel University (612)** and **University of Malta (771)**. In summary, all the co-authors' publications of the SEA-EU partners (80) received **2 482 citations**. The total number of citations of all publications for the SEA-EU alliance (not only the joint ones) in the years 2017-2020 is **233 109**. Therefore, citations from "joint" publications are only about 1% of the total.



In addition, the greatest impact of the abovementioned achievements on the scientific community is confirmed by the **Citations per Publication index** – the highest by analogy for publications with affiliation of the University of Split. For the remaining partners of the SEA-EU alliance and joint articles, the number of citations per one publication is different and ranges from 2 to 29. The average value of the **Citations per Publication index** for all publications of the SEA-EU group (not only joint articles) is **7.3**.

| Institutions | Kiel University | Université de Bretagne Occidentale | University of Malta | 📕 University of Gdańsk | 🚾 University of Cádiz | 📰 University of Split |
|------------------------------------|-----------------|------------------------------------|---------------------|------------------------|-----------------------|-----------------------|
| Kiel University | | 18.6 | 12.2 | 7.2 | 6.0 | 306.0 |
| Université de Bretagne Occidentale | 18.6 | | 20.0 | 6.2 | 12.7 | 0 |
| University of Malta | 12.2 | 20.0 | | 2.0 | 2.2 | 257.0 |
| University of Gdańsk | 7.2 | 6.2 | 2.0 | | 29.0 | 0 |
| University of Cádiz | 6.0 | 12.7 | 2.2 | 29.0 | | 0 |
| University of Split | 306.0 | 0 | 257.0 | 0 | 0 | |





RESEARCH POTENTIAL – internal tool

HTTPS://SEA-EU.PL/ - WEB DATABASE ABOUT RESEARCH GROUPS

Verified users from each university can add data about their research groups. Adding the group to the database is done by filling in numerous text and checkbox fields in the form. Access permissions are granted and connected to specific roles in the system: administrator, moderator of the university, verified user, anonymous user. Moderator can verify registered users and give them permission to add information about research groups at their university. Moderators can edit research groups only at their university. Verified users can edit only their own created data. Anonymous users can view and search research groups using result filters.

RESEARCH GROUPS IN SEA-EU

Disciplines

| DISCIPLINE | NUMBER OF GROUPS |
|---------------------------|------------------|
| Natural Sciences | 155 |
| Engineering & Technology | 76 |
| Medical & Health Sciences | 55 |
| Agricultural Sciences | 7 |
| Social Sciences | 119 |
| Humanities | 78 |
| OVERALL | 490 |



RESEARCH GROUPS IN SEA-EU

GROUP

Institutions

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





Figure 17. Number of research groups in SEA-EU (by institutions) [30.04.2021]

TOPICS IN SEA-EU GROUP

Between 2017 to 2020, researchers in SEA-EU – European University of the Seas have contributed to 11 831 Topics.

Computer Science COMP MATH Mathematics PHYS Physics and Astronomy Chemistry CHEM CENG Chemical Engineering MATE Materials Science ENGI Engineering ENER Energy ENVI Environmental Science Earth and Planetary Sciences EART Agricultural and Biological Sciences AGRI BIOC Biochemistry, Genetics and Molecular Biology IMMU Immunology and Microbiology VETE Veterinary

Subjects Area Abbreviations:

| MEDI | Medicine |
|------|--|
| PHAR | Pharmacology, Toxicology and Pharmaceutics |
| HEAL | Health Professions |
| NURS | Nursing |
| DENT | Dentistry |
| NEUR | Neuroscience |
| ARTS | Arts and Humanities |
| PSYC | Psychology |
| SOCI | Social Sciences |
| BUSI | Business, Management and Accounting |
| ECON | Economics, Econometrics and Finance |
| DECI | Decision Sciences |
| MULT | Multidisciplinary |
| | |

Figure 18. Topics in SEA-EU

- 1. Constant development of cooperation between the partners.
- 2. Increasing joint publications activity.
- 3. Publishing with the strategy focused on the quality of scientific journals.
- 4. Increasing the number of open access publications (this will continue in Research).
- 5. Building reputation and recognition to increase cooperation with other institutions of the higher education sector and the socio-economic environment.
- 6. Implementing research results (societal impact).
- 7. Increasing international cooperation.
- 8. Searching for new areas of potential scientific cooperation (this will continue in Research).
- 9. Greater use of joint research potential.
- 10. Effective use of the research infrastructure of all partners (shared infrastructure as a tool).

LIST OF FIGURES

| Figure 1. Scholarly Output 2000-2020 in SEA-EU | 3 |
|---|-----|
| -igure 2. Citations in SEA-EU | 3 |
| Figure 3. Field-Weighted Citation Impact in SEA-EU | 4 |
| Figure 4. Outputs in Top Views Percentiles in SEA-EU | 6 |
| Figure 5. Field-Weighted Views Impact in SEA-EU | 6 |
| Figure 6. Publications by Journal quartile in SEA-EU | 7 |
| Figure 7. Number of Publications in the top 10% journals by CiteScore in SEA-EU | 8 |
| Figure 8. Individual ASJC categories in SEA-EU | .13 |
| Figure 9. SEA-EU mentions in Mass Media in print | .15 |
| Figure 10. SEA-EU Media Exposure in print | .16 |
| Figure 11. SEA-EU mentions in Mass Media online | .17 |
| Figure 12. SEA-EU Media Exposure online | .18 |
| Figure 13. Publications co-authored with institutions in SEA-EU | .19 |
| Figure 14. Joint publications in SEA-EU | .21 |
| Figure 15. Examples of joint publications 1 | .23 |
| Figure 16. Examples of joint publications 2 | .23 |
| Figure 17. Number of research groups in SEA-EU (by institutions) [30.04.2021] | .26 |
| Figure 18. Topics in SEA-EU | .26 |

LIST OF TABLES

| Table 1. Scholarly Output, Citations per Publications and Field-Weighted Citation Impact in SEA-EU | 4 |
|--|----|
| Table 2. Outputs in Top Citation Percentiles in SEA-EU | 5 |
| Table 3. SEA-EU in 10 most often published journals | 8 |
| Table 4. Number of publications in Open Access in SEA-EU (by institution) | 10 |
| Table 5. Number of publications in Open Access in SEA-EU (by year) | 10 |
| Table 6. Open Access Publishing Models in SEA-EU | 10 |
| Table 7. Percentage of Open Access publications in SEA-EU | 11 |
| Table 8. Individual ASJC categories in SEA-EU | 14 |
| Table 9. SEA-EU print mentions | 16 |
| Table 10. SEA-EU online mentions | 17 |
| Table 11. Percentage of collaboration level in SEA-EU | 19 |
| Table 12. Number of joint publications in SEA-EU | 20 |
| Table 13. Field Weighted Citation Impact for joint publications in SEA-EU | 22 |
| Table 14. Number of citations for joint publications in SEA-EU | 24 |
| Table 15. Citations per Publication index for SEA-EU | 24 |
| Table 16. Number of research groups in SEA-EU (by disciplines) [30.04.2021] | 25 |