



Università
Ca' Foscari
Venezia
Presidio della Qualità
di Ateneo

2018 Annual Research Report

Department of Environmental Sciences, Informatics and Statistics

Reference period 2015-2017

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About this document

This document reports on the research activity of the Department of Environmental Sciences Informatics and Statistics (DAIS), with focus on the quality of the research products, as requested by the “Assegnazioni Dipartimentali per la Ricerca” (AdiR) regulations.

This document was authored by the DAIS Research Committee with the following goals:

- to monitor the quality of the research products published by DAIS researchers;
- to evaluate future internal and external evaluations DAIS is subject to;
- to design supporting actions to improve the research environment of the department;
- to measure the effectiveness of the initiatives by the Research Committee.

This manuscript is intended as a “live” working document, continuously updated to improve its accuracy, to discuss the department initiatives, and to share decision with all faculty members.

The scope of this document is limited to the quality of scientific papers productions, but, in the long term, we aim at including within this document a comprehensive analysis of DAIS’s research activities.

PART I: Research objectives

Section A - Statement of the Department research objectives and indicators

The **Department of Environmental Sciences, Informatics and Statistics (DAIS)** was created in 2011 after joining three departments: environmental sciences, informatics and statistics. DAIS is engaged in multidisciplinary research produced by the recognized experience of the researchers in the analysis of environmental systems, in the management and modelization of environmental and informatic systems, in climate studies, in complexity, in the preservation of cultural heritage and in sustainability. The research activity generates significant impact on educational activities through a complete degree programme (Bachelor's, Master's and PhD programmes) in Environmental Sciences and Informatics, a Master's degree programme in Conservation Science and Technology for Cultural Heritage and a multidisciplinary PhD in Science and Management of Climate Change.

DAIS research focuses on the following areas: biology and ecology, chemistry (environmental, analytical and for the conservation of cultural heritage), environmental engineering, computer science, earth science and statistics. Transversal topics of research include climate and the socio-economic effects of its transformations, complexity, preservation of cultural heritage, monitoring, risk, environmental and computer security and sustainability. Research is developed in collaboration with public bodies and local firms. This synergy together with the multidisciplinary approach allows the department to exploit a wide spectrum of expertises and to develop truly innovative research.

The objectives of the Department are formalized in the (triennial) Department Development Plan 2016-2018 (DDP)¹, which is indeed based on the University Strategic Plan. We report below the research objectives as in the Department Triennial Development Plan:

DDP-1 Amount of research funding:

- Indicators and targets:
 - i EU funding ≥ 3.3 M €
 - ii Other funding ≥ 2 M €

DDP-2 Extent of interdisciplinary research:

- Indicators and targets:
 - i Faculty members actively involved in the Global Challenges Teams² $\geq 50\%$

DDP-3 Number of ERC grantees / Marie Skłodowska-Curie fellows:

- Indicators and targets:
 - i Number of ERC grantees or MSC fellows per year ≥ 1

DDP-4 Research infrastructures and estates:

¹

https://www.unive.it/pag/fileadmin/user_upload/dipartimenti/DAIS/documenti/Dipartimento/AssicurazioneQualita/Piani/DocProgrammatici/PianoTriennale_DAIS_2016-2018.pdf

² <https://www.unive.it/pag/11651/>

- Indicators and targets:
 - i Epsilon Building (70% progress) and departmental shared resources.

DDP-5 Overall research output:

- Indicators and targets:
 - i Increase quality of research output without decreasing its volume.

Note that a new plan is being designed for the 2019-2020 period.

DAIS must undergo several evaluation processes within the University and within the Ministry of Education, University and Research (MIUR). Each process exploits different indicators and enforces different requirements. Most of those process share the VQR³ scheme for the evaluation of scientific publications.

The focus of this document is on DDP-5 Overall Research Output. In this regard, **DAIS aims at improving the quality of its research output** without decreasing its volume. To do so, the departmental Research Committee (CdR⁴) defines the goals described below, which are the subject of the analysis reported in this document. These goals were defined by having in mind the many evaluation procedures the department must undergo, and previous programmatic documents⁵.

With the goal of improving the research output of the department, DAIS pursues the following objectives.

O1.High Quality of Research Output

- Most of the evaluation the department must undergo are based on the ANVUR research product scoring system. The quality of research product is classified as Excellent, High, Average, Fair, Limited, unclassified. Several indicators are derived on the basis of this scores for the evaluation of large institutions rather than individual researchers. The most relevant indicators are given by the average score of the research products by an institution, and the fraction of research products classified as either Excellent or high quality.

O2.Interdisciplinary Research

- The DAIS department is multidisciplinary by nature. It is in the interest of the department to exploit the several expertises in different scientific areas so as to improve the quality of its research.

O3.High Quality Recruiting

- The ANVUR evaluation of the publication record of the newly recruited and promoted staff plays an important role in the evaluation of the department. DAIS aims at recruiting high quality researchers, and to allow them to successfully conduct their research from the very first day in the department.

O4.Internationalization

- DAIS supports exchanges with international institutions so as to foster collaborations and research of international relevance.

³ V.Q.R. is a national evaluation process of research quality <http://www.anvur.it/attivita/vqr/>

⁴ The acronym CdR comes from its name in Italian language "Comitato della Ricerca".

⁵ DAIS Assicurazione della qualità <https://www.unive.it/pag/27538/>

For each objective, we identified a set of Key Performance Indicators. Nevertheless, as we believe indicators alone cannot provide an exhaustive picture of the plenty of research activities and efforts, this document also includes in its analysis some additional indicators that are useful for the sake of monitoring. Part II provides a quantitative analysis of the department productivity.

To achieve the objectives above, DAIS exploits both awarding and incentivizing actions. We are definitely more interested in the incentives the department can provide to its researchers. Indeed, the CdR is also interested into actions that do not have a direct impact on a specific indicator but they are considered useful for an “healthier” research environment. DAIS draws on the following instruments to support the department research activities:

- an annual award to individual researchers (up to €3000, on the basis of their productivity) (ADIR⁶);
- research grants may receive up to 50% co-funding;
- IRIDE provides two kinds of support (<€5000): *i*) newly recruited researchers receive a limited “starting” fund and *ii*) small research projects receive funding to support incoming and outgoing visits for short stays;
- financial support to seminars by visiting scholars.

Part III of this documents discusses in greater detail these incentive instruments.

Part IV of this document discusses key-performance indicators for each of the above objective and sets targets to be achieved in the next future.

⁶ Research Support Department Funds “Assegnazioni Dipartimentali per la Ricerca” (AdiR)

PART II: Human resources and Scientific production

Section A – Human resources

Subsection A.1 – Research personnel

Faculty

Year ⁷	Full Professors	Associate Professors	Researchers	Fixed-Term Researcher <i>[Ricercatori t-det]</i>	Total
2017	19	21	11	7	58
2016	16	26	12	5	59
2015	17	25	12	6	60

The number of faculty members is about constant over time. Still we observe a decrease in the number of Associate Professors, linked to career progress to Full Professor, nevertheless the number of Full Professor is below the 50% of total Professor (Full+Associate) (47% in 2017), as requested by University hiring restrictions. An increment in the number of fixed-term Researchers is hoped as this would positively reverberate, in the mid-term and through career progress, in the number of Associate Professors.

Research Grant Holders and PhD students

Year ¹	Research Grant Holders	PhD students
2017	55	74
2016	53	71
2015	49	72

The number of PhD students is about the same across the three years considered, almost evenly spread along the three PhD programmes of the department, while the number of research grant holders increased by ~10%. We believe it is important to foster high quality research to be attractive for the best research grant holders. In this regard, we will consider the possibility of monitoring the quality of the research output of PhD students and research grant holders.

⁷ Detected at 31 December of every year

Section B - Scientific production (2015-2017)

Subsection B.1 – Overall scientific production⁸

Total scientific production

Publishing year	Journal articles	Book Parts	Books	Conference Proceedings	Patents	Other	TOT
2017	133	16	1	34	0	1	185
2016	172	26	2	41	0	0	241
2015	119	11	2	57	0	2	191
TOT	424	53	5	132	0	3	617

The total scientific production varies significantly across years, and we therefore avoid discussing specific trends. We nonetheless observe the the number of conference proceedings decreased consistently and significantly. The data also suggest that journal articles are increasingly preferred over conference proceedings, which might be a positive trend. It is however difficult to draw any conclusive remark given the different scientific areas covered by the department. We aim at further monitoring this behaviour in the next years in order to confirm this positive trend. We finally observe that there was no patent approved in the last three years, but patents were accepted both before and after the 2015-2017 timeframe.

Indexed publications

Category	2015	2016	2017	TOT
Indexed in WoS/Scopus	161 (84%)	197 (82%)	154 (83%)	512
Articles in top 10% WoS/Scopus Journals	55 (29%)	78 (32%)	78 (42%)	211
Articles in ANVUR “Class A” Journals	50 (26%)	64 (27%)	62 (33%)	176
TOT	266	339	294	899

⁸ Source: University Repository ARCA (<https://arca.unive.it/>). Only publication with a ISBN/ISSN or DOI code have been considered. Book editing activities have been excluded.

Indexed publications including non permanent staff						
Department	Articles in top 10% WoS/Scopus Journals			Articles in ANVUR "Class A" Journals		
	2017	2016	2015	2017	2016	2015
Dipartimento di Economia	19 (9%)	26 (12%)	25 (10%)	66 (32%)	61 (27%)	73 (29%)
Dipartimento di Filosofia e Beni Culturali	2 (1%)	2 (1%)	5 (2%)	36 (14%)	47 (20%)	31 (10%)
Dipartimento di Management	14 (9%)	16 (9%)	8 (6%)	33 (22%)	30 (17%)	25 (19%)
Dipartimento di Scienze Ambientali, Informatica e Statistica	94 (43%)	81 (28%)	49 (24%)	67 (30%)	62 (21%)	45 (22%)
Dipartimento di Scienze Molecolari e Nanosistemi	41 (37%)	44 (36%)	57 (48%)	12 (11%)	7 (6%)	13 (11%)
Dipartimento di Studi Linguistici e Culturali Comparati	1 (0%)	5 (2%)	0 (0%)	36 (15%)	38 (15%)	37 (15%)
Dipartimento di Studi sull'Asia e sull'Africa Mediterranea	4 (2%)	1 (1%)	2 (1%)	39 (23%)	25 (17%)	26 (15%)
Dipartimento di Studi Umanistici	0 (0%)	3 (1%)	1 (0%)	51 (17%)	50 (21%)	35 (12%)

The number of publications indexed in WoS/Scopus is far above the University average. A comparative analysis with the other departments of the University shows that **DAIS had an increment in the quality of its research output** (from 49 to 94 journal articles in the top 10% WoS/Scopus), and **we remark that DAIS is among the best performing departments of the university** with 94 (42%) publications in the top 10% Scopus Journals in 2017 (the second best being DSMN with 41 and 37%). Note that "Class A" journals are less relevant to DAIS as its research products are well covered by Scopus. Still, DAIS performs well also when considering only "Class A" journals. The number of publications seems to be increasing consistently across the considered years. The quality is also increasing, with 2017 exhibiting a large improvement compared to previous years: given the large historical year-to-year variability in the total scientific production, this result needs to be corroborated in the subsequent years before a trend is identified. Finally, it is worth considering that 16 out of 94 articles in 2017 were published by non permanent staff; that means an increased scientific autonomy of PhD students and research grant holder.

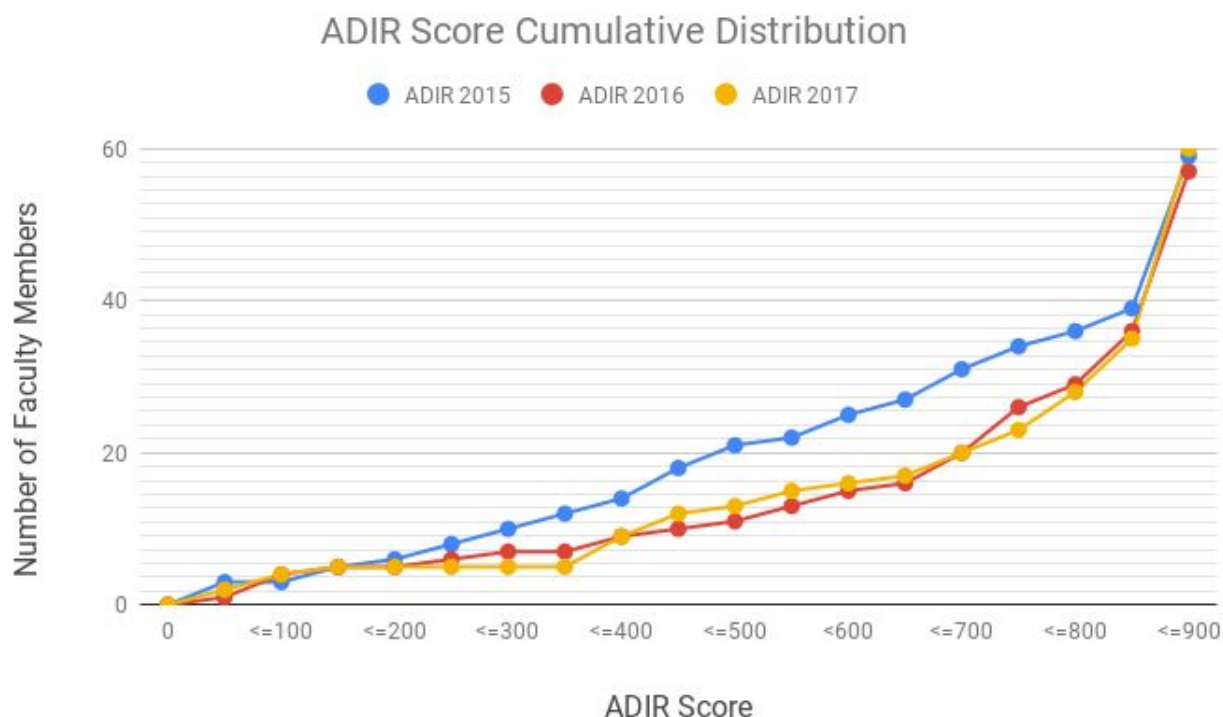
Productivity comparison

Role at Ca' Foscari	Number	ARCA products (avg.)	Indexed in WoS / Scopus (avg.)	Top 10% WOS-Scopus Journals (avg.)	ANVUR Class A Journals (avg.)
Full Professor	19	276 (14.5)	235 (12.4)	97 (5.1)	94 (4.9)
Associate Professor	21	324 (15.4)	267 (12.7)	124 (5.9)	91 (4.3)
Researcher	11	111 (10.1)	93 (8.5)	22 (2.5)	27 (2.5)
Fixed-Term Researchers <i>[Ricercatori t-det]</i>	7	75 (10.7)	63 (9.0)	23 (2.9)	20 (2.9)
TOT	58	786	658	266	232

N.b.: for publications with more than one author affiliated to the Department, the publication is accounted for each category represented in the publication (there are therefore duplications). In parentheses the average number of publications per individual researcher.

We highlight that Full Professors and Associate Professors have about the same productivity and, as expected, this is significantly larger than Researchers.

Additional Indicators: ADIR Score Distribution



The Figure above reports the ADIR score distribution from 2015 to 2017. More details about the ADIR scoring is given in Part III. In 2015 we observe that about 30% of the department members have a score smaller than 400 and about 30% have a score larger than 850 out of a maximum of 900. We observe a significant improvement in 2016 and 2017 where the number of faculty members with a score smaller than 400 nearly halved. This means that the overall quality of the research output of the department increased, with a larger portion of the staff producing higher quality publications. This improvement is maintained in 2019. This improvement can be ascribed partially to the incentivizing actions of the department and partially to retirements (5 with score <300) and new recruitments (5 with score >700).

As recommended by the assessment board, each member of the department is informed yearly about the ADIR evaluation of its own products. We remark that the ADIR scoring provide a measure of the department research quality, still its outcome is different from ANVUR-like evaluations. For this reason, we do not set any specific performance indicator on the ADIR score. In the next future, we might consider to accompany the ADIR scoring with some ANVUR-based evaluation, noting that this might require non trivial procedures (including peer reviewing).

Additional Indicators: Research Quality, VQR-Like and ASN

In the following we make use of the Scientific Production Evaluation Support Tool provided by the University of Basilicata and CRUI (Italian University Rectors Board). This automatic tool, with some limitations, simulates AVNUR evaluations, which are nontrivial as they involve a peer review process for some publications (which is obviously not included in the tool). The tool provides information only for willing universities, which can manually suggest modifications so as to fix errors. Therefore, **data need to be considered carefully** as they are partial and might include

inaccuracies. We thus use the tool only for a prospective analysis. We use the most up-to-date data available including the most recent publications and the current faculty members.

On the positive side, this tool allows to evaluate the DAIS productivity within each single scientific areas therefore avoiding to compare productivity rates across different disciplines. This provides a more detailed and more accurate insight on the DAIS scientific production and allows to compare it with other national universities within the context of each scientific area. **We highlight that this is not yet the best and most accurate setting.** Consider the case of Area 01 Mathematics and Informatics⁹: the DAIS department includes mostly computer scientists and comparing the department skills with the average performance in the area, which includes mathematicians but also physicists, is inaccurate. **We plan to refine and improve the analysis we discuss in this document by investigating more appropriate evaluation mechanisms.**

We finally remark that this ANVUR-based scoring system is largely used for external evaluation by the Ministry of Education and Research and for internal resource assignments within the University of Venice.

Research Quality (FFABR Indicators ¹⁰) [staff 2018, publications 2015-2017]										
	#Researchers	Avg, Prods DAIS	Avg. Prods across Univ.s	Ratio	%Prods class A-B	%Prods class A-B across Univ.s	Ratio	%Prods w/ Intl. Authors	%Prods w/ Intl. Authors across Univ.s	Ratio
Area 01	22	5.55	4.67	1.19	12.00%	23.40%	0.51	42.10%	21.50%	1.96
Area 03	16	9.94	10.01	0.99	24.20%	28.70%	0.84	45.70%	24.30%	1.88
Area 04	7	7.71	8.14	0.95	32.50%	14.00%	2.32	64.90%	23.40%	2.77
Area 05	10	9.90	8.02	1.24	13.80%	26.20%	0.53	24.50%	19.80%	1.24
Area 08b	1	N/A ¹¹	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
Area 09	3	7.67	8.28	0.93	11.50%	16.00%	0.72	34.60%	19.30%	1.79
Area 13	6	8.00	5.63	1.42	27.30%	15.50%	1.76	33.80%	10.80%	3.13

The above table reports on the research products quality in different scientific areas where the department is active and it allows to compare it with average figures within the same area across

⁹ Areas are defined as follows: Area 01 Mathematics and Informatics, Area 03 - Chemistry, Area 04 Earth Sciences, Area 05 Biology, Area 08 Civil Engineering and Architecture, Area 09 Industrial and Information Engineering, Area 13 Economics and Statistics.

See https://www.cun.it/uploads/storico/settori_scientifico_disciplinari_english.pdf

¹⁰<http://www.anvur.it/attivita/ffabr/>

¹¹Not Available: due to privacy concerns, the tool does report statistics about groups of less than 3 people.

other Italian universities. The number of products per researcher is in line with other universities, therefore the volume of the research output needs not to increase. The quality of such publications, measured as the percentage of products in the top two quality classes, varies significantly across areas. The two best performing areas are Area 04 and Area 13, with a performance far beyond the average of other universities. The other areas instead suffer from a lower percentage of high quality publications. Given that all areas exhibit large international collaborations and a good volume, we encourage a better focus on high quality venues.

Research Quality (VQR-Like ¹²) [staff 2018, publications 2015-2017]							
	#Researchers	Avg. product score DAIS	Avg. product score across Univ.es	Ratio	%Products class A-B	%Products class A-B across Univ.s	Ratio
Area 01	22	0.56	0.57	0.98	40.90%	47.30%	0.87
Area 03	16	0.71	0.71	1.00	62.50%	67.20%	0.93
Area 04	7	0.59	0.62	0.95	50.00%	48.70%	1.03
Area 05	10	0.71	0.65	1.09	40.00%	58.80%	0.68
Area 08b	1	N/A	N/A	N/A	N/A	N/A	N/A
Area 09	3	0.52	0.62	0.83	16.70%	51.30%	0.33
Area 13	6	0.77	0.50	1.53	83.30%	35.60%	2.34

The above Table is similar to the previous, but the evaluation is limited to 2 publications per author as in the VQR evaluation process. In this case, results are comparable with other universities, meaning that DAIS researchers are able to produce the two high-quality publications required by VQR. A limited production of high quality products is observed in Area 09 and to some extent also in Area 05. **Given the potential inaccuracies of the tool (especially for those Area with low researchers number) further investigation is needed.**

Research Quality (ASN) [staff 2018, publications 2003-2018]

¹² <http://www.anvur.it/attivita/vqr/>

	#Faculties	#Researchers	#Associate Prof.s	#Full Prof.s	#Researchers with Associate Prof. Req.s	#Associate with Full Prof. Req.s	#Faculties with Full Prof. Req.s
Area 01	22	9	6	7	7	5	13
Area 03	16	8	3	5	4	N/A	5
Area 04	7	3	3	1	N/A	3	4
Area 05	10	2	7	1	N/A	6	7
Area 08b	1	N/A	N/A	N/A	N/A	N/A	N/A
Area 09	3	1	1	1	N/A	N/A	2
Area 13	6	1	3	2	N/A	2	4

The ASN evaluates some publication productivity (h-index, citations, journal) requirements for a becoming Associate or Full professor (note that these are different for each scientific area).

This has however a large degree of approximation due to data incompleteness: for instance, for privacy reasons, the tool yields a Not-Available datum if less than 3 researchers are included in a category for an area. We highlight that this data accounts for the requirement for different roles and that some of them may not own the necessary scientific qualifications. Therefore, we plan to conduct a more detailed and accurate analysis in the next future, also in order to evaluate the “promotion pressure” in different areas.

We also highlight that research areas with a small number of researchers may suffer scarcity of resources in the next future. We hope newly recruited researchers can enrich the smaller areas so as to provide a positive outlook of future promotion and growing.

Subsection B.2 - Scientific production of newly recruited and promoted researchers

Newly recruited researchers (2015-2017)

Entry role at Ca' Foscari	Number	ARCA products (avg.)	Indexed in WoS / Scopus (avg.)	Top 10% WOS/Scopus Journals (avg.)	ANVUR Class A Journals (avg.)
Full Professor	0	0	0	0	0
Associate Professor	3	64 (21.3)	60 (20.0)	24 (8.0)	25 (8.3)
Fixed-Term Researchers [Ricercatori t-det]	4	33 (8.3)	27 (6.8)	12 (3.0)	11 (2.8)
TOT	7	97	87	36	36

Promoted researchers (2015-2017)

Acquired role	Number	ARCA products (avg.)	Indexed in WoS / Scopus (avg.)	Top 10% WOS/Scopus Journals (avg.)	ANVUR Class A Journals (avg.)
Full Professor	7	113 (16.1)	98 (14.0)	37 (5.3)	40 (5.7)
Associate Professor	6	106 (17.7)	98 (16.3)	52 (8.7)	40 (6.7)
Fixed-Term Researchers [Ricercatori t-det]	2	26 (13.0)	25 (12.5)	6 (3.0)	5 (2.5)
TOT	15	245	221	95	85

We first highlight that newly recruited Associate Professors have very large productivity indicators: they are higher than Promoted Associate professors and they are significantly higher than faculty Full Professors. We believe that collaborations with newly recruited staff can be very fruitful for the whole department.

Similarly, promoted researchers have larger performance figures than average faculty members, thus witnessing a healthy selection mechanism. Interestingly enough, promoted associate professors are on average better performing than promoted full professors.

We also highlight that no Full Professor was recruited. We also think that recruiting a Full Professor can be beneficial for the department, but this should be done very carefully: either the professor has a large overlap with the department research topics, or a new research team has to be built around the recruited Full professor.

Subsection B.3 - Researchers with no scientific production¹³

Researchers with no scientific production

Full Professors	Associate Professors	Researchers	Fixed-Term Researchers <i>[Ricercatori t-det]</i>
1	0	0	0

Researchers with no scientific production recruited/promoted in the three-year period 2015-2017

Full Professors	Associate Professors	Researchers	Fixed-Term Researchers <i>[Ricercatori t-det]</i>
0	0	0	0

Comments concerning the critical issues

There is only one inactive full professor, who retired in 2018.

¹³ Researchers with no scientific publication in the three years period (source: University Repository ARCA)

PART III: Resources, incentives, actions

This sections reports on the funding initiatives of the department. The table below shows the expenses related to the different initiatives. The large funding for research grants in 2015 include university-level co-funding. We highlight that the total spending is decreased due to the decreased number of applications. The CdR will evaluate possible strategies to revise current regulations to design initiatives that better fit the necessities of faculty members.

	Conferences	Research Grants	IRIDE	AdiR	Total
2015	9,088.71	307,645.10	23,000.00	139,062.73	478,796.54
2016	14,294.81	179,921.71	19,372.81	139,093.91	352,683.24
2017	21,042.07	126,543.66	8,120.00	125,104.01	280,809.74

Section A – Departmental research funding

AdiR evaluation takes place every year in November and considers the scientific production of the past three years of all the Faculty members, including the RTD-A and RTD-B. The evaluation of the articles in venues indexed by Scopus or WOS is carried out automatically according their ranking. Each article receives a score in the range 30-100 which is proportional to the decile associated with the venue (decile 10 identifies the top). Non bibliometric works are evaluated by members of the Research Committee based on criteria such as international visibility, quality of the contribution. Each work receives a score in the range 0-100 where the top level can be reached only by books. All the products in the 3-year period are evaluated but only the best nine contribute to the evaluation of the Faculty member. The results of the evaluation are verified by each single Faculty member, presented during a plenary meeting of the Department and then approved.

The total funding slightly decreased in the 2017 period, but it was stable at €140,000 in both 2018 and 2019.

We refer to the Part II of this for a detailed analysis of the outcomes of this process and a comparison with the different years.

Section B – Funding for Research Grants and Short-term Research Fellowships

Subsection B.1 – Research Grant Holders co-funded by the department

Researchers (all categories) supervising a research grant co-funded by the Department

	Number of co-funded research grants	Number of supervising researchers	Total amount granted (per fiscal year)	Amount (%) co-funded by Dept.
2015	25	22	673,115.29	45.70
2016	16	15	373,295.48	48.20
2017	15	16	370,983.79	34.11

The Department co-funds research grants, for an amount that usually cannot exceed 50% of the minimum gross amount for an annual research grant (see: https://www.unive.it/pag/fileadmin/user_upload/dipartimenti/DAIS/documenti/Dipartimento/AssicurazioneQualita/Piani/RegolamentiDip/RegolamentoCofinanziamentoAssegniRicercaDottorato_DAIS_2017.pdf). The amount available is established on a yearly basis using predictive budget estimates; two calls are open yearly to request the co-funding.

There is a larger total amount granted for 2015 reflecting the larger number of researchers who applied for the co-funding in the same year. Departmental co-funding of a research grant does not prevent external co-funding for the same (external co-funding not reported). We stress the will of the department to take actions toward improving the co-funding scheme, particularly regarding the number of applicant.

Subsection B.2 – Short term Research Fellowships

Short term Research Fellowships are supported by Public Administrations, Private or Public Bodies and Companies through agreements, contracts or grants (see guidelines <https://www.unive.it/pag/9734/>). The STRF was intended to foster students participation in research groups and projects (<12 months).

Funding sources	SSD (if available)	Number of Short-term Research Fellowships - Period	Final Report	Amount	Research Project
“VoicesOfVenice. Anthro-Ecological Perspective on the Making of Medieval Europe” Project	LM-2, LM-15, LM-89, LM-11, LMR/02, L-43, L-1, L-10, L-42	7 17/07/2017 – 09/09/2017	Sì	€ 5.750,00	Archeologia Altomedievale a Torcello, Venezia

Funding sources	SSD (if available)	Number of Short-term Research Fellowships - Period	Final Report	Amount	Research Project
Istituto per la Dinamica dei Processi Ambientali CNR	CHIM/01	1 14/03/2016 – 13/09/2016	Sì	€ 9.683,00	Studio dei processi di accumulo di elementi in traccia in organismi vegetali

Funding sources	SSD (if available)	Number of Short-term Research Fellowships - Period	Final Report	Amount	Research Project
Microsoft S.r.l.	INF/01	01/07/2016 – 30/06/2017	Sì	€ 19.367,00	Data Science: formazione e ricerca

Section C – Other departmental actions for research support

IRIDE is successful funding program funded of the department aiming at promoting individual research activity by tenured faculty members. This initiatives also supports newly recruited researchers with a *starting grant* which can be used to cover travelling, dissemination, hardware expenses. The initiative is described in larger detail in the following sections.

Section E – Internationalization actions

IRIDE is successful funding program funded of the department aiming at promoting individual research activity by tenured faculty members. The applicants must submit a 18-month project research proposal about a new line of research in an international context. The key points of the program are:

- a. to promote mobility -both incoming and outgoing- by covering expenses associated with implementing collaborations with scholars working in renowned foreign research institution;
- b. to help new tenured faculty members start and accelerate their individual scholarship.

Expected results of the program are:

1. create, or contribute to, new international research networks;
2. publication of joint papers with the international scholars involved in the project.

Year	Number of recipients	Annual funding amount	Average Individual funding amount
2015	5	23,000.00	4,600.00
2016	6	19,372.81	3,228.80
2017	3	8,120.00	2,706.67

Note that the different individual funding, year by year, reflects the different mix of short, medium and long incoming and outgoing mobility. Moreover, in 2015, IRIDE-(b), which grants less than IRIDE-(a), was not yet activated.

Subsection E.1 – Incoming and outgoing scholars and professors

Scholarly visits are promoted by the department, and they are funded with different instruments (including non departmental funds). A detailed list is provided in Appendix I, below we report some summary statistics:

- Visiting Scholars: 4
- Visiting Researchers: 16
- Visiting Fellows: 21
- Visiting Professors: 9
- Outgoing Visit: 7

We highlight that a large portion of visits was funded by IRIDE projects and ADIR funds. Also we remark that no sabbatical leave occurred

Subsection E.2 – Other actions or internationalization incentives

The Department financially supports the organisation of conferences and workshops with the aim to improve the visibility of the Department and to promote the creation of scientific network. Member of the Department are invited to apply for the requests of fundings in two calls (April, October) each year. The following table summarises the total amount of funds devoted to this activity support.

Year	Total Amount	Number of Events
2015	9,088.71	8
2016	14,294.81	10

2017	21,042.07	13
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It is apparent that there is an increment of the number of the events organized by the Department. The average cost increment is motivated by the number of the international events.

PART IV: Assessment

Section A – External evaluation of Research activity

Subsection A.1 - Assessment board

Assessment board evaluation (*Nucleo di Valutazione*)

DAIS was subject to an evaluation by the Assessment Board (*Nucleo di Valutazione*) and by the *Presidio della Qualità* on April 20 2018. Note that the subject of the visit was AVA system (<http://www.anvur.it/attivita/ava/>) which evaluates the solutions adopted by the department for the design, management, self-evaluation and improvement of its scientific activities. The full report of the evaluation is available online¹⁴. We summarize and discuss the most relevant remarks below.

Requirement R4.B.1: Agreement between the university and the department research management strategy.

Comment Summary: The department plan is in agreement with the university strategic plan.

Requirement R4.B.2: Evaluation of results and incentive actions.

Comment Summary: Monitoring efforts are recommended.

Requirement R4.B.3: Definition and advertisement of incentives and awards.

Comment Summary: A wide spectrum of actions is recognized, but a better documentation of such efforts is recommended.

Requirement R4.B.4: Personnel and infrastructures supporting research activities.

Comment Summary: Actions within the department and beyond university initiatives should be evaluated.

Finally, in its last report, *Presidio della Qualità* recommended to inform yearly each faculty member about the evaluation of his productivity.

Review of the Department policies in the light of the Assessment board evaluation

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https://www.unive.it/pag/fileadmin/user_upload/dipartimenti/DAIS/documenti/Dipartimento/AssicurazioneQualita/Azioni/NucleoValutazione/Verbale_audit_DAIS_Sienze_Ambientali_20-04-2018.pdf.

Regarding R4.B.1, there is nothing to be commented as the board acknowledged the goodness of the Department Development Plan, which is going to be updated in the next future.

Regarding R4.B.2., the department adopted the UniBas-CRUI platform discussed in Part II of this document. This tool is being used to actively monitor the productivity of the department. Part of this monitoring was is described in this document.

Regarding R4.B.3, the CdR is reviewing all the regulations related to the various initiative and supporting actions. Also, the CdR will evaluate different information sharing mechanisms which might be more effective in increasing the awareness among faculty members about the department's initiatives, awards and incentives.

Regarding R4.B.4, the department plans to investigate flexible contractual options to deal with work overloads in specific period of the year.

Finally, DAIS yearly informs each researcher on the results of evaluation of each single product considered for the ADIR initiative.

Section B – Self-evaluation of Research activity

Subsection B.1 – Review of the Departmental Research activity (analysis of results) and improvement actions

In this section, for each of the Objective of the department introduced in Part I, we define below a set of Key Performance Indicators aimed at monitoring the department research output and validating of the supported initiatives. Finally, we draw some concluding remarks.

O1 - High Quality of Research Output

KPI-1.1: ANVUR X score: fraction of products in ANVUR Class A or B (Excellent or High quality) normalized by scientific area; **Target ≥ 1**

	Area 01	Area 03	Area 04	Area 05	Area 08b	Area 09	Area 13
KPI-1.1	0.87	0.93	1.03	0.68	N/A	0.33	2.34

This KPI is indeed quite relevant in several internal and evaluation schemes. Performance of the department varies across different scientific areas. We highlight some issues in the Area 05 and 09. Instead, performance of other scientific areas are in line with national average. Finally, Area 13 achieved remarkable results with a score of >2 .

KPI-1.2: Fraction of **faculty members with at least 2 products indexed in WoS/Scopus** in the last 3 years; **Target = 100%**.

This KPI is both related to the minimum number of publications to be presented for VQR-like evaluations. It might also be considered as an inactivity warning.

There are 4 out of 58 faculty members with less than 2 products indexed in WoS/Scopus in the last 2015-2017 time-frame. One of them retired in 2018.

Awarding and Incentive Instruments:

- ADIR: awarding mechanism providing a small research fund (<€3000) each year on the basis of researchers' productivity
- Co-funding of research fellowships (<€13000) is used by the department to support several research projects.
- Reduction of teaching load is allowed for those researchers involved in large international research projects.

New initiatives and correcting actions: *We aim at improving the productivity of all faculty members by increasing collaboration opportunities. One of the options that will be considered is that of providing support to joint research activities.*

O2 - Interdisciplinary Research

KPI-2.1: Fraction of research products having as co-authors faculty members of different scientific areas; **Target = 5%**.

	2015	2016	2017
KPI-2.1	1.3%	1.6%	5.7%

This KPI measure collaborations among authors belonging to different areas. Given the multidisciplinary nature of the department, such collaborations are an added value and they could boost high-quality research. Area 13 and Area 01 can more easily start interesting collaborations. We would like to confirm the positive results achieved in 2017.

Awarding and Incentive Instruments:

- Seminars from incoming visitors are supported, and other seminar activities are regularly advertised.

New initiatives and Correcting actions: *Possible new actions that will be considered include supporting publication fees to top-level multidisciplinary journals, such as Nature, Science.*

O3 - High Quality Recruiting

KPI-3.1: Average number of ANVUR Class A Journals of newly recruited researchers; **Target >= Equivalent permanent staff.**

KIP-3.2: Average number of ANVUR Class A Journals of promoted researchers; **Target >= Equivalent permanent staff.**

KPI-3.1 and KPI-3.2 Average number of ANVUR Class A Journals	Permanent staff	Newly Recruited	Promoted
Full Professor	4.9	N/A	5.7
Associate Professor	4.3	8.3	6.7
Researcher	2.5	N/A	N/A
Fixed-Term Researchers <i>[Ricercatori t-det]</i>	2.9	2.8	2.6

Newly recruited and promoted staff shows a large productivity which will raise the quality level of the department research output. This data further confirms the observed improvement in the ADIR score distribution. This indicator is largely exploited in both internal and external evaluation.

Awarding and Incentive Instruments:

- IRIDE provides a small research fund (<€5000) for new faculty members, that complements university funds which are reserved to “external” staff.

New initiatives and Correcting actions: *No correction appears to be necessary. However, the department might consider to carefully monitor the productivity of research grantees and PhD students and to consider awarding actions for them that might increase the attractiveness of the department for the most promising young researchers.*

Q4 - Internationalization

KPI-4.1: Fraction of publications with international co-authors normalized by scientific area; **Target >= 1**

	Area 01	Area 03	Area 04	Area 05	Area 08b	Area 09	Area 13
KPI-4.1	1.96	1.88	2.77	1.24	N/A	1.79	3.13

The target is largely achieved by all areas. The department conducts high quality research which naturally translates into solid international collaborations.

Awarding and Incentive Instruments:

- IRIDE provides a small research fund (<€5000) for incoming and outgoing scholarly visits so as to foster international collaborations.

- Seminars from incoming visitors are also supported.

New initiatives and Correcting actions: No corrective actions are required.

We conclude this document with the following remarks. The department conducts research of good quality on average in line with other national university departments, with excellent results in some scientific areas and subgroups. The department already provides a good support, especially by co-funding research fellowships. **We believe that novel incentive instruments are to be put in place so as to involve the largest number of faculty members.** We believe that collaborative research within the department could be highly beneficial. To this end, seminars and other dissemination activities are mandatory, but we think that **collaborative research should be further supported** in order to strengthen the department research groups, and to create novel collaboration networks, not only for increasing multidisciplinary, but also to boost the over quality of research thanks new collaborations. We remark that the valuable activity conducted in large research projects is not discussed in this document, and therefore the productivity in terms of research products does not provide a fully comprehensive view of the department.

Regarding recruitment, **the department has benefitted of the joining of new researchers with a strong publication record.** The department aims to continue this trends and to foster collaborations with the newly recruited staff. Also, the department will evaluate the possibility of monitoring more closely the research quality of research grants holders and PhD students and to set up incentive actions so as to increase the attractiveness of the department for the best students we trained.

Finally, **internationalization of research is excellent**, as a result of successful international collaborations.

We plan to refine and improve the analysis discussed in this document by investigating more appropriate mechanisms to contextualize performance figures computed on the basis of university databases and other available data sources.

Appendix I: Incoming and outgoing scholars and professors

Visiting scholars

Period	Da maggio 2016 a ottobre 2016
Name	Alexander Aldoshin
Home institution	Centre of Ecotoxicometry D. Mendeleev – University of Chemical Technology of Russia
Research area	Fellowship on the synthesis of carbonate mustard analogous and their chemical properties
Seminar activities	None
Funding Sources	None

Period	01/09/2016 - 31/08/2017
Name	Hichem Lourguioui
Home institution	Département Ressources Vivantes (DRV) à l'ENSSMAL (Ecole Nationale Supérieure et de l'Aménagement du Littoral, Algeri)
Research area	Applicazione dell'analisi del ciclo di vita alla valutazione di impatto di prodotti da acquaponica e da maricoltura in Algeria” e “Valutazione dell'idoneità di siti da adibire alla molluschicoltura in Algeria
Seminar activities	The use of Life Cycle Assessment to develop sustainable mussel culture in Algeria
Funding Sources	None

Period	23/01/2017-03/03/2017
Name	Moreno Bevilacqua
Home institution	Departamento de Estadística Chile
Research area	Models for spatial and spatio-temporal discrete data
Seminar activities	None

Funding Sources	None
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Period	12/11/2017 – 15/12/2017
Name	Nabendu Chaki
Home institution	Department of Computer Science & Engineering – University of Calcutta
Research area	Formal Specification for Secured Software System
Seminar activities	None
Funding Sources	“Formal Specification for Secured Software System”, under the “Indo-Italian Executive Programme of Cooperation in Scientific and Technological Cooperation” MIUR – MAE, Project number IN17MO07

Visiting Researchers/Visiting Fellows

Period	07/01/2015-07/06/2015	
Name	CUI XIANGFEN	
Home institution	BEIJING NORMAL UNIVERSITY	
Research area	<table border="1"> <tr> <td>Environmental Chemistry and Risk Assessment</td> </tr> </table>	Environmental Chemistry and Risk Assessment
Environmental Chemistry and Risk Assessment		
Seminar activities	None	

Funding Sources	European Project FP7-PEOPLE-2010-IRSES (Support for training and career development of researchers – Marie Curie - International Research Staff Exchange Scheme) Grant Agreement n° 269233 – GLOCOM (Global contaminated land management) – CUP H71J11001210004 maximum 1869.00 Euro per exchanged staff member/month
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Period	01/02/2015 – 13/07/2015
Name	KAI LEI
Home institution	BEIJING NORMAL UNIVERSITY
Research area	Environmental Chemistry and Risk Assessment
Seminar activities	None
Funding Sources	European Project FP7-PEOPLE-2010-IRSES (Support for training and career development of researchers – Marie Curie - International Research Staff Exchange Scheme) Grant Agreement n° 269233 – GLOCOM (Global contaminated land management) – CUP H71J11001210004 maximum 1869.00 Euro per exchanged staff member/month

Period	07/01/2015 – 28/06/2015
Name	HAOBO HUANG
Home institution	BEIJING NORMAL UNIVERSITY
Research area	Environmental Chemistry and Risk Assessment
Seminar activities	None

Funding Sources	European Project FP7-PEOPLE-2010-IRSES (Support for training and career development of researchers – Marie Curie - International Research Staff Exchange Scheme) Grant Agreement n° 269233 – GLOCOM (Global contaminated land management) – CUP H71J11001210004 maximum 1869.00 Euro per exchanged staff member/month
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Period	01/02/2015-30/06/2015
Name	MACHADO FUMAGALLI EDSON
Home institution	UNIVERSITY OF PERNAMBUCO
Research area	Semantic Enrichment of Trajectory Knowledge Discovery Process
Seminar activities	none
Funding Sources	European Project FP7-PEOPLE-2011-IRSES (Support for training and career development of researchers – Marie Curie – International Research Staff Exchange Scheme) Grant Agreement n. 295179 – SEEK: Semantic Enrichment of Trajectory Knowledge Discovery Process – CUP H711001260004 maximum 1995.00 Euro per exchanged staff member/month

Period	GENNAIO 2015 – FEBBRAIO 2015
Name	RENATO FILETO
Home institution	UNIVERSIDADE FEDERAL DE SANTA CATARINA
Research area	Semantic Enrichment of Trajectory Knowledge Discovery Process
Seminar activities	none
Funding Sources	European Project FP7-PEOPLE-2011-IRSES (Support for training and career development of researchers – Marie Curie – International Research Staff Exchange Scheme) Grant Agreement n. 295179 – SEEK: Semantic Enrichment of Trajectory Knowledge Discovery Process – CUP H711001260004 maximum 1995.00 Euro per exchanged staff member/month

Period	01/02/2015 – 26/07/2015
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Name	ZHONG BUQING
Home institution	Chinese Research Academy of Environmental Sciences (P.R. China)
Research area	Environmental Chemistry and Risk Assessment
Seminar activities	None
Funding Sources	European Project FP7-PEOPLE-2010-IRSES (Support for training and career development of researchers – Marie Curie - International Research Staff Exchange Scheme) Grant Agreement n° 269327 – EPSEI (Evaluating Policies for Sustainable Energy Investments: towards an integrated approach on national and international stage) – CUP H71J12000860003 e per i rimanenti mesi all'interno dello European Project FP7-PEOPLE-2010-IRSES (Support for training and career development of researchers – Marie Curie - International Research Staff Exchange Scheme) Grant Agreement n° 269233 – GLOCOM (Global contaminated land management) – CUP H71J11001210004 maximum 1890.00 Euro per exchanged staff member/month

Period	12/02/2015 - 12/04/2015
Name	RADEVICH ELENA
Home institution	National Research Tomsk State University – Siberia (Russia)
Research area	Environmental Chemistry and Risk Assessment
Seminar activities	none
Funding Sources	European Project FP7-PEOPLE-2010-IRSES (Support for training and carrer development of researchers – Marie Curie – International Research Staff Exchange Scheme) Grant Agreement n° 269327 – EPSEI (Evaluating Policies for Sustainable Energy Investments: towards an integrated approach on national and international stage) – CUP H71J12000860003 A CARICO UNIVERSITA' DI PROVENIENZA

Period	23/03/2015 – 30/04/2015
Name	LOURGUIOIU HICHEM
Home institution	ENSSMAL (Ecole Nationale Supérieure et de l'Aménagement du Littoral, Algeri),
Research area	Valutazione dell'impatto ambientale della mitilicoltura mediante metodologie di Life Cycle Assessment
Seminar activities	None
Funding Sources	€ 1.500,00 Fondi scaduti liberi prof. Pastres

Period	15/05/2015-11/08/2015
Name	MU YUNSONG
Home institution	Chinese Research Academy of Environmental Sciences (P.R. China)
Research area	Environmental Chemistry and Risk Assessment
Seminar activities	None
Funding Sources	European Project FP7-PEOPLE-2010-IRSES (Support for training and career development of researchers Marie Curie – International Research Staff Exchange Scheme) Grant Agreement n. 269233 – GLOCOM (Global contaminated land management) CUP H71J11001210004, maximum 1869.00 Euro per exchanged staff member/month

Period	01/10/2015-31/08/2016
Name	LOURGUIOIU HICHEM
Home institution	ENSSMAL (Ecole Nationale Supérieure et de l'Aménagement du Littoral, Algeri)
Research area	"Valutazione dell'impatto ambientale della mitilicoltura mediante metodologie di Life Cycle Assessment"
Seminar activities	None

Funding Sources	Borsa di ricerca Università di provenienza
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Period	20/01/2016 -20/02/2016
Name	ANISIMOV MAXIM
Home institution	VORONEZH STATE UNIVERSITY OF FORESTRY AND TECHNOLOGIES - G.F. MOROZOV
Research area	Environmental Chemistry and Risk Assessment
Seminar activities	None
Funding Sources	European Project FP7-PEOPLE-2011-IRSES (Support for training and career development of researchers – Marie Curie – International Research Staff Exchange Scheme) Grant Agreement n°295260 – ECONANOSORB (Ecological application of nanosorbents on the base of natural and synthetic tonite and carbons) – CUP H71J12000960004, max 1.691,00

Period	20/01/2016 -29/02/2016
Name	SVETLANA VASILEVA
Home institution	VORONEZH STATE UNIVERSITY OF FORESTRY AND TECHNOLOGIES - G.F. MOROZOV
Research area	Environmental Chemistry and Risk Assessment
Seminar activities	None
Funding Sources	European Project FP7-PEOPLE-2011-IRSES (Support for training and career development of researchers – Marie Curie – International Research Staff Exchange Scheme) Grant Agreement n°295260 – ECONANOSORB (Ecological application of nanosorbents on the base of natural and synthetic tonite and carbons) – CUP H71J12000960004, max 1.691,00

Period	20/01/2016-20/02/2016
Name	NOVIKOVA LIUMILLA
Home institution	VORONEZH STATE UNIVERSITY OF FORESTRY AND TECHNOLOGIES - G.F. MOROZOV

Research area	Environmental Chemistry and Risk Assessment
Seminar activities	None
Funding Sources	European Project FP7-PEOPLE-2011-IRSES (Support for training and career development of researchers – Marie Curie – International Research Staff Exchange Scheme) Grant Agreement n°295260 – ECONANOSORB (Ecological application of nanosorbents on the base of natural and synthetic tonite and carbons) – CUP H71J12000960004, max 1.691,00

Period	20/01/2016 – 20/02/2016
Name	STARODUBOV SERGEI
Home institution	VORONEZH STATE FORESTRY ENGINEERING ACADEMY
Research area	Environmental Chemistry and Risk Assessment
Seminar activities	None
Funding Sources	European Project FP7-PEOPLE-2011-IRSES (Support for training and career development of researchers – Marie Curie – International Research Staff Exchange Scheme) Grant Agreement n°295260 – ECONANOSORB (Ecological application of nanosorbents on the base of natural and synthetic tonite and carbons) – CUP H71J12000960004, max 1.691,00

Period	20/01/2016-20/04/2016
Name	ZHUKALIN DMITRII
Home institution	VORONEZH STATE UNIVERSITY
Research area	Environmental Chemistry and Risk Assessment
Seminar activities	None
Funding Sources	European Project FP7-PEOPLE-2011-IRSES (Support for training and career development of researchers – Marie Curie – International Research Staff Exchange Scheme) Grant Agreement n°295260 – ECONANOSORB (Ecological application of nanosorbents on the base of natural and synthetic tonite and carbons) – CUP H71J12000960004, max 1.691,00

Period	28/03/2016 – 27/04/2016
Name	BELOUSOV PETR
Home institution	VORONEZH STATE FORESTRY ENGINEERING ACADEMY
Research area	Environmental Chemistry and Risk Assessment
Seminar activities	None
Funding Sources	European Project FP7-PEOPLE-2011-IRSES (Support for training and career development of researchers – Marie Curie – International Research Staff Exchange Scheme) Grant Agreement n°295260 – ECONANOSORB (Ecological application of nanosorbents on the base of natural and synthetic tonite and carbons) – CUP H71J12000960004, max 1.691,00

Visiting fellows

Period	21/01/2015-29/01/2015
Name	KRIZANC DAVID
Home institution	Mathematics Department, Wesleyan University - Middletown USA
Research area	Algoritmi in sistemi distribuiti e agenti mobili
Seminar activities	None
Funding Sources	Massimale di € 1.000 fondi ADIR/FRA Prof.ssa Luccio

Period	21/01/2015-29/01/2015
Name	KRANAKIS EVANGELOS
Home institution	Mathematics Department, Wesleyan University - Middletown USA
Research area	Algoritmi in sistemi distribuiti e agenti mobili"
Seminar activities	None

Funding Sources	Massimale di € 1.000 fondi ADIR/FRA Prof.ssa Luccio
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Period	27/01/2015-16/02/2015
Name	MORENO BEVILACQUA
Home institution	Department of Statistics, Universidad de Valparaiso Blanco – Chile
Research area	Inferenza di campi aleatori multivariat
Seminar activities	None
Funding Sources	None

Period	20/03/2015-28/03/2015
Name	DUBOIS EMMANUEL
Home institution	UNIVERSITE DE PAUL SABATIER TOULOUSE III
Research area	“Analysis and evaluation of metaphors for tangible interaction systems”
Seminar activities	“Mappings: from theory to spatial interaction technique”
Funding Sources	FONDI LIBERI PROF. CELENTANO MAX 800,00

Period	20/03/2015-28/03/2015
Name	PEYARD ANDREE NATHALIE
Home institution	INRA (National Institute for Research in Agronomy) Toulouse
Research area	Statistica per campi markoviani
Seminar activities	None
Funding Sources	None

Period	31/01/2015-14/02/2015
Name	DE MACEDO FERNANDES JOSE' ANTONIO
Home institution	Federal University of Ceará – Brasile

Research area	Semantic Enrichment of Trajectory Knowledge Discovery Process
Seminar activities	None
Funding Sources	European Project FP7-PEOPLE-2011-IRSES (Support for training and career development of researchers – Marie Curie – International Research Staff Exchange Scheme) Grant Agreement n. 295179 – SEEK: Semantic Enrichment of Trajectory Knowledge Discovery Process Lump sum: maximum 1995.00 Euro per exchanged staff member/month

Period	14/06/2015-29/06/2015
Name	BRUNO ANDRE' EUGENE BOMBLED
Home institution	Laboratory of the Sciences of the Climate and the Environment UMR CEA - CNRS in Gif sur Yvette - France
Research area	Campionamenti di sedimenti superficiali per l'acquisizione di un set di dati sperimentali funzionali all'applicazione di modelli di prima diagenesi
Seminar activities	None
Funding Sources	1.100 fondi IRIDE o fondi ADIR Dott. Brigolin

Period	14/06/2015-29/06/2015
Name	CHRISTOPHE PIERRE GUY RABOUILLE
Home institution	Laboratory of the Sciences of the Climate and the Environment UMR CEA - CNRS in Gif sur Yvette - France
Research area	Campionamenti di sedimenti superficiali per l'acquisizione di un set di dati sperimentali funzionali all'applicazione di modelli di prima diagenesi
Seminar activities	None
Funding Sources	1.100 fondi IRIDE o fondi ADIR Dott. Brigolin

Period	14/06/2015-18/06/2015, 5/07/2015-20/07/2015
Name	GUTTMAN JOSHUA
Home institution	Worcester Polytechnic Institute – Massachusetts (USA)
Research area	Information flow security for network of firewalls
Seminar activities	Information flow in distributed systems: foundations and examples
Funding Sources	€ 700,00 Fondi ACADIA

Period	14/06/2015-29/06/2015
Name	VALDORA MARINA SILVIA
Home institution	Instituto de Calculo - Facultad de Ciencias Exactas y Naturales di Buenos Aires
Research area	“Metodi Robusti per la Previsione del Costo e della Durata della Degenza Ospedaliera”
Seminar activities	M-estimators Based on Transformations for Generalized Linear Models
Funding Sources	€ 400,00 Progetto di Cooperazione MINCyT-MAE "Robust procedures to predict lenght of stay and costs of hospital admissions" IT1306-AR14MO6 - Protocollo esecutivo bilaterale di cooperazione scientifica e tecnologica tra Italia e Argentina

Period	14/06/2015-18/06/2015, 5/07/2015-20/07/2015
Name	ADAO PEDRO
Home institution	DEPARTMENT OF INFORMATICS AND COMPUTER SCIENCES IST TECHNICAL UNIVERSITY OF LISBON
Research area	Information flow security for network of firewalls
Seminar activities	None
Funding Sources	MAX € 800,00 ADIR 2014 Prof. Focardi

Period	10/01/2016 - 20/01/2016
Name	ZHEN LI
Home institution	Chinese Academy of Science Cold and Arid Regions Environmental and Engineering Research Institute State Key Laboratory of Cryospheric Sciences
Research area	Ricerca " <i>Analysis of organic biomarker (levoglucosan) in ice core form Tibetan Plateau</i> " saranno svolte dalla dott.ssa Quanlian Li all'interno del Progetto Europeo EARLYhumanIMPACT - How long have human activities been affecting the climate system? - "Ideas" Specific Programme - European Research Council - Advanced Grant 2010 - Grant Agreement n° 267696
Seminar activities	The relationship between 18-O in precipitation and air temperature observed at high elevations on tibetan plateau
Funding Sources	MAX € 1.600 FONDI PROGETTO

Period	10/01/2016 - 20/01/2016
Name	QUANLIAN LI
Home institution	Chinese Academy of Science Cold and Arid Regions Environmental and Engineering Research Institute State Key Laboratory of Cryospheric Sciences
Research area	Ricerca " <i>Analysis of organic biomarker (levoglucosan) in ice core form Tibetan Plateau</i> " saranno svolte dalla dott.ssa Quanlian Li all'interno del Progetto Europeo EARLYhumanIMPACT - How long have human activities been affecting the climate system? - "Ideas" Specific Programme - European Research Council - Advanced Grant 2010 - Grant Agreement n° 267696
Seminar activities	Composition and source identification of polycyclic aromatic hydrocarbons (PAHs) in cryoconites of tibetan plateau glacier
Funding Sources	MAX € 1.600 FONDI PROGETTO

Period	19/11/2016 - 31/01/2016
Name	KUZNETSOVA ELENA
Home institution	INSTITUTE OF PHYSICAL CHEMISTRY AND ELECTROCHEMISTRY RAS

Research area	Environmental Chemistry and Risk Assessment
Seminar activities	None
Funding Sources	European Project FP7-PEOPLE-2011-IRSES (Support for training and career development of researchers – Marie Curie – International Research Staff Exchange Scheme) Grant Agreement n°295260 – ECONANOSORB (Ecological application of nanosorbents on the base of natural and synthetic tonite and carbons) – CUP H71J12000960004 CHIEDI CONFERMA SE ANCHE GLOCOM

Period	19/11/2016 - 31/01/2016
Name	PYTSKIY IVAN
Home institution	INSTITUTE OF PHYSICAL CHEMISTRY AND ELECTROCHEMISTRY RAS
Research area	Environmental Chemistry and Risk Assessment
Seminar activities	None
Funding Sources	European Project FP7-PEOPLE-2011-IRSES (Support for training and career development of researchers – Marie Curie – International Research Staff Exchange Scheme) Grant Agreement n°295260 – ECONANOSORB (Ecological application of nanosorbents on the base of natural and synthetic tonite and carbons) – CUP H71J12000960004

Period	09/02/2016-23/02/2016
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Name	BAKALINSKA OLGA
Home institution	O.O. Chuiko Institute of Surface Chemistry of National Academy of Sciences of Ukraine, Kyiv – Ukraine
Research area	Environmental Chemistry and Risk Assessment
Seminar activities	None
Funding Sources	Rimborso dalla National Academy of Sciences of Ukraine in base agli accordi riportati nel Partnership Agreement di ECONANOSORB Project (Minutes of the Kick-off meeting, 27 th June 2012) European Project FP7-PEOPLE-2011-IRSES (Support for training and career development of researchers – Marie Curie – International Research Staff Exchange Scheme) Grant Agreement n°295260 – ECONANOSORB (Ecological application of nanosorbents on the base of natural and synthetic tonite and carbons) – CUP H71J12000960004

Period	18/03/2016-26/03/2016
Name	BURYAK ALEKSEI
Home institution	Laboratory of Synthesis and Study of Sorbents, Institute of Physical Chemistry and Electrochemistry RAS
Research area	Environmental Chemistry and Risk Assessment
Seminar activities	None
Funding Sources	European Project FP7-PEOPLE-2011-IRSES (Support for training and career development of researchers – Marie Curie – International Research Staff Exchange Scheme) Grant Agreement n°295260 – ECONANOSORB (Ecological application of nanosorbents on the base of natural and synthetic tonite and carbons) – CUP H71J12000960004 A CARICO UNIVERSITA' DI PROVENIENZA

Period	18/03/2016-26/03/2016
Name	PETUKHOVA GALINA

Home institution	Laboratory of Synthesis and Study of Sorbents, Institute of Physical Chemistry and Electrochemistry RAS
Research area	Environmental Chemistry and Risk Assessment
Seminar activities	None
Funding Sources	European Project FP7-PEOPLE-2011-IRSES (Support for training and career development of researchers – Marie Curie – International Research Staff Exchange Scheme) Grant Agreement n°295260 – ECONANOSORB (Ecological application of nanosorbents on the base of natural and synthetic tonite and carbons) – CUP H71J12000960004 A CARICO UNIVERSITA' DI PROVENIENZA

Period	05/05/2016-15/05/2016
Name	DUBOIS EMMANUEL
Home institution	Université de Paul Sabatier Toulouse III - IUT A - Département GEA
Research area	Activities on advanced interfaces and interaction design/Seminario "Towards a design process for the physical composition of devices"
Seminar activities	Towards a design process for the physical composition of devices
Funding Sources	Vitto e Alloggio massimale € 1.100,00 Fondi ADiR Prof. Celentano

Period	09/05/2016-14/05/2016
Name	BRUNO ANDRE' EUGENE BOMBLED
Home institution	Laboratory of the Sciences of the Climate and the Environment UMR CEA - CNRS in Gif sur Yvette - France
Research area	Surface sediment sampling and microprofiling, purposely designed for the application of a transient biogeochemical model of early diagenesis"
Seminar activities	None
Funding Sources	€ 2.000,00 Progetto di Ricerca IRIDE-Brigolin "DATI e Modelli per lo studio di HABitat marino - COstieri di fondi molli (DAMHACO)"

Period	09/05/2016-14/05/2016
Name	CHRISTOPHE PIERRE GUY RABOUILLE
Home institution	Laboratory of the Sciences of the Climate and the Environment UMR CEA - CNRS in Gif sur Yvette - France
Research area	Surface sediment sampling and microprofiling, purposely designed for the application of a transient biogeochemical model of early diagenesis”
Seminar activities	None
Funding Sources	€ 2.000,00 Progetto di Ricerca IRIDE-Brigolin "DATi e Modelli per lo studio di HABitat marino - COstieri di fondi molli (DAMHACO)";

Visiting professors

Period	1/09/2015-30/11/2015
Name	MC MANUS JERRY F. Delibera ottobre 2014 / 258
Home institution	Department of Earth and Environmental Science, Lamont-Doherty Earth Observatory of Columbia University, Palisades, New York (United States),
Scientific area	EARTH ENVIRONMENT: THE CLIMATE SYSTEMS
Teaching activities/Seminar Activities	1) Earth’s Environment: The Climate System; 2) Paleoceanography; 3) Past Interglacials; 4) Use of proxies in Paleoceanography
Funding Sources	1.500 CMCC-PhD SGCC - DAIS

Period	04/10/2015-03/11/2015
Name	IGOR LINKOV
Home institution	CARNAGE MELLON UNIVERSITY
Scientific area	Environmental risks and decisions
Teaching activities	Environmental risks and decisions

Funding Sources	€ 17.143,00 LORDO PERCIPIENTE BANDO DI ATENEO
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Period	1/04/2016-30/04/2016
Name	CATUSCIA PALAMIDESSI
Home institution	COMPUTER SCIENCE INSTITUTE
Scientific area	Informatic Sciences
Teaching activities	Information flow, Anonymity, e Privacy
Funding Sources	€ 7.708,15 LORDO PERCIPIENTE BANDO DI ATENEO

Period	GEN/APR 2016
Name	ROBERT WALKER
Home institution	Department of Computer Science, University of Calgary, Alberta, Canada
Scientific area	Informatic Sciences
Teaching activities/Seminar Activities	Seminari a titolo gratuito Software Correctness, Security and Reliability, Corso di Laurea Magistrale in Informatica-Computer Science
Funding Sources	None

Period	01/07/2016-30/07/2016
Name	MONIKA HEINER
Home institution	INSTITUT NATIONAL DE RECHERCHE EN INFORMATIQUE ET EN AUTOMATIQUE
Scientific area	Informatic Sciences
Teaching activities	BioModel Engineering: A Petri net perspective on Systems and Synthetic Biology
Funding Sources	€ 7708,15 LORDO PERCIPIENTE BANDO DI ATENEO

Period	05/06/2016-05/07/2016
Name	AMOS WINTER

Home institution	Earth and Environmental Systems, Indiana State University, Terre Haute, Indiana
Scientific area	
Teaching activities/Seminar activities	Studio della variabilità climatica tropicale negli ultimi 10.000 anni, basato su analisi ad alta risoluzione spaziale di depositi calcarei / "Coccolithophores, major primary producers in the ocean, are taking over polar regions previously occupied by diatoms", PhD Course in Environmental Sciences of the Ca' Foscari University of Venice on the following topics: "Increased rate of ocean acidification since 1970 determined by geochemical analyses of mixed-layer sclerosponges" and "The first 30kyr continuous record of tropical climate variability from a Mesoamerican speleothem"
Funding Sources	FONDI ADIR

Period	17/10/2016 – 16/11/2016
Name	IGOR LINKOV
Home institution	CARNAGIE MELLON UNIVERSITY
Scientific area	Environmental risks and decisions
Teaching activities	Environmental risks and decisions
Funding Sources	€ 15.800 LORDO PERCIPIENTE BANDO DI ATENEO

Period	31/03/2017 – 30/04/2017
Name	APOSTOLOS PAPADOPOULOS
Home institution	Department of Informatics, Aristotle University of Thessaloniki Greece
Scientific area	Informatic Sciences
Teaching activities	Mining of Massive Datasets
Funding Sources	€ 6927,34 LORDO PERCIPIENTE BANDO DI ATENEO

Period	20/09/2016 – 11/11/2016
Name	Alexandre Denis Allard

Home institution	Biostatistics & Spatial Processes (BioSP), National Institute for Agricultural Research (INRA), Avignon (France)
Scientific area	Statistics
Teaching activities	Environmental Data Analysis - Dottorato Scienze Ambientali
Funding Sources	€ 5845,82 LORDO PERCIPIENTE BANDO DI ATENEO

Outgoing scholars and professors

Name	Alessandra Raffaetà
Scientific area	Informatic Sciences
Host institution	PUC Rio de Janeiro
Type and duration of mobility	Progetto SEEK - 04/08/2015 - 03/09/2015

Name	Alessandro Roncato
Scientific area	Informatic Sciences
Host institution	University of New Brunswick Canada
Type and duration of mobility	Progetto SEEK 02/08/2015 – 01/09/2015

Name	Marta Simeoni
Scientific area	Informatic Sciences
Host institution	University of New Brunswick Canada
Type and duration of mobility	Progetto SEEK 02/08/2015 – 01/09/2015

Name	Andrea Critto
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Scientific area	Environmental Sciences
Host institution	Voronezh State Academy of Forestry and Technologies - Voronezh -Russia
Type and duration of mobility	Progetto ECONANOSORB 25/07/2015 – 25/08/2015

Name	Flaminia Luccio Riccardo Focard
Scientific area	Informatic Sciences
Host institution	Saarbucken (DE) 19-22/10/2016
Type and duration of mobility	Progetto "Client-side Security Enforcement for Mobile and Web Applications" MIUR-DAAD

Name	Claudio Agostinelli
Scientific area	Statistics
Host institution	Istituto de Calculo - Universidad de Buenos Aires 28/05/2015 - 11/06/2015)
Type and duration of mobility	Progetto MAE "Metodi Robusti per la Previsione del Costo e della Durata della Degenza Ospedaliera" ITA-ARGENTINA 28/05/2105 – 11/06/2015

Name	Agostino Cortesi
Scientific area	Informatic Sciences
Host institution	University of Calcutta
Type and duration of leave	Progetto "Formal specification for Secured Software System" ITA-INDIA 12-17/07/2017