**CHANCELLOR’S DECREE**

*Data that can be deduced from the registration in the protocol:*

*Repertoire Number, Protocol Number, Title,*

*Class File Attachments and References*

**Object: Public selection based on qualifications and interview for the awarding of no. 7 Early stage grants lasting 12 months for conducting research pursuant to art. 22 of law no. 240/2010 at the Departments of University of Bergamo - Pica Code 22AR017**

**THE CHANCELLOR**

GIVEN Law No. 168 of 9 May 1989 laying down rules on the "*Establishment of MIUR*";

GIVEN Law No. 240 of 30 December 2010 “*Norms in terms of organization of universities, of academic personnel and their recruitment, as well as mandate to the Government to subsidize quality and efficiency of academic systems*", in particular art. 22 on research grants;

GIVEN the Statute of the University of Bergamo enacted with Chancellor’s Decree Index No. 92/2012 of 16 February 2012;

GIVEN the University’s current Regulations for awarding grants for conducting research;

GIVEN Ministerial Decree Prot. No. 102 of 09 March 2011, recorded at the Court of Auditors on 13 May 2011, which revalued the minimum gross annual amount of grants for conducting research;

GIVEN Decree-Law No. 192 of 31 December 2014 “*Extension of terms provided for by legislative provisions*”, converted, with amendments, by Law No. 11 of 27 February 2015 and, in particular, Art. 6 paragraph 2 bis which extended by two years the total duration of grants established under Art. 22 of Law No. 240/2010, taking it from four to six years;

GIVEN the D.L. No. 36/2022, converted, with amendments, into Law no. 79/2022, which in art. 14 paragraph 6-quaterdecies establishes that "for one hundred and eighty days following the entry into force of the decree convertion law, limited to the already programmed resources on the mentioned date, or approved by the respective governing structures within the mentioned term of one hundred and eighty days , universities […] may call for awarding procedures of research grants pursuant to article 22 of law no. 240, in the current text before the entry into force of this decree convertion law";

Referring also to:

* the University’s Code of Ethics issued with Chancellor’s Decree. Prot. No. 14405/I/003 of 19.7.2011 and amended with Chancellor’s Decree. Rep. No. 262/2018, Prot. No. 60030/I/003 of 12.4.2018;
* the University’s Regulations on research integrity and ethics, enacted with Chancellor’s Decree Index No. 387/2016 of 18 July 2016;
* the University’s Patent Regulations enacted with Chancellor’s Decree Index No. 390/2016 of 19 July 2016 and amended with Chancellor’s Decree Index No. 158/2018 of 26 February 2018 and with Chancellor’s Decree Index No 421/2020, of 9.9.2020;

ACQUIRED the resolutions of the Councils of the Structures involved which approved the research projects and resolved on the requirements for candidates’ admission to the selection;

ASCERTAINED the financial backing (tab. 1);

**DECREES**

**Article 1**

**Call for public selection**

7 public selections are launched based on qualifications and interview for the awarding of No. 7 grants lasting 12 months each for conducting research pursuant to Art. 22 of L. No. 240/2010 with a contract under private law at the research structures of the University of Bergamo as indicated hereafter:

|  |  |  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- | --- | --- |
| **CODE** | **TYPE** | **DEPARTMENT** | **ANNUAL GROSS AND FUNDS** | **TITLE** | **A.R.F.** | **A.D.** | **TUTOR** |
| **1** |  | Management  (deliberation 22.09.2021) | € 20.172,00  Project STaRs (Supporting Talented Researchers) dipartimentali 2021 (CUP: F59C20000390001 – progetto UGOV: STARS21AZ1JRDIP for annual project); | *Identification, resilience and performance. Analysis of medium and large Italian firms.* | 13/B2  Management | SECS-P08  Management | Prof.ssa Cristina Bettinelli |
| **2** |  | Management, information and production engineering (deliberation 16.06.2022) | € 20.000,00  DIGIPFIS22, 60DIGIP22. VESPENERGI15 on the project “Modelli per la generazione distribuita di energia elettrica con impianti e fonti rinnovabili e batterie di stoccaggio” | *Development of mathematical models for simulating the coupling of the electricity and gas sectors in the decarbonization of national energy systems* | 01/A6  Operations research | MAT/09  Operations research | Prof.ssa Maria Teresa VESPUCCI |
| **3** |  | Management, information and production engineering (deliberation 16.06.2022) | €20.000,00  DIGIPFIS22, 60DIGIP22, 60KALC21 | *Attractiveness policies in the Italian Higher Education system* | 09/B3  Business and management engineering | ING-IND/35 Business and management engineering | Prof.  Michele  MEOLI |
| **4** |  | Management, information and production engineering (deliberation 16.06.2022) | € 20.000,00 DIGIPMARGCOM | *Development of a patent text ontology aimed at the recognition of technological features and product requirements* | 09/A3  Industrial design, machine construction and metallurgy | ING-IND/15 Design methods for industrial engineering | Prof. Davide RUSSO |
| **5** |  | Management  (deliberation 20.06.2022) | € 20.000,00  60DIPSA20 | *Government equity ownership, financial constraints and innovation* | 13/B4  Financial markets, financial institutions, and corporate finance | SECS-P/11 Financial markets and institutions | Prof. Davide CASTELLANI |
| **6** |  | Management, information and production engineering (deliberation 16.06.2022) | € 20.000,00  DIGIPPRESIBAUE, DIGIPFUTUREMAN and on the project “QUASMED – qualità dei software e sistemi medici” codice EI-QUASMEDGAR17 - CUP F52F16001340008 | *TeMeSS – Testing of medical software systems”* | 09/H1  Information processing systems | ING-INF/05 Information processing systems | Prof. Angelo GARGANTINI |
| **7** |  | Languages, literatures and cultures (deliberation 21.06.2022) | € 20.000,00  BOUG\_E21\_RI\_OTH\_WATHERMINES\_01, CUP F55f21002540006 | *Infrastructures of Early European Industrialization as Heritage of the Anthropocene. Analysis of Water canals and Mining system in Belgium and Serbia.* | 11/A5 – Demography, ethnography and anthropology | M-DEA/ 01 Demology, ethnology and anthropology | Prof.ssa Elena BOUGLEUX |

Each grant is paid to the contract holder in monthly instalments of equal amount.

The research projects are described in Annex A of this call constituting an integral part hereof.

**Article 2**

**Requirements for admission to the selection**

The selection procedure is open to **scholars in possession of a professional scientific curriculum suitable for conducting the scientific research provided for by this call, as well as of the following requirements**:

* *2nd cycle degree:* **Diploma di Laurea Specialistica (LS) or Laurea Magistrale (LM)** and equivalent qualifications*, or* **Diploma di Laurea** (DL) obtained according to the procedures preceding the entry into force of Ministerial Decree 509/1999 and following amendments and integrations and equivalent qualifications for admission to public competitions **(see the following table)**.

To establish the equivalence among **Diploma di Laurea** (DL) and **Diploma di Laurea Specialistica (LS) or Laurea Magistrale (LM)**, it is possible to refer to the following link: <http://attiministeriali.miur.it/UserFiles/3160.pdf>

The Decrees that govern the equivalence among Italian academic qualifications for participating in public competitions are available at the following link: <http://hubmiur.pubblica.istruzione.it/web/universita/equipollenze-titoli>

**The qualifications obtained abroad must be recognised as valid in the Italian territory.**

As regards qualifications obtained abroad that have not already been recognised in Italy with formal procedure pursuant to the applicable laws, the Commission is competent to assess the equivalence – as to the nature, level and subject correspondence (degree cycle or CUN Area for PhD qualifications) - to the qualifications required by this call, for the sole purposes of admission to the present selection.

As regards qualifications obtained abroad, required by the call for the purpose of admission to this selection, the applicant is required as follows:

* in the event of qualifications already recognised as valid in the Italian territory, to indicate in the application the details of the provision attesting the occurred recognition pursuant to the applicable laws;
* in the event of qualifications not yet recognised, **to annex to the application a certified copy of the statement of qualification equivalence**, issued by the competent Italian diplomatic and consular authorities abroad, and the certificate of the exams taken or the supplement degree.

In order to ensure the widest participation in the selection, the applicant who is not in possession of the above documentation can annex a copy of the qualification with a translation into Italian or English; the candidate will have to submit the above documents within the terms peremptorily established by the Office under penalty of exclusion.

In the event of qualifications not yet recognised, the candidate is admitted if selected and, if winner, prior to signing the contract, must submit the documents requested by the office within the terms peremptorily established.

* **knowledge of one or more foreign languages (see the following table).**

Moreover, the applicant is also required:

* **to be at least 18 years old**;
* **to be in possession of civil and political rights;**
* **to have no criminal convictions or ongoing criminal proceedings that would prevent, in accordance with the regulations in force, the establishment of an employment relationship.**

For admission to the selections referred to in art. 1 the following specific requirements are also required:

|  |  |  |
| --- | --- | --- |
| **CODE** | **SPECIFIC REQUIREMENTS** | **LANGUAGE** |
| **1** | Diploma di Laurea Specialistica o Magistrale (ed equiparati) or Diploma di Laurea V.O. | English |
| **2** | Diploma di Laurea Specialistica or Magistrale (ed equiparati) in Management Engineering (Classi LM-31 o 34/S) or Diploma di Laurea V.O. | English |
| **3** | Diploma di Laurea Specialistica o Magistrale (ed equiparati) in Management Engineering (Classi LM-31 o 34/S) or in Business economics (Classi LM-77 o 84/S) or Diploma di Laurea V.O. | English |
| **4** | Diploma di Laurea Specialistica o Magistrale (ed equiparati) in Mechanical Engineering (Classi LM-33 o 36/S) or Diploma di Laurea V.O. | English |
| **5** | Diploma di Laurea Specialistica o Magistrale (ed equiparati) or Diploma di Laurea V.O. | English |
| **6** | Diploma di Laurea Specialistica o Magistrale (ed equiparati) in Informatic Engineering (Classi LM-32 o 35/S) or Diploma di Laurea V.O. | English |
| **7** | Diploma di Laurea Specialistica o Magistrale (ed equiparati) or Diploma di Laurea V.O. | excellent mastering of English Language |

The selective procedure does not allow admittance to:

* those who have a degree of kinship or affinity, up to and including the fourth degree, with a professor from the relevant structure, or with the Chancellor, the General Manager or a member of the University’s Board of Directors;
* those who have been holders, including any renewals, of research grants awarded pursuant to Art. 22 of Law No. 240/2010 for a period which, added to the duration of the contract provided for by this call, exceeds a total of six years, except for the period in which the grant was used in coincidence with the PhD within the maximum legal duration of the relevant course;
* those who were contracted as research fellow or fixed-term researcher as per ss. 22 and 24 of Law 240/2010 at the University of Bergamo or other italian public, private or online Athenaeums, as well as any other Body indicated in para 1 of s. 22 of Law 240/2010 for a length of time which, if summed to the duration of the contract in this announcement, exceeds 12 years in total, albeit not consecutive; periods of time spent on maternity or sick leaves do not count to the purpose of the duration of the aforementioned relationships, in accordance with current Laws;

The applicant enrolled in a Diploma di Laurea (DL), Diploma di Laurea Specialistica (LS), Laurea Magistrale (LM), PhD with study grant or medical specialisation in Italy or abroad can participate in the selection object hereof; should the applicant be the winner, the research grant will be awarded subject to withdrawal from studies or PhD study grant.

Pursuant to art. 22 paragraph 2 of Law 240/2010 cannot be recipient of the grants the regular personnel at universities, institutions and public entities of research and experimentation, the Italian National Agency for new technologies, energy and sustainable economic development (ENEA) and the Italian Space Agency (ASI) and institutions whose scientific specialization diploma was recognised equivalent to a PhD pursuant to the fourth paragraph under article 74 of Presidential Decree of 11 July 1980, No. 382.

The holder of the grant can attend PhD courses whose subjects are related to the research activities connected with the grant, upon prior evaluation of the Structure of reference. However, the research grant is incompatible with the enjoyment of the PhD study grant.

These requirements must be met on the date of expiry of the deadline for submitting the application for the admission to this selection.

This Administration guarantees equality and equal opportunities between men and women as to access to employment and treatment at work.

**Article 3**

**Exclusion from the procedure**

The following reasons are causes of exclusion:

* lack of signature on the application form;
* lack of admission requirements as provided for by Art. 2;
* failure to meet the procedures for submitting the application as mentioned under the following Art. 4.

The applicant is admitted if selected; should additional investigations be necessary; the applicant must regularize his/her application within the time peremptorily established.

The Administration may decide to exclude the applicant from the selection launched with this call, at any time, by reasoned Chancellor’s Decree.

**Article 4**

**Terms and conditions for submitting application**

**Under penalty of exclusion applications for participation in the competition, along with the relevant qualifications held and the relevant scientific publications,** **shall be submitted online** through the following online application procedure:

<https://pica.cineca.it/unibg/>

The candidate will be able to register and access the platform using the Public Digital Identity System (SPID - security level 2). In case the candidate does not have one, he or she can request it according to the procedure indicated on the website [www.spid.gov.it](http://www.spid.gov.it). Alternatively, the candidate can register and log in using the credentials released directly by the PICA platform.

It is of utmost importance to provide a valid email address in order to enable the registration process on the electronic procedure.

Applicants shall upload all personal and professional data as requested by the application procedure; all documents must be uploaded in PDF format (.pdf). Each applicant can produce a maximum of no. 40 publications and a maximum of no. 40 other titles and qualifications.

**Failure to comply with the online application procedure will result in exclusion of the applicant**.

Prior to final submission, and within the given deadline for applications submission, the online application procedure allows to modify and save the inserted information in a draft copy.

Confirmation of final submission date will be certified by an automatic notification email.

Submissions after the given deadlines will not be accepted by the system, as the online application procedure won’t be accessible.

Each application will be given a registration number. For all further communications, the registration number shall be quoted along with the code of the research grant competition.

The online application and the submission procedure must be completed by and no later **than 12.00 (Italian time) on the thirtieth day** from the notice publication date on the University website. Should the indicated deadline fall on a non-business day, it shall be postponed no later than 12.00 (Italian time) of the next business day.

The submission of the online application must be completed and finalized:

* **no digital signature**: in this case the candidate has to download the pdf file of the application by the system; the PDF file shall not be modified in any way, It is to printed, signed in original, scanned in a pdf file and uploaded again on the website;
* **sign the application on the server using ConFirma service:** in oder to sign digitally the application it is necessary to have a hardware (e.g. smart card or USB with digital signature certificate issued by an approved certification body) compatible with ConFirma service; after signing, applicants can download the signed pdf application;
* **sign the application digitally on your PC**: In oder to sign digitally the application it is necessary to have a hardware (e.g. smart card or USB with digital signature certificate issued by an approved certification body) and a software for digital signatures in order to create a pdf.p7m file from the pdf file downloaded from this site. The pdf.p7m file must be uploaded in the website again;
* **in case of submission of the application through SPID**, it will not be necessary to sign the application form as it is automatically acquired by the procedure.

**The application must contain all the required data by the system and must be signed and accompanied by a valid identification document of the candidate, under penalty of exclusion.**

For any technical problems, contact support through the link available in the footer https://pica.cineca.it/unibg.

**Article 5**

**Admission application**

The applicant, filling the application, must declare, under his/her own responsibility, pursuant to what provided for by Presidential Decree 445/2000 and following amendments and integrations, as follows:

* his/her citizenship;
* to possess the qualifications mentioned in the previous Art. 2, indicating the degree cycle/CUN Area of PhD, the date on which it was obtained, the Institute that issued it and the final vote/assessment achieved; the applicant with qualification(s) obtained abroad must declare to have obtained the relevant recognition indicating in the application the details of the provision or must annex the required documentation according to what specified hereby;
* to possess any other requirements as mentioned in Art. 2;
* to possess other qualifications useful for the assessment;
* to know the foreign language required by this call;
* in case of Italian citizenship: to be enrolled in the electoral lists, specifying the Municipality of belonging and possibly specifying the reasons for non-inclusion or cancellation from the same lists; in case of foreign citizenship: to possess civil and political rights in the Country of belonging or provenance, or the reasons for non-possession of the same;
* not to be excluded from the active political electorate;
* to have no criminal convictions, or declare possible convictions undergone, indicating the details of related sentences, and any pending criminal proceedings;
* to be/not to be a state employee, specifying to be/not to be a regular employee at Universities and other bodies as mentioned in Art. 22 of L. No. 240/2010;
* to have no degree of kinship or affinity, up to and including the fourth degree, with a professor from the relevant structure or with the Chancellor, the General Manager or a member of the University’s Board of Directors;
* if enrolled in a Diploma di Laurea (DL), Diploma di Laurea Specialistica (LS), Laurea Magistrale (LM), PhD with study grant or medical specialisation, in Italy or abroad, to be aware that, in the event;
* of awarding of the grant, attendance at such courses and the use of the PhD study grant are incompatible with the holding of the contract;
* to hold research grants awarded pursuant to Art. 22 of Law No. 240/2010;
* to hold contracts as fixed-term researcher pursuant to Art. 24 of Law No. 240/2010;
* to have attended a PhD indicating the period, University, date on which the qualification was obtained, cycle, exact title of the course and CUN Area;
* period of enjoyment of any PhD study grant;
* address to which communications concerning this competition are to be sent; it is mandatory to indicate a personal e-mail address as well;
* possible request to conduct the interview via videoconference indicating the phone number and motivation.

In the application for participating in the competition, the applicant, pursuant to Law No. 104 of 5 February 1992, must specify any aid necessary in relation to his/her needs, as well as any need for additional time for the interview.

When submitting the application for participating in the selection, the applicant must annex the following documents:

1. a photocopy of the applicant’s identity document in course of validity;
2. *curriculum vitae* in European format, dated and signed;
3. a list, signed by the applicant, of the publications and other research products, and other titles considered appropriate for the purposes of the selection such as specialisation degrees, certificates of attendance to postgraduate courses, obtained in Italy or abroad, contracts, study grant or research assignments both in Italy and abroad (cf. Annex B);
4. any publications, other research products or other titles that the candidate wishes to assert to the purpose of the procedure, numbered in progressive order matching the relating numbered list;
5. in the event of foreign applicant, it is necessary to annex: a copy of the residence permit (if the applicant is already in its possession).

As regards qualifications obtained abroad, for admission to the selection, the applicant is required as follows:

* if recognised as valid in the Italian territory, the applicant must indicate in the application the details of comparability/equivalence of the qualifications obtained abroad;
* if not recognised as valid in the Italian territory, the applicant must annex copy of the qualification obtained abroad (obligatory annex) with a declaration translated in Italian or in English language and a certified copy of the declaration of equivalent qualification, issued by the competent Italian diplomatic and consular authorities abroad, with the certificate of the exams taken or the diploma supplement.

As regards all other qualifications obtained abroad which the applicant intends to provide for the selection as required by the call, it is necessary to annex to the application a copy of the qualifications.

Each annex must be in PDF format and must not be larger than 30 MB.

Pursuant to Law No. 183/2011, the Administration cannot accept or request certificates, but only declarations in lieu of certifications or affidavits submitted in substitution of the actual certificates signed by the applicant and submitted together with an unauthenticated photocopy of the applicant’s valid identify document. The Administration has the right to carry out suitable controls on the truthfulness of the contents of the declarations in lieu pursuant to what provided for by Presidential Decree No. 445/2000.

The requirements and the qualifications must be owned on the date of the expiry of the call.

It is mandatory to indicate a personal e-mail address to which the communications concerning this selection will be sent. Any variation of said address must be promptly communicated to the Selections Office (Servizio Assegni di ricerca).

**Article 6**

**Examining Commission**

The Examining Commission is appointed with Chancellor’s decree, upon proposal of the Structure’s Council, at the expiry of the deadline for submitting the application.

The Commission is authorized to carry out the on line procedure, in the understanding that such method can be adopted until the conclusion of the relevant works, guaranteeing the security and traceability of communications.

**Article 7**

**Selection**

During its first meeting, the Examining Commission will establish the assessment criteria and procedures explicitly, according to what provided for by the call, fixing a minimum score for admission to the interview.

The overall assessment is expressed in hundredths, as indicated hereafter:

* up to a maximum of 60 points for qualifications and scientific-professional curriculum; to that end, the following will be object of assessment:
* graduation vote;
* PhD (if not already provided for as requirement for admission);
* specialisation degrees and certificates of attendance to postgraduate courses, obtained in Italy or abroad;
* publications and other research products;
* documented research activities – as long as the beginning date and duration of the activities are duly certified – carried out at the premises of public and private subjects with contracts, study grants or assignments, both in Italy and abroad;
* up to 40 points for the interview.

Within the context of its autonomy, the Commission can integrate the above, depending on the research project and on what provided for by this call.

**In particular will be evaluated:**

|  |  |
| --- | --- |
| **CODE** |  |
| **1** | Knowledge of methodologies and software for quantitative analysis of survey data |
| **2** | Papers on national and international journals (topics: mathematical models for analysis and decision making in the energy sector).  Speaker at national and international conferences.  Participation to Summer schools and intensive courses. |
| **3** | Research experience in the disciplinary fields of interest for the research projects, as documented by a track record of publications, with a preference for international publications. |
| **4** | Patent search, design for patenting. |
| **5** | - |
| **6** | Publications about testing and its application to medical software  Participation in a project oriented in developing medical software, possibly in international/collaborative way. |
| **7** | - Master Degree in Social Sciences and Humanities  - excellent knowledge of the topics related to industrial heritage and its potentials;;  - international study experience and aptitude for research;  - the final grade obtained for the Master Degree Thesis. |

The applicants will be informed before the interview on the results of the assessment of the qualifications.

The Commission reserves the right to carry out the interview via videoconference, through the use of IT and digital tools, guaranteeing the adoption of technical solutions that ensure the publicity of the same, the identification of the participants, as well as the security of communications. and their traceability. Failed connection at the time established or late connection, unless due to force majeure, will be considered as a renunciation to participate in the selection.

During the interview, the Commission will verify the applicant’s ability to cover the topics and themes related to the research project and his/her knowledge of at least one foreign language, according to what provided for by the call.

|  |  |
| --- | --- |
| **CODE** | **PROGRAMME OF THE INTERVIEW** |
| **1** | Verification of knowledge of the English language, of knowledge of the topics covered by the research project, of knowledge of survey data analysis methods.  The Commission reserves the right to verify the knowledge of the Italian language for foreign candidates |
| **2** | Mixed-integer linear programming models for long term investment decisions in the energy sector.  Equilibrium models for the energy sector.  The GAMS framework for developing optimization models.  The Commission reserves the right to verify the knowledge of the Italian language for foreign candidates |
| **3** | Concepts of identity, missions, performances of higher education institutions.  Organizational and financing models of higher education institutions, in Italy, in Europe, in the world.  Basic statistics and econometrics.  The Commission reserves the right to verify the knowledge of the Italian language for foreign candidates |
| **4** | -Tools to perform patent analysis, tools and methods, such as patent databases (public - UIBM, Italian Patent Database, Espacenet, WIPO, and proprietary - e.g., Orbit Questel) and documentary sources (Scopus, etc.).  -Techniques and tools for analyzing large masses of information obtained from patents and scientific articles (e.g., through the use of syntactic parsers).  -Methods and tools for systematic innovation and technological forecasting (e.g., problem solving methods, idea generation, TRIZ, conceptual design)  -Design for patenting, state-of-the-art methods and tools  The Commission reserves the right to verify the knowledge of the Italian language for foreign candidates |
| **5** | The interview will focus on knowledge of the following topics:  • Corporate finance: corporate governance, investment decisions and financial choices.  • Construction and management of complex databases.  • Econometric analysis, with particular reference to panel regression analysis.  The Commission reserves the right to verify the knowledge of the Italian language for foreign candidates |
| **6** | The interview will be about:  Testing of medical software and general issues about it  Medical sw certification according to the IEC 62304 standard with emphasis on testing activities.  Use of formal methods for the testing and validation medical software  The Commission reserves the right to verify the knowledge of the Italian language for foreign candidates |
| **7** | Historical-social and thematic context related to industrial heritage; potential of the capitalization of Industrial Heritage aimed to landscape recovery processes and to environmental sustainability;  The Commission reserves the right to verify the knowledge of the Italian language for foreign candidates |

The assessment of the knowledge of the foreign language (or foreign languages) as provided for by this call will be carried out during the selection according to the modalities established by the Commission.

**The date and place of the interview will be communicated with at least a 20-day notice through a communication published on the website of University of Bergamo http://www.unibg.it, under the section “*Concorsi e selezioni-Assegni. Borse e contratti di ricerca-Assegni di ricerca*” supervised by the Servizio Assegni di ricerca.**

**This notice is to all intents and purposes an official communication. Any changes related to the date of the interview will be communicated to the admitted applicants with at least a 20-day notice through the publication of a communication on the University’s website under the section “*Concorsi e selezioni-Assegni. Borse e contratti di ricerca-Assegni di ricerca”*.**

Failure to show up at the interview will be considered as a renunciation to participate in the competition for all practical purposes.

At the end of the works, the Commission draws up the list of the applicants examined, indicating the votes obtained during the interview.

The Commission will draft the merit list in descending order according to the overall final score, which is obtained by adding the score of the qualifications and the score of the interview.

Applicants will be inserted in the merit list if they obtain at least 30 out of the 40 points available for the interview.

In the event of equal score, the PhD or equivalent qualification obtained abroad will constitute a preferential qualification, if not required for admission; in the event of equal merit, the younger applicant will be preferred.

The merit list is approved, under the condition precedent of verifying the requirements provided for by the call, with Chancellor’s Decree and published on the website under the section “*Concorsi e selezioni-Assegni. Borse e contratti di ricerca-Assegni di ricerca”*. The term for submitting any appeals will run from the date of publication.

Should the winning applicant renounce to or withdrawal from the contract, the grant can be awarded to successful applicants according to the order of the merit list, upon prior resolution of the Research Structure.

**Article 8**

**Signing of the contract and withdrawal**

The winning applicant, in possession of the mentioned requirements, will sign an autonomous work contract under private law with effect, normally, on the first day of the month following the month in which the acts are approved.

As regards foreign applicants needing a residence permit, the date of beginning of the contract will be postponed and subject to the completion of the issuing procedure of said permit.

In the event of admission with reservation for qualifications obtained abroad not recognized as valid in the Italian territory, the winner, prior to signing the contract must submit the documents requested by the office within the terms peremptorily established.

The winner of the selection, convoked by the Administrative Office to sign the contract, will lose the right to the grant for collaboration in research activities if he/she does not state to accept the contract or does not begin the activity within the established term, without prejudice to health reasons or causes of force majeure duly and promptly documented.

Each grant as mentioned under Art. 1 can be renewed, under the terms and conditions provided for by the above mentioned Regulations; in any case, the relationship established pursuant to Art. 22 of Law No. 240/2010, including the possible renewal, cannot last more than six years, including the possible renewal, with the exclusion of the period in which the grant was used in coincidence with the PhD within the maximum limit of the legal duration of the relevant course.

**Article 9**

**Rights and obligations of the grant holder**

The employment relationship is governed by an individual contract, according to what provided for by the applicable laws and by the University’s Regulations.

The research activity is flexible, it has a continuous nature, not merely occasional, and is carried out under the leadership of the Scientific Director, with autonomous conditions as to the research programme and its realisation, without any predetermined working hours.

The grant holder must refer to the Research structure that requested the activation of the contract.

The research activity of the grant holder is carried out within the context of the relevant Structure and in other Structures of the University on the basis of the research programme. Any research activities conducted outside of the University must be approved by the Council of the Research structure.

A period of permanence abroad is allowed at one or more qualified universities or research institutes, upon prior authorisation of the Council of the Research structure. During the period spent abroad, the amount of the grant will be increased by fifty percent to be charged to the Structure of reference or to the funds assigned to the Research structure.

The grant holder can participate in all the activities programmed by the Research structure for the promotion of researches and the dissemination of relevant results; he/she can be a member of the profit exams commissions, in quality of expert.

The Research structure must provide the grant holder all necessary support for realising his/her research programme, guaranteeing access to the equipment, the necessary resources and the use of the technical-administrative services.

The grant holder must comply with what provided for by the University’s applicable Regulations on research integrity and ethics.

The winner of the selection who is entitled to the grant, at the time of the signature of the individual contract, should be committed, under penalty of forfeiture of the right to the research grant, to confidentiality and preventive transfer to the University of all intellectual property rights relating to the results produced and/or achieved during the research activities carried out at the University and she/he has the right to be recognized as the author of the his/her results achieved and/or products. The University recognizes the application of the same economic conditions that the University Patent Regulation grants to its Professors/Researchers.

The research fellow may participate in activities performed on behalf of third parties pursuant to art. 66 of Presidential Decree 382/80, in the context of issues related to its project, and the distribution of related proceeds, in accordance with the current University Regulations on the subject.

**Article 10**

**Taxes, welfare, insurance and mission**

With reference to taxes, the grants are subject to what provided for under [Art. 4 of Law No. 476](http://bd01.leggiditalia.it/cgi-bin/FulShow?TIPO=5&NOTXT=1&KEY=01LX0000110493ART4)/1984, while as regards welfare, they are subject to what provided for under [Art. 2, paragraph 26 and following, of Law No. 335](http://bd01.leggiditalia.it/cgi-bin/FulShow?TIPO=5&NOTXT=1&KEY=01LX0000110062ART2)/1995, and following amendments. With reference to mandatory maternity leave, they are subject to what provided for by the [Decree of the Ministry of Labour and Welfare of 12 July 2007](http://bd01.leggiditalia.it/cgi-bin/FulShow?TIPO=5&NOTXT=1&KEY=01LX0000502093ART0), published in the Official Gazette No. 247 of 23 October 2007, and, as regards sickness leave, they are subject to what provided for by [Art. 1, paragraph 788, of Law No. 296 of 27 December 2006,](http://bd01.leggiditalia.it/cgi-bin/FulShow?TIPO=5&NOTXT=1&KEY=01LX0000488506ART787) and following amendments.

In the period of mandatory maternity leave, the bonus paid by INPS pursuant to [Art. 5 of the mentioned Decree of 12 July 2007](http://bd01.leggiditalia.it/cgi-bin/FulShow?TIPO=5&NOTXT=1&KEY=01LX0000502093ART6) is integrated by the University up to the payment of the total amount of the research grant.

The University will cover the grant holder’s accident insurance and civil liability toward third parties insurance within the scope of his/her research activity.

The covering of the grant holder’s mission expenses is financed through the funds of the Scientific Director in charge or the Research structure, according to the modalities provided for by the University’s regulations as to missions.

**Article 11**

**Processing of personal data**

In accordance with articles 13 and 14 of Regulation (EU) 2016/679 (GDPR), on the protection of personal data, and with D. Lgs. n. 196 /2003 and subsequent amendments, it is made known that data is controlled and managed by the legal representative of the University of Bergamo, via Salvecchio 19, - 24129 Bergamo.

Data will be collected exclusively for the present bid purposes and will be kept only for the necessary time to complete the relevant procedures. The data treatment controller will be appointed within the managing unit in charge of bidding procedure, who will carry out the treatment with all due respect of propriety, legitimacy, scope, transparency and confidentiality of the treatment; and data will be used exclusively for purposes connected to the selection and further conferment of the role and possible contract drafting, as well as management of the following employment position, in compliance with current regulations. Data will be kept for the necessary time to accomplish the selection purposes, subject to the application of norms on document retention, and will be transferred uniquely to public administration bodies directly concerned with the juridical and economic position of the selected applicant, treated in compliance with current regulations and used for personal, welfare, insurance and fiscal position management. Data will be handled by appointed staff through the acquisition of printed and electronic documents and using, even digitalised, filing procedures, to guarantee confidentiality; data treatment will be carried out through a coordinated organization and processing system, applying elevated safety standards. Furthermore, data will not be used for profiling. Applicants who have provided their personal data will be able to access it and exercise their rights as by art. 16 to 22 of GDPR UE 2016/679. Any safeguard request can be addressed to the University Data Protection Officer, who can be contacted through the university website (Privacy and Personal Data Protection section), e-mail dpo@unibg.it. In addition to the right of complaint which can be presented to the Italian Data Protection Authority, Piazza Venezia 11, 00187 Roma.

By presenting their application, candidates thereby authorise and fully consent to publication on the University institutional website of all information concerning the current bid, their own data and the contents of their CV in accordance with 111-bis of D. Lgs.196/2003 stating that, within the scope limits defined by art. 6, par. 1, letter b), of the Regulation, consent is not due for personal data present in a submitted CV.

**Article 12**

**Person in charge of the procedure**

The Person in charge of the selection procedure within this call is Dr. Domenico Panetta, manager of Area risorse umane, Via dei Caniana, 2 - 24127 Bergamo, phone (+39) 035 2052 669 - 583 - 878, e-mail address: [assegni.ricerca@unibg.it](mailto:assegni.ricerca@unibg.it).

**Article 13**

**Publication**

This call is published in the University’s Official Registry, on the website of the Conference of the Italian University Chancellors ([www.crui.it](http://www.crui.it)), on the website of the Ministry of Education, Research and University (MIUR) [at](file:///C:\Users\eurostreet\AppData\Local\Microsoft\Windows\Temporary%20Internet%20Files\Content.Outlook\9JGHO03F\at) the link <http://bandi.miur.it>, and on the website of the European Union at the link <http://ec.europa.eu/euraxess> in the form of a notice.

The full competition and related annexed forms are available on the website of the University of Bergamo [www.unibg.it](http://www.unibg.it) under the specially devoted section “*Concorsi e selezioni-Assegni. Borse e contratti di ricerca-Assegni di ricerca”*.

The call is also published on “*Piattaforma Integrata Concorsi Atenei*” (PICA) – link <http://pica.cineca.it/unibg/> from which it is possible to fill the application online for participation at the selection.

**Article 14**

**Final provisions**

For all matters not provided for by this call, the following will be applied: Law No. 240/2010 and following amendments and integrations, the University’s Regulations on the awarding of research grants, the University’s Regulations in force, and the Regulations on employment relationships in the public administration.

Bergamo, *as per protocol registration*

THE CHANCELLOR

(Prof. Sergio Cavalieri)

Documento firmato digitalmente ai sensi

dell’art. 24 del D. Lgs. 82/2005

**ANNEX A**

**RESEARCH PROJECT – CODE 1**

**“Identification, resilience and performance. Analysis of medium and large Italian firms.”**

**Research structure**: Department of Management

**Duration of the grant**: 12 months

**Scientific Area:** 13 – Economics and Statistics

**Academic recruitment field:** 13/B2 - Management

**Academic discipline:** SECS-P/08 - Management

**Scientific Director:** Prof.ssa Cristina Bettinelli

Identification and resilience are two concepts that have recently been very much evoked, both from the academic and managerial literature. However, there is a lack of clear empirical evidence on the dynamics that link these concepts to each other and, more importantly, to business success.

This work will empirically explore the dynamics that link organizational identification (OI) of business decision makers with the resilience of firms (also testing the antecedents of these two variables). The existence of optimal levels of IO and resilience will also be verified to understand how to promote business performance. The contribution will be useful for both academia and business.

From a theoretical point of view, we will highlight how two constructs considered fundamental for the success of a company (IO and resilience) are linked to each other and to company performance. From the empirical point of view we will further strengthen the literature on the antecedents of these constructs and offer new empirical evidence on the nature of the link (curvilinear or linear) between IO, resilience and performance.

From a practical point of view, decision makers belonging to medium and large companies will benefit from the results of our study by understanding which are the variables on which to leverage most to increase the EI and resilience and at the same time becoming aware of the possible presence of optimal levels for both.

**RESEARCH PROJECT – CODE 2**

**“Development of mathematical models for simulating the coupling of the electricity and gas sectors in the decarbonization of national energy systems”**

**Research structure**: Department of Management, information and production engineering

**Duration of the grant**: 12 months

**Scientific Area:** 01 - Mathematics and informatics

**Academic recruitment field:** 01/A6 - Operations research

**Academic discipline:** MAT/09 - Operations research

**Scientific Director:** Prof.ssa Maria Teresa Vespucci

The project aim is to develop mathematical models for simulating and analysing the coupling of the electricity system with the gas system for the achievement of decarbonization targets defined by the European Commision in the Green Deal program. According to the document, the Eropean Commision intends to achieve climate neutrality in 2050 by defining new, more ambitious climate and energy goals for 2030: to cut greenhouse gas emissions by 55% compared to 1990 levels by 2030. The Power system will be particularly involved in the transformation process due to the need for electrification and development of renewables, especially non-programmable ones.

Achieving this ambitious target at European level, will require major overhauls of flexibility resources for the secure operation of the system. Furthermore, as early as 2030, the first applications of the hydrogen vector, synthesis gas, and of the capture and storage of CO2 are considered to appear. These are the reasons why Power-to-X (PtX) technology is considered of large interest: it allows converting surplus renewable generation into gas fuel (hydrogen, biomethane, synthesis gas), which can be stored locally to be used later or injected in the natural gas network. The deployment of PtX plants increases the interconnection between electricity and gas systems and requires an integrated planning framework that could accurately consider this coupling. This issue may be addressed using a joint operational model that determines an optimal solution for both systems. There are, however, non-trivial institutional and administrative barriers to having a single entity operate both systems. Thus, the new energy scenarios should be addressed by developing equilibrium models, which consider independently the two systems, while having some form of co-ordination between them. The complexity of integrated systems requires developing mathematical simulation tools that, starting from simple models applied to small realistic test cases (such as the IEEE test networks), consider increasing degrees of complexity.

**RESEARCH PROJECT – CODE 3**

**“Attractiveness policies in the Italian Higher Education system”**

**Research structure:** Department of Management, information and production engineering

**Duration of the grant:** 12 months

**Scientific Area:** 09 - Industrial and information engineering

**Academic recruitment field:** 09/B3 - Business and management engineering

**Academic discipline:** ING-IND/35 - Business and management engineering

**Scientific Director:** Prof. Michele Meoli

Policies for attractiveness in Higher Education are gaining momentum, given that the international mobility of scientists has a significant impact on National Innovation Systems. There exists evidence of a high scientific productivity of foreign researchers on average as well as a higher innovativeness. International mobility, thus, may have a global positive value resulting from a more efficient international job market, the creation of international knowledge networks and a better transfer of knowledge among countries.

The countries of origin benefit from international movements when they are temporary. Yet, recent evidence shows that, in a considerable number of cases, researchers will not return to their country of origin. Following this approach, sending countries (countries of origin) struggled to limit the phenomenon and induce the return of their researchers who are abroad through economic incentives. Traditional return policies based on economic incentives are considered likely to fail. These policies can be affected by non-ameliorative selection processes, that is they may induce the return of less successful researchers from abroad or create an incentive for the best researchers who are still in the country to leave.

The ineffectiveness of policies based on economic incentives may be due to the fact that scientists decide to leave a country for a kaleidoscope of reasons, including the completion of their studies, an offer or better and quick chance for a higher paid job, academic reasons such as access to publishing, work in a specific area, possibility of creation of own research team or new research area, personal factors like family, cultural and other non-professional reasons, economic or political factors. And their propensity to return to their home countries is related to the reason that drove them to migrate and the lack of understanding of this phenomenon can strongly reduce the ability of the policy to generate the expected effects

The research project is divided into the following operational objectives:

- Literature review on policies for the attractiveness in higher education systems;

- Identification of available datasets and collection of data on policies for attractiveness in higher education system, at macro, meso and micro level;

- Analysis of the impact of attractiveness policies based on fiscal incentives, in comparison with alternative approaches;

- Dissemination and training activities, aimed specifically at the policy makers and media.

**RESEARCH PROJECT – CODE 4**

**“Development of a patent text ontology aimed at the recognition of technological features and product requirements”**

**Research structure:** Department of Management, information and production engineerin**g**

**Duration of the grant:** 12 months

**Scientific Area:** 09 - Industrial and information engineering

|  |
| --- |
| **Academic recruitment field:** 09/A3 – Industrial design, machine construction and metallurgy |
| **Academic discipline:** ING-IND/15 – Design methods for industrial engineering |

**Scientific Director:** Prof. Davide Russo

The research project is in the field of methodologies for building so-called CAI- Computer aided inventing, i.e., computer tools to support problem solving and concept generation for new products.

Thanks to a new generation of tools (syntactic parser, semantic integrators, Ai based pattern recognition, cosine similarity, etc.) in recent years, strategic analysis activities on large corpora of document data have shifted from an almost exclusively bibliometric analysis to a much more granular analysis capable of getting to the heart of the individual document automatically or at least at a low level of supervision.

The reliability of the results of these analyses is all in the choice of the right tools properly trained on the particularities of patent structure and language and to the 'accuracy of the descriptive ontologies of the innovative processes contained in the technical documents.

The reliability of the results of these analyses lies entirely in the choice of the right tools appropriately trained on the particularities of patent structure and language and to the 'accuracy of the descriptive ontologies of innovative processes contained in technical documents.

The specific goal of this project is to improve the ontology with which automated search systems can be guided in identifying technical requirements within patent text.

More specifically, a significant set of patent corpora will be examined on which to conduct specific pattern analysis for the identification of:

-Constituent components of a device

-Constituent materials of each component

-Design parameters and requirements of the main components described in the claims

-Issues related to the application context of the device

The patterns will then be used as a basis for training computer systems to automatically recognize these features, which will then be evaluated using quantitative metrics such as Recall, (number of correct predictions out of the total number of correct documents in the entire corpus), precision (number of correct predictions out of the total number of results in the individual search), F-term (provides a single score that balances both aspects of precision and recall in a single number).

Finally, it will be important to define corpus classification strategies according to the identified technological features and how these can improve patent intelligence models and strategies, support decision making and problem solving, and other activities that the research group promotes within the DIGIP department through Contract Research and Consulting Contracts.

The project has a duration of 12 months. Intermediate results will be validated within the corporate collaborations of Prof. Russo's contracts.

**RESEARCH PROJECT – CODE 5**

**“Government equity ownership, financial constraints and innovation”**

**Research structure:** Department of Management

**Duration of the grant:** 12 months

**Scientific Area:** 13 - Economics and statistics

|  |
| --- |
| **Academic recruitment field:** 13/B4 – Financial markets, financial institutions, and corporate finance |
| **Academic discipline:** SECS-P/11 – Financial markets and institutions |

**Scientific Director:** Prof. Davide Castellani

Innovation is fundamental for firms to achieve a strategic advantage over competitors (e.g., Ireland and Webb, 2007). However, financing innovation with external financial sources tends to be difficult because of the uncertainty and information asymmetry associated with innovative activities (Rajan, 2012; Acharya and Xu, 2017). Empirically, Acharya and Xu (2017) find that listed firms in external finance dependent industries spend more on R&D and generate a better patent portfolio than their unlisted counterparts. While these studies focus on the role of financial constraints and their impact on firm’ innovation, the aim of this project is to analyze the relationship between corporate governance – in particular, government equity ownership - and innovation.

Existing evidence on the relation between firms’ ownership and innovation performance at firm level is far from being conclusive (Sterlacchini, 2012; Belloc, 2014; Clò et al., 2020; Rong et al., 2017; Demircioglu and Audretsch, 2017).

At present, however, relatively little direct evidence exists concerning mechanisms through which government ownership affects innovation in firms. On the one hand, one might expect an inferior innovation capability of firms under State control due to their internal governance structure, lack of adequate monitoring and market incentives. State ownership has long been linked to inefficiency and underperformance (Shleifer and Vishny, 1994, Boycko et al., 1996, Megginson and Netter, 2001). A major cause of this inefficiency is that state ownership is more likely than private ownership to suffer from the soft-budget constraint (SBC) effect first formulated by Kornai, (1979; 1980). Briefly, an organization with a soft budget constraint can always count on a supporting entity (such as the government) to bail it out when its budget constraint is persistently breached. Higher state ownership can lead to softer budget constraints, which in turn can lead to more agency problems. Agency theory advocates that controlling shareholders may exploit corporate resources to further their own interests (Jensen, 1986).

On the other hand, one may argue that firms with government ownership might have a better attitude towards innovation. Government can value more the social benefits of innovation and can be more willing, than private equity investors, to accept the risk and uncertainty associated to the innovation process. Government can favor the departure from short-term goals reducing the risk-aversion associated with an activity that exchanges current and certain returns for future and uncertain ones. From this point of view, under a soft budget hypothesis, the presence of the government as equity investor can be particularly important for research-intensive firms. Moreover, the literature indicates that state ownership is generally associated with a reduction of regulatory monitoring (Eckel & Vermaelen, 1986) which could support the realization of many business activities.

The empirical analysis will be conducted on a sample of more than 3,000 government equity investments in listed firms, extrapolated from the Thomson Reuters SDC Platinum M&As database. The analysis time horizon spans almost thirty years, from 1990 to 2020. The sample of firms will be matched with patent and citation data from the United States Patent and Trademark Office (USPTO) which covers patents filed in the U.S. by firms from 230 different countries, and which has been used by Hsu et al., (2014) and Bena et al. (2017) to study corporate innovation around the world.

The overall estimated time for the realization of the project is approximately 12 months. The plan of activities includes: 3 months for mapping and reviewing the literature; 5 dedicated to the development of theoretical models and to the creation of a new set of data deriving from the merger of previously collected data with information to be collected on the level of innovation of firms; 4 months dedicated to the promotion and dissemination of research through the development of a working paper and its presentation at international conferences.

**RESEARCH PROJECT – CODE 6**

**“TeMeSS – Testing of medical software systems”**

**Research structure:** Department of Management, information and production engineering

**Duration of the grant:** 12 months

**Scientific Area:** 09 - Industrial and information engineering

|  |
| --- |
| **Academic recruitment field:** 09/H1 - Information processing systems |
| **Academic discipline:** ING-INF/05 - Information processing systems |

**Scientific Director:** Prof. Angelo Gargantini

The TeMeSS (Testing of medical software systems) project aims to study methodologies for testing medical software systems.

TeMeSS will develop in two integrated research lines.

The first will try to investigate how the use of rigorous methods based on logic and mathematics (formal methods) can be integrated into the medical software process in order to guarantee those desired safety properties. The use of formal methods is known in the literature and also recommended by the standards and guidelines for the development of medical software. These methodologies have the advantage of providing an objective and verifiable sw quality certification also by third parties. However, the cost of using these techniques makes their application not very widespread. Sometimes the lack of automatic support tools and the lack of training constitute a barrier to their diffusion. With this project we want to study possible actions that encourage the use of these methodologies in the industrial field.

The second line of research concerns the definition of methodologies for the quality assurance of machine learning algorithms (ML) (automatic learning) in the medical field. In fact, it is known that these algorithms can be subject to "adversarial examples" (antagonistic examples): data with changes imperceptible to humans confuse these systems leading to incorrect outputs (for example in the classification of carcinomas causing incorrect diagnoses). Starting from some of our preliminary works, we want to investigate robustness and reliability measures of ML algorithms and techniques to improve these qualities.

**RESEARCH PROJECT – CODE 7**

**“Infrastructures of Early European Industrialization as Heritage of the Anthropocene. Analysis of Water canals and Mining system in Belgium and Serbia”**

**Research structure:** Department of Management, information and production engineering

**Duration of the grant:** 12 months

**Scientific Area:** 11 - History, philosophy, pedagogy and psychology

|  |
| --- |
| **Academic recruitment field:** 11/A5 – Demography, ethnography and anthropology |
| **Academic discipline:** M-DEA/ 01 – Demology, ethnology and anthropology |

**Scientific Director:** Prof.ssa Elena Bougleux

**Objectives:**

This project aims at analyzing some relevant case studies of Industrial Heritage in Europe as elements contributing to shape European identity and its contemporary landscape. The focus of the project is on the infrastructures related to water and on land, the two most exploited natural resources, and on the techniques implied across modern history to transform them into basic elements allowing and fostering industrial revolution. The research focuses on the new attribution of meaning and interpretation required to understand post-industrial landscape, to recover and to be taken care of through a process of accurate construction of an idea of heritage in the two cases of artificial canal system in Belgium and in the underground urban cave system in Serbia. The first case study is very well developed from the point of view of heritage valorization, consequently our objective is to develop a further narrative that takes into account the social dimensions related to work and workers, to the living conditions in mines, and to European migration in the second postwar period. The second case study, on the contrary, has a more exploratory objective: the Belgrade urban mining system is only partially explored and accessible, therefore aim of the project is to evaluate the possibilities of further opening and (re)signification of such urban legacy for the local community.

**Historical and theoretical context of the research:**

The development of industrialization in Europe has been historically possible thanks to the convergence of numerous factors: the availability of natural resources, the creativity and the skills emerged and applied for their use, but most of all, the underlying concept that natural space and natural resources were unlimited, available and at full human disposal. This latter is the most fragile assumption, and the one residing at the core of the project. In the span of two centuries the landscape, the resources and nature itself have all proven to be far form unlimited and available for human exploitation at no cost. The crisis of the landscape and the more general environmental crisis of today require a reflection not only on the various strategies to be adopted in the future, but also require a critical and dialectical rereading of the processes of the recent past. In today's post-industrial landscapes in Europe we see the stratification of techniques, skills, the production of wealth and social complexity, all of which represent an emerging and necessary form of heritage. In today’s post–industrial landscapes in Europe we can see the Anthropocene in action.

**Actions included in the project:**

The researcher will work on the theoretical and field development of the ERASMUS Plus WAT-HER-MINES project, carried out by the LLCS Department on whose funds it is funded, and in partnership with the other institutes and universities involved in the same project: Dalarna University, Haute Ecole Provinciale Condorcet, Center for Urban Development Belgrade. The research will therefore follow the profile and chronology of the WAT-HER-MINES project in its form approved by the Commission, carrying out:

a) preliminary bibliographic survey and activation of the collaborative platform dedicated to the project, in conjunction with the partners mentioned;

b) field observation and field and remote interaction work with local stakeholders;

c) drawing common and / or diverging interpretative lines between the case studies;

d) participating and contributing to the publication of articles and reports on the activities carried out.

e) supervision and coordination of students activities related to the project,

Schedule and calendar of activities:

Indicatively, the phases of the work will be divided as follows:

- A first phase (July-September 2022) to be dedicated to bibliographic background historical and ethnographic research, and the retrieval of archive sources;

- A second phase (October 2022 and March 2023) dedicated to mobility at the two sites that constitute case studies (Belgium October 2022, Serbia March 2023);

- A third phase (following the mobility) dedicated to drafting reports, configuring and updating the collaborative platform.

**Originality and Impact on the Advancement of Knowledge:**

Industrial heritage is becoming a relevant topic characterizing increasing numbers of tourism destinations. Industrial tourism acquires more importance as part of the cultural offer presented by a growing number of contexts, being the industrial features related to their historical, architectural, economic or social values. This new kind of territorial valorization requires multidisciplinary gazes to be developed and new narratives to be told. The perspective of benefitting from a particularly intense industrial past represents an emerging attitude, and a resource generating awareness and potentially distinctive narrations in the context of the otherwise only problematic post-industrial Anthropocenic scenarios. Industrial legacies as historical and memory resources are part of a destination’s culture, a feature of locality, and an opportunity to arouse curiosity and to be encouraged.

**Bibliografia essenziale:**

Alfrey, Judith and Tim Putnam, 1992, The Industrial Heritage: Managing Resources and Uses, London & New York: Routledge.

Arizpe, L. & Amescua, C. (Eds.) (2013). Anthropological perspectives on intangible cultural heritage. Heidelberg: Springer.

Brockington D., Duffy R. & Igoe J. (2012). Nature unbound: Conservation, capitalism and the future of protected areas. New York & London: Routledge.

Colomb, C. & Novy J. (2016). Protest and resistance in the tourist city. London & New York: Routledge.

Gravari-Barbas, M. & Graburn, M. (Eds.). (2016). Tourism imaginaries at the disciplinary crossroads: Place, practice, media. London & New York: Routledge.

Douet J., 2015, Industrial Heritage Re-tooled. The TICCIH Guide to Industrial Heritage Conservation, London & New York: Routledge.

Feifan Xie, P., 2015, Industrial Heritage Tourism, New York: Channel View Books.

Harald A. Mieg, Heike Oevermann, 2017, Industrial Heritage Sites in Transformation: Clash of Discourses Taylor & Francis.

Preite M., Maciocco G., 2022, Fabbriche ritrovate. Patrimonio industriale e progetto di architettura in Italia-Rediscovered factories. Industrial Heritage and Architectural Project in Italy. Grosssto: C&P Adver Effigi.

Presenza A., Perfetto M.C 2015, Industrial Heritage Management (IHM). In- quadramento di un campo di studio emergente attraverso la revisione della letteratura. Il Capitale culturale. Studies on the Value of Cultural Heritage Vol. 11, pp 5-28.

Rosaldo, R. 1993 (2006). Culture & truth: The remaking of social analysis. Boston: Beacon Press.

Salazar, N.B. & Graburn, N.H.H. (Eds.) (2016). Tourism imaginaries: Anthropological approaches. Oxford: Berghahn Books.

Silverman, H. (2011). Contested cultural heritage. Religion, nationalism, erasure, and exclusion in a global world. Heidelberg: Springer.

Wicke C. 2020, Industrial Heritage and Regional Identities, London & New York: Routledge.