



UNIVERSITÀ
DEGLI STUDI
DI BERGAMO

Area
Risorse Umane

Gestione carriere
e concorsi
Assegni di ricerca

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 for conducting research pursuant to art. 22 of law no. 240/2010 at the Departments of University of Bergamo - Pica Code 22AR022

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 conversion 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 conversion 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;
GIVEN	the resolutions of Accademic Senate of 27.06.2022 and of the Board of Directors of 28.06.2022 wich approved the resources allocation for research grants activation to various Departments;
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:

COD E	TYP E	DEPARTMENT	DURATI ON	ANNUAL GROSS AND FUNDS	TITLE	A.R.F.	A.D.	TUTOR
1		Management (deliberazione 26.09.2022)	12 months	€ 20.220,00 Research project ASSEGN022JRDIPSA – CUP: F53C22000670005	Woke brand communication and consumers' social media engagement	13/B2 Management	SECS-P/08 Management	Prof.ssa Daniela ANDREINI
2		Economics (deliberazione 15.09.2022)	36 months	€ 28.320,00 Research project ASSEGN02224SRDSE – CUP: F53C22000670005	Multi-objective optimization methods and applications in Economics and Finance	13/D4 Mathematical methods of economics, finance and actuarial sciences	SECS-S/06 Mathematical methods of economics, finance and actuarial sciences	Prof. Sergio ORTOBELLI LOZZA
3		Management, information and production engineering (deliberazione 26.09.2022)	12 months	€ 20.220,00 Research project ASSEGN022JRDIGIP	<i>Supply chain collaboration as a support to circular economy</i>	09/B3 Business and management engineering	ING-IND/35 Business and management engineering	Prof. Matteo Matteo Giacomo Maria KALCHSCH MIDT
4		Management, information and production engineering (deliberazione 26.09.2022)	36 months	€ 28.320,00 Research project ASSEGN02224SRDIGIP	<i>Enabling factors and barriers to the implementation of industrial symbiosis: development of a pilot case in the Bergamo area</i>	09/B2 Industrial mechanical systems engineering	ING-IND/17 Industrial mechanical systems engineering	Prof. Paolo GAIARDELLI
5		Engineering and applied sciences (deliberazione 22.09.2022)	12 months	€ 20.220,00 Research project ASSEGN022JRDISA	<i>Application of Polyconjugated Molecules to Enantioselective Electrochemical Analysis and Raman Spectroscopy</i>	03/B2 Principles of chemistry for applied technologies	CHIM/07 Principles of chemistry for applied technologies	Prof.ssa Francesca FONTANA
6		Letters, philosophy, communication (deliberazione 20.09.2022)	12 months	€ 20.220,00 Research project ASSEGN022JRDLFC – CUP: F53C22000670005	<i>The recruitment of participants for innovative social research</i>	14/C1 General sociology	SPS/07 General sociology	Prof.ssa Micol PIZZOLATI
7		Law (deliberazione 26.09.2022)	12 months	€ 20.220,00 Research project ASSEGN022JRDIU	<i>The fundamental rights of the person in its broadest and most articulated forms from the perspective of European and comparative law.</i>	12/E2 Comparative law	IUS/02 Comparative private law	Prof. Pieremilio SAMMARCO



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:



CODICE	REQUISITI SPECIFICI	LINGUA
1	Diploma di Laurea Specialistica o Magistrale (ed equiparati) o Diploma di Laurea V.O.	Italian and English
2	Diploma di Laurea Specialistica o Magistrale (ed equiparati) in Matematica (classi LM-40 o 45/S) o in Scienze statistiche (classi LM-82 o 91/S Statistica economica, finanziaria ed attuariale, 90/S Statistica demografica e sociale, 48/S Metodi per l'analisi valutativa dei sistemi complessi, 92/S Statistica per la ricerca sperimentale) o in Modellistica matematico-fisica per l'ingegneria (classi LM-44 o 50/S) o in Scienze dell'economia (LM-56 o 64/S) o in Finanza (LM-16 o 19/S o 91/S Statistica economica, finanziaria ed attuariale) o in Scienze economico-aziendali (LM-77 o 84/S) o Diploma di Laurea V.O.	English
3	Diploma di Laurea Specialistica o Magistrale (ed equiparati) in Ingegneria gestionale (classe LM-31 o 34/S) o Diploma di Laurea V.O.	English
4	Diploma di Laurea Specialistica o Magistrale (ed equiparati) in Ingegneria gestionale (classe LM-31 o 34/S) o Diploma di Laurea V.O.	English
5	Diploma di Laurea Specialistica o Magistrale (ed equiparati) in Scienze chimiche (classe LM-54 o 62/S) o Diploma di Laurea V.O.	English
6	Diploma di Laurea Specialistica o Magistrale (ed equiparati) in Informazione e sistemi editoriali (classi LM-19 o 13/S) o in Scienze della politica (classi LM-62 o 70/S) o in Scienze delle pubbliche amministrazioni (classi LM-63 o 71/S) o in Scienze filosofiche (classi LM-78 o 17/S Filosofia e storia della scienza, 18/S Filosofia teoretica, morale, politica ed estetica, 96/S Storia della filosofia) o in Servizio sociale e politiche sociali (classi LM-87 o 57/S Programmazione e gestione delle politiche e dei servizi sociali) o in Sociologie e ricerca sociale (classi LM-88 o 89/S Sociologia, 49/S Metodi per la ricerca empirica nelle scienze sociali) o Diploma di Laurea V.O.	English
7	Diploma di Laurea Specialistica o Magistrale in Giurisprudenza (classi LMG-01 o 22/S, 102/S Teoria e tecniche della normazione e dell'informazione giuridica) o Diploma di Laurea V.O.	English

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. 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 be 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 order 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 order 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	- a doctoral degree or the attendance of a doctoral program - track record of publications in well-reputed international journals; - track record of participation to international and national academic conferences; - a proven ability to use software used in social sciences research and to use data scraping software are a plus;
2	-
3	Experience in collecting primary data (through case studies or surveys) Experience in the analysis of scientific literature Research experience in the topics covered by the announcement
4	Documented research activity, provided with attested starting date and duration – at public and private entities with contracts, scholarships (including PhD) or assignments, in Italy and/or abroad Experience in theoretical and/or applied research in sustainability and circular economy subjects also related to one or more strategic industrial areas including but not limited to the steel, metallurgical, mechanical, electrical engineering, chemical, food, textile-clothing, cement and paper production. Publications and other research products in the subject of technological innovation in support of sustainability and for the circular economy Participation and presentation of sustainability-related works and papers at national and international conferences in the disciplinary scientific area ING-IND/17
5	Preceding experience in organic synthesis; publications concerning organic synthesis and analytical chemistry.
6	PhD in Area CUN 14 - Political and social sciences Social research experiences with qualitative methods, documented by contracts and / or publications
7	-

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	During the interview, besides assessing English proficiency, candidates will be required to discuss and provide further details about their previous research experiences and about the publications and other scientific outputs presented for the initial screening. Motivation and the individuals' fit with the research project will also be considered.
2	Multivariable functions; Optimization and Constrained Optimization; Multi-objective optimization problems; Algorithms for multi-objective optimization; Fuzzy logic and interval analysis; Portfolio theory; Economic equilibrium and financial equilibrium; Decision analysis; Mathematical programming; Decision Models under uncertainty conditions; Risk management. The Commission reserves the right to verify the knowledge of the Italian language for foreign candidates.
3	Circular economy: the definition of the concept, the main models identified in the literature, the main differences compared to the classic linear economy model Supply Chain Management: the main supply chain management strategies, supply chain collaboration, performance evaluation related to supply chain management The link between circular economy and supply chain management The management of global supply chains The Commission reserves the right to verify the knowledge of the Italian language for foreign candidates.
4	Circular Economy and eco-industrial development Methods for environmental and economic impact analysis Supply chain exchanges: distinctive features, barriers, facilitators and supporting technologies. The Commission reserves the right to verify the knowledge of the Italian language for foreign candidates.
5	Methods of organic synthesis; chromatographic separation techniques; spectroscopic techniques. The Commission reserves the right to verify the knowledge of the Italian language for foreign candidates.
6	Discussion on the previous social research experiences of the candidate Evidence of knowledge of the English language suitable for conducting interviews / focus groups The Commission reserves the right to verify the knowledge of the Italian language for foreign candidates.
7	Discussion on cultural profile of the candidate, the aptitude for research with assessment of competence in the field of comparative law and knowledge related to the European civil law. Assessment on the knowledge of the English language. 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. 476/1984, while as regards welfare, they are subject to what provided for under Art. 2, paragraph 26 and following, of Law No. 335/1995, 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, 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, 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 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.

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.cru.it), on the website of the Ministry of Education, Research and University (MIUR) 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 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

“Woke brand communication and consumers’ social media engagement”

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 Daniela Andreini

Brands are increasingly asked to be “woke” and communicate their stance on various divisive sociopolitical issues, particularly on social media platforms. However, research shedding light on the outcome of woke brand communication is in short offer, and did not compare the persuasive effects of this latter with those prompted by traditional communication cues, and provided scant guidance on which brand should better adopt this strategy.

The aim of this research project is hence to investigate the effectiveness of this form of brand communication through the use of suitable research designs and through the development and further adoption of suited metrics. To this aim both the volume and semantic virality patterns of traditional and woke communication cues adopted by brands on social media platform should be analyzed.

To achieve this aim the research project will require the development of composite research frameworks based on theories like language expectancy theory (LET) (Burgoon 1993; Burgoon, Denning, and Roberts 2002), complemented with brand-based literature like brands as intentional agents (Kervyn, Fiske and Malone 2012), and the thriving literature on CESH (de Oliveira Santini, Ladeira, Pinto, Herter, Sampaio and Babin 2020).

Methodologically, the fulfilment of the project’s aim requires the identification of brands using woke brand communication as a rhetorical strategy across many industry and the ability to master methodological techniques like computer-aided textual analysis (CATA) (Brunzel 2021; Humphreys and Wang 2018).



RESEARCH PROJECT - CODE 2

“Multi-objective optimization methods and applications in Economics and Finance”

Research structure: Department of Economics

Duration of the grant: 36 months

Scientific Area: 13 – Economics and Statistics

Academic recruitment field: 13/D4 – Mathematical methods of economics, finance and actuarial sciences

Academic discipline: SECS-S/06 - Mathematical methods of economics, finance and actuarial sciences

Scientific Director: Prof. Serio Ortobelli Lozza

In this project we propose to study new solutions and ideas to solve multi-objective decision-making problems in uncertain and imprecise environments. First of all, we want to examine techniques based on goal programming approaches that integrates fuzzy goal programming and multi-choice goal programming. Moreover, we examine multi-objective optimization methods that accounts the “Exclusive-or” (XOR) logic that is present in several real-life problems. In this context, we have to discuss how to use, order and rank XOR numbers and XOR vectors and when these optimization methodologies can be applied for large scale problems.

Within this framework, we want to develop new techniques, that will be validated with applications to some real-life problems. In particular, we want to develop these multi-objective optimization problems for optimizing renewable energy portfolios under uncertainty, or for selecting the best location for the wind farm, or for measuring the impact of the COVID-19 pandemic, or for proposing a multi-objective portfolio selection, providing valuable solutions to complex problems.



RESEARCH PROJECT - CODE 3

“Supply chain collaboration as a support to circular economy”

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. Matteo Kalchschmidt

The manufacturing industry poses one of the biggest environmental challenges, its overproduction and excessive consumption have an incredible impact in terms of resource consumption, greenhouse gas emissions, land use and waste generation. This system is no longer sustainable and needs substantial restructuring. Organizations must address these problems taking into account environmental and social concerns, the importance of which should be equivalent to the economic performance of the company. A viable solution to improve the situation and reduce the harmful impact of the current system on the environment without hindering economic viability is the Circular Economy (CE).

Circular business models would reduce the need for primary resources as an input and the production of waste as an output. However, the structure of the manufacturing industry does not facilitate such business models: these are largely based on cooperation between the different players. As these players are particularly numerous and geographically dispersed in today's global value chains, there is a significant barrier to the development of CE.

Different actors along the supply chain (SC) carry out various stages, and therefore different stages may have conflicting goals. For this reason, each member may have only a local consideration of its activities and lose sight of its interdependencies with the operations of the partners, resulting in a lower total benefit for the whole SC.

Since the literature on the link between CE and collaboration in SC is still evolving and has not been extensively examined from an empirical perspective so far, this project will produce, on the one hand, theoretical contributions by filling the gaps present in the reference scientific literature, on the other hand, practical contributions for managers, companies and policymakers as regards the identification of the problems that prevent the implementation of a circular economy.

The research project aims to study, through the collection of primary and secondary empirical data from a mixed method perspective:

- i) the role of collaboration in the SC in the development of EC systems, focusing on the drivers that lead to the selection of business partners,
- ii) the main problems that can prevent companies from establishing functional collaborations,
- iii) the most relevant collaborative practices in supporting EC.

Therefore, the ultimate goal of this research project is to clarify the importance of collaboration in the SC for the development of fruitful CE practices.

Furthermore, the project will produce scientific and informative outputs that will be presented at national and international conferences, as well as at more practitioners-oriented events. The articles produced will be submitted to prestigious academic journals.



RESEARCH PROJECT - CODE 4

“Enabling factors and barriers to the implementation of industrial symbiosis: development of a pilot case in the Bergamo area”

Research structure: Department of Management, information and production engineering

Duration of the grant: 36 months

Scientific Area: 09 - Industrial and information engineering

Academic recruitment field: 09/B2 - Industrial mechanical systems engineering

Academic discipline: ING-IND/17 - Industrial mechanical systems engineering

Scientific Director: Prof. Paolo Gaiardelli

Despite its enormous potential, industrial symbiosis is to date an underdeveloped and not fully exploited business model. The main reason lies in several cultural, economic, organizational and technical barriers that prevent and make the transition to this business model difficult. In addition, very often companies find it difficult to create exchange opportunities due to the lack of systems that facilitate transactions among parties. Moreover, the implementation of industrial symbiosis projects in the Bergamo area would prove particularly interesting because of the advantages from which the industrial network of the area could benefit, facilitated by the coexistence of several supply chains and industrial sectors, characterized by significant energy and material consumption. Based on these premises, this research project aims to create a regulatory framework for the development of an industrial symbiosis business model. At the same time it strives for the creation of a real application of industrial symbiosis in the Bergamo area, laying the foundations for the development of cross-matching platform supporting exchanges among supply chains whose adoption would allow enable the project scalability at regional, national and European levels.

The research will be developed in three phases:

Analysis of existing models of industrial symbiosis, aimed at uniquely identifying their distinctive features and components. Through a joint analysis of scientific literature and current regulations, this stage will enable a clearer definition of industrial symbiosis, highlighting its distinctive features with reference to the typical dimensions of a circular economy model. In addition, at this stage it will be essential to identify and analyze the pre-conditions, enablers and facilitators underlying an industrial symbiosis project, as well as the potential barriers and inhibitors to its implementation in the different characteristic phases of the relevant life cycle. The expected output will be the definition of a theoretical regulatory framework developed around the distinctive features of industrial symbiosis.

Exploration in the Bergamo area. The study will be carried out through secondary analysis and primary data collection (surveys, interviews, focus groups, etc.). The results will allow the identification of supply chains and sectors potentially of interest to the implementation of an industrial symbiosis project. In addition, this phase will foster the creation of a network of potential users, also consolidated through the dissemination of results in workshops and thematic events. This phase will also include scouting activities for software for industrial symbiosis models. The scouting will allow for the identification of the most suitable software for the specific types of industrial symbiosis and to better target a future development of a supply chain cross-matching and exchange management platform.

Development and implementation of an industrial symbiosis model. This activity will be carried out within the territory of Lombardy and more specifically in the province of Bergamo. Once the project feasibility will be verified, taking advantage of the results of the second phase of the project, the focus will shift to the implementation of the industrial symbiosis model. Intense training of the potential actors to be involved to raise awareness of the advantages and challenges of implementation will be followed by the identification of companies and by the implementation of a pilot case.

Finally, to foster the dissemination of project activities and results, scientific papers on the topic will be presented at scientific conferences and in international journals. Participation in organization of dissemination events in collaboration with

representative organizations and clusters of local, regional and Italian manufacturing companies is also planned.



RESEARCH PROJECT - CODE 5

“Application of Polyconjugated Molecules to Enantioselective Electrochemical Analysis and Raman Spectroscopy”

Research structure: Department of Engineering and applied sciences

Duration of the grant: 12 months

Scientific Area: 03 - Chemistry

Academic recruitment field: 03/B2 - Principles of chemistry for applied technologies

Academic discipline: CHIM/07 - Principles of chemistry for applied technologies

Scientific Director: Prof.ssa Francesca Fontana

The research will deal with the synthesis and characterization of intrinsically chiral, extensively conjugated organic molecules containing nitrogen. These molecules, appropriately transformed into positively charged quaternary derivatives or endowed with side chains with appropriate functional groups, will be employed in the preparation of functional materials for the analysis of biomolecules, also in complex matrices, by means of various analytical techniques, in collaboration with research groups at Università di Milano and Politecnico di Milano. In particular, the project aims to realize: a) cyclic voltammetry experiments where the organic selector prepared within the project, separated into its enantiomers and quaternarized at the nitrogen atom, will be used as chiral additive in the ionic liquid used as solvent for voltammetric analyses; b) cyclic voltammetry experiments where the organic selector prepared within the project will be used to coat the working electrode used for voltammetric analyses; c) experiments of SERS spectroscopy (Surface Enhanced Raman Spectroscopy) where the organic selector prepared within the project and endowed with an appropriate side will be bound to a spectroscopically active nanostructured gold surface. The chiral selector will allow the recognition of chiral biomolecules such as aminoacids, drugs and their metabolites, as already verified in several proof-of-concept publications. Besides, molecules bearing more than one nitrogen atom will be studied with the aim of preparing intrinsically chiral metal complexes with transition metal ions or rare earths ions, for applications in catalysis and optoelectronics. The hired person will have to deal with the synthesis of the molecules of interest, part of which will be known and part will be new structures, to design also based on the output of the electrochemistry and complexation experiments. He/she will also realize the structural modifications needed for the different applications, characterize the materials by UV-vis, IR and MS spectroscopies, and functionalize the nanostructured gold surfaces for SERS spectroscopy.



RESEARCH PROJECT - CODE 6

“The recruitment of participants for innovative social research”

Research structure: Department of Letters, philosophy, communication

Duration of the grant: 12 months

Scientific Area: 14 - Political and social sciences

Academic recruitment field: 14/C1 - General sociology

Academic discipline: SPS/07 - General sociology

Scientific Director: Prof.ssa Micol Pizzolati

The research aims to explore complications connected to participants selection in research adopting non-traditional qualitative methods.

Although crucial for data collection in qualitative research, recruiting participants is often overlooked in both research design and methodological discussions. Despite social researchers expect a general willingness to take part in a research process, finding willing participants proves to be difficult in many circumstances. People are generally familiar with the traditional research process, and this may be an advantage for recruiting participants in qualitative research based on interviews, as potential interviewees have expectations about what the research encounter imply. However, this familiarity can be a disadvantage too, because the expectations it creates about the research process, may be misleading. This is particularly evident in the case of innovative research processes that, by design, aim to disrupt traditional paths of research: potential participants may in fact be hesitant in being involved in research using methods that contradict their expectations. The research main objective is to explore the complications in participants' recruitment experienced by researchers engaged with innovative research. Researchers in social sciences based in different countries who lead research projects adopting creative and arts-based methods will be engaged. Will be explored the following aspect: the challenges they experienced in recruiting participants, the solutions they put in place, the unsuccess, and more broadly, the strategies they used to handle the research complications, in light of the external pressures to produce excellent and impactful outputs.

The Research Grant holder is expected to:

- Collaborate in the design of interviews/focus group
- Implement interviews/focus group with about ten researchers
- Transcribe and analyse empirical documentation produced
- Co-write and submit an article in a peer-reviewed journal (rated 'Classe A' for 14-C1 Academic recruitment field by ANVUR)
- Collaborate in organizing and carrying out a scientific seminar - Collaborate in the dissemination of research results.



RESEARCH PROJECT - CODE 7

“The fundamental rights of the person in its broadest and most articulated forms from the perspective of European and comparative law”

Research structure: Department of Law

Duration of the grant: 12 months

Scientific Area: 12 - Law studies

Academic recruitment field: 12/E2 - Comparative law

Academic discipline: IUS/02 - Comparative private law

Scientific Director: Prof. Peiremilio Sammarco

Objectives:

The social and technical evolution produces the birth of new legal situations of belonging and also connected to them, emerging fundamental rights for individuals.

In general, the protection of these rights is one of the areas of law that has greatly affected doctrine and jurisprudence in the last century; in spite of the limited references within the civil code on the assets to be protected, the interpretative interventions and the efforts of the doctrine to bring them back to a unitary system aimed at encompassing both moral and patrimonial profiles are instead plentiful.

Proceeding to a mere reconnaissance of the regulatory references, it is noted that they are scattered dispersively in the various and heterogeneous sources, but it can be said that they all originate from art. 2 of the Constitution placed to protect the human person in its widest form and its primary and inviolable rights.

The research, starting from these assumptions, intends to address a systematic recognition of the category of the fundamental rights of the individual, focusing on some peculiar aspects of some of them and their protection at national, European and comparative level.