



INSTM

NATIONAL INTERUNIVERSITY CONSORTIUM  
OF MATERIALS SCIENCE AND TECHNOLOGY

# GENDER EQUALITY PLAN

## 2022-2024

## Introduction

The Gender Equality Plan (GEP) is the instrument, envisaged by the European Parliament Resolution of 3 July 2003 and introduced in Italy by Legislative Decree 150/2009, to go in the direction of achieving the objectives established by the United Nations 2030 Agenda in relation to gender equality, emancipation (empowerment) and self-determination of women and girls. The GEP is a significant opportunity to promote gender balance in the wide and variegated fields of Research granted by Horizon Europe financing programs of the European Commission.

Gender equality (GE) is just one aspect of the wider mission of contrast to any sort of discrimination, by ethnicity, religion, language, sexual orientation, or gender identity.

The INSTM National Interuniversity Consortium of Materials Science and Technology is proudly giving its contribution in the direction of minimizing any potential deficiency in the equal opportunity-equal outcome objective.

The world of research, in its widest sense, is certainly not to be counted among the most gender-unbalanced environments. However, in the specific fields of interest of the INSTM Consortium (mainly materials chemistry, physics, biology, and engineering) there is a strong historical gap between men and women (with a clear prevalence of masculine gender) both in the number of involved researchers and in the leading or apical positions, especially for engineering areas. There is certainly room for improvement in this direction, starting with the long-term results achievable by implementing cultural bias-suppression informative e supportive actions, at many different levels.

The nature of the INSTM, a non-profit research organisation that groups numerous autonomous public institutions, each one endowed with a strong identity of objectives and of governance, makes the position of the Consortium, with respect to the implementation of gender equality actions, quite peculiar. In fact, in front of a very large number of affiliated researchers (“associated collaborating staff”) from the member Universities, INSTM counts a very limited number of own employees.

GE actions will therefore be mainly calibrated in the twofold direction of building up a stronger awareness in the affiliates, on one hand, and guaranteeing or improving equality between employees and in the leading and decision-making governing bodies, on the other hand.

The overall structure of this GEP is the following:

- Dedicated resources
- Data collection and monitoring
- Proposed actions:
  - o Work-life balance and organizational culture
  - o Gender balance in leadership and decision-making
  - o Gender equality in recruitment and career progression
  - o Integration of gender dimension into research content
  - o Measures against gender-based violence including sexual harassment
- GEP document publicity

## 1. Dedicated Resources

The President of INSTM National Interuniversity Consortium of Materials Science and Technology, Prof. Federica Bondioli, has appointed as her Delegate for the Gender Equity Plan (GEP) one of the members of the Executive Board, Prof. Cecilia Bartuli, charged of coordinating and implementing the consortium activities for the gender equality goals.

The President Delegate is supported in the continuous action for the development of the GEP by a GEP Team, consisting of:

- the Vice-President of the Consortium, Prof. Angela Agostiano, former President of the Italian Chemical Society, a person with a solid and wide experience in gender-oriented activities;
- an INSTM Employee from the Administration Office, Mrs Claudia Bettaccini, charged of the extraction of raw data for GE monitoring and of the control of the compliance of proposed actions with internal consortium procedures;
- an INSTM Employee from the group of INSTM Researchers, Dr Robertino Pilot, charged with the set-up of communication procedures between Consortium and the members Universities on GE issues.

## 2. Data collection and monitoring

In order to appreciate the significance of gender data for INSTM, it is important to briefly report the nature and the structure of the organization. INSTM is a Consortium of 50 Italian Universities, active in the research fields of materials science and technology. It coordinates common research activities of the member Universities with the aims of promoting research and development in the fields of interest, promoting the development of centers of excellence, providing a point of reference for international cooperation and for industry, promoting technology transfer, and finally, promoting mainstream society's greater involvement in materials science and technology.

The affiliates of the Consortium count for 2900 Researchers from 50 Universities from all over the country. The member Universities are responsible for their gender-equality goals and produce individual GEPs; therefore, INSTM cannot be called directly responsible for equality actions towards its affiliates. However, the consortium is all the same engaged in carrying out informative and training activities for conscience awareness and in promoting lateral work-life balance for what of its competence.

The actual Employees of the Consortium consist of a major administrative team (14 Employees), and a minor group of Researchers (5 Researchers): Hiring/selecting procedures are better specified in par. 4.3.

The governance bodies of the INSTM Consortium are the following:

- **Governing Council (GC):** comprising representatives from each one of the member Universities. Each representative is designated by the Rector of his/her University (four-year term). INSTM Consortium has no authority in the selection of the representatives in charge. The GC deliberates on the Consortium's scientific activities and the use of its financial means. The GC elects the Executive Board and the President (Legal Representative).
- The **Executive Board (EB):** made of 5 members, 3 elected by the GC, the President, and the Director (four-year term). The EB nominates the **Vice-President**.
- The **President:** convenes and chairs the GC, the EB and the Scientific Council (SC) and nominates the Director, after consultation with the Executive Board. He/she oversees the implementation of the Governing Council's and Executive Board's resolutions (four-year term).
- The **Director:** is appointed by the President, after consultation with the Executive Board, and is responsible for ensuring that EB and GC resolutions are acted upon and oversees the Consortium activities (four-year term).
- The **Scientific Council (SC)** is made of the **Directors of the Fields of Research (FoR)** of the Consortium (nominated for 4 years by the Executive Board) and of maximum of 4 **Experts** (nominated for 4 years by the President). The SC is the scientific advisory board of the Consortium and decides on the Consortium's research priorities (four-year term).

INSTM finances the following types of positions/grants:

- **Scholarships**
- **Research temporary contracts**
- **Scientific awards**

The Consortium organizes a biennial **Conference** for the affiliates.

The GEP Team has collected the following gender-disaggregated data (Male M and Female F), referred to the past four-year terms or to the year 2021, for affiliates, employees, contracts, and awards (Tab. 1) and for leadership and decision-making groups (Tab. 2).

**Tab. 1 – Gender disaggregated data for Affiliates, Employees, Contracts, and Awards**

	Time reference	Total	M	% M	F	% F
Affiliates (total)	2021	2900	1803	62%	1097	38%
Affiliates (per research areas):						
- Chemistry, Physics, Agriculture, Geology		1900	1132	60%	768	40%
- Engineering		929	623	67%	306	33%
- Medicine		28	14	50%	14	50%
- Others		bal.	bal.		bal.	
Employees – Administration	2021	14	5	36%	9	64%
Employees – Researchers	2021	5	5	100%	0	0%
Scholarships	2021	152	91	60%	61	40%
Research temporary contracts (Type I – Co.co.co.)	2021	59	27	46%	32	54%
Research temporary contracts (Type II- Pr. Occ.)	2021	49	38	78%	11	22%
Scientific awards	2020-21	12	6	50%	6	50%

**Tab. 2 – Gender disaggregated data for Leadership and Decision-Making Groups**

	Time reference	Total	M	% M	F	% F
President	2016-2020 2020-2024	1	1	-	1	-
Vice-President	2016-2020 2020-2024	1	1	-	1	-
Director	2016-2020 2020-2024		1 1	- -	- -	- -
Executive Board	2016-2020 2020-2024	3 3	3 1	100% 33%	0 2	0% 67%
Governing Council	2016-2020 2020-2024	49 50	33 32	67% 64%	16 18	33% 36%
Scientific Council	2018-2022 2022-2026 to be elected	8	8	100%	0	0%

As observed in Table 3 (source AlmaLaurea, year 2018), women who graduated in Italy in the areas of Industrial and Information Engineering are a strict minority (only 24,7%), while women who graduated in the wider field of Science are a majority (57,8%). This last number, however, is not specific to Chemistry (the main area covered by materials science affiliated researchers), but also covers areas, such as biology, traditionally preferred by women students.

At a more general European level, data from the official EU [SheFigures2021](#) report, referred to 2018 doctoral positions, show that women continue to be under-represented among Doctoral graduates

in the narrow STEM fields of Physical Sciences (38.4%), Mathematics & Statistics (32.5%), ICT (20.8%), Engineering & Engineering Trades (27%), and Architecture & Construction (37.2%). In contrast, women represented more than half of Doctoral graduates in the fields of Biological & Related Sciences, and Environment in 2018 (EU average of 59.7% and 56% in the respective fields).

Among INSTM affiliates, women in the field of Engineering cover 33% of the 929 researchers, while women in the fields of Science (mainly Chemistry and Physics) cover 40% of the 1900 researchers, thus substantially reproducing the national and European picture of graduate and doctoral students.

**Tab. 3 – Gender disaggregated data for Italian students who graduated in 2018 (Laurea and Laurea Magistrale) in the different disciplines (source [AlmaLaurea](#))**

	Totale	Disaggregato per gruppo disciplinare														
		agrario-forestale e veterinario	architettura e ingegneria civile	arte e design	economico	educazione e formazione	giuridico	informatica e tecnologie ICT	ingegneria industriale e dell'informazione	letterario-umanistico	linguistico	medico-sanitario e farmaceutico	politico-sociale e comunicazione	psicologico	scientifico	scienze motorie e sportive
<b>Genere (%)</b>																
Uomini	41,3	50,3	54,8	29,4	49,6	6,1	35,8	85	75,3	36,4	15,6	32,4	37,3	18,6	42,2	68,4
Donne	58,7	49,7	45,2	70,6	50,4	93,9	64,2	15	24,7	63,6	84,4	67,6	62,7	81,4	57,8	31,6

INSTM employees with competence and activities in the administrative procedures of the consortium are for the large majority of women (9 out of 14). Upper and intermediate-level positions are entirely covered by women employees.

More specific comments on contracts and awards can be found in paragraph 4.

With special reference to Table 2, by comparing data relative to the Consortium governance in the past two quadrennia, a positive trend is immediately apparent. The positions of President and Vice-President are presently covered by women, and the Executive Board has today a feminine majority. On the other hand, the Governing Council, with 67% male representatives, remains unbalanced and the positions of Scientific Council are presently entirely covered by men, representing the most evident criticality.

The above-presented data, to be used as the basis for the identification of proposed actions towards GE, will be constantly monitored, with a yearly cadence, to give evidence for any variation and to prove the efficacy of the measures proposed in the present plan.

### **3. Training and Capacity Building**

Raising awareness on the importance of equality issues and, furthermore, strengthening a positive attitude towards diversity is an essential matter.

Gender equality actions and specific measures proposed for overcoming discrimination issues will be made the object of presentation and general discussion during the future Biennial Conference events of the Consortium.

## 4. Proposed actions

### 4.1 Work-life balance and organizational culture

For employees:

INSTM develops a working environment that supports its employees, researchers, and collaborators in achieving an appropriate balance among work, study, and family commitments. INSTM offers adequate flexibility of working hours, in accordance with work needs, which increases the work-life balance. During the pandemic, INSTM used for the first time the remote working procedure (with alternating weekly rotation). In order to support work-life balance and organizational culture, remote working is an important initiative that could be continued, so long as this complies with operative constraints, national rules, and internal procedures.

Objective	Action	Timeline		
		2022	2023	2024
Support work-life balance and facilitate the work of employees with care home-duties	- Evaluating the possibility of maintaining shares of working hours/days in “smart working” mode, when compliant with operative constraints, national rules, and internal procedures.	✓	✓	✓

For affiliates:

Action is proposed to the benefit of mother-researchers for promoting participation in the common life moments of associates, mainly the Biennial Congress organized for the affiliates.

Objective	Action	Timeline		
		2022	2023	2024
Promote and facilitate the participation of women with children to the get-together moments of the Consortium	- Offering support and organizing free or fee-based kindergarten for mother-researchers during biennial INSTM Congress.	✓	✓	✓



#### **4.2 Gender balance in leadership and decision making**

Women cover today apical positions in the INSTM governance (President, Vice-President, 2 members/3 of the Executive Board). No action can be undertaken to improve gender balance in the Governing Council, whose members are nominated by the respective Universities.

Action will be undertaken for improving the gender composition of the Scientific Council, whose members for the 2022-2026 term are to be nominated in 2022 by the Executive Board.

Scientific awards are assigned on the basis of an evaluation by a dedicated committee. Actions will be promoted for improving gender equality prize assignation procedures.

Objective	Action	Timeline		
		2022	2023	2023
Improve gender balance in INSTM leadership	Achieve gender balance in the group of Directors of the Fields of Research and in the Scientific Council	✓		
Encourage the participation of women researchers in the highest-level research	Establish graduate/research awards for women in the field of chemistry and engineering of materials	✓	✓	✓

### 4.3 Gender equality in recruitment and career progression

Recruitment of personnel (administration/research position) on permanent contracts is carried out by means of national competitions or selections based on national competitions or selection based on qualifications and/or examinations for all professional levels, in the application of the internal staff and personnel regulations (*Regolamento Organico e del Personale*) and the National Collective Labor Contract for the Tertiary and Services Sector (CCNL Terziario-Servizi).

The requirements for recruitment, the procedures for holding competitions and selections, the composition of evaluation committees and the composition of the examining commissions, and the procedures for ascertaining physical fitness are defined by special regulations deliberated by the Executive Board on the joint proposal of the President and the Director.

The hiring of managers is by direct call.

Recruitment with a fixed-term contract or temporary contract are made by direct call accordingly with the internal regulations (*Regolamento Organico e del Personale / Regolamento per l'assegnazione e la gestione di borse di studio, premi, collaborazioni, prestazioni e consulenze*). Their eventual confirmation for an indefinite term must be deliberated and/or ratified by the Executive Board.

With specific resolutions, the Executive Board has, for some time now, introduced specific procedures for the recruitment and hiring of temporary staff, scholarship holders, and collaborators, and for the assignment of tasks and professional services to consultants with VAT numbers, based on expenditure relating to competitive projects financed by public administrations and bodies (ministries, regions, European Commission, etc.) and not included in the Public Contracts Code, in order to guarantee publicity, transparency, and impartiality in the identification of those in charge and the assignment of tasks, by means of the publication of specific notices.

Presently, a major fraction of administrative personnel (64%) is feminine. Actions will be undertaken to maintain gender balance for future recruitments and for career progressions.

The hiring procedure for personnel to be employed in the research positions consists of public calls based (where applicable according to the internal rules and the CCNL applied) on scientific-technical profile relevance criteria. The 5 positions activated in the past year were covered by male research personnel, and no formal action can be undertaken to formally guarantee gender balance in public calls recruitment procedures.

As for scholarships, presently, 66% of temporary positions and 60% are covered by male researchers, representing anyway sensibly lower share with respect to the percentage of male students in the areas of Materials Science & Engineering.

For both researchers and scholarships gender balance in committees will be promoted together with the introduction of gender-oriented precedence selection criteria (for equal score in scientific-technical criteria).

Objective	Action	Timeline		
		2022	2023	2023
Maintain gender balance in INSTM Administrative Employees	Monitor the career progression rates of the present employees and operate to maintain a gender balance.	✓	✓	✓
Improve gender balance in INSTM Researchers Employees	Include gender-oriented precedence criteria (for equal score in scientific-technical criteria) in scholarships and researchers selection procedures. Promote gender balance in scholarships and researchers committees.	✓	✓	✓

#### 4.4 Integration of the gender dimension into research content

Objective	Action	Timeline		
		2022	2023	2024
Integrate gender content in the research in the fields of interest	Promote/finance a review study aimed at the valorization of the contribution of outstanding women researchers in the history of Materials Science & Technology.		✓	
Gender balance in research	Promote gender balance in panels and programs of scientific and public engagement events	✓	✓	✓
Gender balance in research	Adopt award scores for a parity composition of research groups in calls for research on INSTM funds		✓	✓

#### 4.5 Measures against gender-based violence including sexual harassment

No incidents of sexual harassment nor gender-based violence have ever been reported since the creation of the INSTM Consortium in 1992. However, it is important to set up and formalize an action plan for such potential events.

Objective	Action	Timeline		
		2022	2023	2024
Prevention and zero tolerance of sexual harassment	Development of a Discrimination and Sexual Harassment Complaint Procedure (formal and informal)		✓	✓
	Spreading information on the complaint procedure among employees			✓
	Set up a centralized digital recording system for formal and informal complaints		✓	✓

## 5. GEP Document Publicity

The present GEP has been widely discussed and approved by the Executive Board on February 7th 2022.

The GEP is published on the website [https://www.instm.it/consorzio/i\\_nostri\\_valori.aspx](https://www.instm.it/consorzio/i_nostri_valori.aspx) and is disseminated within the Consortium by sending a copy to all INSTM affiliates and employees.