

Approved by the Director of Latvian Institute of Organic Synthesis

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Public research organization

Latvian Institute of Organic Synthesis

Action plan for
gender equality,
2022



Latvian Institute of
Organic Synthesis

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1 Introduction

The Latvian Institute of Organic Synthesis (hereinafter – LIOS) has adopted the Action plan for gender equality 2022 (hereinafter – GEP) to promote equality and eliminate discrimination among the LIOS employees regardless of their gender.

According to European Commission “Having both women and men represented is crucial for successful leadership. Inclusive and diverse leadership is needed to solve the complex challenges that decision-makers face today. More inclusion and more diversity are essential to bring forward new ideas and innovative approaches that better serve a dynamic and flourishing EU society¹.”

The data analysis provided in section 2.2. of this document shows that LIOS faces equality challenges. One of the key challenges concerns the lack of gender balance in top scientific positions and among members of LIOS highest decision-making body, LIOS Scientific Council. The unfortunate general trend suggests that the higher the position in the organizational hierarchy, the wider the equality gap. This is particularly pronounced for scientific and science related positions. Another key challenge relates to the pay gap, which tends to widen for higher levels of hierarchy.

The above-mentioned challenges have to be tackled as they deprive LIOS from fully exploiting the potential of its human resource, and they are detrimental to the successful development of LIOS.

In line with applicable EU soft law and the guidelines of European Institute of Gender Equality (EIGE), the Gender Equality Group (GEG) of LIOS has conducted the data audit and based on the results of the analysis has developed this document to address the abovementioned challenges.

¹ Brussels, 5.3.2020, COM(2020) 152 final, COMMUNICATION FROM THE COMMISSION TO THE EUROPEAN PARLIAMENT, THE COUNCIL, THE EUROPEAN ECONOMIC AND SOCIAL COMMITTEE AND THE COMMITTEE OF THE REGIONS
A Union of Equality: Gender Equality Strategy 2020-2025

2 Methodology and Baseline data analysis

2.1 Methodology

In October 2021, LIOS appointed internal Gender Equality Group (GEG) to conduct the gender equality data analysis, to draft GEP as well as to monitor its implementation. The GEG was composed in line with recommendations of Horizon Europe Guidance on Gender Equality Plans² and included representatives of all major position groups, hierarchy levels, educational background, and gender. The GEG members were appointed on a voluntary basis.

The following materials and guidelines have been used to draft the GEP:

- DIRECTIVE (EU) 2019/1158 OF THE EUROPEAN PARLIAMENT AND OF THE COUNCIL of 20 June 2019 on work-life balance for parents and careers and repealing Council Directive 2010/18/EU
- GENDER EQUALITY IN ACADEMIA AND RESEARCH, GEAR tool, European Institute of Gender Equality (EIGE)
- Horizon Europe Guidance on Gender Equality Plans, European Commission, September 2021
- A Union of Equality: Gender Equality Strategy 2020-2025, European Commission, Brussels, 5.3.2020, COM(2020) 152 final
- Horizon Europe, Work Programme 2021-2022, 13. General Annexes, European Commission Decision C(2021)1940 of 31 March 2021
- Integrating gender equality into academia and research organisations, Analytical paper, European Institute of Gender Equality (EIGE)

According to the Horizon Europe Guidance on Gender Equality Plans, to be eligible for Horizon Europe, it is mandatory that organisations follow four minimum process-related requirements in the course of developing their GEPs:

- **Publication.** A GEP must be formal document published on the institution's website and signed by the top management. LIOS GEP complies with this requirement as it is approved by LIOS Director, and it is posted in LIOS web site.
- **Dedicated resources.** Commitment of resources and expertise in gender equality to implement the plan must be present. LIOS has committed a set of resources for development of GEP (in terms of

² Horizon Europe Guidance on Gender Equality Plans, European Commission, September 2021, <https://op.europa.eu/en/publication-detail/-/publication/ffcb06c3-200a-11ec-bd8e-01aa75ed71a1/language-en/format-PDF/source-232129669>

person months of GEG members) as well as for the implementation of GEP as illustrated by column Resources of section 3. There are three types of resources LIOS has devoted: personnel effort, financial resource and in-kind contribution of necessary infrastructure.

- **Data collection and monitoring.** Sex/gender disaggregated data on personnel and annual reporting based on indicators have been collected under the audit stage of GEP as outlined in the next section 2.2.
- **Training.** Awareness raising/training on gender equality and unconscious gender biases for staff and decision-makers is foreseen under the Tasks # 1.1., 1.2., 1.3. and 2.1. of section 3 of the GEP.

To develop the GEP, first, the baseline situation has to be established. It involved the collection of gender-disaggregated data and a review of practices to identify gender inequalities and their causes. The following metrics were selected by GEG:

- Staff numbers by gender at all levels, by disciplines, by function (including administrative / support staff), by academic vs. administrative decision-making positions (e.g. laboratory heads, heads of the administrative departments, Scientific Council)
- Wage gaps by sex/gender and job categories
- Number of staff by gender applying for/taking parental leave
- Share of men and women in successful grant applications (in monetary and numerical terms)
- Share of men and women in patent authors (Innovators)
- Share of men and women among LIOS Corresponding authors
- Share of men and women among LIOS defenders and supervisors of MSc and PhD thesis

Since LIOS is small institution certain data are not of statistically significant sample for instance the # of defended thesis as well as # of innovators. Nevertheless, the data are collected to have a full set of indicators.

Year 2021 was chosen as a baseline year for the analysis. The results and conclusions of the data audit is provided in the next section of the GEP. The same data set will be analyzed on an annual basis to monitor the progress, efficiency of the measures as well as to provide basis for corrective actions.

2.2 Baseline data analysis

2.2.1 Staff numbers by gender

The first metric selected for gender analysis refers to gender disaggregated headcount across academic positions (PI, researcher, assistant, lab. technician), heads of the scientific departments, LIOS Scientific Council as well as administrative staff and administrative department heads. The data for year 2021 are presented below in Figure 1.

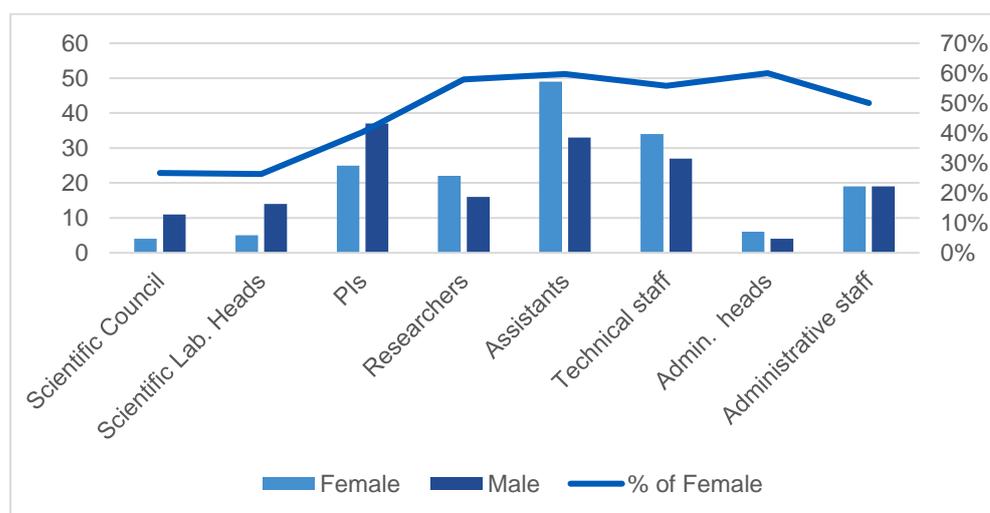


Figure 1. Staff head count by gender at all levels, disciplines and function, 2021

The general trend following from the data is that females are heavily underrepresented in higher decision-making bodies such as PIs, scientific Lab. heads and Scientific Council, however they prevail in lower academic positions such as technicians, assistants and researchers. At the same time the total LIOS staff is well balanced as women count for 53% of the total LIOS head count. So, the higher the position in organizational hierarchy, the wider the representation gap, suggesting that academic career paths for women are not sufficiently pronounced and women are not sufficiently promoted.

This pattern corresponds to the general EU trend of more women than men being in junior positions and more men than women being in senior positions as reported by SHE Figures 2021³.

³ <https://op.europa.eu/en/web/eu-law-and-publications/publication-detail/-/publication/67d5a207-4da1-11ec-91ac-01aa75ed71a1>

The situation is radically different for administrative staff. Among the total administrative personnel women represent 50%, however at the level of heads of the administrative departments women prevail and constitute 60%.

So, the obvious challenge for LIOS is underrepresentation of women in the higher-level academic positions.

2.2.2 Wage gap

The general underlying principle of LIOS remuneration policy stands for equal pay for equal type of job disregarding gender, ethnicity, national origin, language, religion and beliefs, functional abilities, sexual orientation, gender identity and age. The Wage gap metric attempts to capture the difference in hourly rates disaggregated by gender across different jobs. The wage gap in percentage terms is calculated as

$$(hourly\ rate\ for\ men - hourly\ rate\ for\ women) / hourly\ rate\ for\ men$$

So, it essentially represents the missing fraction for women's hourly rate to reach the rate paid to men. The LIOS data for year 2021 are summarized in Figure 2 below.

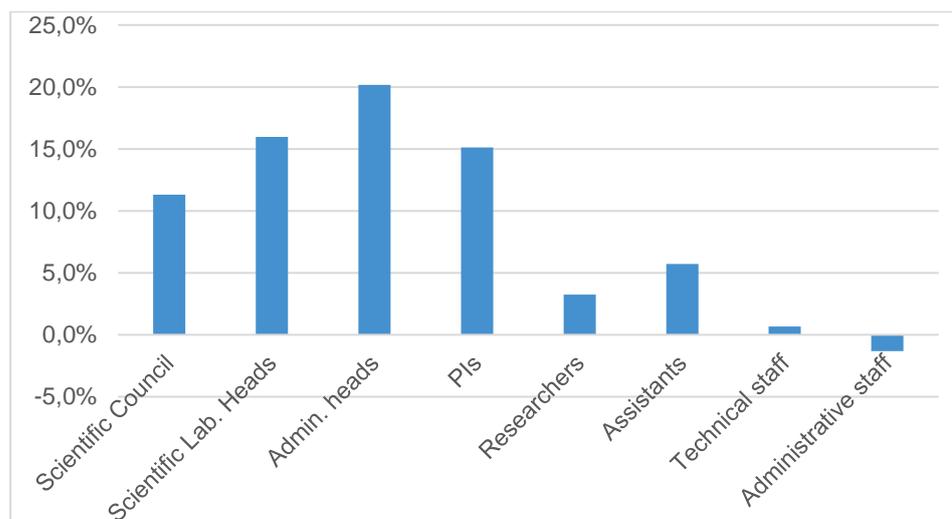


Figure 2. Wage gap, %, 2021

As can be seen from the data above, the Wage gap follows the pattern already identified from the headcount analysis. The higher the position in organizational hierarchy the wider the pay gap. Contrary to the headcount

analysis, this trend is characteristic to scientific as well as administrative positions. The administrative heads group, however, is less homogenous in terms of level of responsibility, required qualification and range of duties, so no definite conclusions can be drawn from the figure regarding this group.

It has to be noted that SC and Scientific lab heads are in a position to set their salaries for themselves, so women are obviously more conservative when evaluating their own merit.

Overall, LIOS is not substantially different from average EU performance in this respect as the average EU pay gap amounts to roughly 14%⁴. This disparity has to be dismantled not only from the perspective of general equality, fairness and inclusiveness, but as pointed out by EC, accumulated lifetime gender employment and pay gaps result in an even wider pension gap and consequently older women are more at risk of poverty than men⁵.

2.2.3 Number of staff by gender applying for/taking parental leave

During 2021 four women applied for and used parental leave, whereas no parental absence was applied for by men. This is rather typical situation and follows the general tradition in Latvia, however, it is subject to change due to transposition of Work-life Balance Directive into national legislation. Art. 5.2. of the Directive calls for two months as the minimum period of parental leave which cannot be transferred from one parent to the other in order to encourage fathers to take parental leave⁶.

2.2.4 Share of men and women in successful grant applications

Due to the fact that LIOS operates under project-based funding system, the ability to apply for external public research funding is essential for any researcher aiming for senior academic positions. The objective of this section is to explore whether there are any signs of women being precluded from successful participation in competition-based research funding system.

⁴ https://ec.europa.eu/eurostat/statistics-explained/index.php?title=Gender_pay_gap_statistics#:~:text=A%20negative%20gender%20pay%20gap,higher%20than%20those%20of%20men.&text=For%20full%2Dtime%20workers%2C%20pay,Italy%20to%2024.1%20%25%20in%20Latvia.

⁵ A Union of Equality: Gender Equality Strategy 2020-2025, European Commission, Brussels, 5.3.2020, COM(2020) 152 final

⁶ <https://eur-lex.europa.eu/legal-content/EN/TXT/?uri=celex%3A32019L1158#PP4Contents>

As can be seen in Figure 3 below, applications submitted by women constitute 30% of the total application pool. Given the fact that usually senior research positions are equipped with necessary expertise and track record to apply for external research funding, this pattern replicates the headcount trend, namely given the fact that around 30% of women occupy the positions suitable to apply for external funding it is coherent to observe 30% of applications produced by women.

	# of applications	EUR
Female	6	1 035 785
Male	14	5 950 226
% of female	30.00%	14.83%

Figure 3. Share of men and women in successful grant applications (in monetary and numerical terms), 2021

In monetary terms the pattern is more skewed towards men which would suggest that women, once in the right positions, tend to apply for smaller grants, but this is not quite the case for 2021, due to outlier of one large ERC grant in 2021. So, overall, there is no strong evidence that once reaching upper levels of career paths, women would be structurally precluded from successful participation in fundraising system.

2.2.5 Share of men and women in patent authors

According to LIOS strategy for 2027, development of strong innovation and entrepreneurial culture at LIOS is one of the goals for the upcoming years. From this perspective it is essential to make sure LIOS potential is realized at its maximum and there are no structural or other barriers for women to innovate. Although statistically the data sample of 2021 is not very large, the numbers (see Figure 4 below) suggest that female employees prevail in the Inventors pool of LIOS. It has to be noted that LIOS excels positively on EU level with this regard, as women were significantly under-represented among inventors for EU-28, holding just one inventorship for every 10 inventorships held by men in the period between 2015-2018⁷.

	# of Inventors
Female	5
Male	4
% of females	55.56%

Figure 4. Share of men and women in patent authors (Innovators), 2021

⁷ <https://op.europa.eu/en/web/eu-law-and-publications/publication-detail/-/publication/67d5a207-4da1-11ec-91ac-01aa75ed71a1>

2.2.6 Share of men and women among LIOS Corresponding authors

One of the essential outputs of any public research organization is high impact scientific papers. Different metrics appraising the contribution of corresponding authors are used by national and international evaluators and Funding Authorities when assessing the LIOS performance. During 2021 out of 56 papers published by LIOS (where LIOS employees holds the position of corresponding author) roughly 21% were produced by women (see Figure 5).

	# of Cor. Authors
Female	12
Male	44
% of female	21.43%

Figure 5. Share of men and women among LIOS Corresponding authors, 2021

Considering that women on average occupy around 30% of upper scientific and science related positions, women are slightly underrepresented in the total LIOS pool of corresponding authors. In this respect LIOS also lags behind the average EU-28 figure for period of 2015 – 2019, where number of publications for which a woman is corresponding author constituted around 1/3rd of the total pool, indicating the need of some targeted motivational measures in the scope of career development paths for women.

2.2.7 Share of men and women among LIOS defenders and supervisors of thesis

Although LIOS is not a degree issuing institution, as a research organization it is committed to contribute to the development of higher education sector in Latvia by providing infrastructure and supervision of graduate and undergraduate thesis. The Figure 6 below suggests that overall, no substantial gender deviations can be observed among supervisors and defenders of MSc and PhD thesis for LIOS.

	PhD		MSc	
	Supervisors	Defenders	Supervisors	Defenders
Female	1	2	2	4
Male	1		5	4

Figure 6. Share of men and women among LIOS defenders and supervisors of MSc and PhD thesis, 2021

From the data above it is possible draw two major challenges for LIOS:

1. Underrepresentation of women in senior scientific and science related positions;
2. Considerable wage gap for top scientific positions and Scientific Council.

Two major objectives shall address the challenges stated above:

1. Increase the share of women among PIs, SC and Scientific Lab. Heads;
2. Eliminate the wage gap for top scientific and science related positions.

3 Action Plan

Based on the analysis of data in section 2.2. and major objectives set above, the following action plan for 2022 was developed by GEG.

No. of Objective	Objective	Task No.	Tasks	Deadline/time schedule	Responsible person/s	Resource
1	Increase the share of women among PIs, SC and Lab. Heads	1.1.	Training on gender equality, diversity and unconscious bias for the purpose of general awareness raising to all LIOS employees	31.12.2022.	GEG	EUR 5k. (LIOS budget, f.y. 2022)
		1.2.	Training on gender equality, diversity and unconscious bias aimed at all managers and decision makers	31.12.2022.	GEG	EUR 5k. (LIOS budget, f.y. 2022)
		1.3.	Leadership workshops for women:	31.12.2022.	GEG	PMs of GEG
		1.3.1.	presentations on career development by successful women (LIOS and external, for example: Riga TechGirls, Women Go Tech)	31.12.2022.	GEG	PMs of GEG + LIOS premises
		1.3.2.	presentation by highest LIOS management (welcome note)	31.12.2022.	LIOS Director	PMs of LIOS Director + LIOS premises
		1.4.	Feasibility study for development of mentoring system	31.12.2022.	GEG	PMs of GEG

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No. of Objective	Objective	Task No.	Tasks	Deadline/time schedule	Responsible person/s	Resource
		1.5.	Enhancing Work-life balance:	31.12.2022.	GEG	PMs of GEG
		1.5.1.	analysis of necessity to provide assistance on nursery service	31.12.2022.	GEG	PMs of GEG
		1.5.2.	installing changing desks and info signs	31.12.2022.	The head of technical department	EUR 0.5k. (LIOS budget, f.y. 2022)
		1.5.3.	enforcing flexible working time in internal labor regulation	31.12.2022.	The deputy director for finance, administration and law	PMs
		1.6.	Enhancing safety during pregnancy, enforcement in internal labor regulation	31.12.2022.	GEG The deputy director for finance, administration and law	PMs
		1.7.	Media information about women in science in Latvia, with media support: Forbes Latvia, TVNET, DELFI (https://forbesbaltics.com/lv/reitings/raksts/30-lidz-30)	31.12.2022.	GEG LIOS PR unit	PMs of GEG
		1.8.	Organize a panel discussion, for example, "Women in science and research - can we reconcile professional career and personal life"	31.12.2022.	GEG	PMs of GEG
		1.9.	Feasibility study on initiative for children travel fund (Employees having children between 0 and 3 years can apply for a travel fund (up to 1500 Euros per application) to pay the	31.12.2022.	GEG	PMs of GEG

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No. of Objective	Objective	Task No.	Tasks	Deadline/time schedule	Responsible person/s	Resource
			expenses of the child and one extra person to accompany them for attending conferences or workshops.)			
2.	Eliminate the wage gap for top scientific and science related positions	2.1.	Training on gender equality, diversity and unconscious bias aimed at all managers and decision makers	31.12.2022.	GEG	EUR 5k. (LIOS budget, f.y. 2022)
		2.2.	Early alarm system indicating at the project application phase (and salary submission) that the intended hourly rate is below the average	31.12.2022.	The head of Project department The head of HR department	PMs
		2.3.	Encourage women to apply for positions in LIOS Scientific council	31.12.2022.	GEG	PMs of GEG
		2.4.	Feasibility study on formalized criteria for reimbursement system.	31.12.2022.	GEG	PMs of GEG