Perception of Gender Bias on Technical Faculties: A Comparative Case of Two Faculties in Croatia and Slovakia

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Abstract. In this article, the authors of the paper share information on the perception of gender bias on the Faculty of Electrical Engineering and Computing (FER) of University of Zagreb (UNIZG), Croatia, and the Faculty of Materials Science and Technology (MTF) of the Slovak University of Technology (STU) in Bratislava, Slovakia. As part of the internal assessment for the CALIPER project: Linking Research and Innovation for Gender Equality, UNIZG-FER and MTF STU conducted a survey in May and June 2020. The survey was anonymous and included both closed and open-ended questions, addressing existing gender biases and inequalities of organizations. The covered topics included recruitment and promotion processes, work life balance, promoting mobility, wellbeing, gender-sensitive communication, and gender equality structures and procedures. Both institutions are in the process of establishing their first gender equality plan.

Keywords: Perception of Gender Bias, Gender Equality Plan, Gender Bias in Research and Innovation, Survey on Gender Bias, Gender Equality in Technical Faculty, Work Discrimination, Gender Bias in Academia, Women in STEM.

1 Introduction

1.1 Gender inequalities in the research and innovation

Gender inequalities are still very much present in research and innovation in all countries of the European Union [8], as well as in other countries in the world [12-16]. The inequalities are even more present in the STEM field, where women hold only 15% of grade A academic positions in the EU [8]. The numbers are only slightly more encouraging on doctoral level. For example, in ICT and engineering, 21% and 29% of doctoral graduates are female. Reports state higher proportion of women researchers than men who are working part-time and under contract arrangements considered as 'precarious employment'. At the same time, the joint European workplace offers more jobs in this area than there are qualified experts.

In order to tackle this issue in the European Research Area (ERA), three objectives were established in relation to gender equality in research:

1. removing barriers to the recruitment, retention and career progression of female researchers;

2. addressing gender imbalances in decision making processes;

3. integrating the gender dimension in research and innovation content.

To achieve these objectives, universities and research organizations are encouraged to promote gender equality. UNIZG-FER and MTF STU are in the process of establishing gender equality via participation in the H2020 project CALIPER: Linking Research and Innovation for Gender Equality.

1.2 Faculty of Electrical Engineering and Computing

The Faculty of Electrical Engineering and Computing of University of Zagreb (UNIZG-FER) is the largest technical faculty and leading educational and R&D institution in the fields of electrical engineering, information and communication technology and computing in the Republic of Croatia. The Faculty is organized into 12 departments, where all represent the focal points of education, research and development in various fields. The present research and educational staff comprise of more than 190 professors and 202 teaching and research assistants, around 3300 students at the undergraduate and graduate level, and around 300 PhD students.

As do all countries of the EU, Croatia also has a lack of women among STEM researchers in the public and private sector. According to the Croatian Bureau of Statistics [7], STEM researchers in 2018 were 60.07% men and 39.93% women. The share of precarious contracts on the overall employment positions in Higher Education in Croatia in the year 2018 is 3.97% for female researchers and 4.92% for male researchers [8].

At present, there are no mechanisms in place to promote gender equality in Higher Education, but there were some attempts. ERA Implementation Plan for Croatia 2016

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- 2020 [9] states gender equality and gender mainstreaming policy in research as one of their top priorities.

Recruitment and promotion processes in the R&D sector are framed with the legislation that promotes equality and non-discrimination in employment. The Anti-discrimination Act [10] is in force in Croatia since 2009, and it follows the legislation of the European Union. The Labor Act of Croatia [4] contains Article 4 called Protection of Pregnant Employees, Parents and Adoptive Parents. National Anti-discrimination Plan for 2017 – 2022 [11] includes, as one of the main priorities, the measure of promoting equal opportunities in the area of labor and employment.

1.3 Faculty of Materials Science and Technology

The Faculty of Materials Science and Technology based in Trnava, the Slovak University of Technology, (MTF STU) is the place where the first University Scientific Park was founded in Slovakia, and is also established to be the most successful faculty in obtaining funding from grant schemes in Slovakia, too. The faculty consists of 6 Institutes, the present research and education staff consists of 41 professors, 147 teaching staff, 56 researchers and the faculty is attended by 1688 students on all three levels of study. The total number includes 385 female students and 98 PhD students, where 30% is composed of females [17].

Within teaching positions, women are actually in the majority; 55% of senior lecturers are women. On the other hand, the first female professor was appointed at MTF STU in 2019 [17]. As the process of obtaining the professor title is long, it will take years to reach equal number of male and female professors at MTF STU.

The process of recruitment and promotion of employees at MTF STU is regulated by law, which helps to prevent gender inequality.

2 Survey results

2.1 Survey profile

As part of the internal assessment for the CALIPER project: Linking Research and Innovation for Gender Equality, UNIZG-FER and MTF STU conducted a survey in May and June 2020. The survey was anonymous and included both closed and open-ended questions on addressing existing gender biases and inequalities of the organization.

Table 1. Participants in the survey

Participants	UNIZG – FER	MTF STU
Total	108	77
Women	52	45

Men	55	30	
Prefer not to say	1	2	

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At UNIZG-FER 48.1%, and at MTF STU 58.4%, of the participants in the survey were women (Table 1).

Age	UNIZG – FER	MTF STU
18-24	4	0
25-34	57	11
35-44	29	29
45-54	13	24
55-64	4	9
Over 64	1	4

Table 2. Age of the participants

Institution's employees/staff of different offices and positions/levels were involved (Table 3).

Employees	UNIZG-FER	MTF STU	
Researchers (non-tenured)	55	12	
Senior PhD lecturer	0	20	
Researchers (tenured)	15	2	
Associate Professors	11	14	
Full Professors	9	5	
Heads of department	3	6	
Staff of administrative offices	14	17	
Other stakeholders	1	1	

Table 3. Staff positions and levels

2.2 Recruitment and promotion processes

UNIZG-FER implements its internal rules of operation based on Internal Labor Regulations of Faculty of Electrical Engineering and Computing [1], Internal Labor Regulations of the University of Zagreb [2], Collective Agreement for Science and Higher Education for Croatia [3] and Labor Act of Croatia [4]. The documents state that direct or indirect discrimination in the field of work and working conditions, including selection criteria and conditions in employment, promotion, in accordance with special laws, is prohibited.

The rules for recruitment and promotion at MTF STU are specified within the following documents: Labor Code [18], Act on Higher Education Institutions [19], Code of Ethics for STU employees in Bratislava [20], internal regulation no. 2/2014 on Principles of the selection procedure for filling the positions of university teachers, researchers, positions of professors and associate professors, and positions of senior employees at the Slovak University of Technology in Bratislava (Principles of committee procedure at STU) [21, 17].

According to the obtained responses, 51,9% participants at UNIZG-FER and 28.4% at MTF STU perceive that their institutions are implementing gender sensitive protocols/policies for recruitment and hiring (Table 4). A fairly large number of participants, 30.2% at UNIZG-FER and 41.9% at MTF STU, expressed that protocols in place are not gender sensitive. Finally, 13.7% at UNIZG-FER and 22.9% at MTF STU did not know the answer. The remaining answers were: "I never noticed that gender is important when hiring", "I don't understand the question," and "There is no kind of discrimination – gender, age, nationality, invalidity".

When comparing the two institutions, a higher number of participants perceive that UNIZG-FER adopts gender sensitive protocols on a higher level than they believe MTF STU does.

Answers	UNIZ-FER	MTF STU
Yes	51.9%	28.4%
No	30.2%	41.9%
I don't know	13.7%	22.9%
Other	3.6%	

 Table 4. Do you think the institution you work for adopts gender sensitive protocols/policies for recruitment and hiring?

The following options were given to candidates when asked several questions about feeling discriminated when applying for position or a promotion:

- Yes, I have experienced a gender bias due to being a woman/man or identifying as such.
- No, I have not experienced any gender biases due to being a woman/man or identifying as such.
- No, I have not experienced biases of other types.
- Yes, I have experienced biases of other types (ethnicity/age/gender identity, disability, other).

Most participants from UNIZG-FER and MTF STU report not having experienced gender biases or other kinds of discrimination (for ethnicity/age/gender identity, disability, other) as a candidate, when applying for a position within an institution, in their last application. Only 4.7% had felt a gender bias and 1.8% had experienced other types of biases at UNIZG-FER. At MTF STU, only 2.7% participants reported having experienced other type of biases (Table 5).

Table 5. Have you experienced a gender bias or other kinds of discrimination (for ethnicity/age/gender identity, disability, other) as a candidate, when applying for a position within your institution, in your last application?

Answers	UNIZ-FER	MTF STU
Yes, gender-based discrimination	4.7%	0%
No, gender-based bias discrimination	36.4%	85.5%
Yes, other types of discrimination	1.8%	2.6%
No discrimination	70.1%	57.9%

Most of the participants also reported not having experienced a gender bias or other kinds of discrimination as a candidate, when applying for a promotion within their institution, in their last application (Table 6).

Table 6. Have you experienced a gender bias or other kinds of discrimination as a candidate, when applying for a promotion within your institution, in your last application?

Answers	UNIZ-FER	MTF STU
Yes, gender-based discrimination	4.7%	1.3%
No, gender-based discrimination	0%	82.9%
Yes, other types of discrimination	4.7%	2.6%
No discrimination	93.5%	56.6%

The survey also posed questions about gender biases or other kinds of discrimination as a candidate, when applying for a position or a promotion throughout their entire career. When applying for a position throughout their entire career, most of the participants had never felt a gender bias (36.1% at UNIZG-FER and 71.4% at MTF STU) or other kinds of discrimination (54.6% at UNIZG-FER and 48.1% at MTF STU). However, the percentage of those who did feel discriminated is higher: a gender bias was experienced by 12% participants at UNIZ-FER and 16.9% at MTF STU; and other type of discrimination by 7.4% and 5.2% participants respectively (Table 7).

Table 7. Have you experienced a gender bias or other kinds of discrimination, as a candidate, when applying for a position throughout your career?

Answers	UNIZ-FER	MTF STU
Yes, gender bias	12%	16.9%
No, gender bias	36.1%	71.4%
Yes, other types of discrimination	7.4%	5.2%
No discrimination	54.6%	48.1%

When asked about feeling discriminated when applying for a promotion throughout their entire career, the same pattern in answers were noticed (Table 8).

 Table 8. Have you experienced a gender bias or other kinds of discrimination as a candidate, when applying for a promotion in your whole career?

Answers	UNIZ-FER	MTF STU
Yes, gender-based discrimination	13.1%	17.3%
No, gender-based bias discrimination	23.4%	64%
Yes, other types of discrimination	10.3%	12%
No discrimination	63.6%	45.3%

Based on the answers given in the survey, the authors concluded that most of the participants had not felt discriminated against when applying or being promoted for their last position at MTF STU or UNIZG-FER. However, this number significantly decreases when asked about their entire career. The authors of the paper can conclude that the situation concerning discrimination when being hired or promoted has significantly improved in the recent time, and that most of the participants did not feel discriminated when being admitted to their last position at MTF STU and UNIZG-FER.

In Croatia, the promotion/tenure criteria for the scientific staff are defined by law, and they are the same for all public universities [5] and [6].

At MTF STU, on the basis of qualification growth in accordance with the Act on Higher Education Institutions [19], a university teacher/scientific employee can fill a higher position on the basis of which, in accordance with the Remuneration Act [22], can be in a higher tariff class. Another way is that the employee may fill the leading position on the basis of a tender or he may be appointed to the position by the Dean of the faculty, on the basis of which he/she is included in a higher tariff class in accordance with the Remuneration Act [17]. For other non-academic functions, the school is guided by the knowledge, skills and abilities of the staff [17]. Employees at MTF STU are regularly offered training organized by the company PROEKO (Institute of Education) Bratislava, where they can gain education. However, such training does not ensure immediate promotion of the employee [17].

The survey included questions about the perception weather the institution adopts transparent and flexible promotion/tenure criteria. Most of the participants think that promotion/tenure criteria are transparent and flexible, 70.6% at UNIZ-FER and 52.2% at MTF STU (Table 9).

 Table 9. Do you think the institution you work for adopts transparent and flexible promotion/tenure criteria?

Answers	UNIZ-FER	MTF STU
Yes	70.6%	52.2%
No	23.5%	13.1%
Partly	2%	0%

I don't know	4%	18.4%

Although the number of participants responding that the criteria for advancement is transparent and flexible is high, there is room for improving transparency and informing of the employees.

2.3 Work life balance

Work life balance is a widespread challenge for the working force of the 21st century. Therefore, it is not surprising that many participants at UNIZG-FER and MTF STU report feeling tension between the work that is demanded by them and their family roles. (Table 10).

 Table 10. Have you ever experienced, or do you still experience, any tensions between the work that is demanded to you and your family roles?

Answers	UNIZ-FER	MTF STU
Yes, often	18.5%	27%
Yes, sometimes	55.6%	35%
No	26.9%	36.8%

All legal options to facilitate work life balance for employees in Croatia are listed in The Labor Act of Croatia [4]. At UNIZG-FER all these measures are available to employees.

In Slovakia, legal options to facilitate work life balance are listed in the Labor Code [18], Code of Ethics [19] and Collective Agreement [23].

Currently, as elsewhere in the world, the balance between private and professional life is disturbed by the COVID-19 virus, which also affects the work done at MTF STU. Under normal circumstances, MTF STU provides a swimming pool and gym areas for employees and students. Likewise, the employees have the opportunity to regularly enjoy the organization of sports activities such as football and volleyball.

The participants were asked several questions on their perception on several measures to improve their work-life balance. The following options were given to participants for evaluation:

- 1. Teleworking/remote working
- 2. Part-time posts
- 3. Measures to support return (after leave)
- 4. Reduction and/or flexible hours for childcare
- 5. Reduction and/or flexible hours for other family dependents' care (elderly, other)
- 6. Reduction and/or flexible hours for other reasons (e.g. for final exams, measures to support victims of gender-based violence)

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- 7. Job sharing
- 8. Leave (maternity, paternity, adoption, parental/family)
- 9. Sabbatical leave

In Slovakia, sabbatical leave is not supported from the point of view of legislation, and moreover, the employer does not provide this possibility either. For this reason, this option was avoided in the questionnaire. The answers are given in the charts of Fig. 1 - Fig. 6. There is a high number of participants not knowing if some measures are available or not.



Fig. 1. UNIZG-FER Are you aware whether any of the following measures to improve worklife balance are available in your institution?



Fig. 2. MTF STU Are you aware whether any of the following measures to improve work-life balance are available in your institution?

Most participants report not ever having used the proposed measures, except for remote working (Fig. 3 and Fig. 4).



Fig. 3. UZG-FER If you are aware that the measures are available, do you use any of them or have you done so in the past?



Fig. 4. MTF STU If you are aware that the measures are available, do you use any of them or have you done so in the past?

Even though most of the participant are not well informed about the measures and have not used them, they have positive attitude towards their effect on their work-life balance (Fig. 5 and Fig. 6). The second most dominant answer for UNIZ-FER is that these measures have no effect, while for MTF STU it "depends".



Fig. 5. UNIZG-FER How do you rate them in terms of effects on your work-life balance?



Fig. 6. MTF STU How do you rate them in terms of effects on your work-life balance?

The participants were asked if they knew whether their institution analyzed the needs of researchers / staff (e.g. through focus groups, surveys, etc.). Most answer that their institution does not have such mechanisms in place: 88.8% at UNIZ-FER and 74% at MTF STU (Table 11).

 Table 11. Are you aware if your institution analyses researchers/staff needs (e.g. through focus groups, survey etc.)?

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Answers	UNIZ-FER	MTF STU
No, I am not aware	88.8%	74%
Yes, I am aware and it does so	11.2%	7.7%
Yes, I am aware and it does not	0%	5.2%
Other	0%	6.4%

2.4 Promoting mobility

The participants were asked whether the institution facilitates in-/out-going mobility for female researchers. The dominant answer is the positive one: 66.4% at UNIG-FER and 57.9% at MTF STU (Table 12).

 Table 12. In your opinion, does your institution facilitate in-/out-going research mobility for women researchers?

Answers	UNIZ-FER	MTF STU
Yes	66.4%	57.9%
Yes, partly	0%	17.1%
No	12.1%	3.9%
I don't know	7.5%	21.1%

From those who answered that the institution facilitates mobility, 64.5% and 66.7%, respectively, say that institution facilitates ingoing international mobility, 70% and 78.3% outgoing international mobility, 23.7% and 24.6% ingoing national mobility, 24.7% and 29% outgoing national mobility. Finally, 24.7% and 20.3% did not know the answer (Table 13).

Table 13. If yes, which kind of mobility is facilitated?

Answers	UNIZ-FER	MTF STU
Ingoing international mobility	64.5%	66.7%
Outgoing international mobility	70%	78.3%
Ingoing national mobility	23.7%	24.6%
Outgoing national mobility	24.7%	29%
I don't know	24.7%	20.3%

At UNIZG-FER, the participants answered that the services that institution provides are financial support (29.5%), administrative support, and documentation (57.1%). At MTF STU, the numbers are much lower: financial support (10.3%), administrative support, and documentation (3.11%). Most of the participants did not know the answer: 49.1% and 61%, respectively.

Table 14. Which services are provided by your institution for promoting mobility?

Answers	UNIZ-FER	MTF STU
Financial support	29.5%	10.3%
Administrative support and documentation	57.1%	3.11%
Support for a childcare	1.9%	0%
Support for a family numbers care	1%	0%
I don't know	49.1%	61%

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2.5 Wellbeing

When asked about the climate in their work environment, most of employees perceived the climate in the institution as positive (72% at UNIZ-FER and 54.5% at MTF STU). Approximately one quarter found it neutral (24.3% at UNIZ-FER and 28.6% at MTF STU), and small share perceived the climate to be negative (3.7% at UNIZ-FER and 13% at MTF STU), (Table 15).

Table 15. How would you define the climate in your work environment?

Answers	UNIZ-FER	MTF STU
Positive	72%	54.5%
Neutral climate	24.3%	28.6%
Negative	3.7%	13%

Overall, most of the participants are satisfied or partly satisfied with their job (Table 16). Other answers include "It depends on the working atmosphere", "Some things are frustrating, but this does not have anything to do with gender", "The job is good, but there is too much of it".

Table 16. Generally speaking, are you satisfied with your job?

Answers	UNIZ-FER	MTF STU
Satisfied	87%	57.1%
Partly satisfied	0%	40.3%
Not satisfied	9.3%	0%
Other	3.7%	2.6%

2.6 Gender-sensitive communication

When speaking about adaptation of gender-sensitive communication policies by institutions, the numbers differ. So far, 25% of respondents think that UNIZG-FER implements the policy of gender sensitive communication, 38.5% think the opposite, and the remaining submitted answers corresponding to "I do not know". A few people stated they did not know what gender sensitive communication is. At MTF STU, only 2.6% participants thought their institution implements such policy, 42.9% did not, and 48.1% did not know at all (Table 17).

Table 17. Does your organization adopt gender-sensitive communication policies?

Answers	UNIZ-FER	MTF STU
Yes	25%	2.6%

No	38.5%	42.9%
I don't know / other	36.5%	48.1%

Only 9.3% participants at UNIZ-FER and 7.9% at MTF STU believe that their institution promotes or partly promotes awareness-raising campaigns aimed at fighting stereotypes (Table 17). Furthermore, 28% and 40.2% participants, respectively, do not think such promotion exists. Most of participants are not aware if such campaigns exist at their institutions.

 Table 18. Does your institution promote awareness-raising campaigns aimed at fighting stereotypes?

Answers	UNIZ-FER	MTF STU
Yes	9.3%	2.6%
Yes, partly	0%	5.3%
No	28%	40.2%
I don't know	62.6%	53.9%

2.7 Gender equality structures and procedures

UNIZG-FER and MTF STU do not have gender equality plans put in place. The institutions plan to establish it via participation in the H2020 project CALIPER: Linking Research and Innovation for Gender Equality.

When asked about gender equality plans at their institutions, the answers were as indicated below. Most of the participants are not aware if gender equality plan is established (78.8% at UNIZ-FER and at MTF STU 70.1%), Table 19.

Table 19. Are you aware of whether a gender equality plan is established at your institution?

Answers	UNIZ-FER	MTF STU
Yes, I am aware that this is established and am well informed about it	1.9%	0%
Yes, I am aware that this is established but I am not very well informed about it	10,2%	2.5%
Yes, I am aware that this is established, but I have no information about it	0%	1.2%
No, I am aware that this is not established	9.3%	26%
I do not know whether this is established	78.7%	70.1%

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3 Conclusion

The presented paper shares information on the perception of gender biases at two universities within the STEM field of study in two European countries – Croatia and Slovakia. UNIZG-FER and MTF STU conducted a survey within the CALIPER project: Linking Research and Innovation for Gender Equality in May and June 2020. The survey searched answers to questions addressing existing gender biases and inequalities of the organizations. The findings in individual topics can be summarized as follows:

- Recruitment and promotion processes: a higher number of participants perceive that UNIZG-FER adopts gender sensitive protocols on a higher level than they believe MTF STU does. Most participants from both UNIZG-FER and MTF STU report not having experienced a gender bias or other kinds of discrimination (for ethnicity/age/gender identity, disability, other), neither as a candidate when applying for a position within their institution, nor as an employee when applying for a promotion within their institution. Decreasing numbers of those who did experience the situation concerning discrimination when being hired or promoted show an improvement in the recent years. The process and criteria for hiring and promotion of university employees are regulated by law in both countries, which helps to obtain equality and transparency in the hiring and promotion processes. According to results of the survey, there is still room for improvement.
- Work life balance: many participants at UNIZG-FER and MTF STU report feeling tension between the work that is demanded by them and their family roles. Even though most of the participants were not informed well about the measures to improve work life balance or have not yet used them, they have positive attitude towards their effect on the work-life balance. Most participants think that the institutions do not analyze the needs of their employees. Therefore, awareness about worklife balance measures should be more notable among the employees, and universities should be focused on the needs of their employees and promote them more.
- Promoting mobility: most respondents from both universities think that their institution facilitates in/outgoing mobility for female researchers. Most respondents were aware of administrative support, documentation support, and financial support of the universities. Other services are either not offered or not promoted among the respondents.
- Wellbeing: most of employees perceive the climate in the institution as positive. Overall, most of the participants are satisfied or partly satisfied with their job. There is still space for improvement. The employees should be able to express their dissatisfaction without the fear of being punished in any way.
- Gender-sensitive communication: a few people did not know what gender sensitive communication was and only 2.6% of MTF STU respondents think their institution applies such policies. On the other hand, 25% of UNIZ-FER respondents think their organization adopts gender sensitive communication policies. However, even though the difference about the awareness about gender-sensitive communication is significant, only 9.3% participants at UNIZ-FER and 7.9% at MTF STU believe that their institution promotes or partly promotes awareness-raising campaigns aimed at

fighting gender stereotypes. Most of participants were not aware if such campaigns existed at their institutions.

 Gender equality structures and procedures: Neither UNIZG-FER nor MTF STU have a gender equality plan in place. Most of the participants are not aware if gender equality plan was established. The institutions plan to establish it via participation in the H2020 project CALIPER: Linking Research and Innovation for Gender Equality.

As both institutions are in the process of establishing their first gender equality plan, suggestions from the findings of the presented paper can be considered.

In conclusion, ways for open discussion, as well as for anonymous complaints, should be supported within university faculties, so that the leaders are informed about the level of gender equality within the work environment, work-life balance and the wellbeing of their employees. To support mobility of female researchers, universities should raise awareness among people about the offered services and support, as well as about the concept and implementation of gender sensitive communication.

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References

- 1. Faculty of Electrical Engineering and Computing: Internal Labor Regulations. (2015)
- 2. University of Zagreb: Internal Labor Regulations. (2005)
- 3. Collective Agreement for Science and Higher Education, Official Gazette of Republic of Croatia no. 9, (2019)
- 4. Labor Act of Croatia, Official Gazette of Republic of Croatia, no. 14 (2009)
- Law on Scientific Activity and Higher Education, Official Gazette of Republic of Croatia, no. 94 (2013)
- Rector's Assembly, Decision on the necessary conditions for the evaluation of teaching and scientific-professional activities in the process of election to scientific-teaching titles, Official Gazette of Republic of Croatia, no. 122 (2017)
- 7. Croatian Bureau of Statistics: Research and Development 2018, SR 1667, (2020)
- 8. European Commission: She Figures 2018. (2019)
- 9. European Commission: ERA Progress Report 2018 country profile Croatia. (2019)
- 10. Anti-discrimination Act, Official Gazette, no. 85. (2009)
- Office for Human Rights and Minority Rights: National Anti-discrimination Plan 2017 2022. (2017)
- Latimer, Jane; Cerise, Somali; Ovseiko, Pavel V; Rathborne, Jill M; Billiards, Saraid S; El-Adhami, Wafa. Australia's strategy to achieve gender equality in STEM. *The Lancet*, Volume 393, Issue 10171, 524 - 526 DOI10.1016/s0140-6736(18)32109-3 https://www.thelancet.com/journals/lancet/article/PIIS0140-6736(18)32109-3/fulltext
- Hilary P.M. Winchester & Lynette Browning (2015) Gender equality in academia: a critical reflection, Journal of Higher Education Policy and Management, 37:3, 269-

281, DOI: 10.1080/1360080X.2015.1034427 https://www.tandfonline.com/doi/full/10 .1080/1360080X.2015.1034427

- 14. Chung, H., van der Lippe, T. Flexible Working, Work–Life Balance, and Gender Equality: Introduction. *Soc Indic Res* **151**, 365–381 (2020). https://doi.org/10.1007/s11205-018-2025-x https://link.springer.com/article/10.1007/s11205-018-2025-x
- 15. Smith, Angela. 2020. Gender Equality in Changing Times. Multidisciplinary Reflections on Struggles and Progress. Cham: Springer Nature Switzerland AG. ISBN 978-3-030-26570-0. DOI: 10.1007/978-3-030-26570-0 https://books.google.sk/books?id=_z38DwAAQBAJ &printsec=frontcover&dq=gender+equality&hl=en&sa=X&ved=2ahUKEwj8vsT_147tAh WVDWMBHXKBC2E4ChDoATAFegQICBAC#v=onepage&q=gender%20equality&f=f alse
- 16. Conley, Hazel and Page, Margaret. 2014. Gender Equality in Public Services: Chasing the Dream. London: Routledge. 148pp., ISBN: 978-0-203-10177-3 https://books.google.sk /books?id=rSRWBQAAQBAJ&pg=PT49&dq=gender+equality&hl=en&sa=X&ved=2ah UKEwi5gbbU3I7tAhVDAWMBHWypB7w4HhDoATAHegQICRAC#v=onepage&q=gender%20equality&f=false
- 17. MTF STU: Internal documents. (2020)
- 18. Labour Code (Act No. 311/2001 coll., as amended)
- Act no. 131/2002 Coll. on Higher Education Institutions and on Amendments to Certain Acts
- 20. Code of Ethics for STU employees in Bratislava
- 21. Internal regulation no. 2/2014 o Principles of the selection procedure for filling the positions of university teachers, researchers, positions of professors and associate professors and positions of senior employees at the Slovak University of Technology in Bratislava
- 22. Act No. 553/2003 Coll. Act on Remuneration of Certain Employees in the Performance of Work in the Public Interest and on Amendments to Certain Acts, hereinafter referred to as the Remuneration Act.
- 23. Collective Agreement STU. (2020)