

## Promoting Gender Diversity Research in Slovakia within 7<sup>th</sup> Framework Programme

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### Introduction

The contribution introduces EU strategies and support activities promoting gender issues. The Seventh Framework Programme (FP7) with acronym “DIVERSITY” is discussed. The Slovak research and gender perspective is analysed and summarized.

### EU strategies

The EU has long recognised the need to promote gender equality in decision-making and has encouraged the process in various ways. In 1996, the EU's Council of Ministers made a formal recommendation to Member States to introduce legislative, regulatory and incentive measures to promote gender balanced participation in decision-making. The European Commission's action in this field includes increasing awareness on the issue among all stakeholders, the analysis of trends and dissemination of information, the promotion of networking, the exchange of good practices and data collection [1]

EU programmes support activities to achieve gender equality in Europe. The European Union believes that it is worth to support women's entrepreneurial talents to boost European prosperity. The EU creates a legislative framework for maintaining rules for equality and what is clearly visible in the regulations and challenges (e.g. Employment Framework Regulation Guideline). The EU has also set up a network of women in decision-making to accelerate women's access to power, and is establishing an Institute for Gender Equality.

At the same time the European Commission created the database with information about gender equality in decision-making positions to support statistical data and monitor the progress towards balanced situation. On the basis of these data and other scientific verifications it is possible to analyse the actual trends.

The European Commission launched **She Figures 2009** as the third publication (following She Figures 2003 and She Figures 2006) of a key set of indicators that are

essential to correctly comprehend the situation of women in science and research. It is a collection of available data related to the situation of women in science and research. This data collection has evolved from the willingness to pay attention to the gender dimension of research and to monitor gender equality in the field where strong gender imbalances are evident. The cross-national comparisons could allow to increase knowledge about the gender issue available at the EU level.

However, She Figures 2009 proves that the proportion of female researches as actually growing faster than that of men (over the period 2002-2006, +6.3% for women and +3.7% for men). Also, the share of women among scientists and engineers has grown by 6.2%, compared to 3.7% for men over the same period. Moreover the Glass Ceiling Index is generally decreasing everywhere [2].

The Glass Ceiling Index is an indicator that measures the relative chance for women compared to men of reaching a top position.

The under-representation of women on boards and at the head of higher-education institutions reflects their difficulty to influence the design and implementation of the research agenda. The ratio of women on boards is below 30% in 20 European countries. Indeed, the situation is better in Sweden, Norway and Finland.

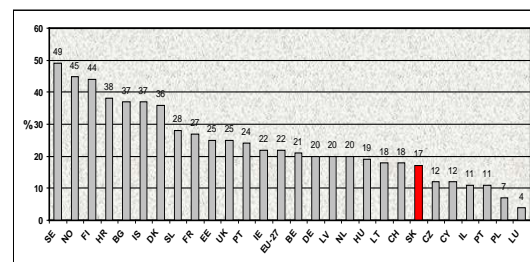


Fig. 1. Proportion of women on boards, 2007 [2]

From the Fig. 1 it is evident, that the situation in Slovakia is much worse (21<sup>st</sup> place from EU-27) in

comparison not only with countries like Sweden, Norway, but also in comparison with European average.

## 7<sup>th</sup> Framework Programme Project Diversity

The Project “Improving the Gender Diversity Management in Materials Research Institution“ (acronym DIVERSITY) is a support action - type project funded by the European Commission within the 7<sup>th</sup> FP for research and technological development and addresses to the Capacities programme, part 5 Science in Society, activity 5.2.1. Gender and Research, thematic area 5.2.1.1. Strengthening the role of women in scientific research. The project has started on the 1st of January 2009 and will last 36 months.

DIVERSITY consortium is a multi-cultural team consisting of 13 partners from 10 countries:

**Table 1.** Project consortium

No	Name of institution	Country
1	Leibniz-Institut für Festkörper- und Werkstoffforschung Dresden	Germany
2	Wirtschaftsuniversität Wien	Austria
3	Centre National de la Recherche Scientifique	France
4	Georg-August-Universität Göttingen	Germany
5	Universita Autònoma Barcelona	Spain
6	Jozef Stefan Institute	Slovenia
7	Institut für Nanotechnologie, Forschungszentrum Karlsruhe	Germany
8	Chalmers University of Technology	Sweden
9	Università di Torino	Italy
10	University of Oxford	UK
11	Slovak University of Technology	Slovakia
12	University Ioannina	Greece
13	Sächsisches Staatsministerium für Wissenschaft und Kunst	Germany

The project represents a pilot initiative of networking policy makers in science and research, human resources experts, sociologists, women scientists networks and experienced scientists (men and women) to boost gender equality in materials research.

DIVERSITY is dealing with problem of under-representation of women in decision-making by fostering the change in institutional culture and changing the attitudes with regard to gender diversity in materials research organisations.

*The three strategies* have been developed, which have not been addressed before in this combination.

1. Improving the gender diversity in decision-making by strengthening the role of women at the highest level of research.
2. Involving the men decision- makers and emphasizing their role in gender equality&diversity issues.
3. Acting organised/concerted in a traditionally male-dominated scientific field: materials research [3].

### Project objectives

Improvement of the gender diversity management in materials research organisations by:

- **strengthening** the role of women scientists in decision-making;
- **supporting** the materials research institutions to create their individual profile on the basis given by the principles of the European Charter for Researchers and the Code of Conduct for their Recruitment;
- **enhancing** the solidarity and involvement of men decision-makers in promoting gender equality in scientific decision making;
- **raising** awareness within the scientific community, in the general public and among policy makers about gender and research.

**Reasons** why research institutions should aim to improved gender diversity at all levels of research:

- ethical arguments (‘democracy and justice’);
- demographic trends;
- economic/efficiency reasons.

The project contains 6 work packages (WP) logically divided into 3 stages. **Stage 1** (WP1,WP2) after establishing the conceptual framework of the project and dissemination strategies, the focus will be on benchmarking and monitoring the gender equality&diversity measures in participating research institutions in order to identify the best practise examples as well as the reasons behind low participations of women in decision making process. **Stage 2** (WP3, WP4) comprises support activities aiming to encourage the materials research institutions to create their individual profile on the basis of the principles of the Charter&Code and to provide guidelines and recommendations for improving the transparency in recruitment, promotion and nomination in order to increase the proportion of women at the highest levels of scientific research. **Stage 3** (WP5, WP6) is dedicated to an efficient awareness raising campaign within the scientific community, in the general public and among policy makers about gender and research.

*DIVERSITY activities.*

- Local/institutional workshops on the methodologies of the implementation of the European Charter of the Researchers and the Code of Conduct for their Recruitment.
- Networking actions.
- Satellite meetings/events to increase the level of awareness of the Charter & Code.
- European workshop “How to promote more women in leadership positions”.
- Round-table and colloquia on “better leadership” organized at local level.
- Final workshop on gender diversity in materials research institutions European Forum “How to improve the gender diversity management in scientific research”.
- Dissemination activities.

### Slovak gender research

In 2007 the Government Board of the Slovak Republic for gender equality (43 members) was created by the decree of the Slovak Republic government. The first specific results of its existence are the documents National

strategy for the years 2009-2013 and The Report on the state of gender equality in Slovakia. The following facts are visible from the above mentioned report: According to the official data: the number of women in decision-making management positions is as follows- 1 female rector (from the rectors of 20 public universities), 2 women in the Presidium of the Slovak Academy of Sciences (from 16 members), and 3 women from 22 members in the Scientific Board of the Slovak Academy of Sciences [4].

The institutional structure of the Slovak research system is divided into four categories: the universities (mainly basic research), the Slovak Academy of Sciences (basic and applied research), governmental research institutes and private research institutes (branch and commercial research organisations) [5].

So far, a gender perspective is missing in the whole process of the Slovak research system. Slovakia has adopted several laws that should guarantee the equal opportunities for men and women (particularly the Labour Code and the Anti-Discriminatory Law), however, their enforcement has been inefficient and formal. Among about 70 women's organisations there are none devoted to the problem of women in research decision making.

### The Faculty of Materials Science and Technology (MTF) as a part of Slovak University of Technology

Slovak University of Technology in Bratislava (STU) is a modern educational and scientific institution. Since its foundation in the year 1937 more than 115 000 students have graduated. In average, 19 000 students study at the STU every year. At present, the STU consists of seven faculties. In the area of scientific and research activities the STU successfully joins the European Union programs.

From the total amount of MTF employees are 46 % women (the ratio is similar in other faculties of STU) the number of women in scientific board (basic body of academic self-government) and in executive boards within the whole STU as follows

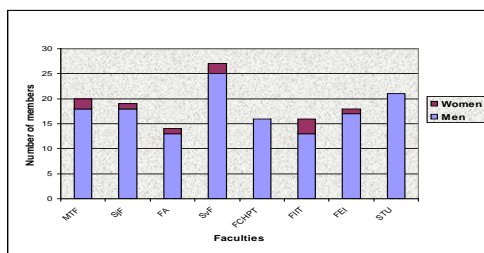


Fig. 2. The number of women on scientific boards from 7 faculties and the university (STU)

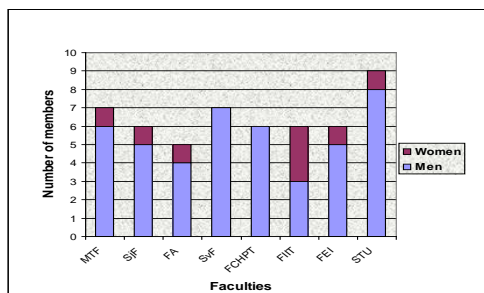


Fig. 3. The number of women on executive boards from 7 faculties and the university (STU)

The similar results are evident from the Fig. 4, 5 in Comenius University (UK) in Bratislava (this university is not technically oriented as STU):

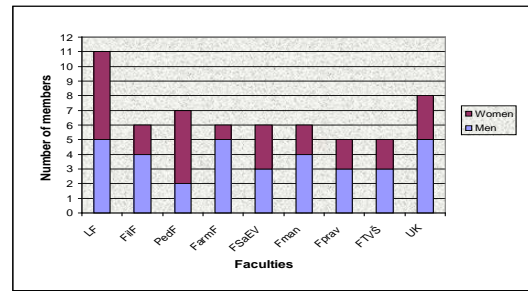


Fig. 4. The number of women on executive boards from faculties and the university (UK)

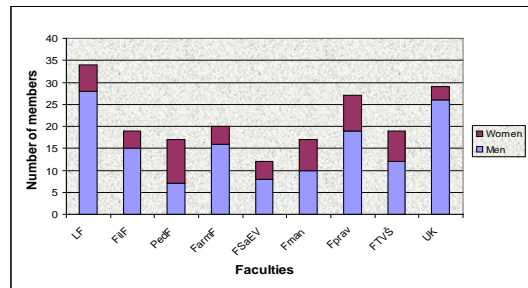


Fig. 5. The number of women on scientific boards from faculties and the university (UK)

So far the above mentioned facts are also the reason why MTF STU accepted the challenging offer to be implemented into the 7FP project consortium.

### Promoting DIVERSITY at MTF STU

The Faculty of Materials Science and Technology in Trnava from the Slovak University of Technology was invited by the main project coordinator to participate in the above mentioned project on the basis of long lasting cooperation with the research institute Leibniz Institute for Solid State and Materials Research Dresden, Germany (IFW Dresden). MTF STU participates in four from 6 work packages (WP 2, WP3, WP4, WP6): WP2- benchmarking and monitoring the gender equality&diversity, WP3- The European Charter and Code as a label for gender diversity enhancement in scientific research, WP4- Guidelines for improving transparency in recruitment, promotion and nomination, WP6- Dissemination& Raising awareness.

### Future planned dissemination activities

Satellite event – Joint International IGIP (International Society for Engineering Education)-SEFI (European Society for Engineering Education) Annual Conference 2010- “Diversity Unifies - Diversity in Engineering Education”.

To disseminate the results about gender diversity in the form of scientific articles.

Participation in trainings like (“From gender audit to profitable enterprise“) organised by local/republic authorities.

However, within the scope of the project there is planned the cooperation with the Slovak Academy of Sciences in Bratislava and the Research Institute of Power Plants in Trnava.

## Conclusions

With harmony with [5] the key factors hindering equality in research decision making are: gender stereotypes; the low awareness of gender equality concept, issues, problems and benefits among men and women; the absence of national and institutional strategies and policies aimed at equal opportunities in research and research decision making; work and family balance and choice and societal/cultural expectations.

Positive effects of gender diversity could be:

- increased creativity
- increased international competitiveness
- improved efficiency and quality
- optimization of human resources [6]

To summarise the previous information, the institutional strategies, policies and regulations do not address the issue of gender equality in research. The outputs of the 7<sup>th</sup> FP project DIVERSITY shall act as an accelerator for the institutional and cultural change for a

greater inclusiveness of women at all levels of scientific research.

## Acknowledgments

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**J. Stefankova, D. Caganova, O. Moravcik. Promoting Gender Diversity Research in Slovakia within 7<sup>th</sup> Framework Programme // Electronics and Electrical Engineering. – Kaunas: Technologija, 2010. – No. 6(102). – P. 59–62.**

The article highlights 7<sup>th</sup> FP project „Improving gender diversity management in materials research institutions“ from the point of view one from 13 project partners and its role in the project, the Faculty of Materials Science and Technology (MTF) STU in Bratislava, Slovakia. The focus is put on the problem of under-representation of women in research and decision making processes and effort to support the institutional culture change for a greater inclusiveness of women scientists in materials research organisations. Finally, the authors would like to exchange and share their Slovak gender issues experience with other colleagues, professionals to contribute for an optimum development of European Research. Ill. 5, bibl. 6, tabl. 1 (in English; abstracts in English, Russian and Lithuanian).

**Я. Стефанкова, Д. Цаганова, О. Моравчик. Исследование разнообразия полового состояния на предприятиях Словакии // Электроника и электротехника. – Каунас: Технология, 2010. – № 6(102). – С. 59–62.**

При выполнении седьмой программы в университете Братиславы определены разнообразие принятия решения на разных этапах деятельности. Установлено некоторые свойства принятых решений с учетом количества сотрудников женского пола. Ил. 5, библи. 6, табл. 1 (на английском языке; рефераты на английском, русском и литовском яз.).

**J. Stefankova, D. Caganova, O. Moravcik. Lyčių įvairovės sklaidos tyrimas vykdam septintąją bendrąją programą // Elektronika ir elektrotechnika. – Kaunas: Technologija, 2010. – Nr. 6(102). – P. 59–62.**

Vykdam septintąją bendrąją programą siekiama didinti lyčių įvairovę tyrimų ir sprendimų priėmimo procesuose. Stengiamasi padidinti šiuose procesuose dalyvaujančių moterų skaičių. Bendradarbiaujama su Slovakijos technologijos universiteto Medžiagų mokslo ir technologijos fakultetu Bratislavoje. Apžvelgti klausimai ir problemos, susijusios su lyčių pasiskirstymu. Il. 5, bibl. 6, lent. 1 (anglų kalba; santraukos anglų, rusų ir lietuvių k.).