Polish Women in Science

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Maria Skłodowska-Curie (1867 – 1934)

- the first woman to win a Nobel Prize
- the first person and only woman to win twice
- the only person to win twice in multiple sciences
- the first woman to become a professor at the University of Paris
- wife (married to Pierre Curie)
- mother (two daughters)

**The Nobel Prize in Physics 1903** shared with Pierre Curie and Henri Becquerel

"in recognition of the extraordinary services they have rendered by their joint researches on the radiation phenomena discovered by Professor Henri Becquerel,"

**The Nobel Prize in Chemistry 1911**

"in recognition of her services to the advancement of chemistry by the discovery of the elements radium and polonium, by the isolation of radium and the study of the nature and compounds of this remarkable element"
Directors, employees & Ph.D. students in Jerzy Haber Institute of Catalysis and Surface Chemistry PAS

- Directors: total – 3, men – 1, women - 2
  - Małgorzata Witko
    - Director
  - Tomasz Borowski
    - Deputy Director for Research
  - Renata Tokarz-Sobieraj
    - Deputy Director for Operations

- Number of employees: total - 128, men – 65, women - 63

- Number of Ph.D. students: total – 40, men – 4, women - 36
Leadership positions in Polish science

- **Faculty of Chemistry of the Jagiellonian University in Kraków**

  - **Professor Grażyna Stochel**
    - Dean
  - **Associate Professor Barbara Rys**
    - Vice-Dean for General Affairs
  - **Associate Professor Andrzej Eilmes**
    - Vice-Dean for Research and IT implementation
  - **Associate Professor Lucjan Chmielarz**
    - Vice-Dean for Learning and Teaching
Leadership positions in Polish science cont.

- **Faculty of Chemistry, University of Warsaw**

  - **Professor Paweł Kulesza**
    - Dean
  - **Associate Professor Grzegorz Litwinienko**
    - Vice-Dean for Development and International Cooperation
  - **Associate Professor Andrzej Kudelski**
    - Vice-Dean for Learning and Teaching
  - **Associate Professor Zbigniew Stojek**
    - Vice-Dean for Research and Finance
Polish Women in Leadership positions - government

in Polish Government

Ewa Kopacz
Prime Minister

Małgorzata Kidawa-Błońska
marshal of the Sejm
(a chamber in Parliament)

Beata Szydło
Future Prime Minister?
Polish Students – Master Degree

- in 2012: 17.5 % of men & 25.4 % of women graduated with Master Degree
- in 2013: 68.3% of women among all students graduated with Master Degree
  - Informatics: 12.3%
  - Technical studies: 22.9%
  - Science: 46.1% (UE average: 40.4%)

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<tr>
<th>Country</th>
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Women graduated with Ph.D. degree in Science in **2010**:

Poland – 54%
UE – 40%
Number of people with Ph.D. degree, after habilitation and with Professor title – Poland 2010

<table>
<thead>
<tr>
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<th>No. of people</th>
<th>Women %</th>
<th>Men %</th>
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<tr>
<td>Ph.D.</td>
<td>122 722</td>
<td>43.8</td>
<td>56.2</td>
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<tr>
<td>Habilitation</td>
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<td>67.2</td>
</tr>
<tr>
<td>Professor</td>
<td>25 593</td>
<td>20.3</td>
<td>79.7</td>
</tr>
</tbody>
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- in 2013: 190 women out of 641 people received Professor title (29.6%)
Polish Women in Research & Development

- in **2013**: percentage of women employed in R&D – 39.8%
- in **2012**: percentage of women employed in R&D – 40.2%
  - among employees with Ph.D. or M.Sc.: women - 42.7%
  - habilitated doctorate: women - 33.2%
  - Professor: women - 22.6%

- in **2009**: percentage of women employed in R&D – 40% (*average in UE: 33%*)

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"Women in science (as in most other professions) suffer from what Margaret Rossiter calls hierarchical discrimination: as one moves up the ladder of power and prestige, the female faces disappear. There are many women at the bottom—lots of women post-docs, assistant professors and the like— but few women at the top, in high government posts, as deans of colleges, or as heads of major research laboratories….." Women in Science: Historical Perspectives,"Proceedings of the Women in Astronomy Workshop, ed. Meg Urry (Baltimore: Space Telescope Science Institute, 1992), 11-19
Why so many Polish women decide to go for a PhD course and to get academic position?

**Historical background**

- Before 1890s, Polish women who wanted to enter a university went abroad to Switzerland, France, Belgium, or USA. Among them was: Maria Skłodowska-Curie

- Twenty five years later, Galician universities (in Southern Poland, at the time, part of the Austro-Hungarian Empire) admitted numbers of women students from all parts of Poland with the support of a major part of the Polish intellectual elite (*Hulewicz, 1936, p. 4*)

*R. Siemienska, Higher education in Europe, vol. XXV, No. 2, 2000*
Why so many Polish women decide to go for a PhD course and to get academic position? – cont.

**Historical background**

- After Poland regained its independence in 1918, women obtained the right to vote and formal political and social equality with men. Nevertheless, women did not have the same educational or professional opportunities as men.

Women represented 27.2% of all students in 1928–1929 and 28.3% in 1937–1938 (Small Statistical Yearbook, 1939, p. 263).

- After the II World War, the number of educated women increased - the communist system emphasized equality as a way among others to enlarge the reserves of the labour force (Siemienska, 1989).

- In the 1980s, the number of women exceeded the number of men enrolled in university-level studies.

*R. Siemienska, Higher education in Europe, vol. XXV, No. 2, 2000*
Why so many Polish women decide to go for a PhD course and to get academic position? – cont.

**Economic background**

- In 1990s - economic system changed to free market:
  → high rate of unemployment
  → drop in founding for science from government → less money for research and lower salary (compared to the national average) than in 1970s or early 1980s

- Scientists (mainly men) emigrated abroad or moved to other more attractive sectors, e.g. business

- „women began to fill the vacuum appearing at the “heights” of academic careers relatively more rapidly and frequently” R. Siemienska, *Higher education in Europe, vol. XXV, No. 2, 2000*

- Nowadays, it is difficult to find a job even after graduation with MSc → many people decide to get PhD
Why so many Polish women decide to go for a PhD course and to get academic position? – cont.

**Traditional, cultural and personal reasons**

- „Because the managers of various types of companies consider women to be less attractive as employees than men, the former leave scientific institutions to work in such companies less frequently than do the latter” *R. Siemienska, Higher education in Europe, vol. XXV, No. 2, 2000*

- „Perhaps, certain women, because of traditional concepts of gender roles, want to have employment (that among other things gives more flexible working hours) allowing them to reconcile family expectations and the demands of employment” *R. Siemienska, Higher education in Europe, vol. XXV, No. 2, 2000*

- „love” for science
Why so many Polish women decide to go for a PhD course and to get academic position? – cont.

**Vocational reasons**

- „Dla kobiet i Nauki“ *(Engl. For Women and Science)* - competition organized by L’Oreal Poland & Ministry of Science and Higher Education. It is addressed to young women scientists engaged in research on life sciences. It aims to promote women, their achievements & the popularization of science.

- *Dziewczyny przyszłości. Śladami Marii Skłodowskiej- Curie (Engl. Future Girls. Following Maria Skłodowska-Curie footsteps)* - competition organized by Ministry of Science and Higher Education and the magazine "Elle". It aims to support students in science, technology, natural and mathematics, which lead independent research or engage in research projects.
Why so many Polish women decide to go for a PhD course and to get academic position? – cont.

**Vocational reasons**

- **Parent/Bridge programme** – support for pregnant women conducting research – programme undertaken by Foundation for Polish Science - enable the best scientists with small children to return to the research work & to facilitate a pregnant woman conducting research projects. Support for pregnant women covers costs of hiring of a researcher to take the place of the woman for tasks necessary to carry out the research project which she is unable to perform herself. No additional calls planned.

- „**Baby at University**“ - project undertaken by Ministry of Science and Higher Education - for students, PhD students and academic employees, who wish to combine education and work with parenting. Higher education institutions are able to create places of care for children under the age of three, kindergarten, day care centre of children’s club (public funding).

- Maternity & parental leaves do not stop the scientific career – women still can apply for scientific projects
Support system for women in Poland after getting baby

In Poland, working parents with child can use the following leave after the childbirth:

- **20 weeks** (31, 33 or 35 weeks if 2, 3 or 4 children are born in one confinement) of obligatory **basic maternity** leave; 14 weeks after the childbirth reserved to the mother only

- **2 weeks** of **paternity leave** - fathers are entitled to take the paternity leave up to 12 months after the birth of the child

- **6 weeks** of **additional maternity leave** (mother or father)

- **26 weeks** of **parental leave** (mother or father)

- **36 months** of **childcare leave** (mother or father) – no allowance granted

Maternity, additional and parental leaves - **maternity allowances**

Parent can choose:

- **100% & 60%** of the allowance for the 1\textsuperscript{st} & 2\textsuperscript{nd} half of the year or **80%** of the allowance during whole year
Family benefits in Poland

- Family allowance - basic family benefit to contribute towards the costs of child subsistence:
  - 77 PLN (19 €) per child up to 5 years (per month)
  - 106 PLN (26 €) per child aged 6 to 18 years (per month)
  - 115 PLN (29 €) for a child between the ages of 19 to 24 years (per month)
Supplements to family allowance

- **newborn supplement** - a single payment of 1000 PLN (250 €) for one child, condition: family income ≤ 250 € per person

- **additional newborn supplement** - a one-time grant 1000 PLN (250 €), condition: mother has to remain under medical supervision from 10th week of pregnancy (medical certificate)

- **a bringing-up-a-child-alone supplement** 170 PLN (42 €), a month for a child, however, not more PLN 340.00 for all children or PLN 250, not more than PLN 500 if the child is disabled

- **a large family supplement** 80 PLN (20 €), paid monthly for the third and every subsequent child eligible for the family allowance

- **a training-and-rehabilitation-of-a-disabled-child supplement** - granted to a child until 16 years of age provided that the disability is proven by an official certificate, or, if the child is between 16 and 24 years old, by an official certificate attesting to moderate or severe disability; PLN 60 (15 €), per month for the child until completion of 5 years, PLN 80 (20 €), for the child older between completion of 5 and 24 years

- **a commencement-of-a-school-year supplement**, paid once a year at the beginning of each school year

- **a child-education-out-of-the-place-of-residence supplement** intended to cover accommodation and travel costs to the location of the school. This supplement is paid for 10 months of the year
Family benefits also cover attendance benefits:

- **Medical care allowance** - for disabled children until the age of 16 and people over 16 who hold an official certificate attesting to severe or moderate disability which arose prior to their 21st birthday; granted regardless of the family’s income.

- **Nursing benefit** - paid to people caring for a child who were forced to give up their job to do so; an official certificate, attesting to disability and indicating the need for permanent or long-term care or assistance by another person, is required; granted regardless of the family’s income.

- **Special attendance allowance** - granted to persons charged with a maintenance obligation if they abandon employment or another gainful activity due to the necessity to provide constant care to a person who is certified as having a high level of disability or as being disabled and in need of: constant and long-term care or assistance of another person.

Special attendance allowance is granted if the total income per member of the family of the person providing care and of the family of the person requiring care does not exceed the amount of PLN 623 (€ 144).

Special attendance allowance amounts to PLN 520 (€ 120) a month.
Support system for women in Poland after getting baby – cont.

- After the birth, most mothers and babies stay at the hospital for about a week to recover. They can get help learning baby care basics from the nurses, and the baby will have regular checkups.

- Midwife visits for about 10 days after mum and baby return home from the hospital: checkups and help with breastfeeding, sleep, diapering, bathing and all the other basics that challenge new parents.
Support system for women after getting baby - other UE countries - Germany

- **maternity leave** - generally 6 weeks before and 8 weeks after birth; mothers who have health insurance with a state-regulated insurance company receive up to 13 € per day. Working mothers who are insured privately or are part of a family insurance policy with a state-regulated insurance company receive a total of maximum 210 €

- **a two-month paid paternity leave** that can be extended for up to seven months if the mother reduces her maternity leave

- **parental leave** - maximum 14 months - parental allowance payments amount to 67% of the average monthly income previous to the birth after deduction of taxes, social insurance payments and professional expenses. The maximum and minimum monthly payments are 1,800 € and 300 €

- **child benefits** - payments made to a child’s parent(s) or legal guardian(s). For the 1st and 2nd child, the monthly child benefit payment is 184 € per child, for the 3rd child 190 € and for each additional child 215 €. Child benefits are paid until the age of 18 or 25 if the child is in school, doing professional training or at university.
Support system for women after getting baby - other UE countries – United Kingdom

- **United Kingdom**
  - pregnant women receive pay for time taken off for antenatal care like doctor and midwife visits
  - women who have worked at the same place for at least half a year have job security for **up to a year of maternity leave**. They receive paid leave at **90% of their pay for six weeks**, and £136.78 (about $200) for the next **33 weeks**.
  - 2 weeks of paid paternity leave plus another 26 weeks if partner returns to work
  - a midwife visits every day for 10 days after mum and baby return home from the hospital: checkups and help with breastfeeding, sleep, diapering, bathing and all the other basics that challenge new parents
Women in Science – is it difficult?

“For many years I accepted the clear-cut division into important and unimportant issues: in the face of constraint, aspirations for independence are important, and the struggle for women’s rights is unimportant…. Several years later … it has turned out that in free Poland a woman is not a human being, but a “family being”, who instead of [being in] politics, should look after the home …. I personally never had any illusions regarding “equal rights”. I believe that attaining my present position cost me a lot more than it would have] cost a man …. „ Maria Janion, Gazeta Wyborcza, 3-4 July 1999, p.25

Nawadays situation has changed but women need to find a compromise between family and work duties.
Kacper
Thank you for your attention