Women in Science and Engineering
The Greek Reality

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women in ancient Greece

although there are considerable differences
(and remarkable exceptions) across the ancient greek world,

women were mostly

- restrained at home
- under the oppression of men (father, then husband)
- not allowed to participate in social and political activities
- solely intended for child bearing

however...
women in ancient Greece

- equal men/women representation in the Greek pantheon
- strong women involvement in philosophy and mathematics
women in ancient greece

philosophers/mathematicians (10th c. BC – 4th c. AC)

- Αίθοα - mathematics & accounting
- Πολυγνώτη - geometry
- Θεμιστόκλεια - geometry (Delphi priestess, Pythagoras' teacher)
- Θεανώ - theory of numbers (Pythagoras' wife)
- Δαμώ, Αριγνώτη, Μυία, Δεινώ, Ελορίς, Φίντυς, Μέλισσα, Τυμίχα, Πτολεμαῖς, Διοτίμα, Βιτάλη, ...
- Περικτιόνη - philosophy, mathematics (Plato's mother)
- Λασθένεια, Αξιοθέα, Νικαρέτη, Αρετή, Πυθαϊς, Πάνδροσος, ...
Greece today

still a patriarchal society, but

- socially
  - continuous improvements due to women's obligatory education and socio-economic development

- legally
  - no specific gender mainstreaming
  - law on equal treatment requires a minimum of 1/3 of each sex to be represented in all decision-making bodies

- on the basis of specific initiatives
  - considerably more than 100 societies dealing with gender equality and related issues
some specific initiatives

1924 The Hellenic Association of University Women (SEE).  
http://www.see1924.gr/

1994 Research Center for Gender Equality  
http://www.kethi.gr

1995 EDEM - Greek Women’s Engineering Association  
http://www.edem-net.gr/  
a member of WiTEC - European Association for Women in Science, Engineering and Technology

2004 Periktioni: A Women Researchers Network in Greece  
Greece today - some facts

- women undergraduate university students
  - 1970: ~30%
  - 2000: ~59%

- women undergraduates university students
  - Natural Sciences
    - 1971: 20%
    - 1997: 43%
  - Engineering
    - 1971: 6%
    - 1997: 25%

- women in 'scientific professions'
  - 1960: ~4%
  - 1990: ~20%
statistical survey in Greece (2006)

- by the Periktioni Network
  General Secretariat for Research & Technology
  Ministry of Development

- 2,239 women researchers in 50 research institutions

- 34% replies (757 replies)

- quantitative survey

- success stories (qualitative survey)
statistical survey in Greece (2006)

- Social sciences & humanities: 43%
- Medical sciences: 34%
- Natural sciences: 12%
- Engineering & technology: 4%
- Agricultural sciences: 7%
statistical survey in Greece (2006)

women distribution in academic/research ranks

- Rank A: 20%
- Rank B: 30%
- Rank C: 26%
- Rank D: 24%
statistical survey in Greece (2006)

participation in decision making bodies

- consulting body: 69%
- management body: 20%
- no participation: 11%
statistical survey in Greece (2006)

have you been appointed as a national representative in EU and/or national research committees?

- no: 90%
- yes: 10%
statistical survey in Greece (2006)

Factors hindering women's research career:

- Household duties: 7%
- Lack of required skills: 1%
- National policies: 29%
- Motherhood: 26%
- Other: 37%
statistical survey in Greece (2006)

summary of qualitative results

- factors that inhibit a research career
  - lack of adequate infrastructure
  - lack of meritocracy

- no direct reference to gender discrimination at the workplace – indirect reference only by older women

- the majority reports very good working relationships with male colleagues

- more than 50% face problems related to family commitments
statistical survey in Greece (2006)

summary of suggested actions

- emphasis on education
- increase support for motherhood and child care
- establishment and activation of related societies & organizations
- clear rules in the workplace
- public dissemination and awareness activities
<table>
<thead>
<tr>
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<th>Greece</th>
<th>EU-15 mean</th>
<th>EU max</th>
<th>EU min</th>
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</thead>
<tbody>
<tr>
<td>women graduates in tertiary education</td>
<td>62%</td>
<td>59%</td>
<td>77%</td>
<td>30% Bosnia &amp; H.</td>
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<tr>
<td>women graduates in engineering, manufacturing &amp; construction</td>
<td>45%</td>
<td>26%</td>
<td>45% Greece</td>
<td>13% Netherlands &amp; Switzerland</td>
</tr>
<tr>
<td>women Grade A professors</td>
<td>11%</td>
<td>13%</td>
<td>29% Romania</td>
<td>8% Ireland</td>
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Women/Men in Academia - Greece 2006

- Women in Academia: 17.07%
- Men in Academia: 82.93%

Percentage distribution across different academic levels:
- Undergraduate students: Women 59.23%, Men 64.33%
- BSc holders: Women 55.54%, Men 58.97%
- Postgraduate students: Women 44.46%, Men 41.03%
- MSc holders: Women 42.14%, Men 57.86%
- PhD students: Women 40.35%, Men 59.65%
- PhD holders: Women 39.78%, Men 60.22%
- Lecturer: Women 66.81%, Men 72.32%
- Assistant Professor: Women 33.19%, Men 27.68%
- Associate Professor: Women 10.00%, Men 10.00%
- Professor: Women 10.00%, Men 10.00%
so, where do we really stand?
high rank academic/research posts
decision making bodies
management
national representative committees
currently in Greece

- women scientists in Greece
  - seem to be rather happy from their work environment
  - although they report facing difficulties mainly due to motherhood and lack of meritocracy

- figures show that
  - women are well represented (even overrepresented) in undergraduate studies, better than the EU mean
  - there is a lower representation in science and engineering, however, Greece is doing better that the EU-15
  - women are poorly represented in higher academic ranks and decision making bodies
need to enhance

- women’s participation in
  - high rank academic/research posts
  - decision making bodies
  - management
  - national representative committees
  - ...

- legislation and streamlining for clear rules, meritocracy, infrastructure
thank you !!!
issues raised during discussion

- involve men!!!
  - try to find men who can help
  - ask men to present the problem

- bring more women in science
  - study how to approach them

- mentoring - at a personal level

- women should ask for their rights
  - rights are not given - rights are taken