

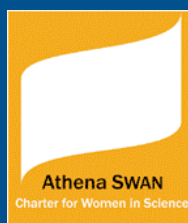
Living with Athena

Good practice in UK university chemistry departments

Lesley Yellowlees
University of Edinburgh



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Chemical Sciences



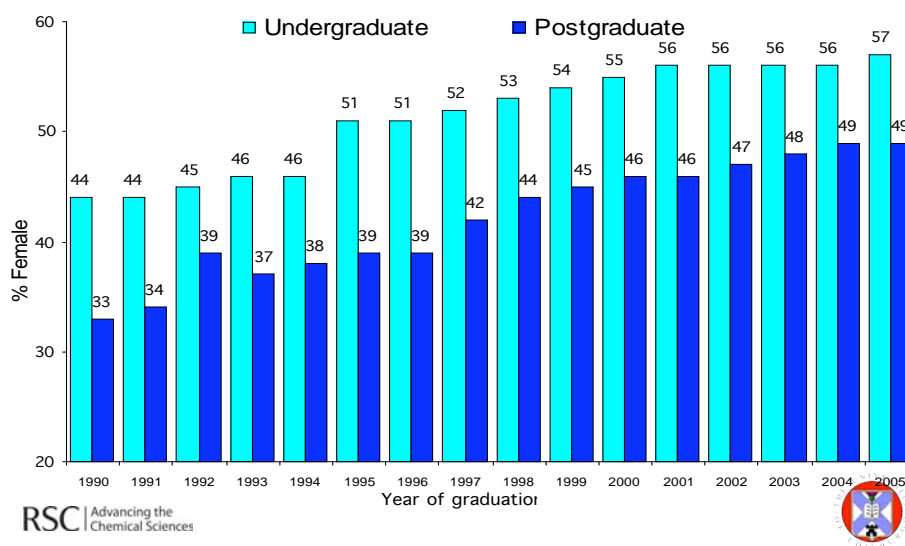
Outline

- Women in UK university Chemistry departments
- RSC (Royal Society of Chemistry) and Athena
- Changing a Department culture – Chemistry at Edinburgh

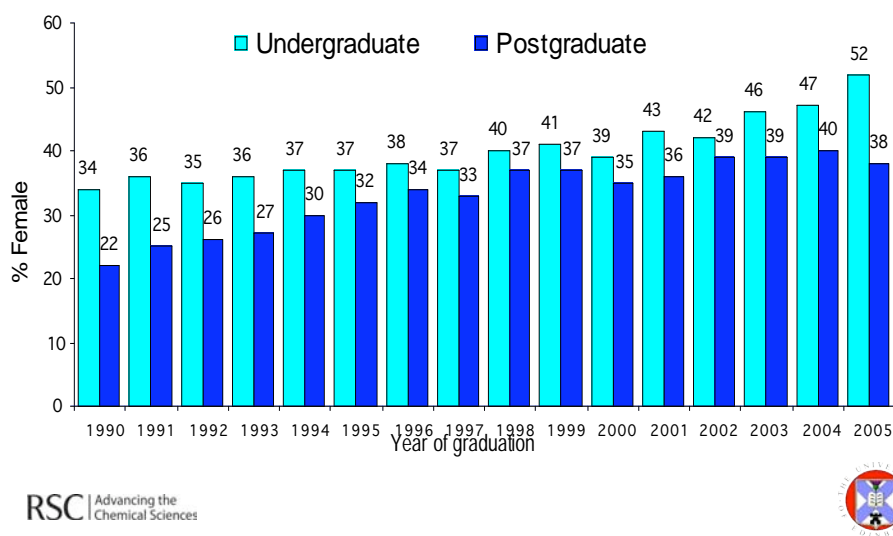
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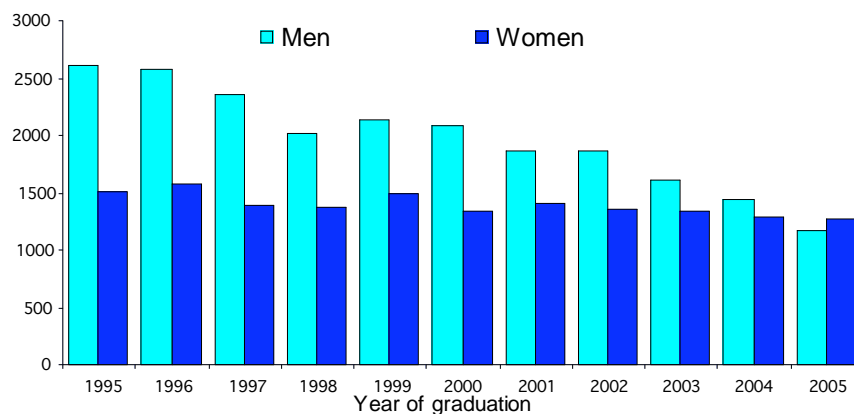
Overall Students Numbers: HE is increasingly a female environment



Chemistry Student Numbers



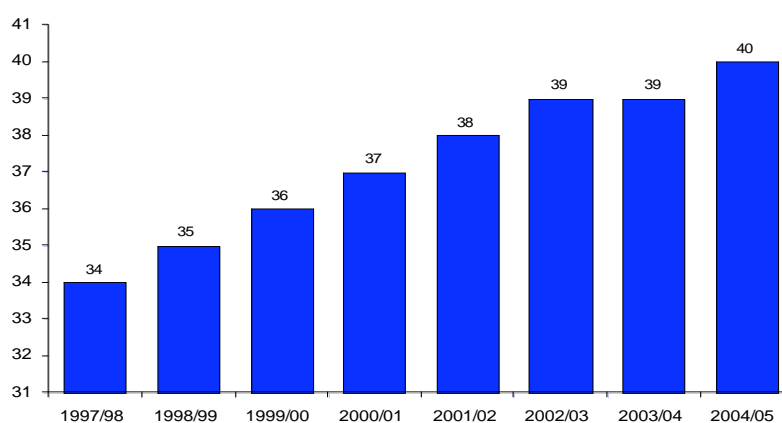
Chemistry Student Numbers: but it's not all good news...



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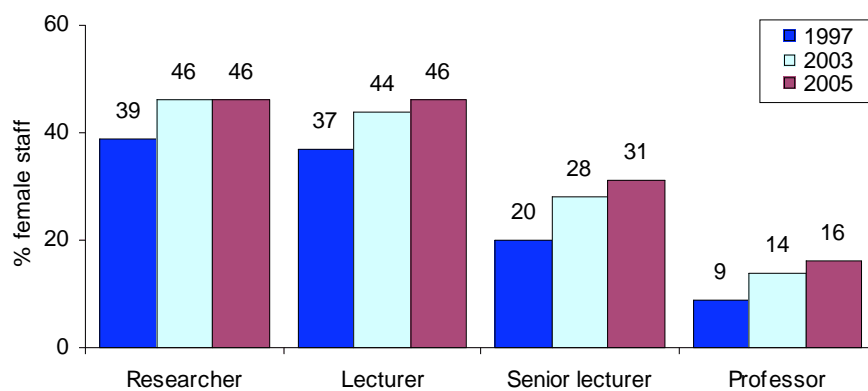
Percentage of female academic staff in all subjects



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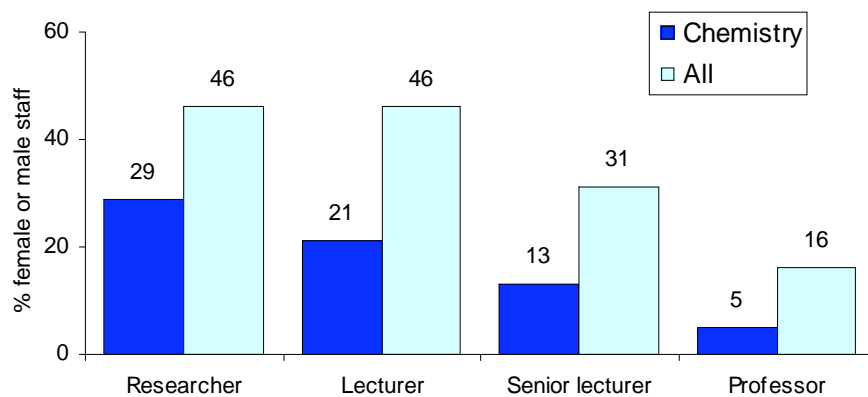
Percentage of female staff by grade in all subjects



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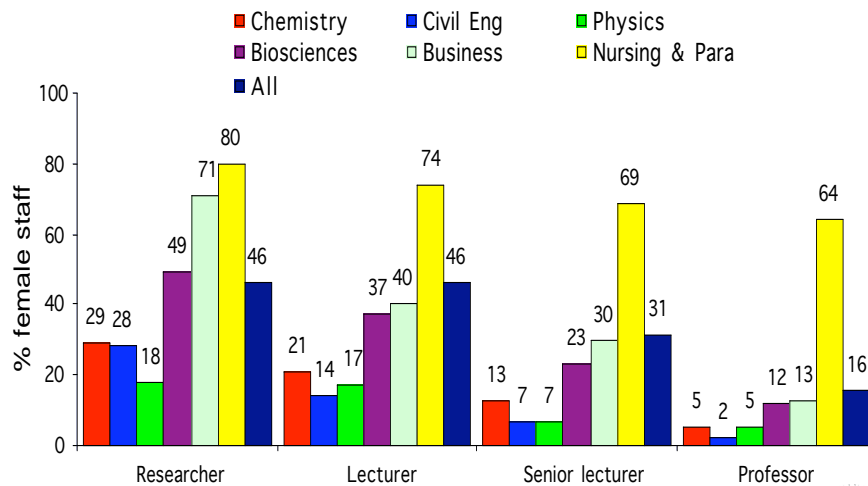
Percentage of female staff by grade



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Some comparisons....



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Some observations: staff

- The proportion of female staff in chemistry is increasing by 0.80% each year
- At the current rate, chemistry will achieve parity (all grades considered together) in 2038
- However, parity in chemistry professorships is not likely for eighty years

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Some observations: staff

- NOTE: within SET chemistry has one of the steepest declines in the proportion of women in moving from undergraduate (~52%) to professorial level (~5%)



Athena Project

Established 1999



Athena Project

ATHENA AIMS

To advance and promote the careers of women in science, engineering and technology in higher education (HE) and research and to achieve a significant increase in the number of women recruited to top posts

ATHENA FOCUS

Working in partnership to encourage, support, develop, identify and disseminate good practice, which is

simple

cheap

effective

And changes 'how we do things round here'



Cooperation between Athena and the Royal Society of Chemistry (RSC)

- Factors affecting career choices of graduate chemists
- Recruitment and Retention of Women in Academic Chemistry
- Good practice in university chemistry departments
- Dissemination of good practice



Factors affecting career choices of graduate chemists

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Summary

Published in 1999, this study found that:

- Both men and women had concerns about long hours, low pay and career structure
- Women alone were concerned about:
 - Poor working conditions
 - Emphasis on results rather than process
 - Isolation and segregation
- Working environment in academic chemistry deters large numbers of women from remaining
- Structure of departments and the nature of the subject creates barriers to their promotion

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Recruitment and Retention of Women in Academic Chemistry

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Rationale

- A few chemistry departments were observed to have a significantly greater proportion of women staff than most
- Was this purely by chance or was there more going on?
- Study sought to find out through interviews with a number of female staff in a number of different departments

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Conclusions

- The introduction of good management practice has a identifiable impact on the willingness of women to apply to and remain within departments
- The personality—and personal circumstances—of the head of department are significant in determining good management practice
- Institutions have a role in ensuring that selection procedures for department heads prevent departments selecting leaders in their own image
- The best departments do not target measures specifically at women



Strategic Messages

1. The problem of increasing the number of women in chemistry and in senior positions is not intractable.
2. But good practice is patchy and needs to be spread to become the prevailing ethos:
 - in UK chemistry departments
 - in science departments in general.
3. Good practice is embedded in department cultures, histories and personalities: it will take time to become universal.



Strategic Messages

4. The RSC, institutions and departments need to:
 - plan to sustain long-term culture change
 - take short-term initiatives to improve the immediate position.
5. Both sets of measures should take account of needs:
 - over the working week
 - over the career trajectory.
6. Action to promote change:
 - should largely be gender-neutral
 - create a better professional and employment environment for men and women.



Good Practice in University Chemistry Departments



Rationale

- To provide a tool to allow departments to assess themselves for good practice
- And to provide examples of good practice



Both men and women benefit from good practice, however, women in particular are adversely affected by bad practice:

- Recognising good practice
- Describing good practice
- Measuring good practice
- Disseminating good practice



University of Utopia

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University of Utopia

Open doors....

Open minds

Good practice....

Good science

Sustainable careers....

Sustainable departments

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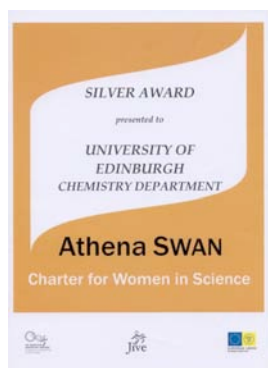
University of Utopia

- An appointments process that encourages women and men to apply for academic posts at all levels
- Department career progression arrangements that encourage women and men to remain in academic chemistry
- A departmental organisation and culture that is open, inclusive, transparent and supportive of its staff



University of Edinburgh

- University member Athena Swan Charter
- University – Bronze Swan Award 2006
- School of Chemistry – Silver Swan Award 2006



School of Chemistry



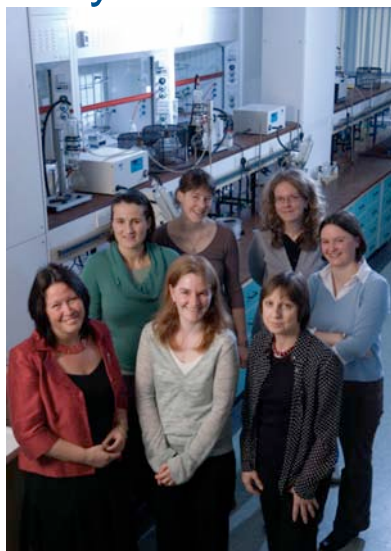
- 45 Academic Staff
- >150 Postgraduate School
- ~500 Chemistry undergraduates
- Top rated Chemistry school for research and teaching in Scotland

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School of Chemistry

- 25% academic staff female including 2 full professors
- Article in UoE Annual Review highlighting equality, diversity and good practice



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School of Chemistry

- 5 years ago change in management structure/style and culture – values all staff for their contributions
- Used University equality policies
- Created environment that respected work/life balance leading to improvement of working life of all staff



School of Chemistry



- 2002 fundamental reorganisation of management structure – rotation of posts



School of Chemistry

- Transparent
- Communicate
- Inclusive
- Opportunities
- Flexible working conditions
- Effective appraisals
- Mentoring of junior staff
- Encouragement/reward



Personal Experience

- Supportive environment
- Research reputation
- Diverse opportunities
- Encouraging family
- Healthy children



Influencing Change - What we know from Athena's successes

- Increasing the supply of graduates does not on its own solve the problem
- Women are as academically active but do not make it to the top in numbers that reflect their abilities and contributions to science
- Heads of departments and senior scientists need to take a greater responsibility for career progression
- Women scientists need to expect more of themselves and their careers, and of their departments and universities

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Thanks

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Royal Society of Chemistry

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