

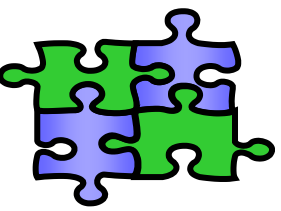
Commission of Women and Science- Spanish National Research Council CSIC

M^a Pilar López Sancho

Instituto de Ciencia de Materiales de
Madrid-CSIC

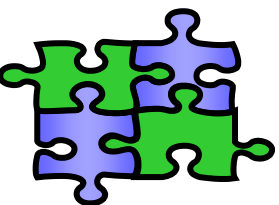
Comisión Mujeres y Ciencia





CSIC

- The Spanish National Research Council (CSIC) is the largest public institution dedicated to research in Spain and the third largest in Europe, its main objective is to develop and promote research that will help bring about scientific and technological progress, and it is prepared to collaborate with Spanish and foreign entities in order to achieve this aim. According to its Statute (article 4), its mission is *to foster, coordinate, develop and promote scientific and technological research, of a multidisciplinary nature, in order to contribute to advancing knowledge and economic, social and cultural development, as well as to train staff and advise public and private entities on this matter.*



Its research is driven by its centres and institutes, which are spread across all the autonomous regions, and its more than 15,000 staff, of whom more than 3,000 are staff researchers.

- Its multidisciplinary and multisectorial nature means CSIC covers all fields of knowledge. Its activity, which covers everything from basic research to technological development, is organised around eight scientific-technical areas:
- Area 1. Humanities and Social Sciences
- Area 2. Biology and Biomedicine
- Area 3. Natural Resources
- Area 4. Agricultural Sciences
- Area 5. Physical Science and Technologies
- Area 6. Materials Science and Technology
- Area 7. Food Science and Technology
- Area 8. Chemical Science and Technology



Rolf Tarrach
Presidente CSIC

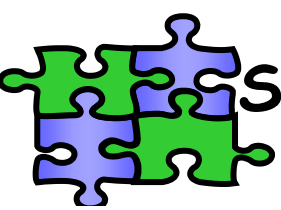
March 8th 2001

During the celebration of the International Women's Day at the CSIC headquarters, female scientists called the attention of the President about the gender discrimination they felt at the CSIC.

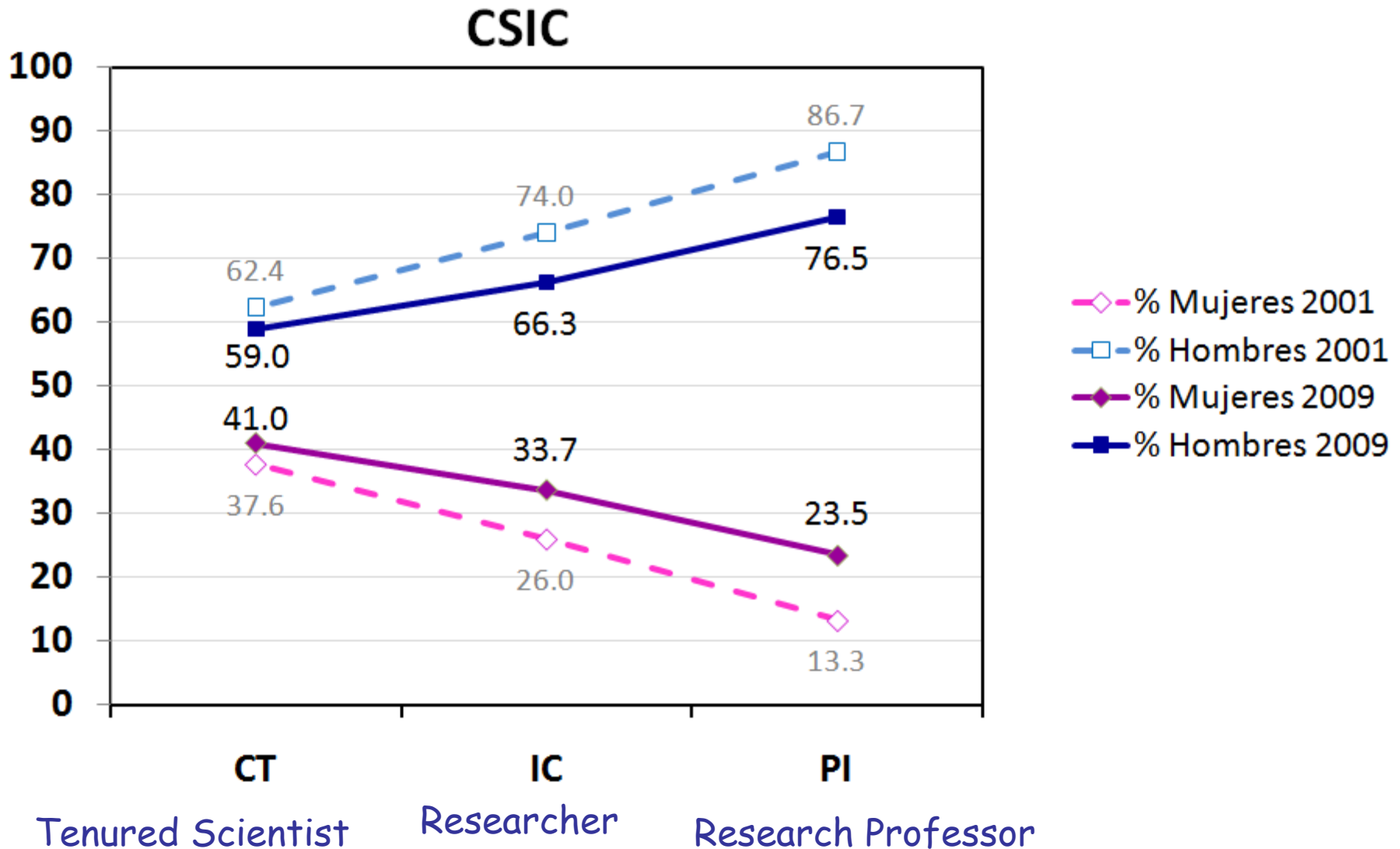
Although reluctant to admit it, the President formed a Working Group in June.

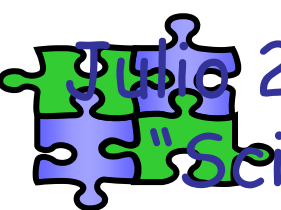
At the end of 2001 the first sex-disaggregated statistics of the Scientific Staff were published:

Evidence of the gender gap was clearly shown.



Scientific Staff - CSIC 2001-2009





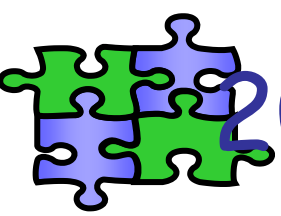
July 2002- Special issue of the Journal ARBOR

"Science and Technology at CSIC: A Gender perspective"



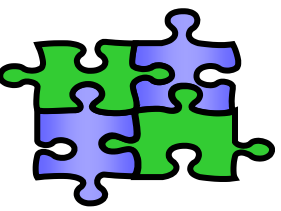
M. Pila
2011

Presidente del CSIC con las colaboradoras del número especial de ARBOR



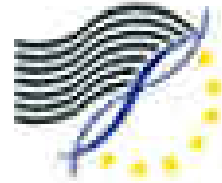
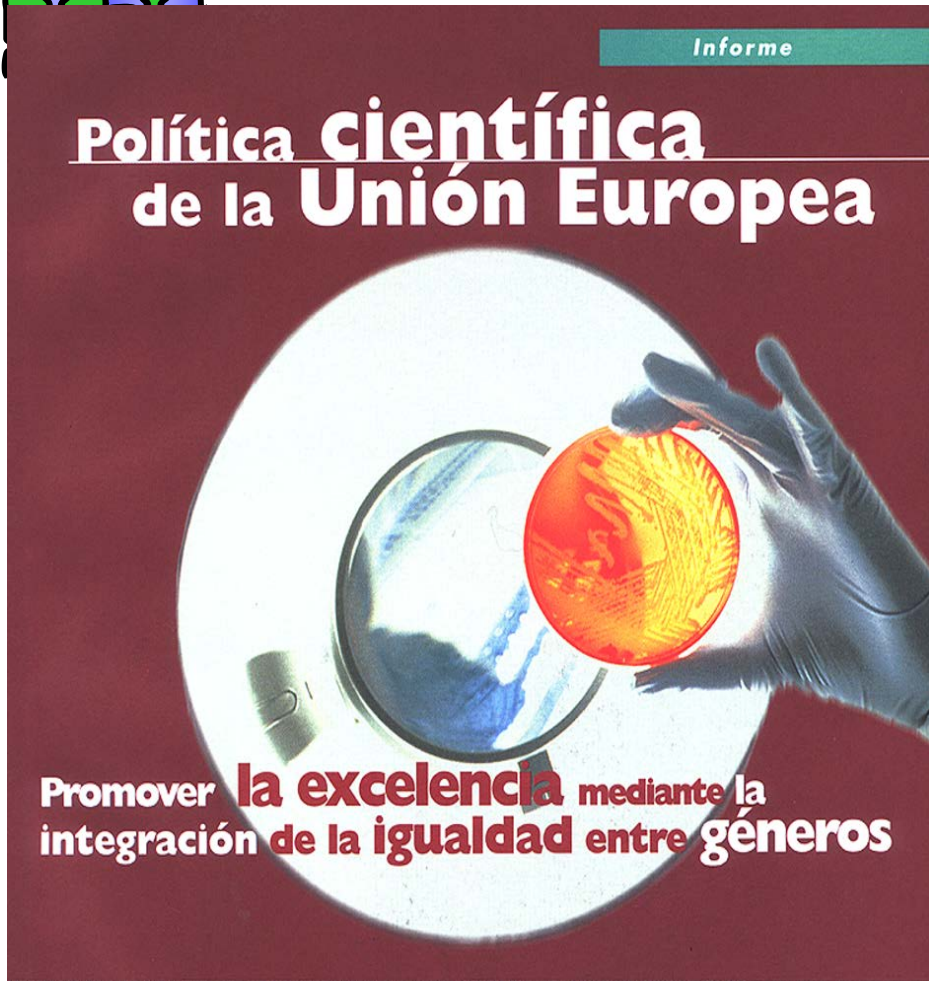
2002 Commission "Women and Science"

- On September 30th the CSIC Executive Board passed the creation of a Commission to advise the Presidency for *the analysis, tracking and improvement of the scientific career of women in the CSIC.*
- The Women and Science Commission (CMYC) is formed by eight elected delegates of the eight areas in which the research activities are divided, and four members designed by the President.



CMYC

- Since 2002 has published and analysed the sex-disaggregated statistics of the scientific staff every year.
- Has denounced the lack of women in the committees.
- Has watched and tracked the results.
- Has enhanced the visibility of women scientific achievements



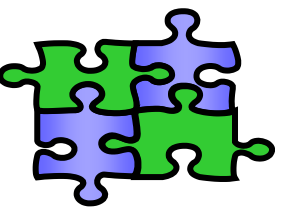
Women and Science

Active measures should to be taken
to eliminate the gender gap in
Science



Promoting Excellence through mainstreaming
gender equality

M. Pilar López Sancho
2011



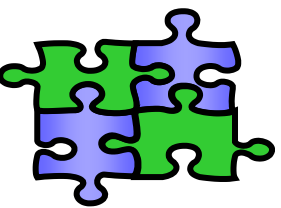
Legal Framework

- April 2004, First Spanish Government with the same number of female and male ministers ; first Public Post for Equality Policies.
- December 2004 Law against gender violence.
- December 2005 Plan CONCILIA, agreement between Public Administration and Trade Unions for work-life balance.
- March 2007 Law of Effective Equality between Women and Men.
- Strategic Plan of Equal Opportunities 2008-2011.
- March 2008 Creation of the Ministry of Equality.



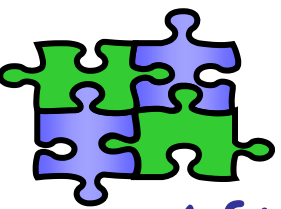
Specific Measures for Academy

- **March 8th 2005- Order, of the Head of the Government:** to reach gender balance in public institutions and companies.
Recomendations about the composition of recruitment, promotion and decision-making boards (40% of the least represented sex).
- Creation of the **Unit of Women and Science** in the Ministry of Education and Science.
- The number of women in research teams taken into account, as an additional criterium, in the assesment of Research Projects for funding.



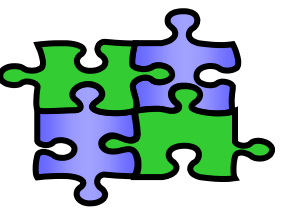
UNIVERSITIES

- Most public universities have Equal Opportunity Committees, Equality Plans, and Departments of Gender Studies.
- Measures to increase the number of women in decision making commissions are included in the General Law of Universities.
- The proportion of women is 14,3% of full professors and 36% of assistant professors.



CMYC

- After 2005, has ensured that the proportion of women was a 40% (when possible) in the recruitment and promotion committees.
- 2007 Gender Equality Plan for the Scientific Staff was elaborated.
- 2010 the proportion of women in the highest category, Research Professor, is 23% close to the optimum minimum (25%) fixed by the EU in Lisbon for 2010.



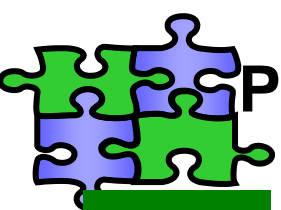
CSIC 2010

- Total Staff: 13000, 50.27% women
- Scientific Staff: 3092, 34.61% women
- Scientific Staff categories:

Tenured Scientist (CT)

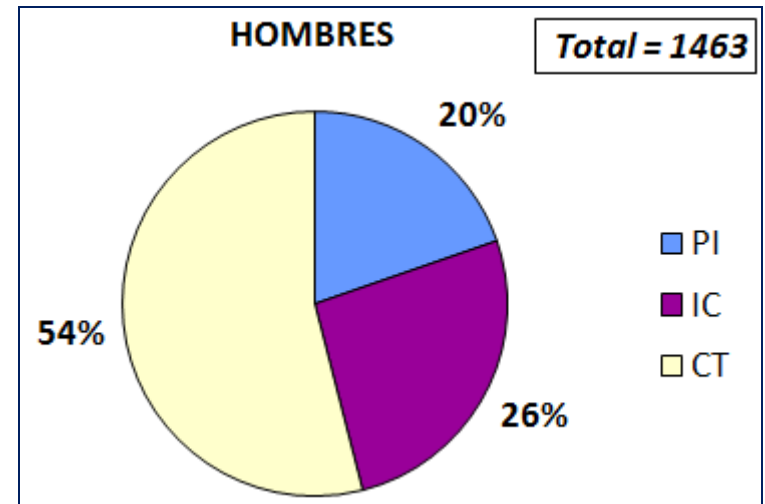
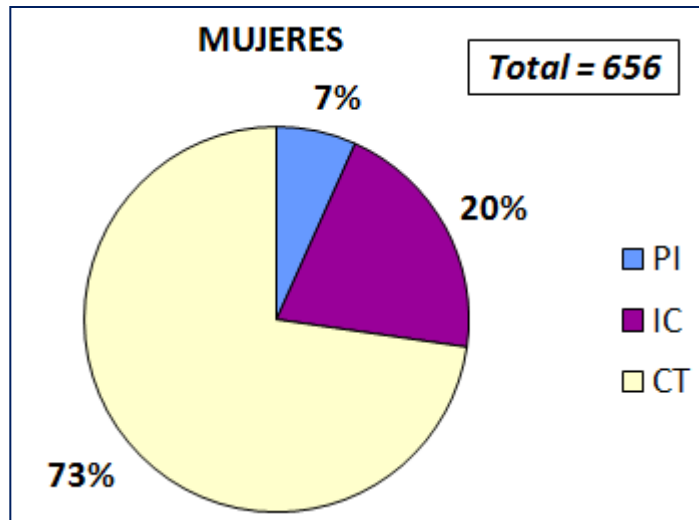
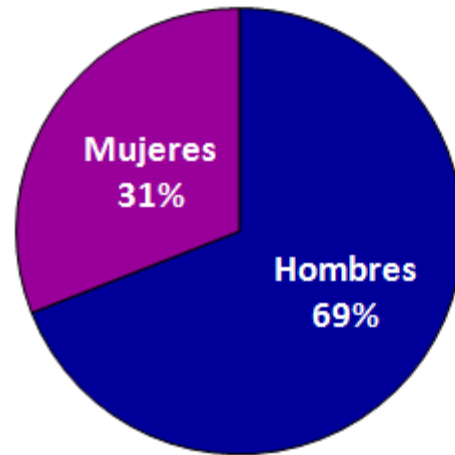
Researcher (IC)

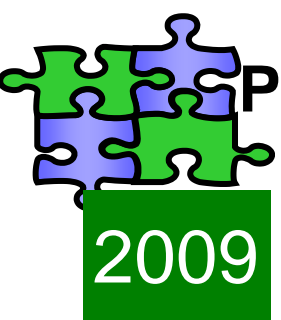
Research Professor (PI)



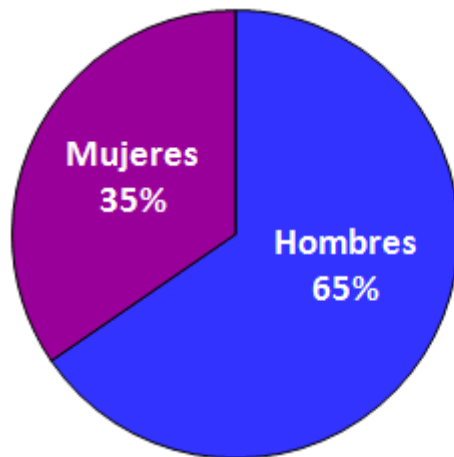
PERSONAL CIENTÍFICO - CSIC

2001

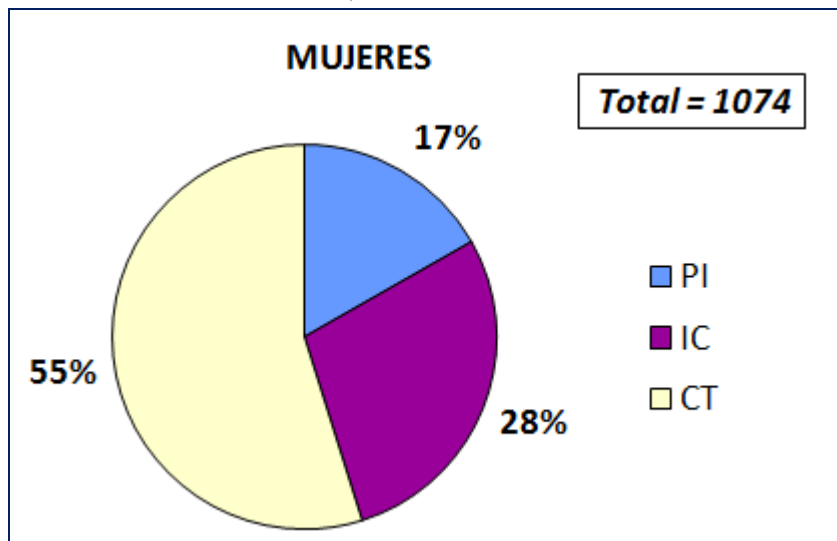




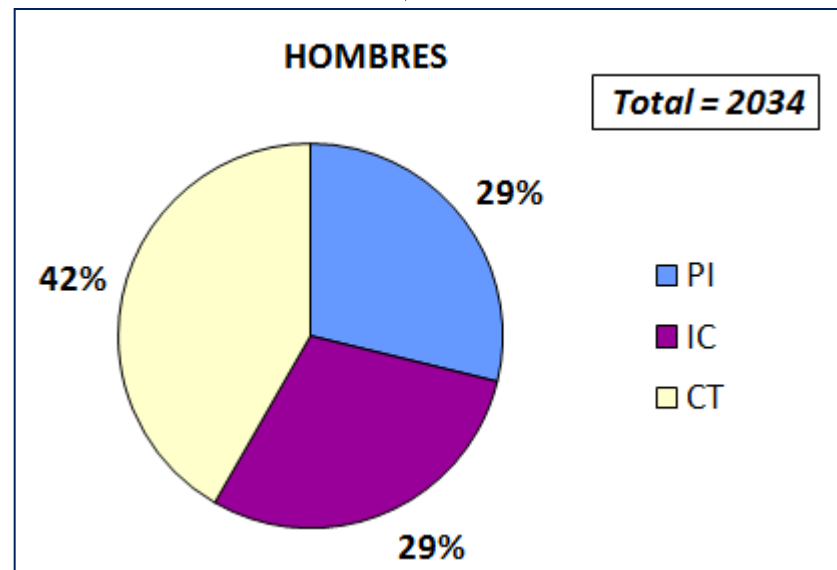
PERSONAL CIENTÍFICO - CSIC



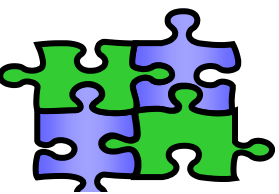
Total = 3108



Total = 1074



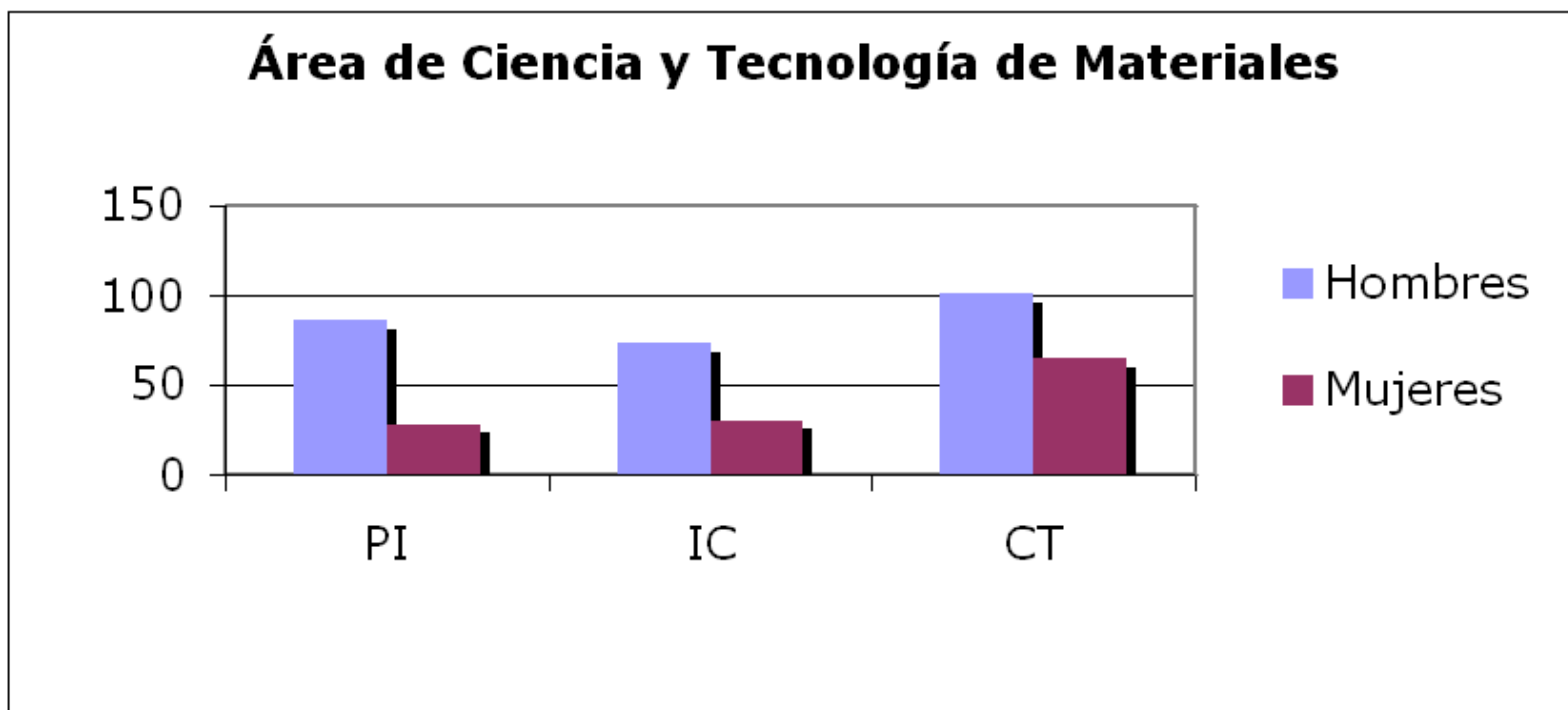
Total = 2034

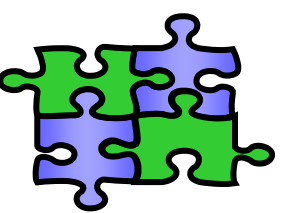


Informe 2011

ÁREA DE CIENCIA Y TECNOLOGÍA DE MATERIALES (8906)

ESCALAS	HOMBRES	MUJERES	TOTAL	% MUJERES
PROFESORES DE INVESTIGACIÓN	86	32	118	27.12%
INVESTIGADORES CIENTÍFICOS	73	40	113	35.40%
CIENTÍFICOS TITULARES	101	88	189	46.56%
TOTAL	260	160	420	38.10%





ICMM 2000-2010

Figura 2

Distribución del personal investigador por categoría y sexo
Histogram of the Scientific Personnel by Professional Category and Sex .

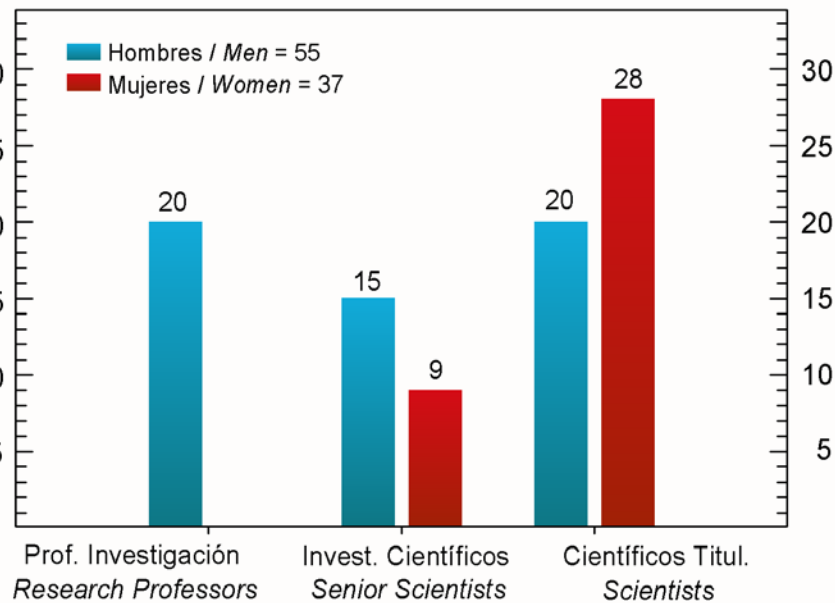
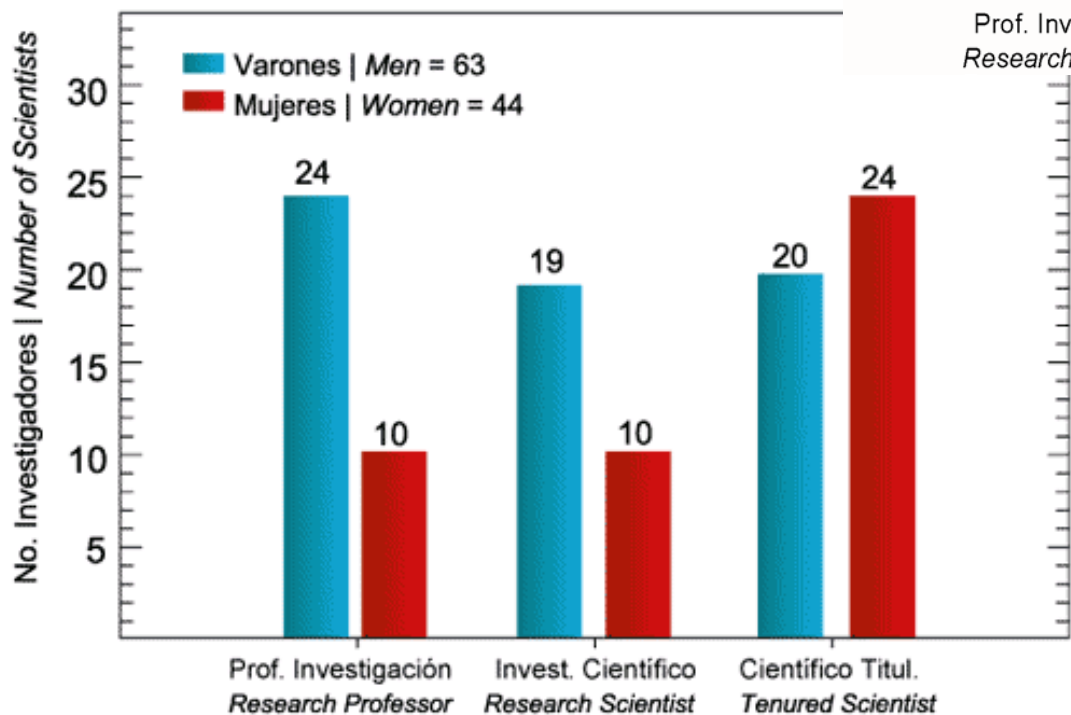
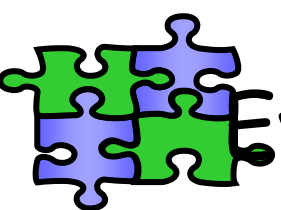
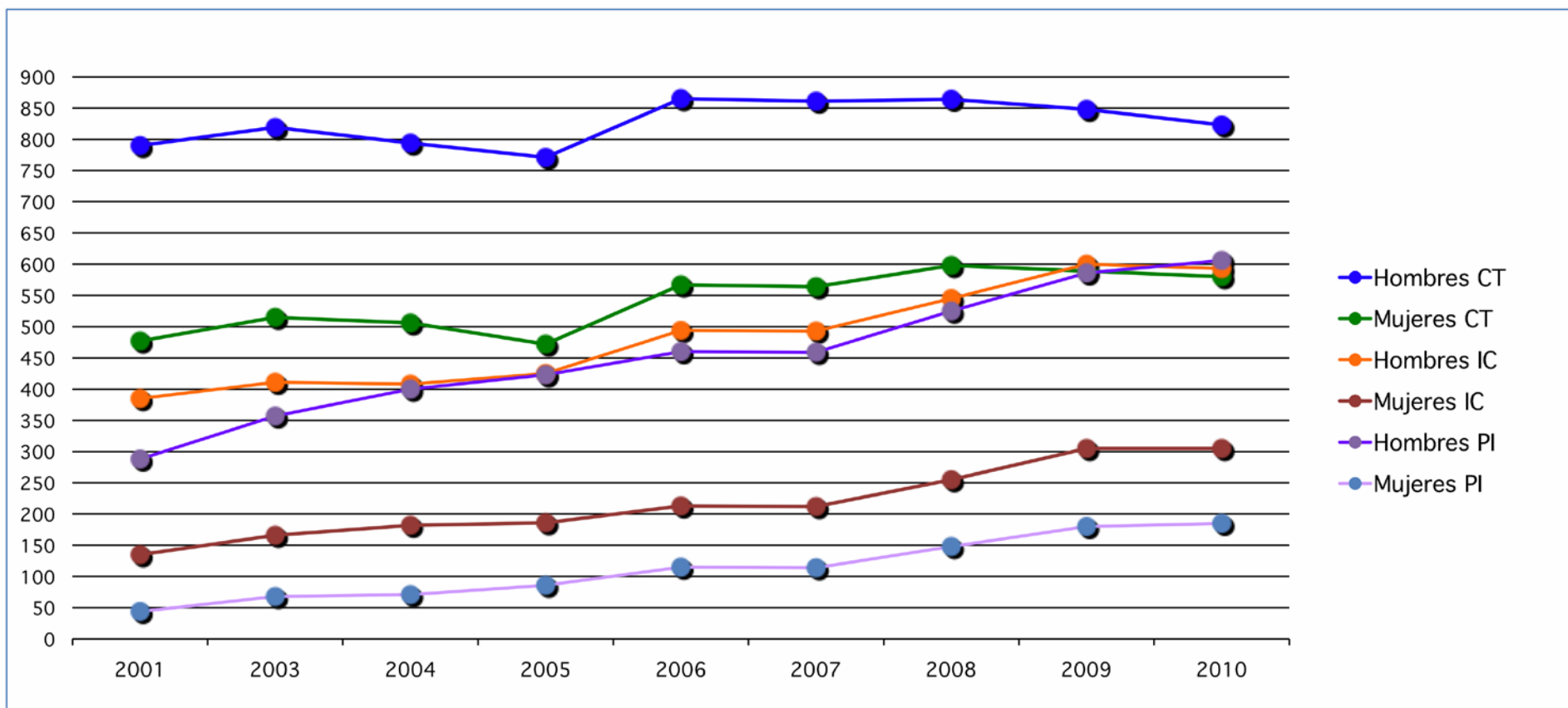


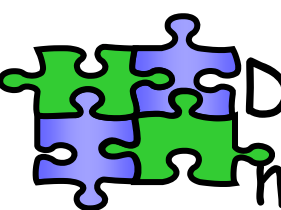
Fig. 2
Distribución del personal investigador por cateq
Histogram of the Scientific Personnel by Professional C



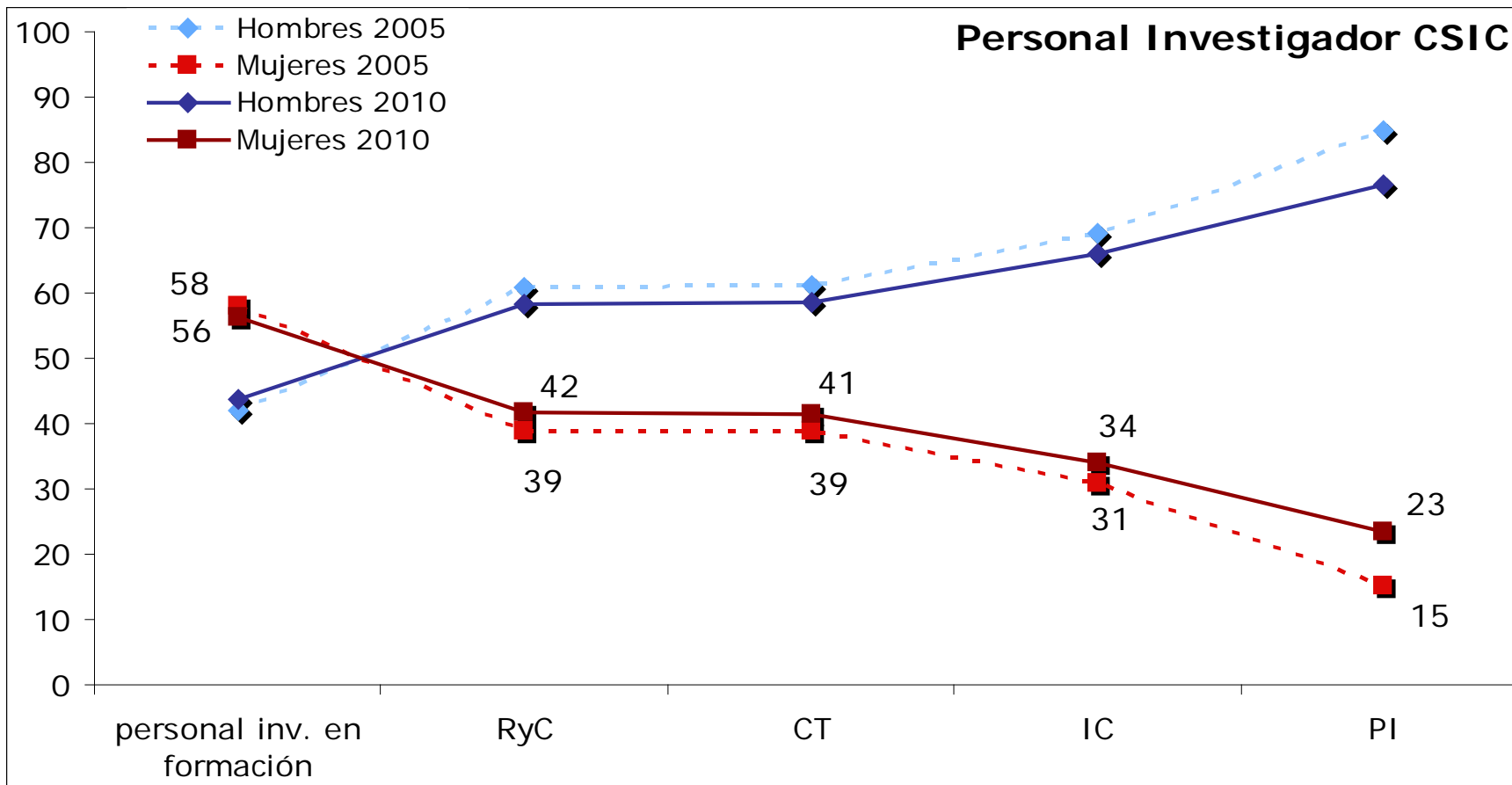


Evolución de la plantilla investigadora desde 2001 hasta 2010



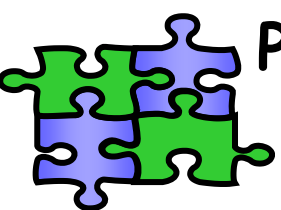


Distribución del porcentaje de hombres y mujeres en todos los niveles del personal científico del CSIC-2005- 2010



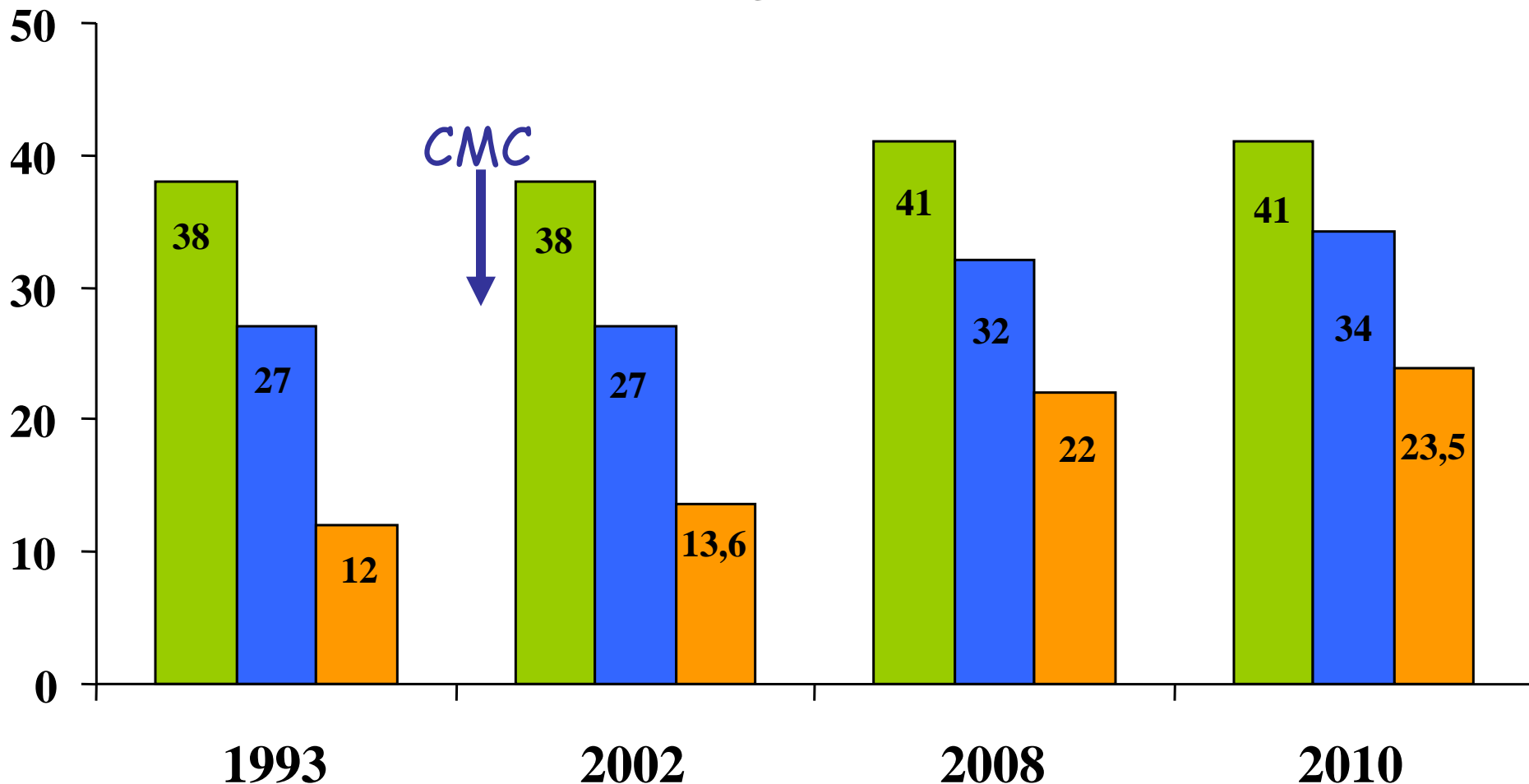
M. Pilar López Sancho

Gráfica elaborada por J. Álvarez-Marrón



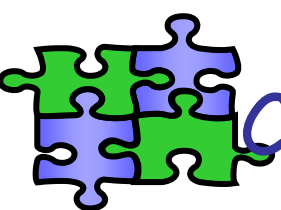
Porcentaje de Mujeres en el CSIC 1993-2010 (sobre el total en cada escala)

■ %C. Titular ■ %Investigadoras C. ■ %Profesoras I.



M. Pilar López Sancho

Recopilado por Flora de Pablo
CSIC: 2011
CSIC: 2008



Composición de la CMYC del CSIC

Presidente: Rafael RODRIGO MONTERO

Presidente de la Agencia Estatal CSIC

Preside por delegación: M^ª del Pilar LÓPEZ SANCHO

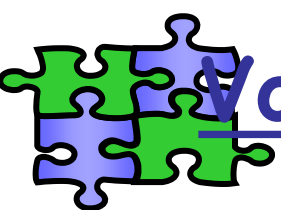
Vocales designados por el Presidente del CSIC

M^ª Luz MARTÍNEZ CANO-Secretaria de la Comisión

M^ª Pilar NIEVA DE LA PAZ

Juan José DAMBORENEA GONZÁLEZ

Felipe CRIADO BOADO



Vocales Electas por Área Científico

Técnica

Eulalia PÉREZ-SEDEÑO-Humanidades y C. Sociales

Flora DE PABLO- Biología y Biomedicina

Joaquina ÁLVAREZ MARRÓN -Recursos Naturales

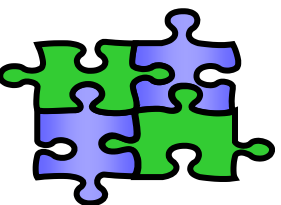
Luisa M^a SANDALIO GONZÁLEZ- Ciencias Agrarias

Francesca CAMPABADAL SEGURA-Ciencia y Tecnologías
Físicas

M^a Jesús LÁZARO ELORRI- Ciencia y Tecnologías Químicas

Alicia DURÁN CARRERA-Ciencia y Tecnologías de Materiales

Elena MOLINA HERNÁNDEZ- Ciencia y Tecnologia de
Alimentos

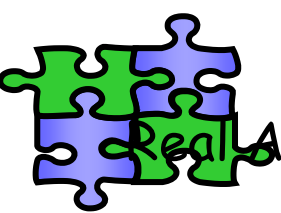


She Figures 2009

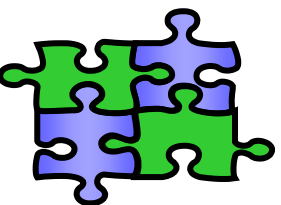
- 60% of the University Degrees
- 45% of the PhDs
- The growth rate of female PhDs is 6,8%, higher than that of men 3,2%
- The proportion of women drops to 18% in Grade A academic staff. Glass Ceiling?
Decades will be needed in order to close the gender gap.
- Institutions should be changed (women have already changed)



Academias-España

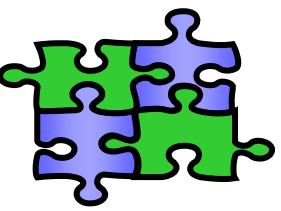


Real Academia Española	1713	
H 39 (93%)		M 3 (7%)
R. A. de Jurisprudencia y Legislación	1730	
H 36 (10%)		M 0 (0%)
R. A. Nacional de Medicina	1734	1999
H 44 (98%)		M 1 (2%)
R. A. de Historia	1738	1991
H 33 (92%)		M 3 (8%)
R. A. de Bellas Artes de S. Fernando	1744	1995
H 60 (97%)		M 2 (3%)
R. A. de Ciencias Exactas, Físicas y Naturales	1847	1998
H 43 (98%)		M 1 (2%)
R. A. de Ciencias Morales y Políticas	1857	
H 35 (97%)		M 1 (3%)
R. A. Nacional de Farmacia	1919	1987
H 45 (90%)		M 5 (10%)
R. A. de Ingeniería	1994	2003
H 45 (96%)		M 2 (4%)



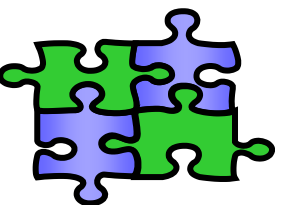
Academias-Europeas

• Academie Francaise	1635	1980
• A. des Sciences F.	1666	1979
• Royal Society of London	1660	1945
• Berlin-B. Akademie der W.	1700	1964
• Russian Academy of Sciences	1724	1939
• Royal Swedish A. of Sciences	1739	1748
• Icelandic A. of Sciences	1918	1928
• Académie R. des Sciences	1772	1957
• Royal Irish A.	1785	1949
• Royal Dutch A. of Sciences	1808	1950
• Finnish S. of Science and L.	1838	1960



Conclusions

- Legal framework-Political leader attitude.
- Watching and tracking.
- To analyse and assess results.
- To demonstrate that gender equality is good for SCIENCE.
- To change the criteria to assess scientific quality in order to increase the proportion of women as invited speakers, in scientific committees, in scientific awards, in decision-making boards (**Visibility**)

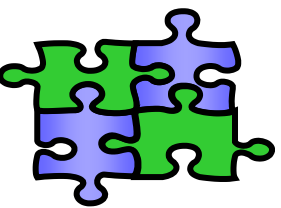


Marie Anne Pierrette Paulze (1758-1836)

En 1772 married Lavoisier. Translated to french Boyle and Priestsley works. She worked with her spouse at the laboratory and sketched diagrams of the experimental designs. She organised the publication of the *Chimie Memoirs* when Lavoisier was executed on May 1794.

She eventually remarried the Count Rumford.





Marie Sklodowska

- 1903 Presenta su tesis doctoral: la radiación es una propiedad intrínseca del átomo. Dos nuevos elementos el polonio y el radio.
- 1903 L' Académie de Sciences propone a H. Becquerel y a Pierre Curie a la Academia Sueca.

Pierre escribe una carta explicando que el trabajo en radiactividad estaba hecho en colaboración con Mme. Curie por lo que deberían ser considerados juntos *'plus joli d'un point de vie artistique'*

- **1903 Premio Nobel de Física**
- **1910 Rechazada por l' Académie des Sciences.**
- **1911 Invitada a la primera conferencia Solvay. Premio Nobel de Química.**

