
The 1st European employment survey for chemists & chemical engineers and an **outlook for the next one**

Reiner Salzer
ECTN & TU Dresden

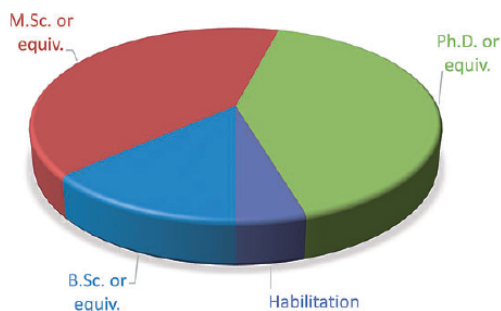
- 1. The Complete Report**
 - 2. Responses and Language**
 - 3. Qualification and Job Market**
 - 4. Salaries**
-

1. The Complete Survey Report

European Survey for Chemists

The Professional Status of European Chemists and Chemical Engineers

Reiner Salzer,^{*[a]} Philip Taylor,^{*[b]} Nineta H. Majcen,^[c] Francesco De Angelis,^[d]
Sophie Wilmet,^[e] Evangelia Varela,^[f] and Ioannis Kozaris^[f]



European chemists and chemistry:

This guest editorial presents the results of the first European employment survey for chemists and chemical engineers. It provides fascinating insights into which chemical sub-discipline offers the most jobs, in which country is a chemist likely to get a job quickest and where is the chemist likely to earn the highest salary.

DOI: 10.1002/chem.201501364

The Report's Altmetric Score



This article has an **Altmetric score** of **53**. This is our high-level measure of the quality and quantity of online attention that this article has received. This score was calculated when the article was last mentioned on **22 July 2015**.

ALL ARTICLES

#55,728

of 4,271,945 articles

ARTICLES IN CHEMISTRY - A
EUROPEAN JOURNAL

#5

of 2,967 articles

ARTICLES OF SIMILAR AGE

#3,877

of 154,790 articles

ARTICLES OF SIMILAR AGE IN
CHEMISTRY - A EUROPEAN
JOURNAL

#1

of 386 articles

Altmetric has tracked 4,271,945 articles across all sources so far. Compared to these this article has done particularly well and is in the 98th percentile: it's **in the top 5% of all articles ever tracked** by Altmetric.

„Europe Seeks Chemists“

Regional chemical industry strengthens efforts to build skills and ensure employment

**EuCheMS as
successful
political player**



A Post by Chemjobber

- It seems goofy to report the results of a survey of **chemists and chemical engineers** (it would be in the US and Europe.)
- We have no idea how representative the survey reflects the **academic and industrial chemists**.
- It is not clear how well this survey reflects the **European chemical societies**.
- It is an attempt to understand **who did not answer the survey**. What was the response rate?

...

**More responses
necessary**

2. Responses

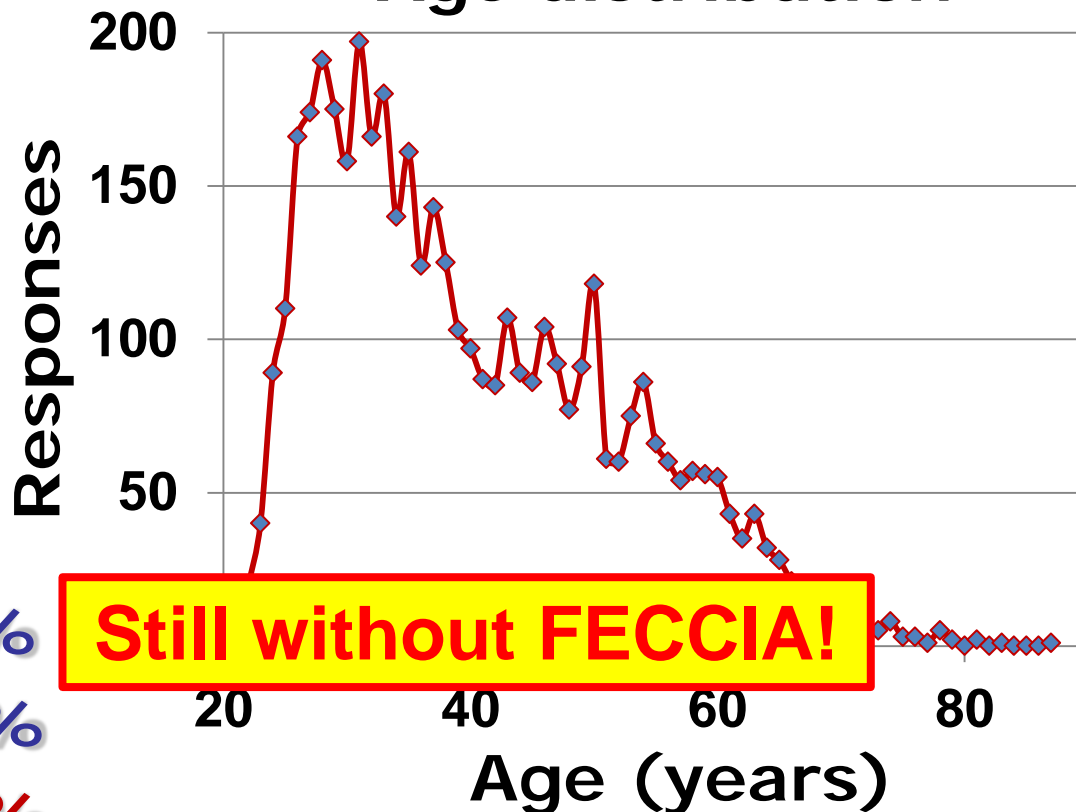
4440 responses

<3% EuCheMS Membership

3830 responses accepted

2445 graduated within last 15 years

Age distribution



Shares:

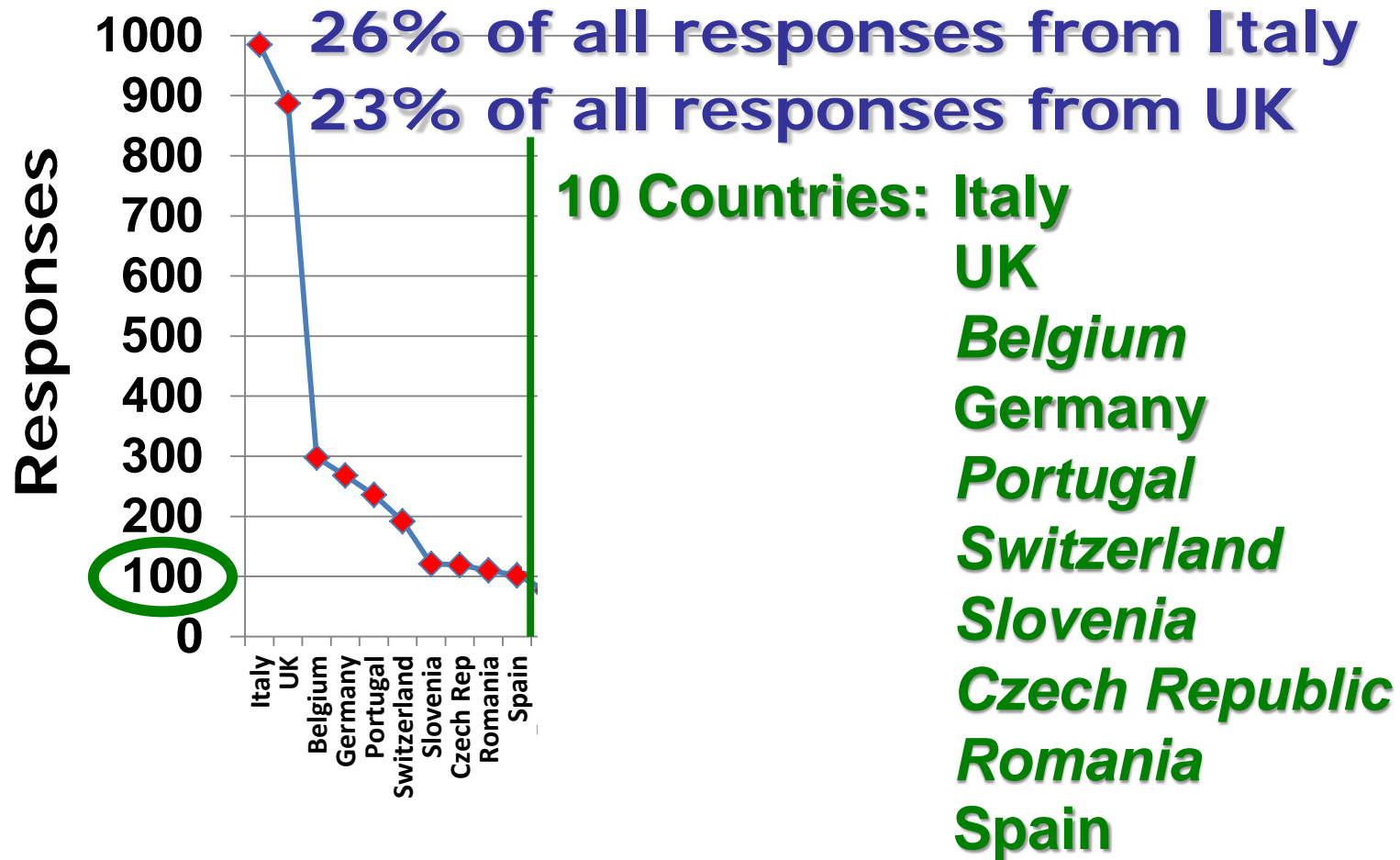
Industry: 47%

Females: 39%

Not employed: 3%

Current Working Country

Responses stored in anonymous form



... Thanks to the G10 Societies!

Activation of Membership

Based on EuCheMS Membership

60%
40%
20%

**How to become an
Catalyst?**

Czech
Hungary
Austria

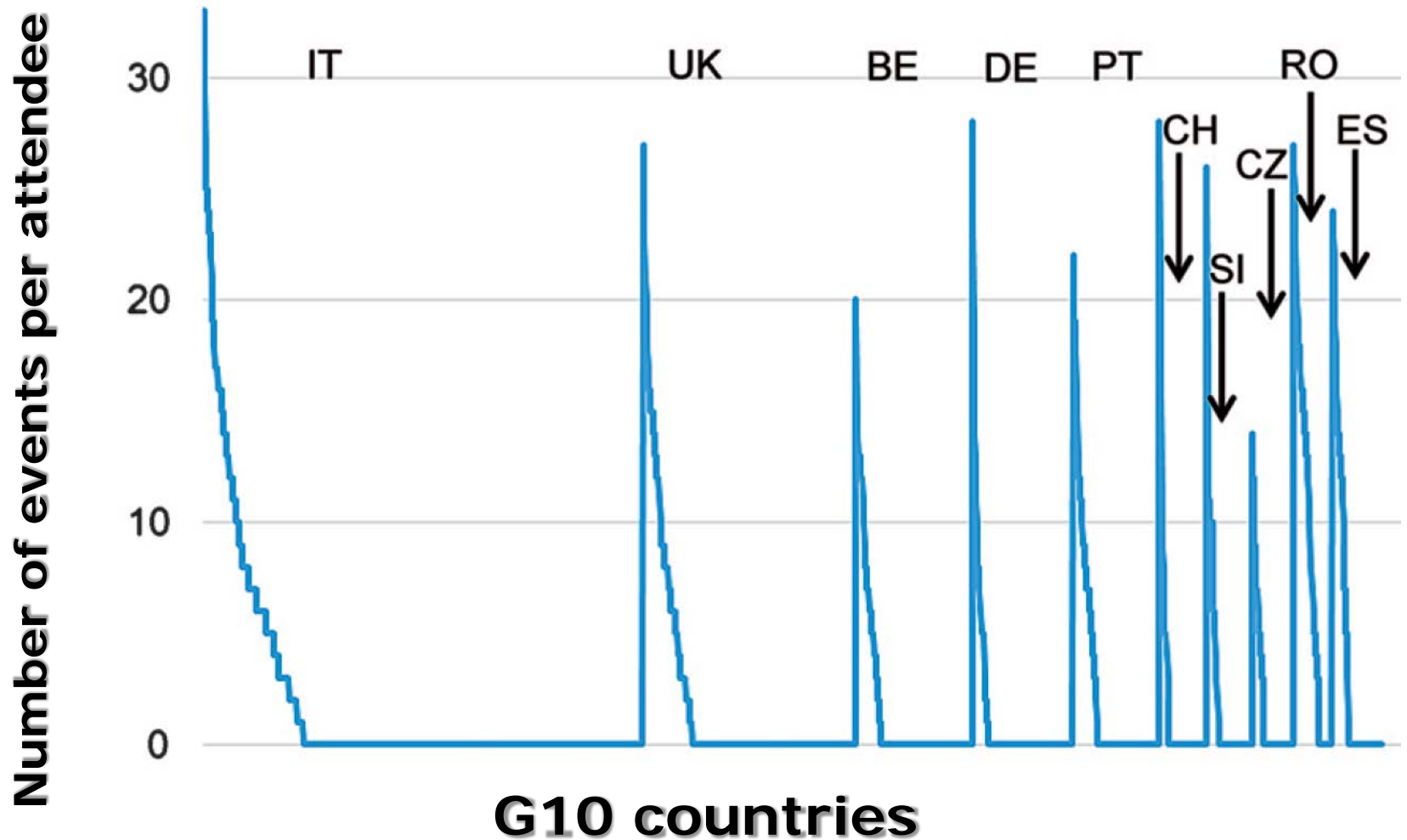
Country

Italy
Switzerland
Czech Republic
Romania
Norway
Hungary
Austria

... Thanks to the Catalysts!

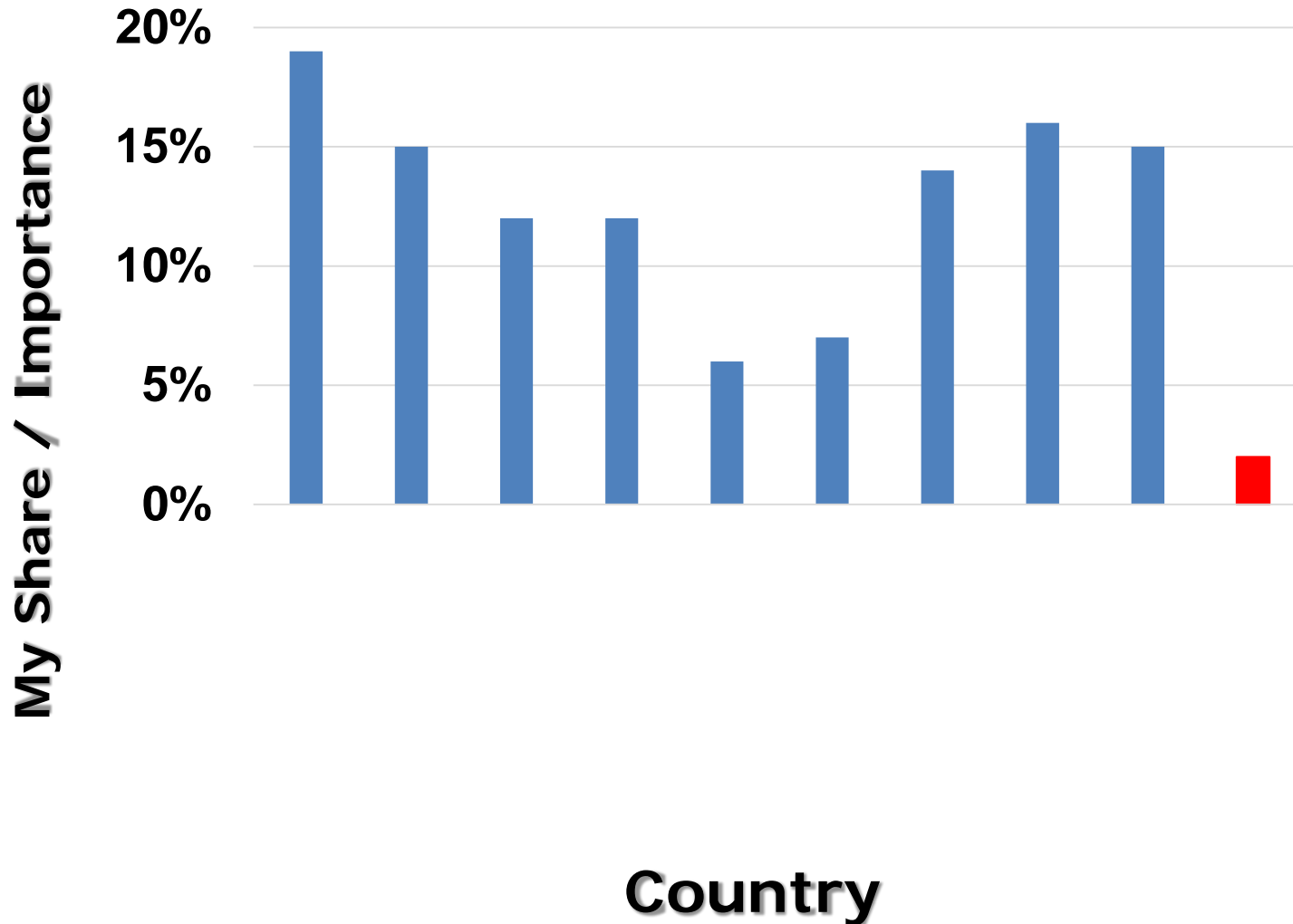
Results only Valid for Italy and UK ?

Continuing Education: Participation



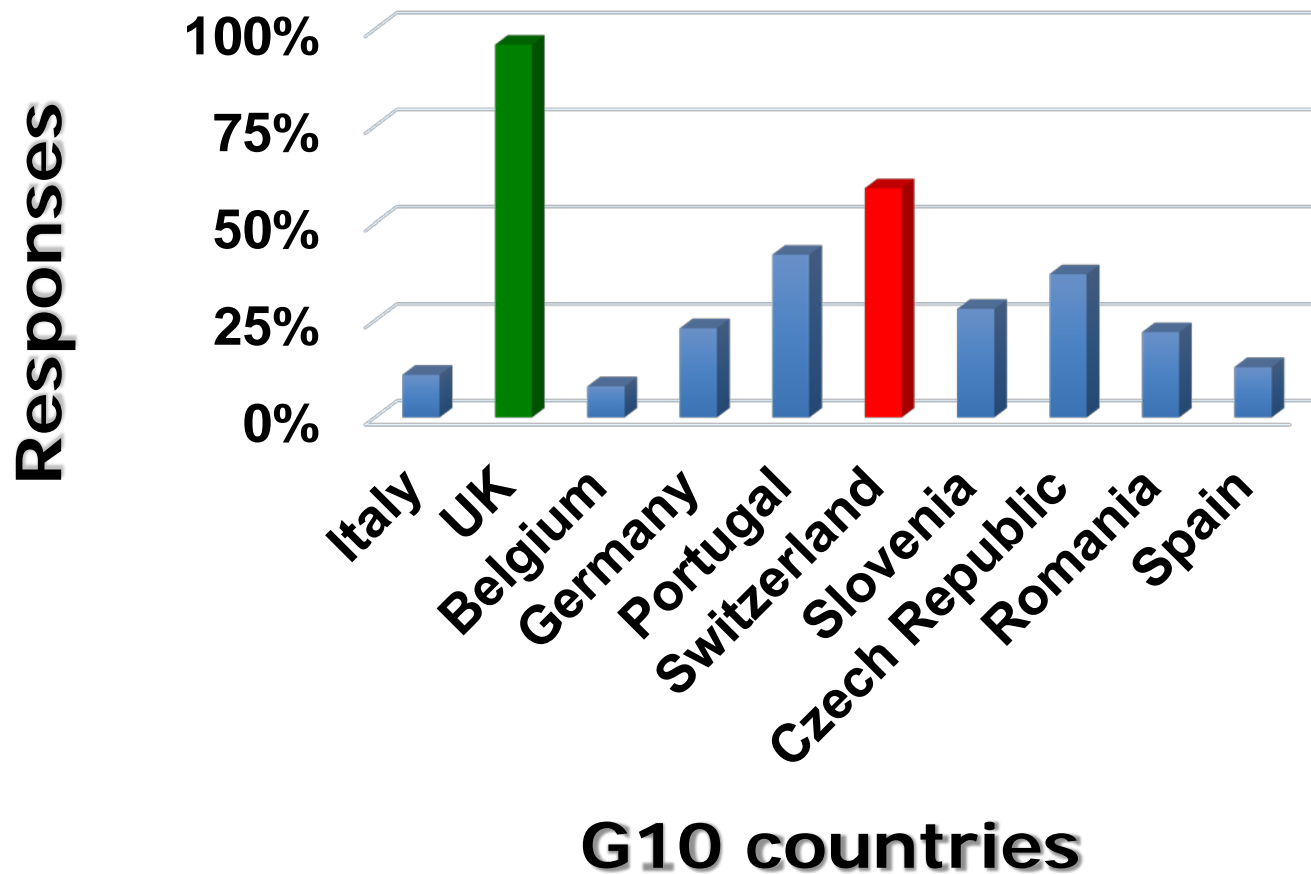
Graduates of last 15 years

What, if You Simply do not Participate?



Language

Percentage of responses in English even though the native language was available:



Online O

**24 Languages
required?
Who translates?**

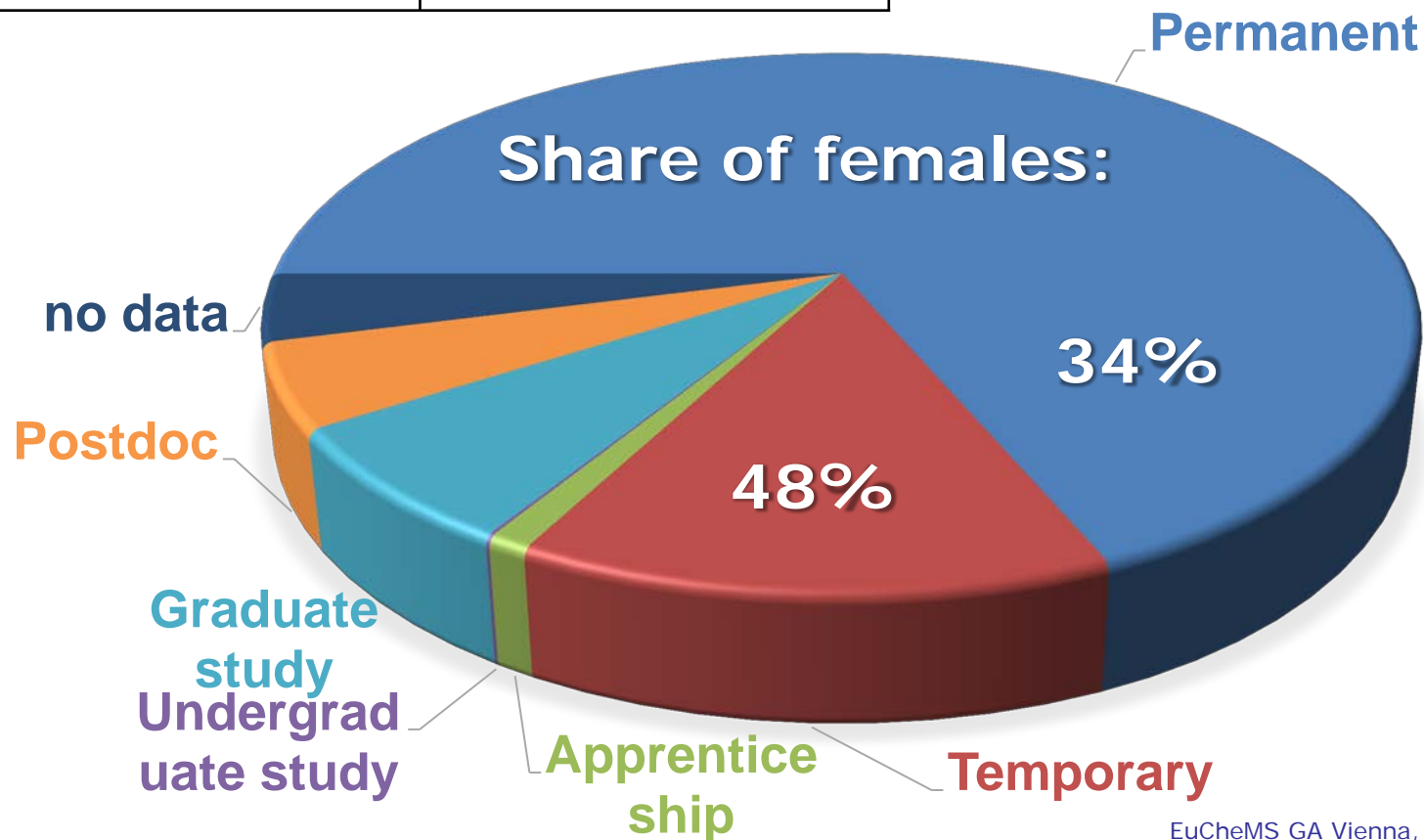


**Requires Simplification!
No Free-text anymore**

3. Qualification and Job Market

Current Job Contracts

Employment Status	
Full time	84%
Part time	6%



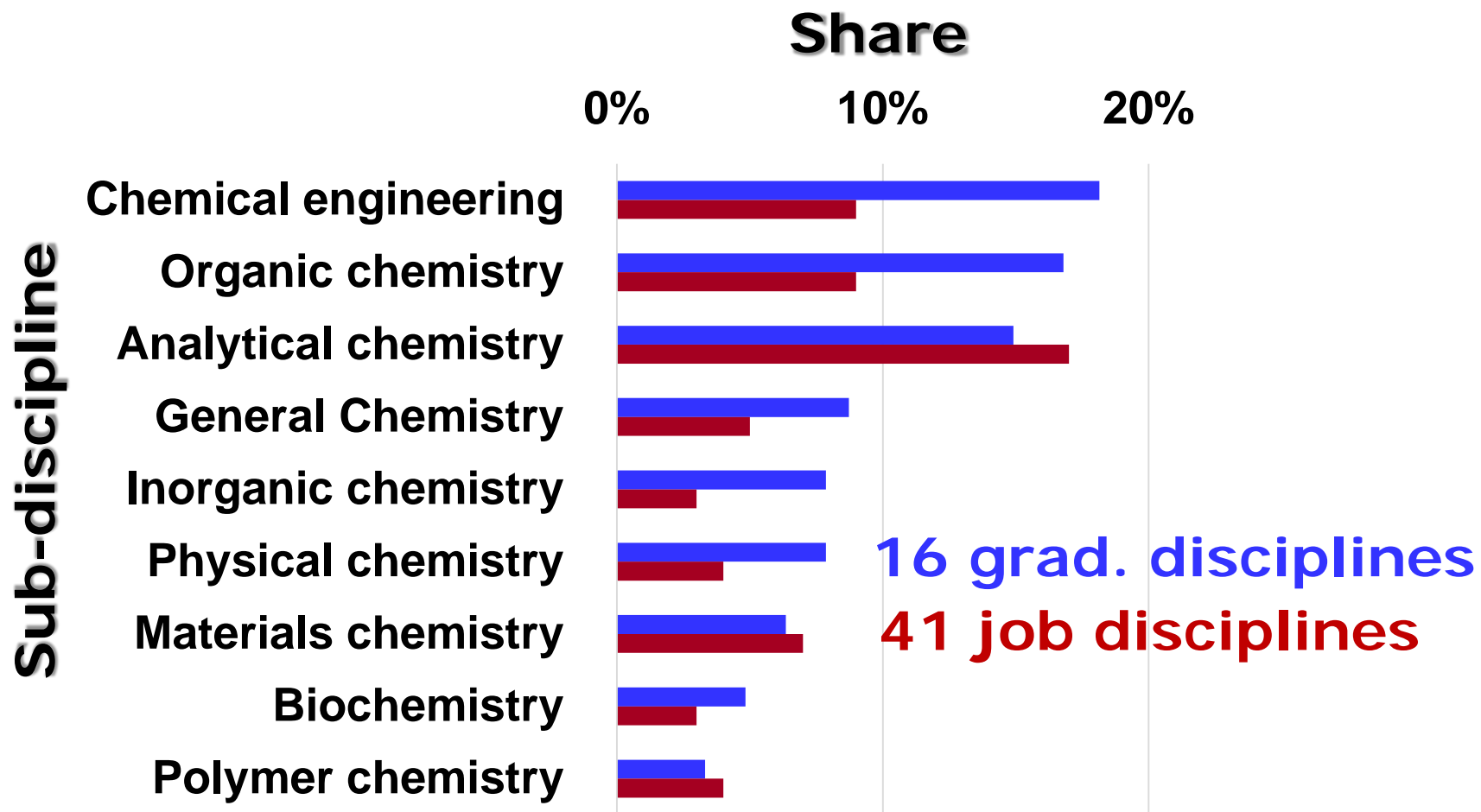
Qualification of Chemists in Europe

M.Sc. or
equiv.

**EuChemS/ACS data
comparable?
→ Joint Survey!**

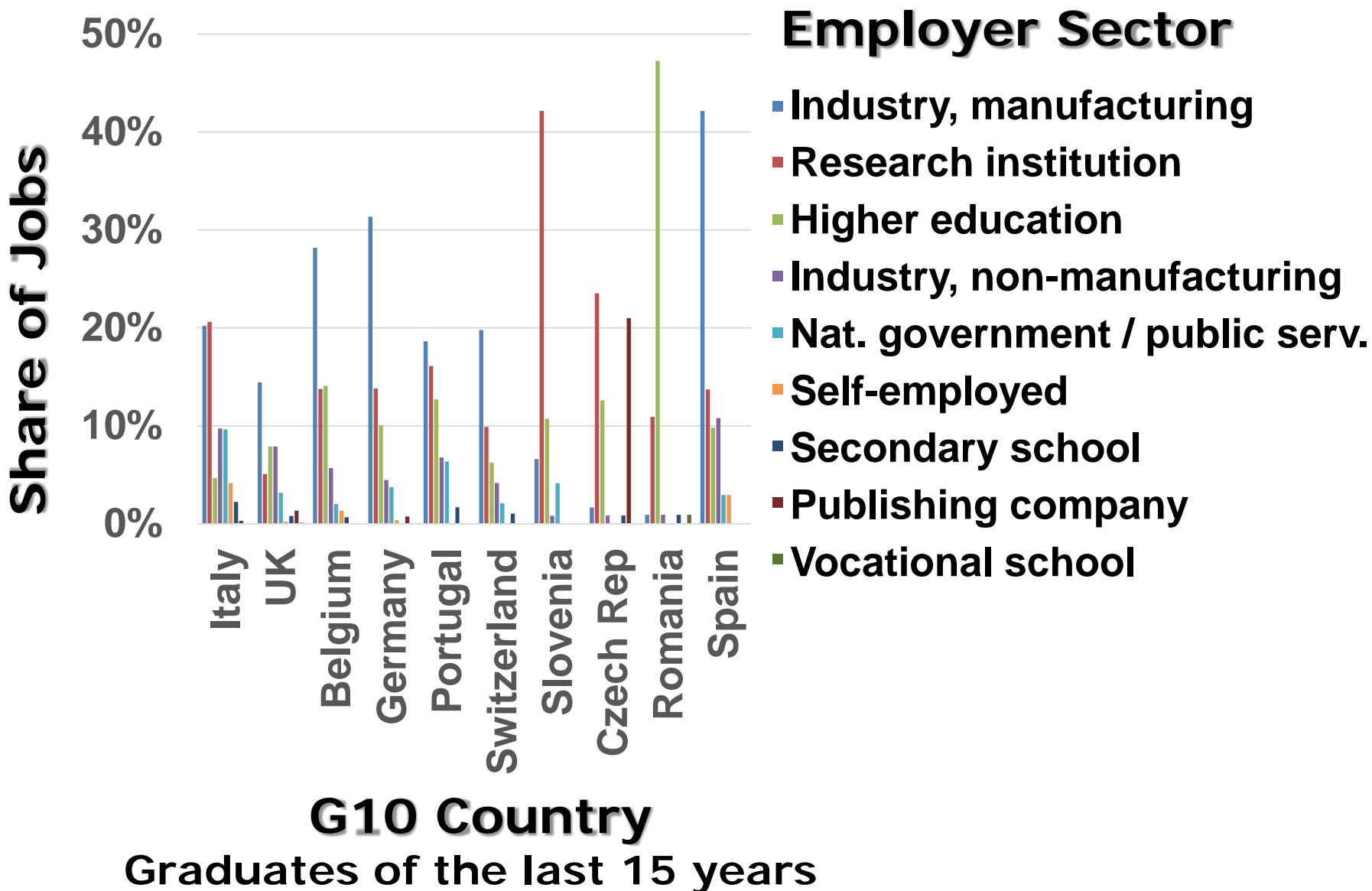
		Females	
	Grads	Grads 2009	ACS 2009
M.Sc. or equiv.	44%	38%	48%
Ph.D. or equiv.	37%	48%	39%

My Current Job is dominated by ...

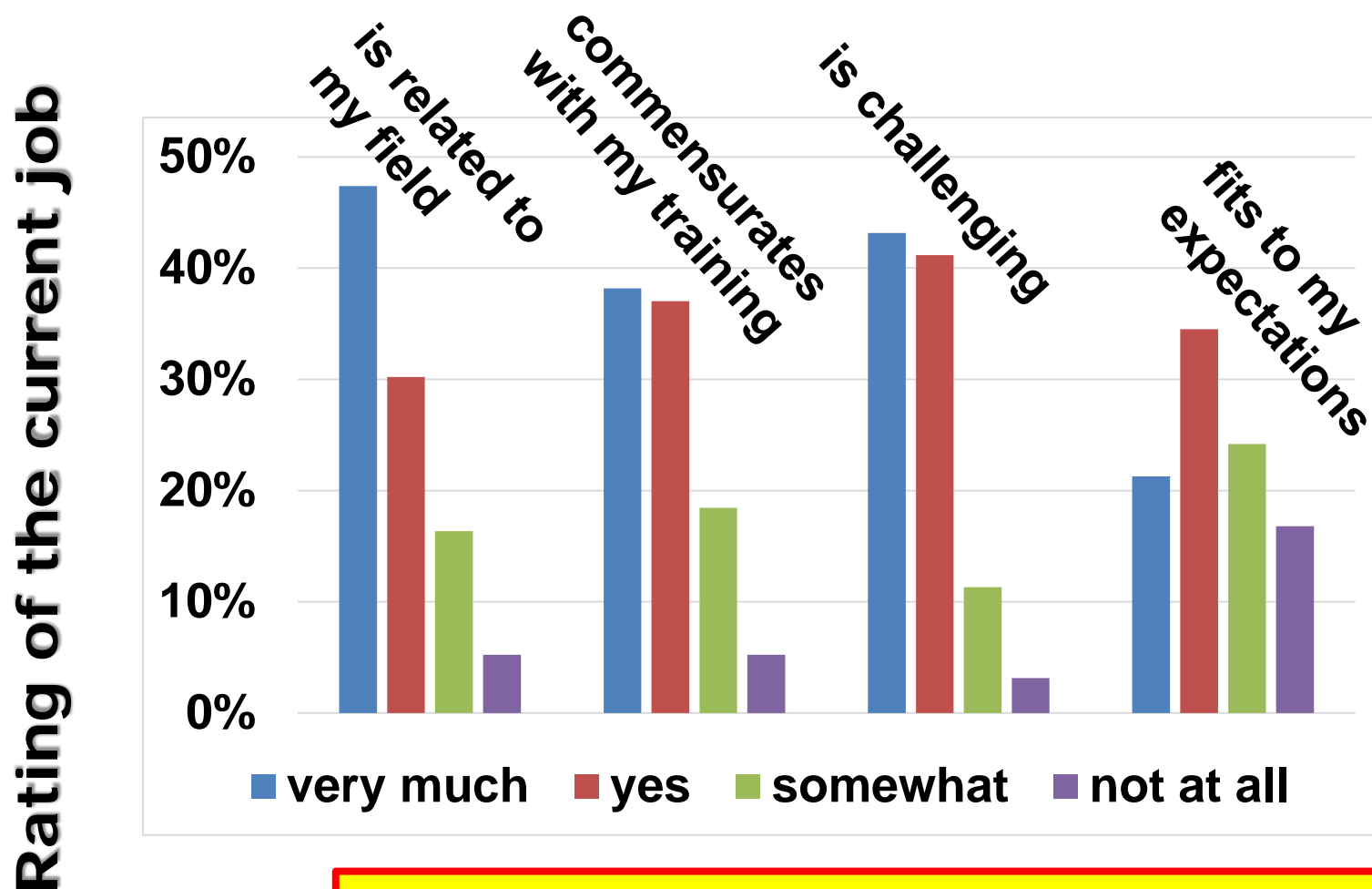


Graduates of last 15 years, top 9 sub-disciplines

Country-specific Job Market



My Job ...



... the image of chemistry

4. Salaries

Median Salaries (EUR)

Country	Master		PhD	
	#resp.	salary	#resp.	salary
Italy	242	35000	88	38000
UK	122	49302	311	59764
Belgium	62	53150	67	83000
Germany	15	51000	103	80000
Portugal	49	35000	30	36000
Switzerland	13	98000	90	130000
Czech Republic	i.d.		18	14966
Romania	i.d.		48	5000
Spain	27	43000	i.d.	

Full time, perm. contract, >3 years experience

4. Salaries

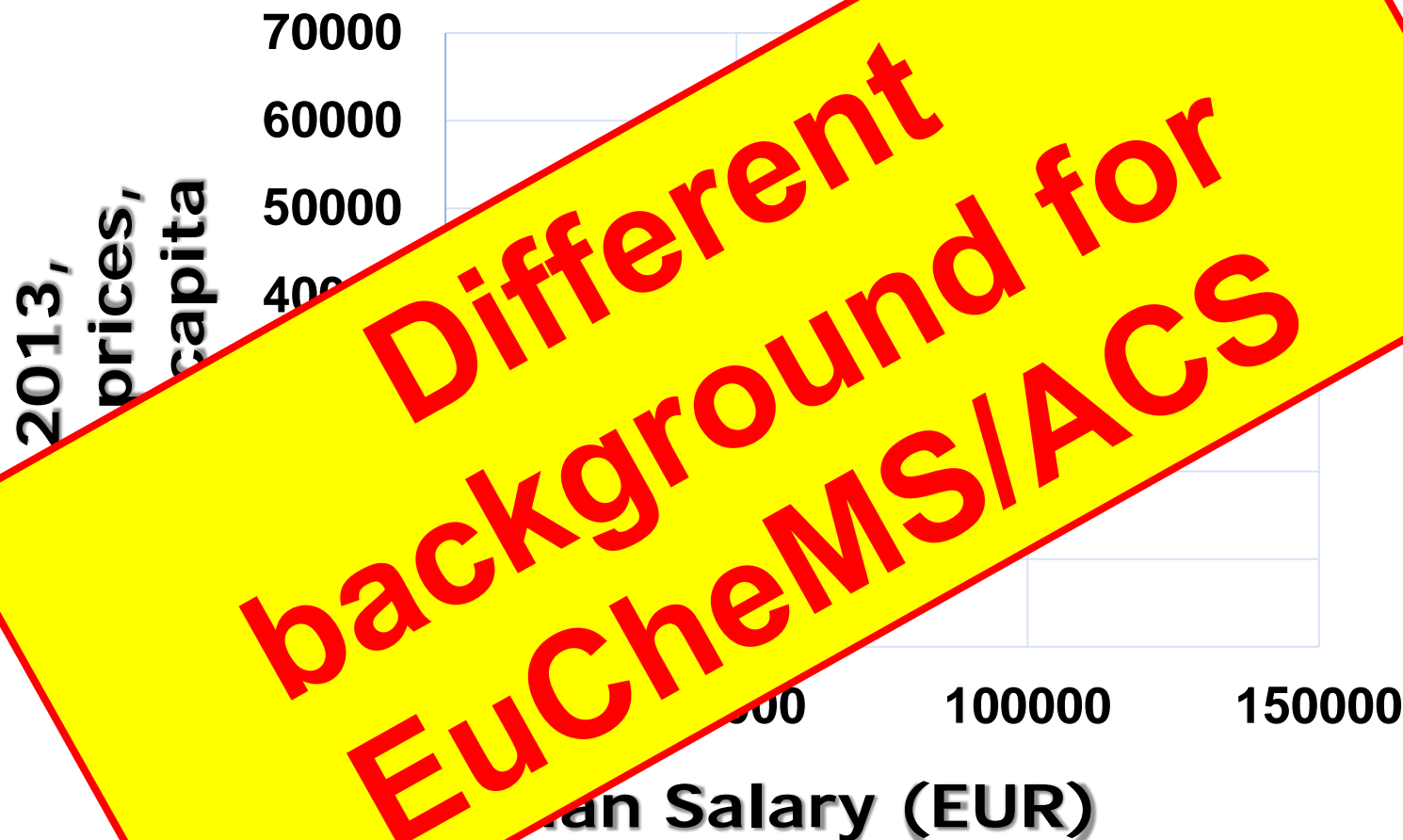
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Spain	27	43000	i.d.	

EU: Ph.D. BE/RO: 16.6

USA: male Ph.D. Pac.Coast/Central 1.3

Ph.D. Median Salaries and GDP



Full time, term. contract, >3 years experience

Proposals for the 2nd Survey

- **EuCheMS/ACS project in 2017 (?)**
- **ECTN is responsible partner, Cefic, JRC participate actively**
- **Simplified online questionnaire, common core plus special pages**
- **Translation by national societies**
- **National societies approach their members directly (>5% response)**

Immediate Next Step: Questionnaire

Name of the National Society:

Name of the President / Secretary General:

Our society supports a stronger political activity of EuCheMS: yes / no

Our society supports regular EESs organized by EuCheMS and executed by its Member ECTN: yes / no

Cefic and the European Commission/Joint Research Centre shall be invited for active participation: yes / no

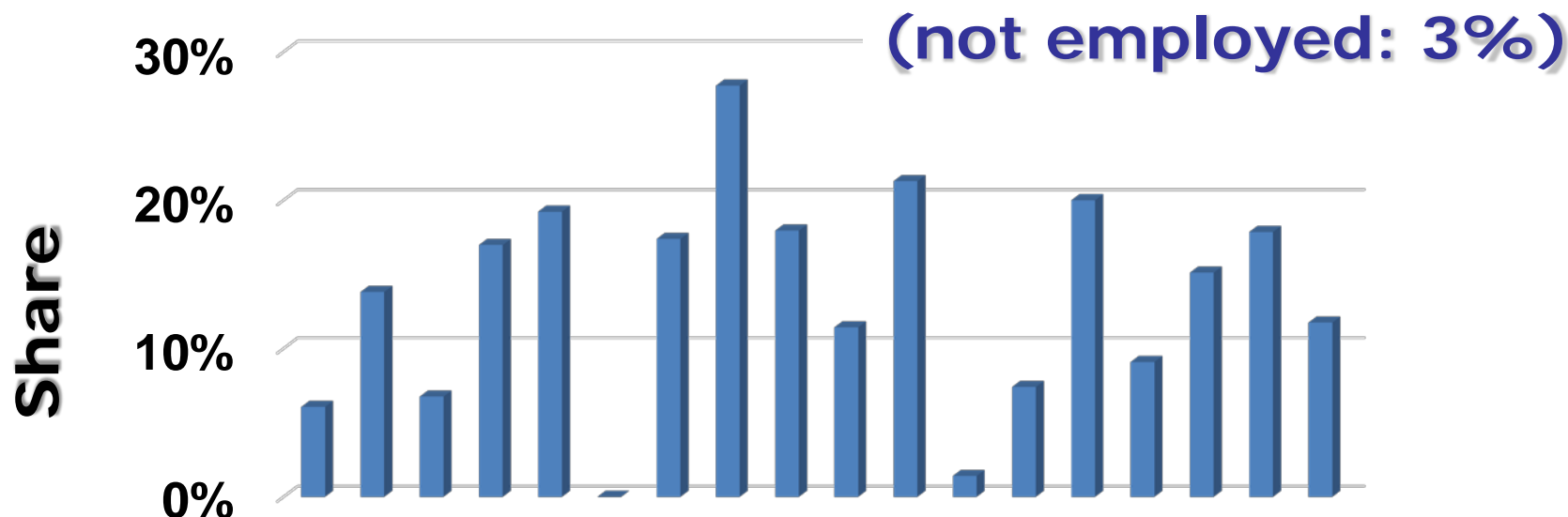
We support a joint survey EuCheMS/ACS: yes / no

The EuCheMS/ACS questionnaire shall consist of a common core and a partner-specific part: yes / no

....

3. Employment

Found Job not Immediately after Graduation

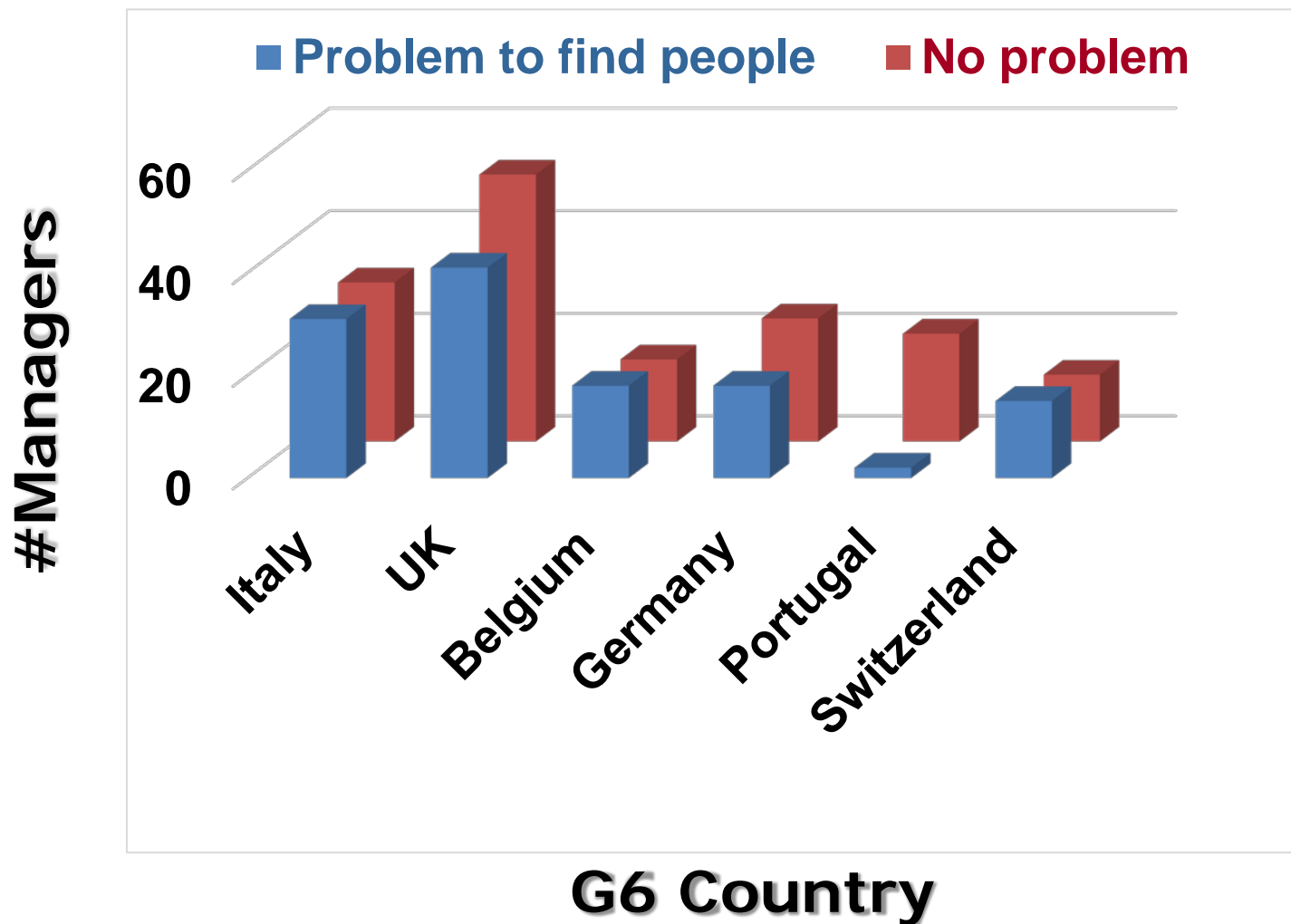


... the higher the level of education, the lower the unemployment ratio of young people.

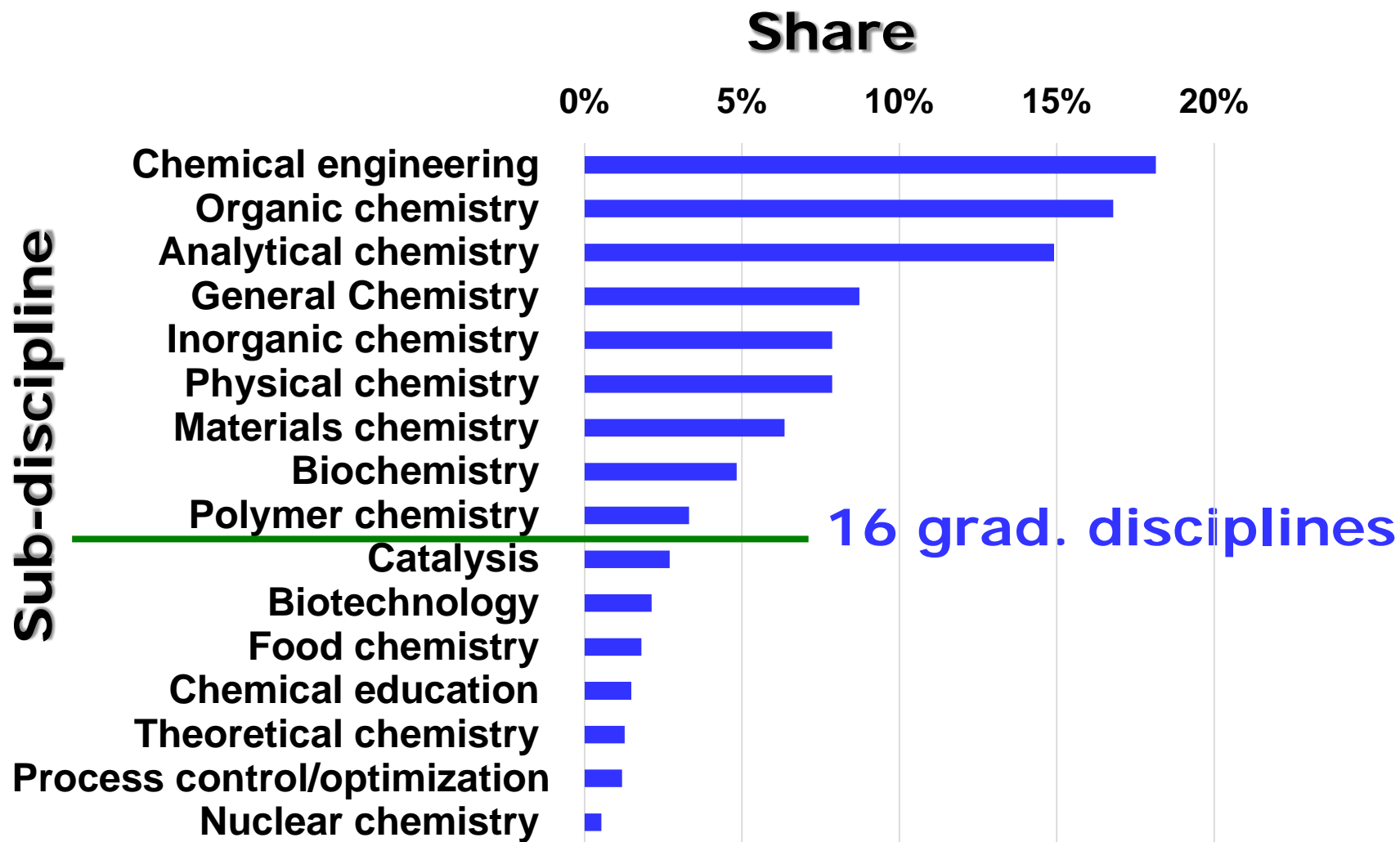
Yerevan 2015

Country (>20 entries)
Graduates of the last 15 years

Problems to Find New Employees?

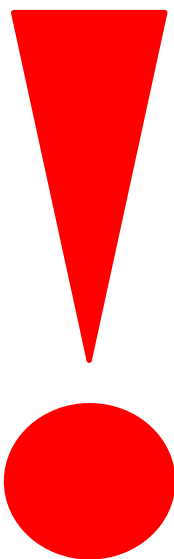


I Graduated in ...



Graduates of last 15 years

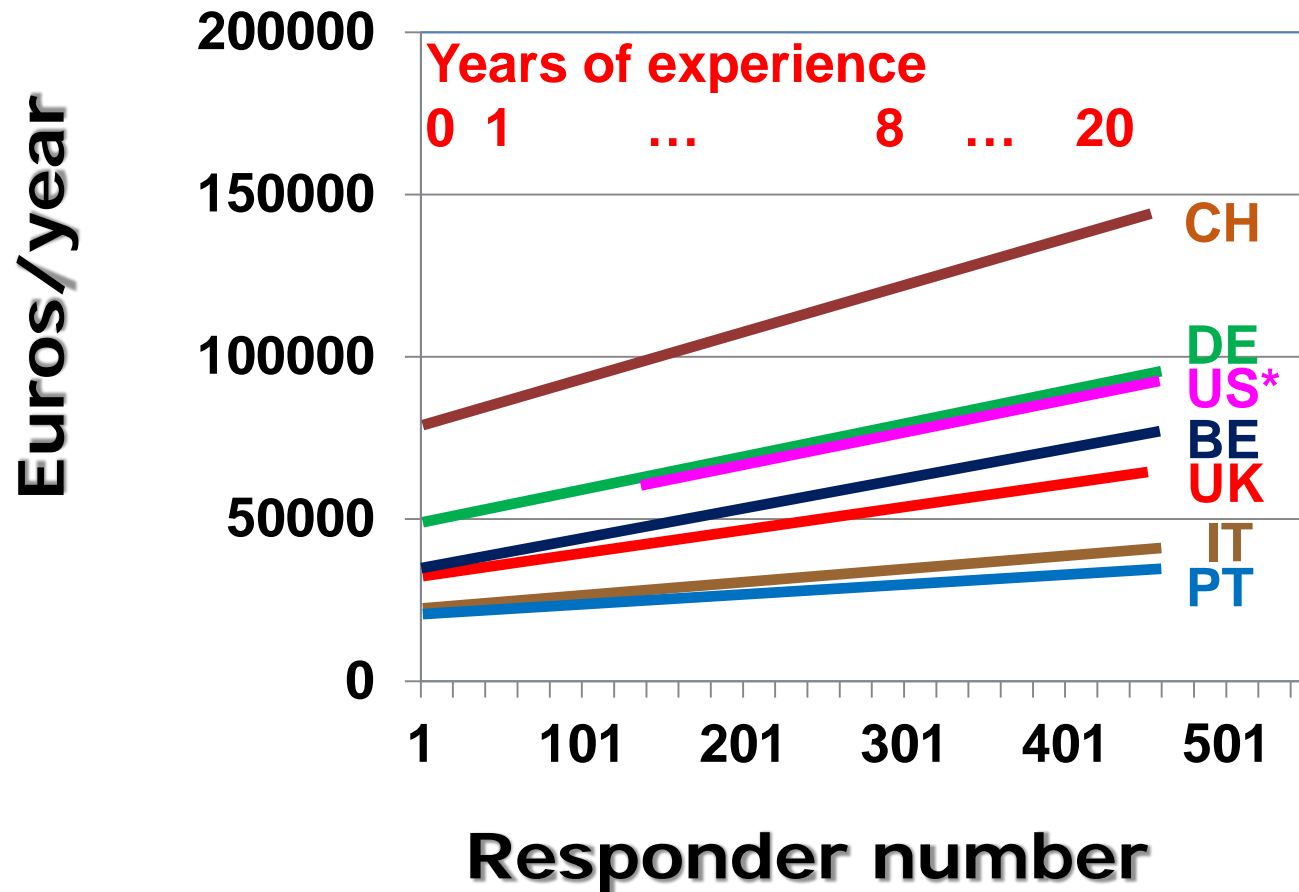
Continuing Education: **Participation**



	Participated
Bachelor	50%
Master	38%
Doctoral	32%
Habilitation	25%

5. Salaries: M.Sc.

Fully employed, permanent contract



ECTN - A SUSTAINABLE FUTURE FOR CHEMISTRY EDUCATION IN EUROPE

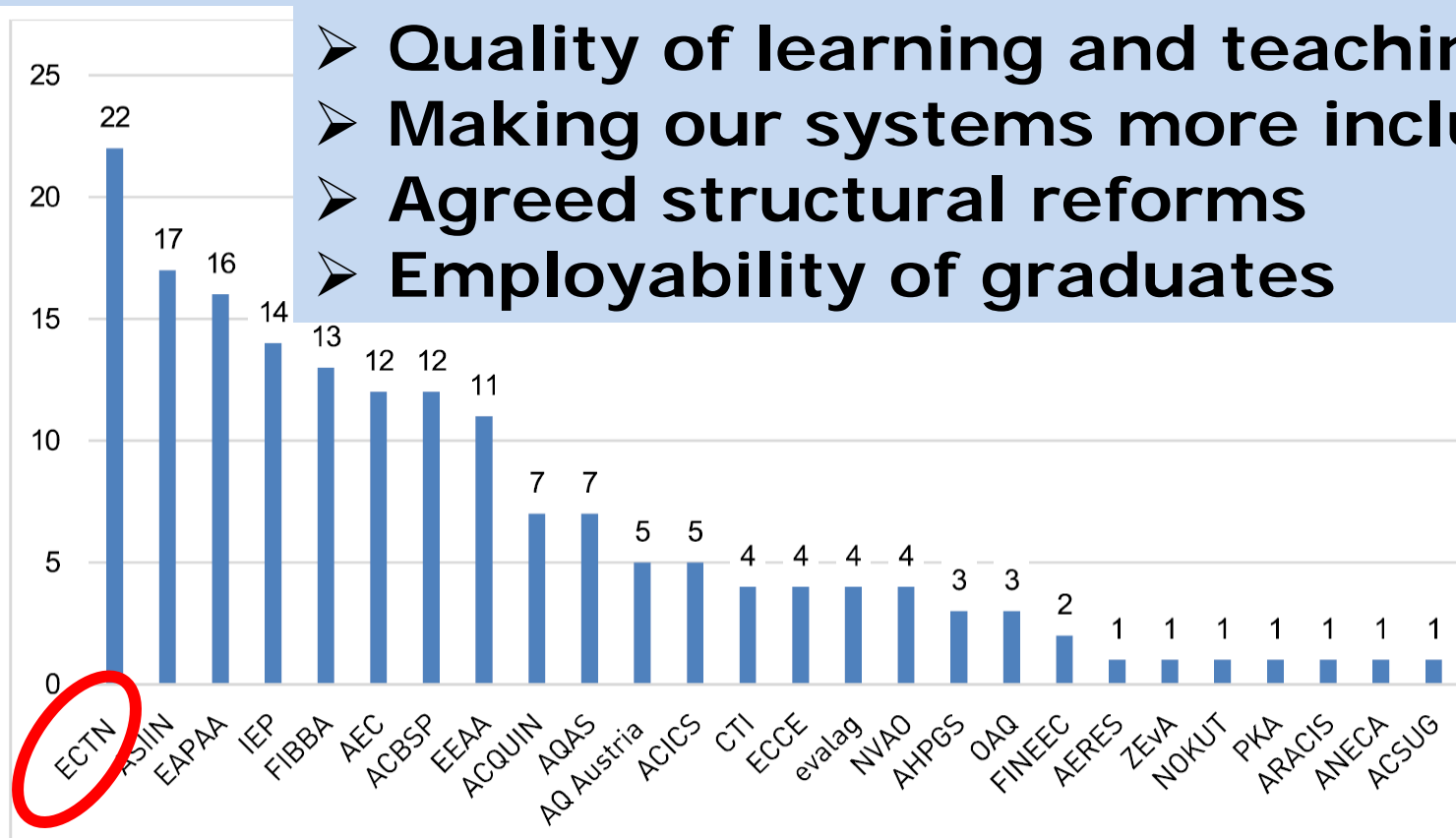


- **Pioneered** by six network activities funded by the **EC** (Lifelong Learning Programmes)
 - **Established in 2002**, comprises **120 institutional members** from 31 European countries plus 8 worldwide
 - Founded to give continuity to and to **implement programmes of skills and knowledge in chemistry** primarily, in science in general and in chemical engineering
 - **Supporting member of EuCheMS**
-

ECTN - A SUSTAINABLE FUTURE FOR CHEMISTRY EDUCATION IN EUROPE



Yerevan 2015:



- Quality of learning and teaching
- Making our systems more inclusive
- Agreed structural reforms
- Employability of graduates

https://www.eqar.eu/fileadmin/documents/eqar/riqaa/WP5_RIQAA_Report_final.pdf

Info from ResearchGate

ResearchGate

Your research is in the spotlight



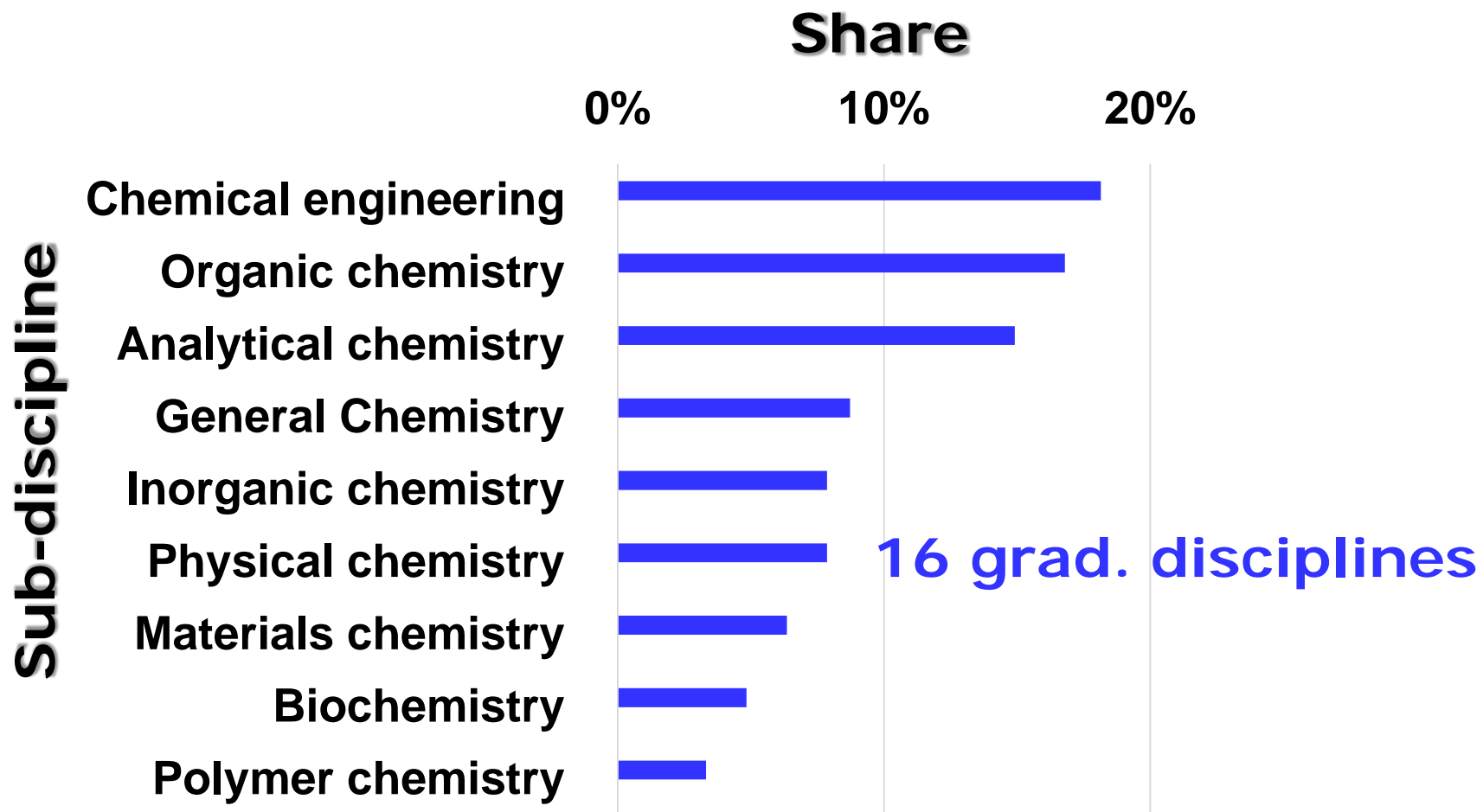
With **141 new publication views**, you were the **most viewed** researcher from your department last week

[Go to your stats](#)

Congratulations, Reiner. Your achievement is shown on the home feeds of your colleagues and co-authors. [Go to your home feed](#) now to see your peers' recent achievements.

Received Sept 22, 2015

My Current Job is dominated by ...



... what is required?

Graduates of last 15 years, top 9 sub-disciplines