# Demographics of chemistry students and staff at UK higher education institutions 2012/13 to 2021/22

## Overview

This report has been assembled by the Royal Society of Chemistry to show an overview of the demographics of Chemistry students and staff at UK Higher Education Institutions for the latest 10 years of available data. It presents HESA (https://www.hesa.ac.uk/) data provided by JISC Services Ltd., based on the HESA Student and Staff record.

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The Jisc Services Standard Rounding Methodology (https://www.hesa.ac.uk/about/regulation/data-protection/rounding-and-suppression-anonymise-statistics) has been applied so that all FTE (Full Time Equivalent) counts displayed or plotted have been rounded to the nearest 5.

The report comprises numbers about chemistry students and staff at different levels of UK higher education institutions:

- General statistics of chemistry students and staff (total numbers)
- Demographics of chemistry students (percentage breakdowns by domicile, school type, socio-economic classification, young/mature marker, institution type, institution region, sex, ethnicity, disability status)
- Demographics of chemistry staff (percentage breakdowns by nationality, terms of employment, academic employment function, age, institution type, institution region, sex, ethnicity, disability status)

See the footnotes for details about the processing of the data.

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# General statistics on chemistry students and staff at UK higher education institutions
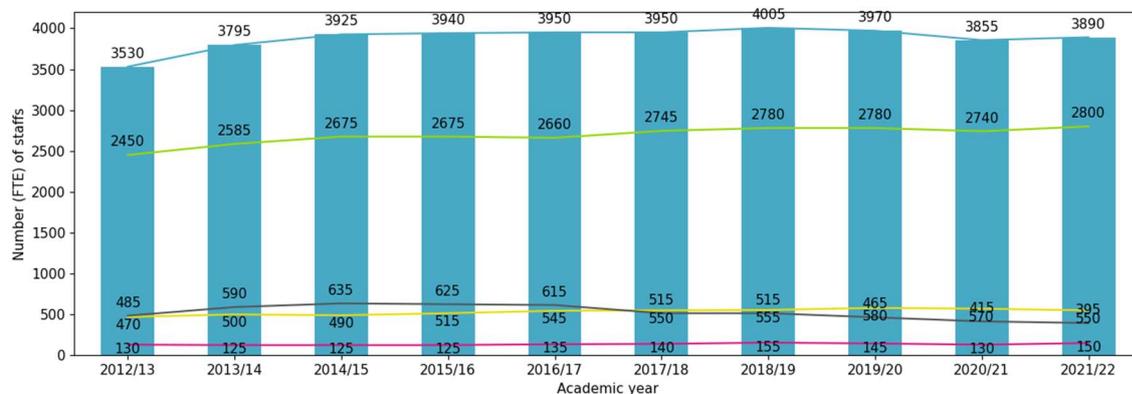
## Student numbers 2012/13 to 2021/22
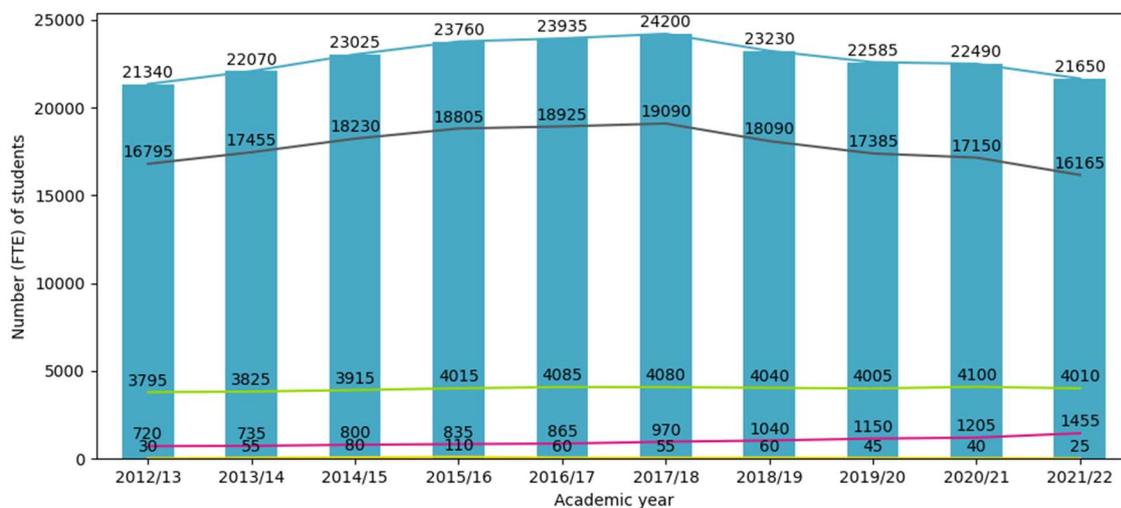


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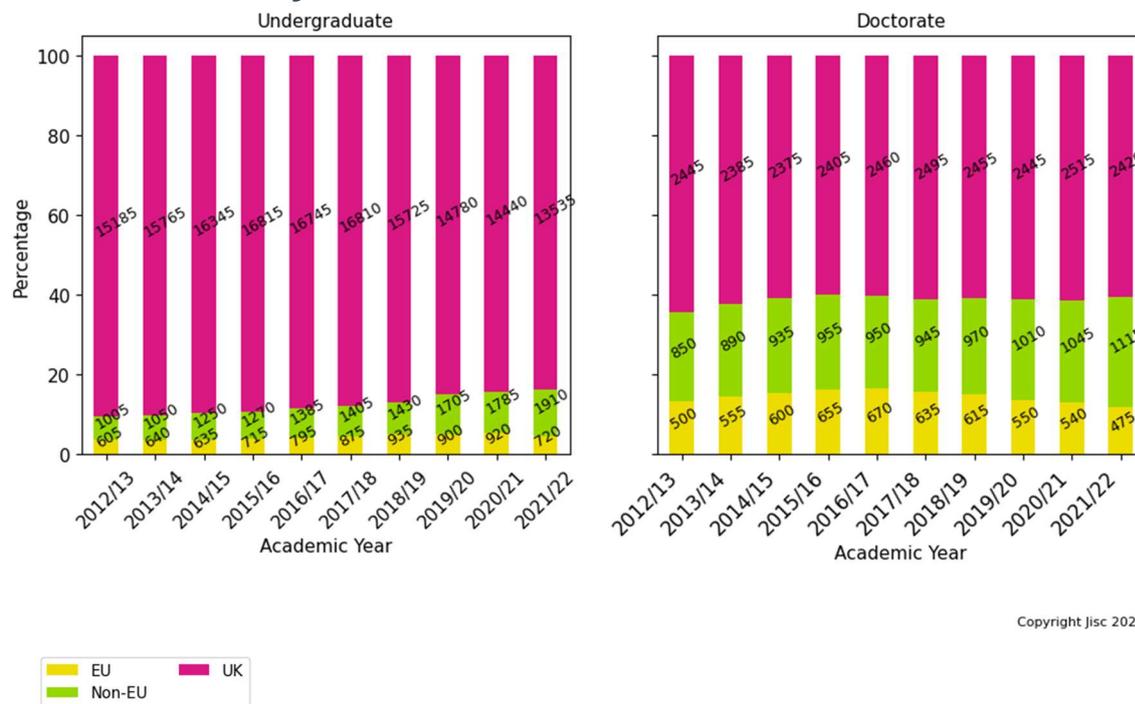
## Staff numbers 2012/13 to 2021/22



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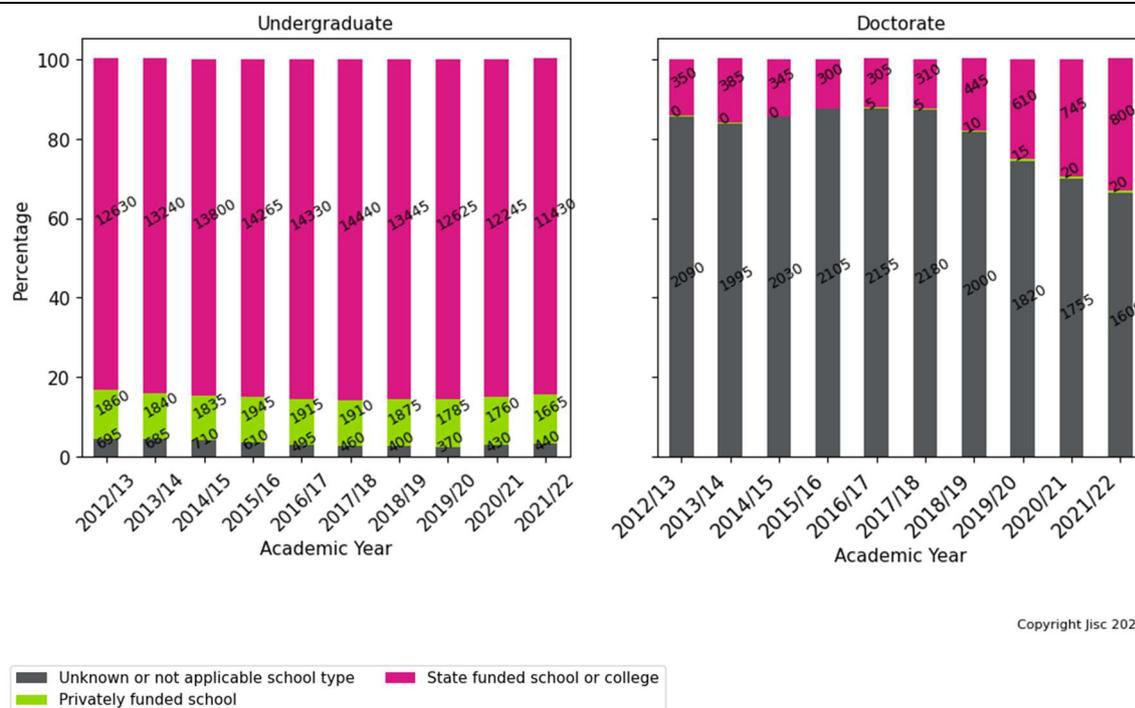# What are the demographics of chemistry students by "level of study" at UK higher education institutions?

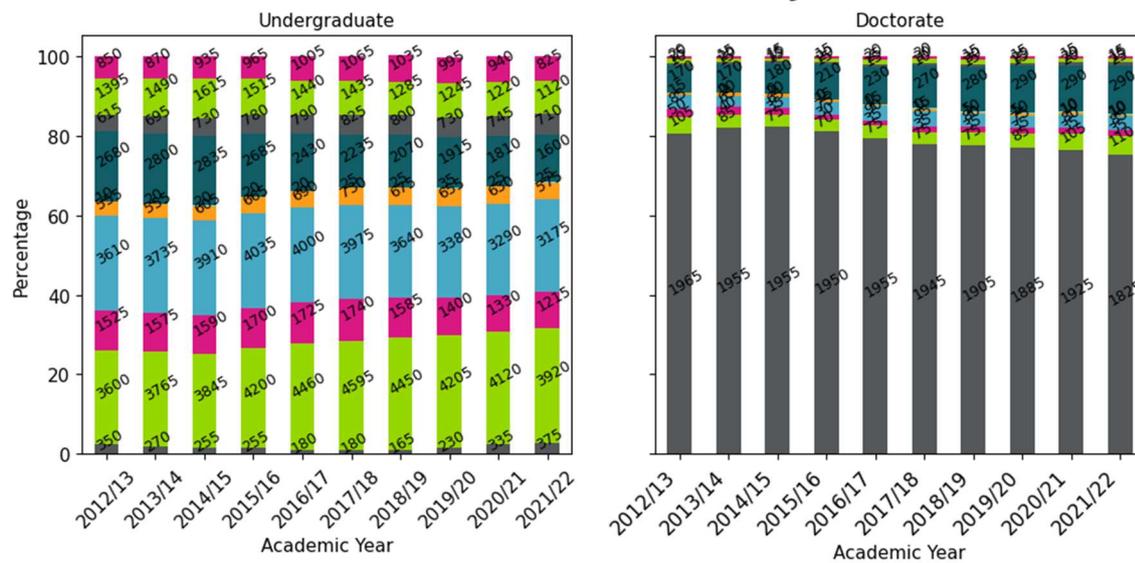## Domicile of chemistry students



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Legend: EU, Non-EU, UK

## School type of UK domiciled chemistry students



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Legend: Unknown or not applicable school type, Privately funded school, State funded school or college

## Socio-economic classification of UK domiciled chemistry students



Undergraduate | Doctorate

Legend:
- Unknown
- Higher managerial & professional occupations
- Intermediate occupations
- Lower managerial & professional occupations
- Lower supervisory & technical occupations
- Never worked & long-term unemployed
- Not classified
- Routine occupations
- Semi-routine occupations
- Small employers & own account workers

## Young/mature UK domiciled chemistry students



Undergraduate | Doctorate

Legend:
- Mature
- Young
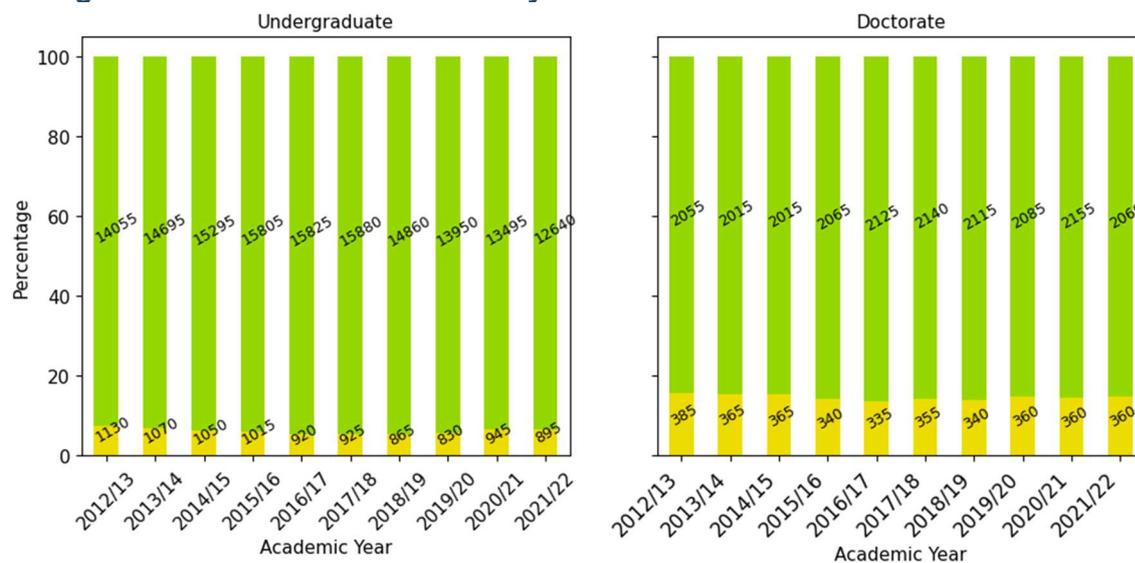
# Institution type of UK domiciled chemistry students



Undergraduate

Doctorate

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Legend: Post-1992 | Russell Group | Pre-1992
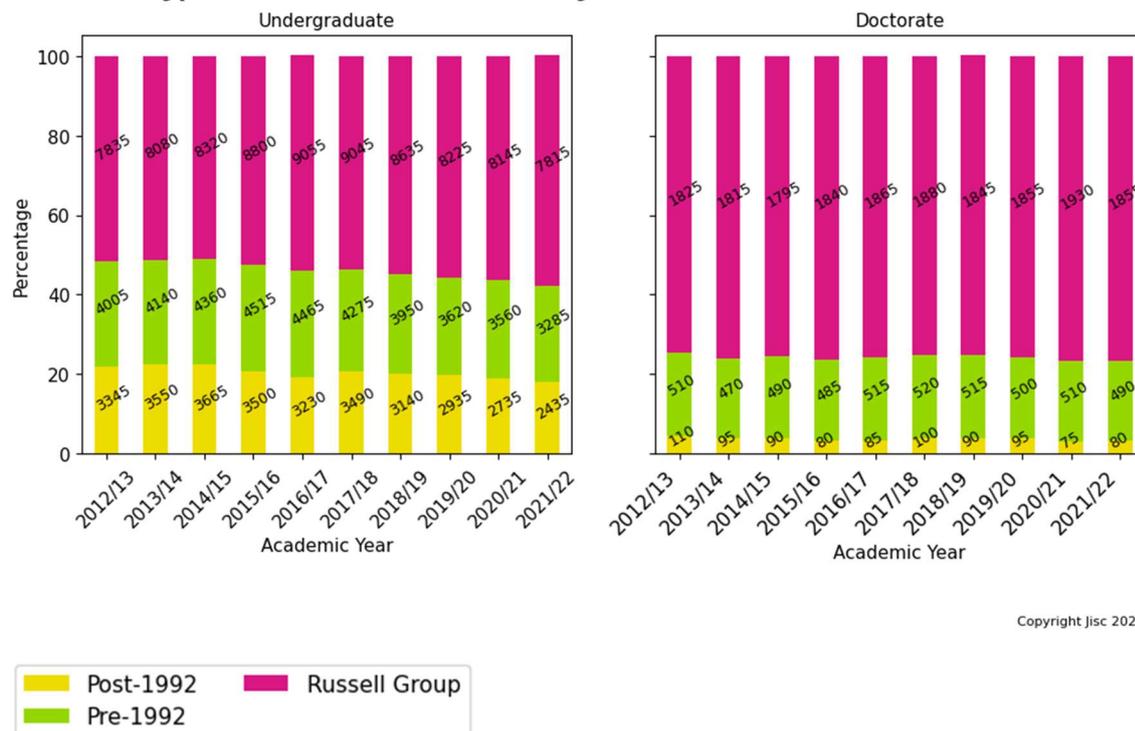
# Institution region of UK domiciled chemistry students
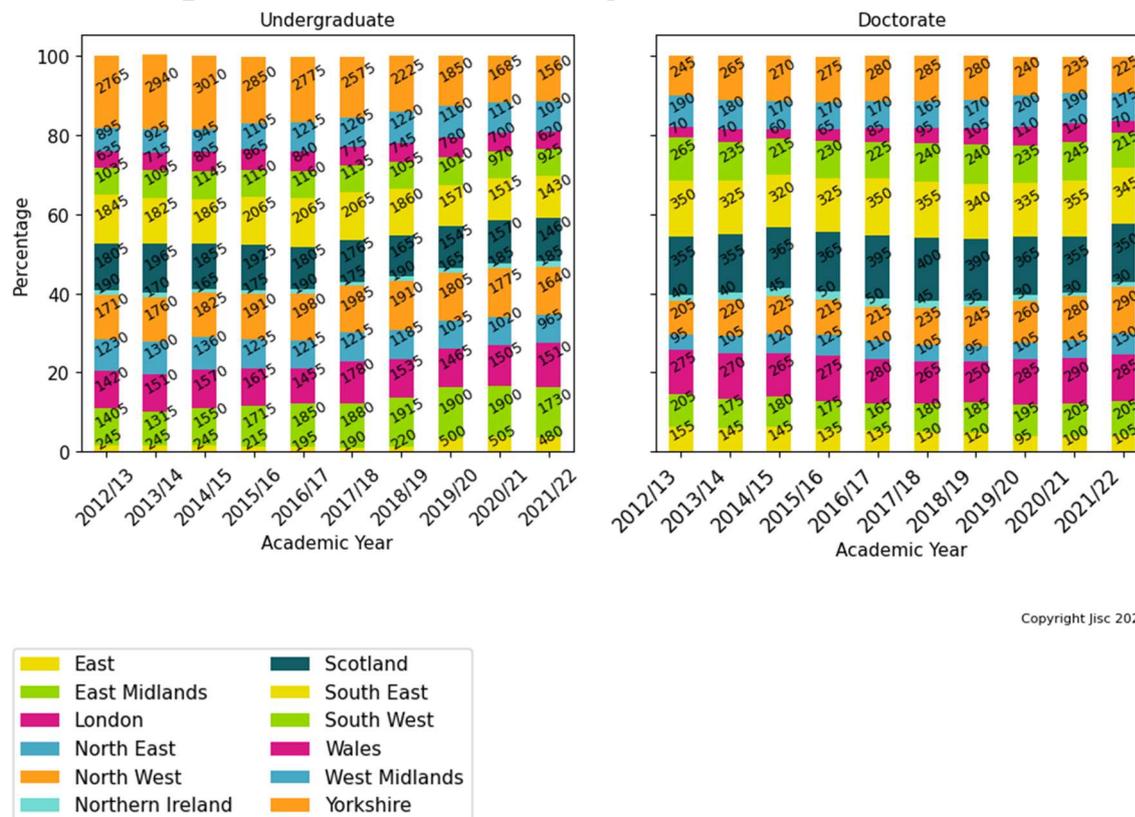


Undergraduate

Doctorate

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Legend: East | Scotland | East Midlands | South East | London | South West | North East | Wales | North West | West Midlands | Northern Ireland | Yorkshire

## Sex of UK domiciled chemistry students



Undergraduate

Doctorate

Female
Male
Other
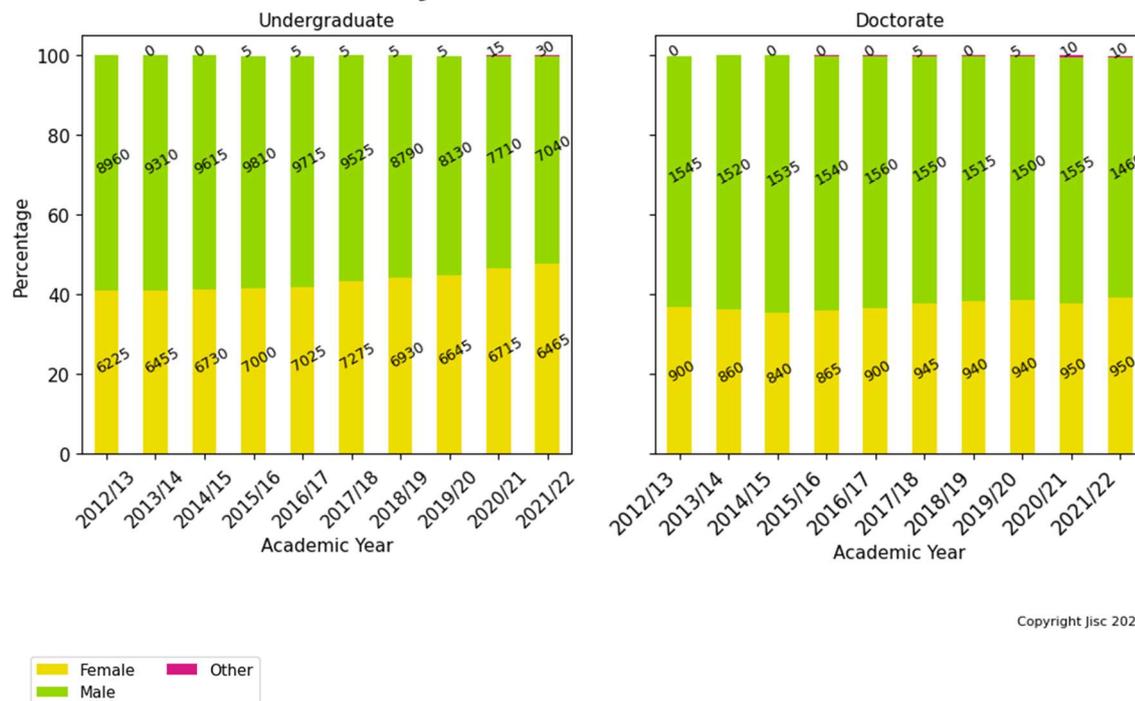
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## Ethnicity of UK domiciled chemistry students



Undergraduate

Doctorate

Unknown/Not applicable
Asian
Black
Mixed
Other
White
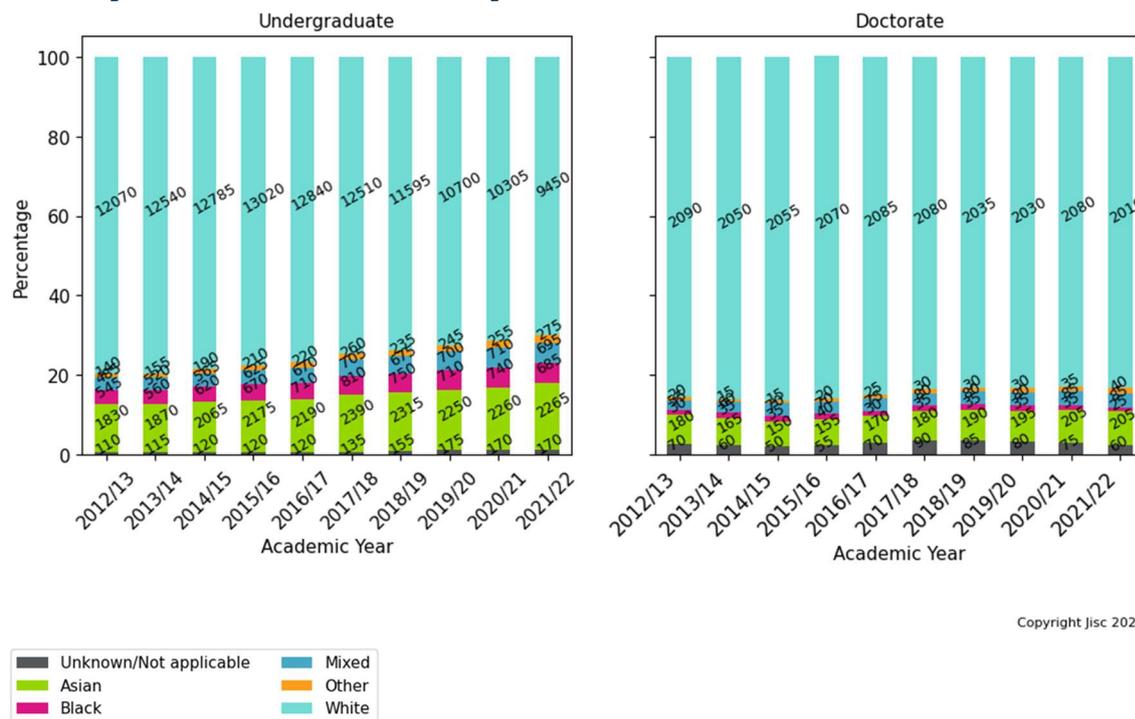
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## Disability status of UK domiciled chemistry students



**Undergraduate**

Percentage

2012/13: 1510 / 13675
2013/14: 1630 / 14135
2014/15: 1865 / 14480
2015/16: 2020 / 14800
2016/17: 2135 / 14610
2017/18: 2285 / 14525
2018/19: 2350 / 13375
2019/20: 2340 / 12440
2020/21: 2490 / 11945
2021/22: 2590 / 10945

Academic Year

**Doctorate**

2012/13: 200 / 2245
2013/14: 200 / 2185
2014/15: 210 / 2170
2015/16: 235 / 2170
2016/17: 265 / 2200
2017/18: 295 / 2200
2018/19: 330 / 2125
2019/20: 340 / 2105
2020/21: 375 / 2140
2021/22: 415 / 2005

Academic Year

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- ■ No known disability (including unknowns)
- ■ Known disability

# What are the demographics of chemistry staff by "contract level" at UK higher education institutions?

## Nationality of chemistry staff



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Legend: Unknown, Non-EU, EU, UK
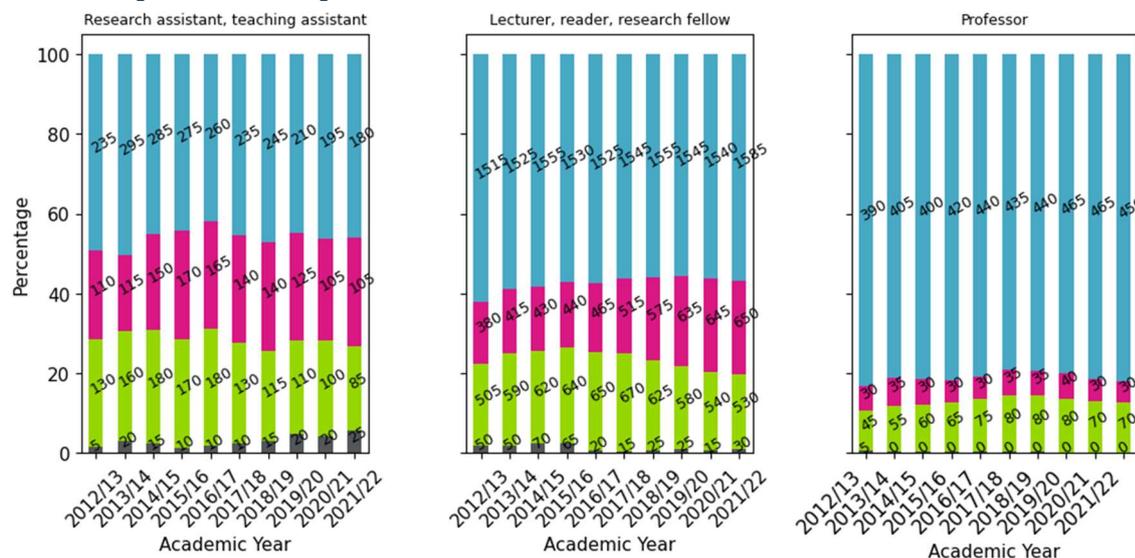
## Terms of employment of chemistry staff



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Legend: Atypical, Open-ended/Permanent, Fixed-term
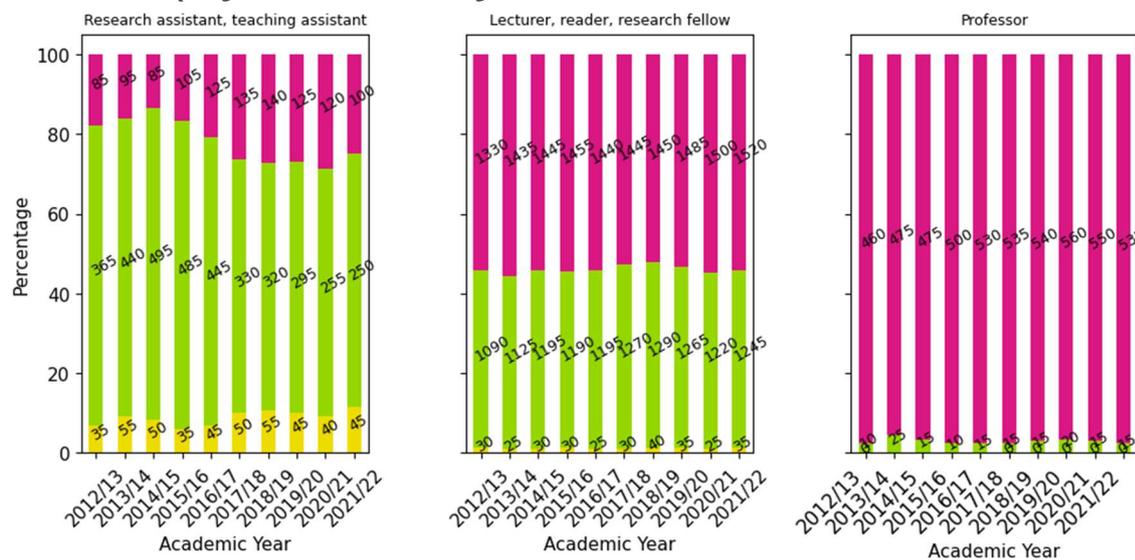
# Academic employment function of chemistry staff



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Legend:
- Teaching and research
- Neither teaching nor research
- Research
- Teaching

# Age of chemistry staff



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Legend:
- 25-34
- 35-44
- 45-54
- 55-64
- 65+
- Under 25
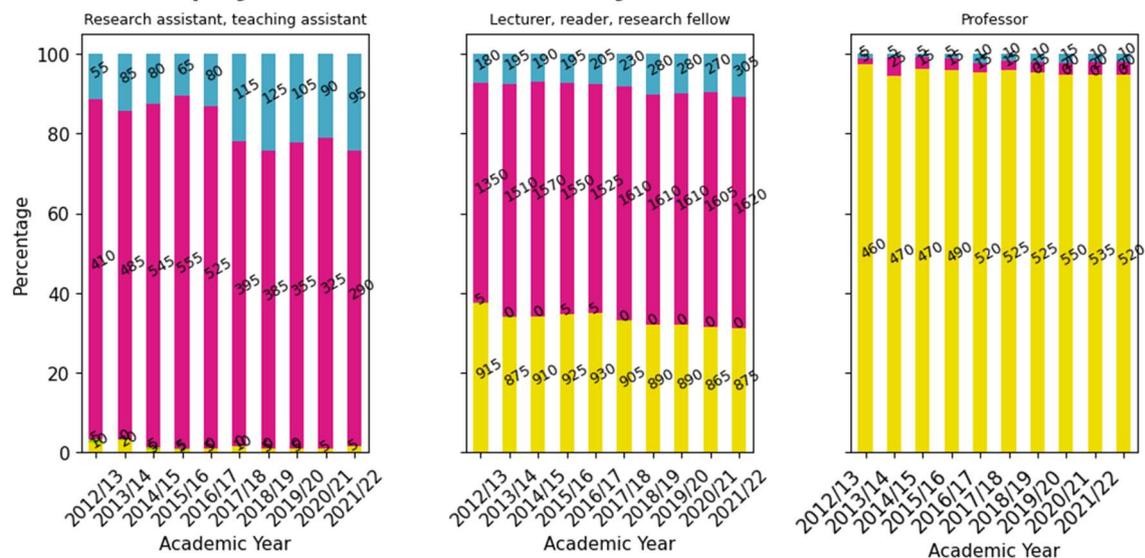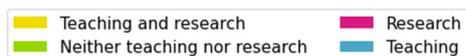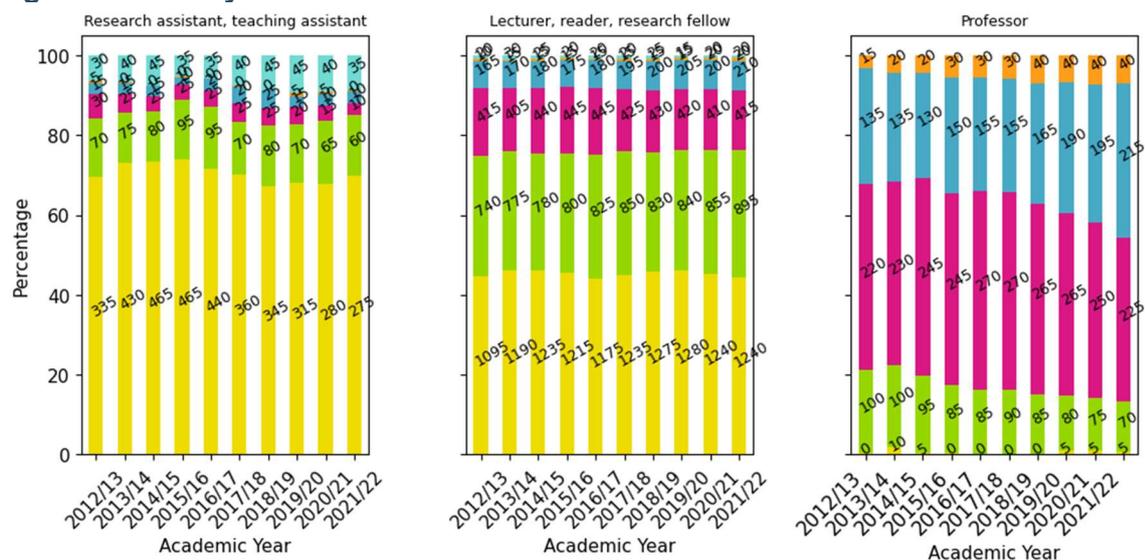
## Institution type of chemistry staff



### Research assistant, teaching assistant

Values (top to bottom per year):
- Russell Group: 325, 470, 495, 500, 485, 390, 370, 335, 300, 285
- Pre-1992: 120, 70, 90, 80, 75, 65, 75, 60, 55, 55
- Post-1992: 40, 45, 50, 45, 55, 60, 75, 70, 55, 55

### Lecturer, reader, research fellow

Values:
- Russell Group: 1640, 1660, 1745, 1725, 1745, 1815, 1830, 1855, 1840, 1865
- Pre-1992: 445, 570, 570, 580, 555, 565, 575, 560, 590, 605
- Post-1992: 365, 355, 360, 365, 355, 365, 375, 365, 315, 325

### Professor

Values:
- Russell Group: 320, 355, 350, 370, 390, 395, 400, 425, 425, 420
- Pre-1992: 105, 110, 115, 115, 120, 115, 115, 110, 105, 100
- Post-1992: 35, 35, 30, 30, 35, 35, 35, 45, 40, 35

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Legend:
- Post-1992
- Pre-1992
- Russell Group

## Institution region of chemistry staff



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Legend:
- East
- East Midlands
- London
- North East
- North West
- Northern Ireland
- Scotland
- South East
- South West
- Wales
- West Midlands
- Yorkshire

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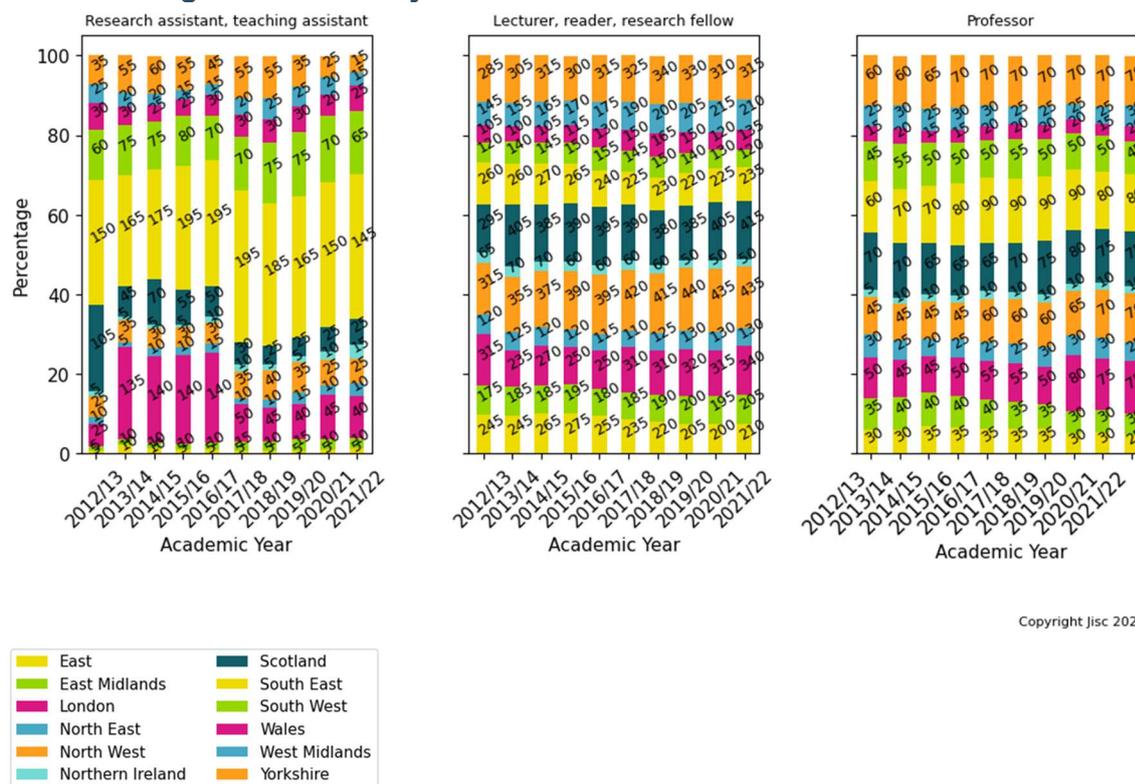
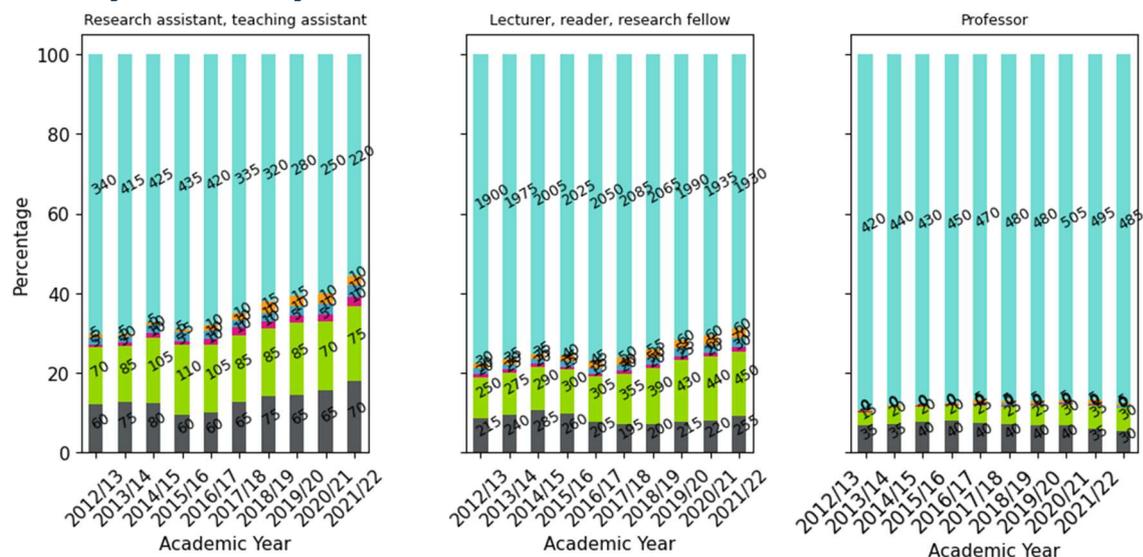## Sex of chemistry staff
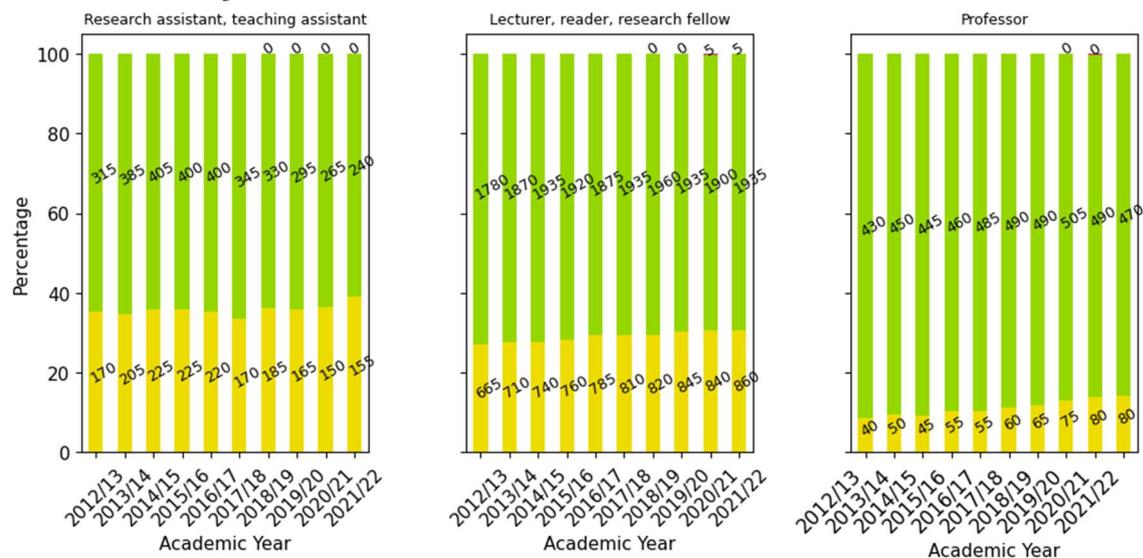


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## Ethnicity of chemistry staff



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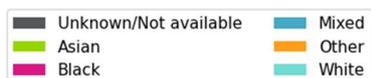
# Disability status of chemistry staff



**Research assistant, teaching assistant**

Percentage values by Academic Year (2012/13 – 2021/22):
No known disability: 450, 545, 585, 580, 575, 480, 475, 430, 350, 325
Known disability / Unknown: 30, 20, 25, 30, 30, 25, 25, 25, 15, 20 / 20, 25, 30, 30, 25, 25, 25, 25, 50, 50

**Lecturer, reader, research fellow**

No known disability: 2300, 2415, 2495, 2505, 2505, 2590, 2620, 2610, 2450, 2490
Known disability / Unknown: 95, 65, 70, 90, 85, 80, 80, 100, 150, 170 / 90, 105, 110, 100, 85, 80, 80, 100, 75, 180

**Professor**

No known disability: 455, 480, 470, 485, 520, 520, 525, 545, 520, 505
Known disability / Unknown: 5, 10, 10, 10, 15, 20, 20, 20, 20, 20 / 5, 10, 10, 10, 15, 20, 20, 25, 30, 25

Academic Year: 2012/13, 2013/14, 2014/15, 2015/16, 2016/17, 2017/18, 2018/19, 2019/20, 2020/21, 2021/22

Legend:
- Unknown/Not available
- Known disability
- No known disability

## Footnotes

1. Student numbers are based on the summed [FTE (Full Time Equivalent)](#) values of the Student dataset, years 2012/13 to 2021/22. The following filters have been applied:
   - "[Subject of study (Principal subject JACS 3.0) (2012/13-2018/19)](#)" includes only "(F1) Chemistry" or "[Subject of study (CAH3) (2019/20 onwards)](#)" includes only "(CAH07-02-01) chemistry"
   - "[Session population marker](#)" includes only "The instance is counted within the HE session population"
   - Some HESA diversity characteristics are only populated for students with UK domicile, so all of the breakdown graphs apart from that showing "Domicile" are filtered to only show UK domiciled students

   "Institution type" has been determined by mapping "HE provider" onto the groups "Russell Group universities", "Non-Russell Group universities" ("1992-2000" and "Post 2000") or "Post-1992 universities" ("1960-1991", "1600-1959" and "Before 1600").

   "Institution region" has been determined by mapping "[HE provider](#)" onto the groups "South East", "London", "Scotland", "West Midlands", "East", "South West", "East Midlands", "Northern Ireland", "Yorkshire", "North West", "Wales", "North East".

2. Staff numbers are based on the summed [FTE (Full Time Equivalent)](#) values of the Staff dataset, years 2012/13 to 2021/22. The following filters have been applied:
   - "[Academic employment function](#)" includes: "Academic contract that is both teaching and research"; "Academic contract that is neither teaching nor research"; "Academic contract that is research only"; "Academic contract that is teaching only" but excludes: "Unknown", "Not an academic contract"
   - "[Cost centre](#)" includes: "(11) Chemistry" and "(113) Chemistry"
   - "Staff contract session population" includes only "Contract counted within session population"

   The following groupings have been applied to the staff dataset, based on the HESA variable "[Contract level (Full) (since 2012/13)](#)":
   - "Professor" corresponds to value "Professor"
   - "Lecturer, Reader, Research fellow" corresponds to: "Non-Academic section manager, Senior/principal lecturer, Reader, Principal Research fellow"; "Team Leader(Professional, Technical, Administrative), Lecturer, Senior Lecturer, Senior Research Fellow"; "Senior Professional(Technical), Lecturer, Research fellow, Researcher (senior research assistant), Teaching fellow"
   - "Research assistant, Teaching assistant" corresponds to: "Senior Administrative staff ( Professional/technical) Research assistant, Teaching assistant"
   - "Other" corresponds to: "Senior Management"; "Head of schools/Senior function head"; "Function head"; "Assistant professional staff, Administrative staff"; "Junior Administrative Staff, Clerical Staff, Technician/Craftsmen, Operative"; "Routine task provider"; "Simple task providerr"; "Not applicable"; "Unknown"

   "Institution type" has been determined by mapping "[HE provider](#)" onto the groups "Russell Group universities", "Non-Russell Group universities" ("1992-2000" and "Post 2000") or "Post-1992 universities" ("1960-1991", "1600-1959" and "Before 1600").

   "Institution region" has been determined by mapping "[HE provider](#)" onto the groups "South East", "London", "Scotland", "West Midlands", "East", "South West", "East Midlands", "Northern Ireland", "Yorkshire", "North West", "Wales", "North East".

   "Staff age" has been determined by mapping "[Age](#)" onto 10 year age ranges.