



Statistics for use in the evaluation of mathematics, informatics and technology

Analysis of research personnel in 2013, 2017 and 2021

TALL

SOM FORTELLER

RAPPORTER / REPORTS

2024/15

Kristoffer Rørstad and Kaja Wendt

In the series Reports, analyses and annotated statistical results are published from various surveys. Surveys include sample surveys, censuses and register-based surveys.

© Statistics Norway

Published: 14 May 2024

ISBN 978-82-587-1971-4 (electronic)

ISSN 0806-2056 (electronic)

Symbols in tables	Symbol
Category not applicable Figures do not exist at this time, because the category was not in use when the figures were collected.	.
Not available Figures have not been entered into our databases or are too unreliable to be published.	..
Confidential Figures are not published to avoid identifying persons or companies.	:
Decimal punctuation mark	.

Preface

This report presents statistics and indicators for research and development (R&D) personnel at department or institute level for the units in the Norwegian higher education and institute sectors which are included in the ongoing evaluation of mathematics, informatics and technology (evalmit) in Norway conducted by the Research Council of Norway (RCN). Conducting evaluations of Norwegian research is a key task of the Research Council of Norway (abbreviated RCN). Evaluations are reviews of how research fields, scientific disciplines and academic institutions are performing in the national and international context. R&D statistics have been part of the knowledge base in previous evaluations and have contributed with data also in the evaluations started in 2022/2023 and over the next few years. They will cover biosciences, natural sciences, mathematics, informatics and technology, and medical and health science.

The main purpose of this report is to provide statistics and indicators on R&D personnel within mathematics, informatics and technology. The R&D personnel statistics are based on individual data from the Register of Research Personnel at Statistics Norway. The report is commissioned by the Research Council of Norway (RCN) and produced in collaboration with the Nordic institute for Studies in innovation, research and education (NIFU), by senior adviser Kristoffer Rørstad and head of group/senior adviser Kaja Wendt at Statistics Norway. Statistics Norway is responsible for data on R&D personnel for the evaluated units, while NIFU conduct bibliometric studies.

Statistics Norway, 29 April 2024

Per Morten Holt

Abstract

The statistics and indicators presented in this report provide background data for the evaluation of mathematics, informatics and technology sciences (evalmit) conducted by The Research Council of Norway. Data are compiled by Statistics Norway and include data for 47 higher education units (university departments and faculties) and 10 research institutes (institute sector) for the years 2013, 2017 and 2021.

Almost 5 600 researchers at the evaluation units in 2021

A total of 5 580 R&D personnel were employed at the evaluated units in 2021, about 3 700 in the higher education sector and almost 1 900 researchers at the research institutes. Since 2013, there has been a growth of about 1 430 persons, or around 60 per cent in the higher education sector, while the growth of researchers in the institute sector was about 380 persons or 25 per cent.

Low share of women in the higher education sector

For the higher educational units in the evaluation, the overall gender balance among researchers was 25 per cent women and 75 per cent men. The percentage of female researchers was significantly lower compared to the overall percentage of women in higher education, at 51 per cent, and for the personnel in all natural sciences units where women have a share of 37 per cent. However, in the field of engineering and technology, women account for 26 per cent of the research personnel, which is about the same level as for the evaluated units. At the research institutes, 29 per cent of the researchers were women. The gender balance is lower than average in the institute sector, which was 46 per cent in 2021.

Younger researchers than average

The average age of the R&D personnel at the higher education units was 39 years in 2021, which was a decrease of two years since 2013. Overall, the average age for all positions have been quite stable over the period. The average age for professors was 54 years for all three years. However, associated professors decreased in age from 48 years in 2013, to 45 years old in 2021. Compared with the total population of the higher education sectors, the population within this evaluation is younger. In the total population of the higher education sector, the average age was 45 years old in 2021, while professors were in average 56 years old. However, the average age of the total population in the higher education sector, within natural sciences and engineering and technology was 40 years old for both major fields.

The average age of the researchers among research institutes was 43 years old in 2021. This average age has been quite stable over time. However, the average age of all institutes in the institutes sector was 46 in 2021.

A high share of foreign PhD-holder/citizens

About 40 per cent of the researchers in the evaluated units of the higher education sector had a foreign PhD-degree in 2021, indicating foreign citizenship. Among the professors, the share was also 40 per cent while the share among associate professors was 33 per cent. As many as 48 per cent of the researchers and postdocs had a foreign PhD-degree as well. Among the research institutes, 20 per cent of the researchers had a foreign PhD-degree.

Sammendrag

Statistikk og indikatorer som presenteres i denne rapporten gir bakgrunnsdata for evalueringen av matematikk, informatikk og teknologivitenskap utført av Norges forskningsråd. Data er utarbeidet av Statistisk sentralbyrå og omfatter data for i alt 47 enheter (institutter og fakulteter) i universitets- og høyskolesektoren og 10 forskningsinstitutter i instituttsektoren for årene 2013, 2017 og 2021.

Nesten 5 600 forskere var ansatt ved evalueringsenhetene i 2021

Totalt var det nesten 5 580 forskere og andre faglige ansatte ved de evaluerte enhetene i 2021, om lag 3 700 i universitets- og høyskolesektoren og nesten 1 900 forskere ved forskningsinstituttene. Siden 2013 har det vært en vekst på om lag 1 430 personer, eller rundt 60 prosent i universitets- og høyskolesektoren, mens veksten av forskere i instituttsektoren i samme periode var på om lag 380 personer eller 25 prosent.

Lav kvinneandel blant evalueringsenhetene

For enhetene i universitets- og høyskolesektoren utgjorde kvinner 25 prosent. Dette var vesentlig lavere enn totalt i universitets- og høyskolesektoren, hvor kvinner utgjør mer enn halvparten, 51 prosent, av det vitenskapelige/faglige personalet. Blant personalet innenfor fagområdene matematikk og naturvitenskap er kvinneandelen på 37 prosent, og innenfor fagområdet teknologi utgjør kvinner 26 prosent. Kvinneandelen blant de evaluerte enhetene i universitets- og høyskolesektoren, er dermed på nivå med gjennomsnittet for fagområdet teknologi. Ved forskningsinstituttene som inngikk i evalueringen utgjorde kvinner 29 prosent. Til sammenligning var kvinneandelen totalt sett i instituttsektoren 46 prosent.

Yngre forskere enn gjennomsnittet

Gjennomsnittsalderen blant personalet ved de evaluerte enhetene i universitets- og høyskolesektoren var 39 år i 2021, og dette var en nedgang på to år siden 2013. Samlet sett har gjennomsnittsalderen for alle stillingene vært ganske stabil over perioden. Gjennomsnittsalderen for professorer var 54 år i 2021, mens den for førsteamanuensene var 45 år. For professorene var gjennomsnittsalderen stabil gjennom perioden, mens den var fallende for førsteamanuensene, som var 48 år i gjennomsnitt i 2013.

Gjennomsnittsalderen for hele forskerpersonalet i universitets- og høyskolesektoren var 45 år i 2021, mens professorene i gjennomsnitt var 56 år. Innenfor de to fagområdene matematikk og naturvitenskap og teknolog var gjennomsnittsalderen for det samlede personalet 40 år. Alderen på personalet blant evalueringsenhetene var dermed på samme nivå som på fagområdene de tilhører, men yngre enn for hele universitets- og høyskolesektoren.

Gjennomsnittsalderen for forskerne blant forskningsinstituttene i evalueringen var 43 år i 2021. Til sammenligning var gjennomsnittsalderen for alle enheter i instituttsektoren imidlertid 46 år i 2021.

En høy andel utenlandske Ph.d.-innehavere/borgere

Om lag 40 prosent av forskerne i de evaluerte enhetene i universitets- og høyskolesektoren hadde utenlandsk doktorgrad, noe som indikerer utenlandsk statsborgerskap. Blant professorene var andelen også 40 prosent mens andelen blant førsteamanuensis var 33 prosent. Hele 48 prosent av forskerne og postdoktorene hadde også utenlandsk Ph.d.-grad. Blant forskningsinstituttene hadde 20 prosent av forskerne utenlandsk Ph.d.-grad.

Contents

Statistics for use in the evaluation of mathematics, informatics and technology	1
Preface	3
Abstract.....	4
Sammendrag	5
1. Introduction.....	7
1.1. The Norwegian research and innovation system	7
2. Data and methods	10
2.1. R&D personnel data.....	10
2.2. The Register of Research Personnel.....	12
2.3. R&D expenditure.....	12
2.4. Field classification in the higher education sector	12
3. R&D personnel in the higher education sector.....	14
3.1. Overall R&D personnel figures.....	14
4. R&D personnel in the institute sector	28
4.1. R&D personnel and gender balance in the institute sector	28
4.2. R&D personnel data in the institutes sector per institute.....	30
5. R&D expenditure in the higher education and institute sectors 2021.....	34
5.1. Total R&D expenditures in academia.....	34
5.2. R&D expenditures for the evaluated units in the higher education sector	36
References	38
Appendix A: R&D Personnel statistics for units in the higher education sector.....	39
List of figures.....	68
List of tables	69

1. Introduction

This report presents statistics and indicators for research and development (R&D) personnel at department/institute level in the higher education and institute sectors for the units included in the ongoing evaluation of mathematics, informatics and technology in Norway conducted by the Research Council of Norway (RCN). Conducting evaluations of Norwegian research is a key task of the Research Council of Norway (abbreviated RCN). Evaluations are reviews of how research fields, scientific disciplines and academic institutions are performing in the national and international context. R&D statistics have been part of the knowledge base in previous evaluations and will contribute with data also in the new round of evaluations started in 2022/2023 and over the next few years they will cover biosciences, natural sciences, mathematics, technology and medical and health science. The main aim of this evaluation is to assess the quality of Norwegian research within mathematics, informatics and technology, assess the framework conditions for the research and the research's relevance to key areas of society. The evaluation will result in recommendations to the evaluated institutions, the Research Council and the ministries¹.

The main intention of the report is to provide statistics and indicators on R&D personnel within mathematics, informatics and technology. The R&D personnel statistics are based on individual data from the Register of Research Personnel at Statistics Norway.

The report includes an overview of R&D expenditure, by field of R&D in the higher education sector of the last 20 years. Finally, we present an overview of the Norwegian research and innovation system.

First, we present personnel statistics for the higher education sector. Then, the units are presented separately. In the higher education sector, a total of 47 units are included in the evaluation, while 10 units are included from the institute sector. The purpose of the overall figures and tables is to give an overview of the research population of all evaluation units in the higher education for all indicators chosen for this evaluation. With these figures, the evaluated units can be compared with each other and with the average of all units as benchmark figures. A total of 5 580 researchers, 3,704 researchers in the higher education sector, and 1 876 researchers in the institute sector, were employed at the evaluated units in 2021, and included in this analysis.

1.1. The Norwegian research and innovation system

The Norwegian research and innovation system include many institutions with different roles. It is common to distinguish between three levels: the performing, the strategic and the political level. Extensive internationalisation also applies to Norwegian research and is increasingly important for all parts of the Norwegian R&D system.²

The performing level

At the performing level in Norway, there is the higher education sector (including university hospitals), the institute sector and the industrial sector. The higher education sector performed about one third of Norwegian R&D activity in 2021. There is a broad variety of institutions in the higher education sector, including universities, state university colleges and private higher education institutions. At the same time, research activity is concentrated, as universities, including university hospitals, accounted for more than 87 per cent of the higher education sector's total R&D expenditure in 2021. Compared with other countries, a relatively high share of Norwegian R&D is

¹ For more information: <https://www.forskingsradet.no/tall-analyse/evalueringer/fag-tema/evaluering-matematikk-ikt-teknologi/>

² The presentation of this part is based on (The Research Council of Norway (2021): Science and Technology Indicators for Norway 2021.

performed by research institutes (20 per cent). The Norwegian institute sector is rather heterogenous in terms of institute size, profile, and legal status. The sector includes both public sector-oriented and industry-oriented institutes, of which the latter group plays an important role in carrying out contract research for Norwegian and foreign companies. Even though the industrial sector accounts for nearly half the R&D expenditure in Norway, the proportion of research performed in this sector is low compared with other countries.³ Given the resource-based structure of the economy, there are relatively few large R&D-intensive companies in Norway.

The strategic level

At the strategic level, there are several agencies that are important for Norwegian STI policy. The two most important players are the Research Council of Norway (RCN), which focuses on research and technological funding, and Innovation Norway, which focus on innovation. More than half of the budgetary funding for Norwegian R&D activity goes through the Ministry of Education and Research and the RCN. The RCN has more than 25 per cent of public R&D funding and receives funding from all 15 ministries. Innovation Norway encourages innovation at the regional and national level, with a focus on small and medium sized enterprises. SkatteFUNN, the R&D tax incentive scheme, is organised under RCN and has become a major tool for encouraging innovation by supplying tax credits for the R&D activity. In addition to RCN, Innovation Norway and SkatteFUNN, there are several other key players. SIVA encourages the development of science parks, incubators, and services to start-up firms. GLEK supplies long-term guarantees that encourage Norwegian industry to take part in more international trade and export. Enova, owned by the Ministry of Climate and Environment, encourages environmentally friendly production and consumption of energy and exploration of new sources of clean energy. Digdir (Norwegian Digitalisation Agency) aims to be the government's foremost tool for faster and more coordinated digitization of society. Finally, Norwegian Defence Research Establishment (FFI) aims to advance knowledge in artificial intelligence, additive manufacturing, quantum computing, nanotechnology, the Internet of Things, and autonomy.

The political level

The Norwegian research and innovation system can be characterised by considerable pluralism at the political level. According to the "sector principle", all 15 ministries (after the 2021 election) are responsible for financing both short term and long-term research within their respective sectors. Hence, public research funding and science policy involves extensive coordination. At the same time R&D funds are concentrated, as five ministries account for 85 per cent of total public R&D funding, based on government budget allocations. The most important one is the Ministry of Education and Research. This ministry also prepares the long-term plan for research and higher education and is responsible for coordinating research policy across ministries at the national level. 11 Other important contributors are the Ministries of Trade, Industry and Fisheries, Health Care Services, Climate and Environment, Local Government and Modernisation and Defence. The Research Council of Norway (RCN) also supplies advice to the government on STI policy and network governance between various actors in the STI system.

The S&T statistical infrastructure

The production of STI statistics has historically been distributed across different parts of Norway's statistical system. The official statistical agency, Statistics Norway, is a key pillar. Since 2022 the agency produces R&D and innovation statistics for all sectors, conducts evaluations and research and provides a macro and micro-data warehouse. R&D statistics for the government and higher education sector were produced by NIFU since the 1960s. From 2022 this responsibility was

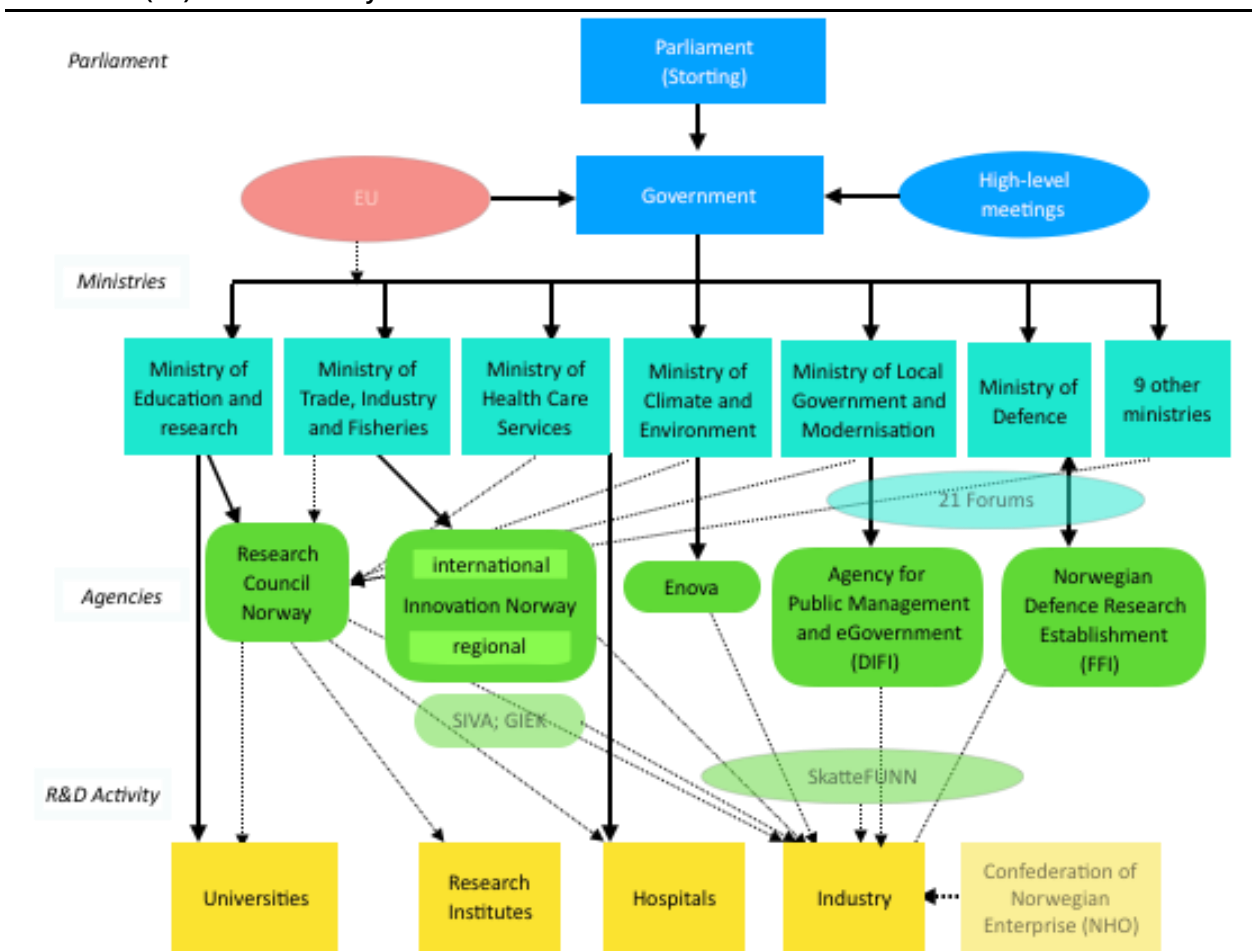
³ In international R&D statistics the Norwegian business enterprise sector includes the enterprises (here industrial sector) and in addition business-oriented institutes that primarily serve business. This is in accordance with OECD guidelines (OECD, 2015, Frascati Manual).

transferred to Statistics Norway. NIFU's staff who produced the statistics also moved to Statistics Norway. In this way the quality of the statistics has been maintained. Statistics Norway is from 2022 responsible for reporting all STI statistics to Eurostat and the OECD.

Norway has recently undergone a transformation in digital support services to the research and higher education sector by reforming the key agencies. The Norwegian Directorate for Higher Education and Skills (HK-dir) was established in 2021 and is subordinate to the Ministry of Education and Research. The Directorate is a result of the merger of Diku (Norwegian Agency for International Cooperation and Quality Enhancement in Higher Education), Competence Norway, Universell and parts of Unit and the Norwegian Centre for Research Data (NSD) and has also been taking over tasks for the Norwegian Agency for Quality Assurance in Education (NOKUT). The Directorate has an overall, national responsibility for administrative tasks within higher education, higher vocational education and competence policy and gives advice to the ministry, implements the policy, and coordinates the tools. In 2022, an additional agency under the Ministry of Education and Research was established: Sikt – Norwegian Agency for Shared Services in Education and Research. Its main tasks are to provide access to high-quality infrastructure, sharing of data and high information security in the sector.

The figure provides a simplified picture of the organisation and the division of labour in the R&D and innovation system, including the international dimension (EU).

Figure 1.1 The Norwegian system of education, research and innovation. Main Science, Technology and Innovation (STI) actors in Norway¹



SIVA: The Industrial Development Corporation of Norway. GIEK-The Norwegian Export Credit Guarantee Agency.

ENOVA: A state-owned enterprise for the restructuring of energy use and energy production.

SkatteFUNN: The Norwegian tax deduction scheme.

Source: The Research Council of Norway (2021): Science and Technology Indicators for Norway 2021.

2. Data and methods

2.1. R&D personnel data

Data on R&D personnel cover department/research institutes for three years; 2013, 2017 and 2021. While the 2021-figures are the most relevant for the evaluation, figures from 2013 and 2017 are presented to show the development in the research population over a period of almost ten years. Statistics are also available for intermediate years. However, to reduce the amount of data presented, the analysis has been limited to these years. The statistics provide detailed information on these indicators:

- number of persons (researchers)
- share of women
- share of PhD-degrees
- share of foreign PhD-degrees
- average age
- share of persons above 62 years and older
- group of academic positions

In the higher education sector, the academic positions are grouped in these categories:

- professors (i.e., full professors),
- associate professors,
- researchers and postdoctoral fellows (postdocs)
- PhD-students

Other tenured staff (i.e., university lecturer, senior lecturer, head of department, docent, and dean) are excluded from the data since these positions have teaching as their main task.

The position structure in the institute sector is very diverse, the personnel in this sector is therefore not split in different groups.

About the indicators:

- number of persons (researchers): gives the scope of research of each unit and the total population of the evaluation. This can be considered as an input indicator.
- share of women gives information on gender for each academic position for all units, and the average of the evaluated units. To promote gender balance is a top priority for ethical, legal, quality reasons. In the EU as well as in the Research Council of Norway it is a high priority task to ensure that the best research talents and a breath of perspectives are included.
- share of PhD-degrees, gives a measure for the level of PhD-holders for all positions and units. A high level of PhD-degrees among the R&D personnel can be a measure of high level of competence within a position group or a unit and provides information on the recruitment situation.
- share of foreign PhD-degrees, gives a measure of foreign researchers since most of the foreign PhD-holders in Norway are foreign researchers.
- average age provides information of the average age for all academic position, can be used to assess future recruitment needs.
- share of persons who are 62 years and older, provides information on the share of persons which have reached the age for contractual early retirement (AFP). The most common age for retirement in Norway is 67 years old. However, many professors at the universities work until

they are 70 years or older. A high level of R&D personnel over 62 years indicates that recruitment needs in the next few years.

- group of academic positions show the composition of the staff and comparisons can highlight whether the composition is biased on top (professor) level or starting level (PhD-students).

A list of the units in the evaluation is presented for the higher education sector in Table 2.1 and the institutes sector in Table 2.2. The tables show how the administrative units correspond to the units in the Register of Research Personnel. In most cases, we have figures for all the units in the evaluations and on the same level. However, when data are missing, it is commented.

Table 2.1 Overview of the administrative units in the higher education sector. 2021.

Institution	Department (Administrative unit)
Norwegian University of Life Sciences	Faculty of Science and Technology
Norwegian University of Science and Technology	Department of Architecture and Technology
Norwegian University of Science and Technology	Department of Civil and Environmental Engineering
Norwegian University of Science and Technology	Department of Computer Science
Norwegian University of Science and Technology	Department of Electric Power Engineering
Norwegian University of Science and Technology	Department of Electronic Systems
Norwegian University of Science and Technology	Department of Energy and Process Engineering
Norwegian University of Science and Technology	Department of Engineering Cybernetics
Norwegian University of Science and Technology	Department of Geoscience and Petroleum
Norwegian University of Science and Technology	Department of ICT and Natural Sciences
Norwegian University of Science and Technology	Department of Information Security and Communication Technology
Norwegian University of Science and Technology	Department of Manufacturing and Civil Engineering
Norwegian University of Science and Technology	Department of Marine Technology
Norwegian University of Science and Technology	Department of Mathematical Sciences
Norwegian University of Science and Technology	Department of Mechanical and Industrial Engineering
Norwegian University of Science and Technology	Department of Structural Engineering
Oslo Metropolitan University	Department of Built Environment
Oslo Metropolitan University	Department of Computer Science
Oslo Metropolitan University	Department of Mechanical, electronic and chemical engineering
University of Agder	Department of Information Systems
University of Agder	Faculty of Engineering and Science
University of Bergen	Department of Mathematics
University of Bergen	Department of Informatics
University of Bergen	Department of Physics and Technology
University of Oslo	Department of Informatics
University of Oslo	Department of Mathematics
University of Stavanger	Department of Electrical Engineering and Computer Science
University of Stavanger	Department of Mathematics and Physics
University of Stavanger	Department of Petroleum Engineering
University of Stavanger	Dept. of Mechanical and Structural Engineering and Materials Science
UiT The Arctic University of Norway	Department of Automation and Process Engineering
UiT The Arctic University of Norway	Department of Building, energy and material technology
UiT The Arctic University of Norway	Department of Computer Science
UiT The Arctic University of Norway	Department of Computer Science and Computational Engineering
UiT The Arctic University of Norway	Department of Electrical Engineering
UiT The Arctic University of Norway	Department of Industrial Technology
UiT The Arctic University of Norway	Department of Mathematics and Statistics
UiT The Arctic University of Norway	Department of Physics and Technology
UiT The Arctic University of Norway	Department of Technology and Safety
University of South-Eastern Norway	Department of Business and IT
University of South-Eastern Norway	Department of Microsystems
University of South-Eastern Norway	Department of Process, energy and environmental technology
University of South-Eastern Norway	Department of Science and Industry systems
University of South-Eastern Norway	Department of electrical engineering, IT and cybernetics
Western Norway University of Applied Sciences	Faculty of Engineering and Science
Østfold University college	Faculty of Computer Science, engineering and economics

Table 2.2 Overview of administrative units in the institute sector. 2021

Research institute
Norce Technology
SIMULA Research Laboratory
Institute for Energy Technology
Si Ocean
Norwegian Computing Center
Sintef Community
Sintef Digital
Sintef Energy
Sintef Industri
Sintef Manufacturing

2.2. The Register of Research Personnel

The Register of Research Personnel at Statistics Norway is a part of the national R&D statistics. The register contains individual-level data on researchers/academic staff involved in R&D and higher administrative staff in the higher education sector and in the institute sector, including health trusts with and without university functions. It provides data on individuals employed in positions which require competence at the master's degree level or higher. Researchers in the higher education sector are identified by their position codes. The database contains individuals with at least 25 per cent employment.

The register contains the following variables for each individual including their name, national identification number, age, gender, academic position, affiliation by institution, faculty, department, education (degree, field and year), doctoral degree (type, field, year, country), subject field (i.e., department field).

The main sources of information for this register are the higher education institutions, health trusts and the research institutes. From 2016 the data on the higher education sector is mainly obtained via the Database for higher education (DBH) at the Directorate for Higher Education and Skills (HK-directorate) which receive data from the higher education institutions.

2.3. R&D expenditure

In this report, current R&D expenditure are included to show the research volume measured by expenditure. Current expenditure includes salary, other personnel, and other current costs, while investments for equipment and building costs are excluded. R&D expenditure are, together with personnel statistics an input indicator for resources to R&D.

2.4. Field classification in the higher education sector

In the official R&D statistics of the higher education sector, all university departments are assigned to one, and only one field of R&D (e.g., mathematics, informatics, and so on). In the R&D statistical questionnaire, each unit can classify the research in many fields. However, since the unit can only be assigned to one specific field, the largest field in this classification, will be the assigned field for the unit. This principle is called the maximum classification criteria and is used in the official figures of R&D statistics. However, most university departments conduct research within several fields. Due to the abovementioned principle of classification, this will not appear in the official R&D statistics. In some analysis, it is useful to show the entire width of research fields of the unit (from the R&D questionnaire) by specific field classification. In this evaluation, we will present figures using both methods. When the specific field classification is used, it will be stated.

In the official R&D statistics, all fields are divided into six major fields of R&D. The fields in this evaluation are assigned to either natural sciences, or engineering and technology. Mathematics and informatics are assigned to natural sciences, while technology fields, are assigned to engineering and technology.

3. R&D personnel in the higher education sector

This part includes R&D personnel statistics for the units in the higher education sector. The first tables contain aggregated data and summary tables for the units included in the evaluation. Then statistics for each unit (i.e. university department) are presented.

3.1. Overall R&D personnel figures

R&D personnel within the evaluation units included about 3 700 persons working in the higher education sector in 2021. The total number of researchers increased notably over the years, from about 2 272 in 2013 to 3 051 in 2017, and further to 3 704 in 2021, which amounted to a growth of about 63 per cent.

The largest field of R&D which the units were assigned to, in terms of both numbers of units and numbers of researchers, was Information and communication technology with 6 units and 630 researchers. The second largest single field of R&D was informatics, and then followed mathematics with 328 researchers in 2021.

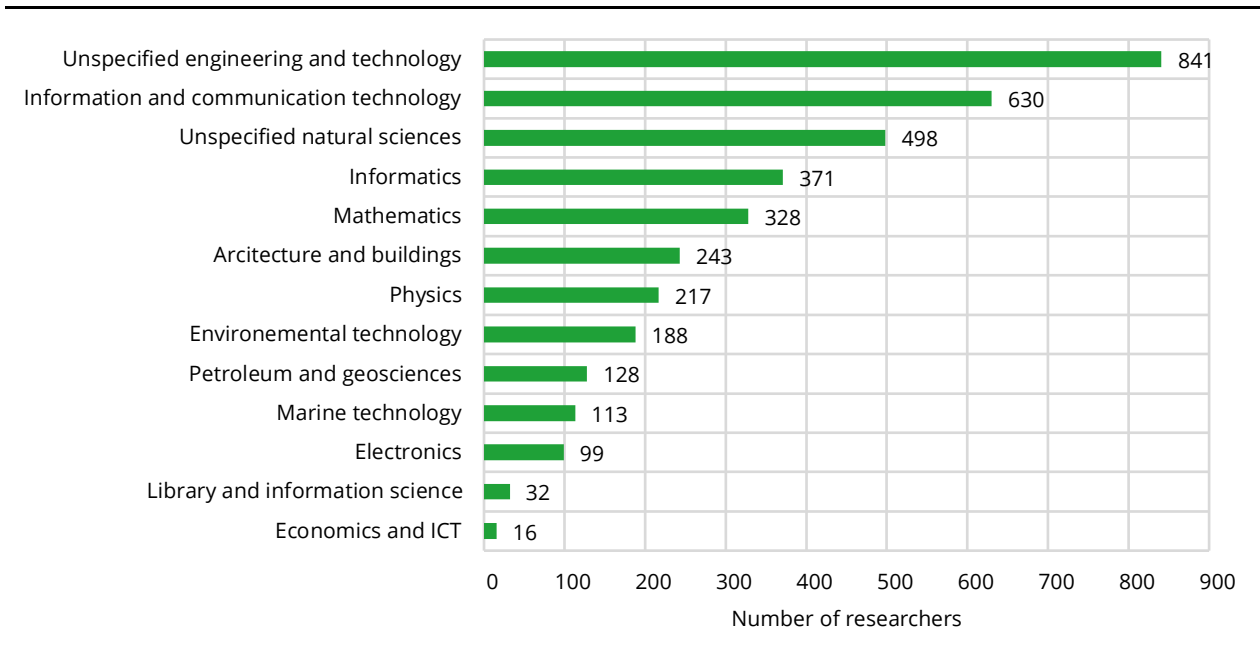
Table 3.1 Number of researchers participating in the evalmit evaluation in the higher education sector by fields of R&D (assigned fields of the units) in 2013, 2017 and 2021

Fields	Number of units	2013	2017	2021	Growth in per cent (2013-2021)
Architecture and buildings	4	216	221	243	13
Electronics	2	49	58	99	102
Environmental technology	1	115	167	188	63
Informatics	3	240	283	371	55
Information and communication technology	6	323	430	630	95
Library and information science	1	13	20	32	146
Marine technology	1	96	109	113	18
Mathematics	4	220	284	328	49
Petroleum and geosciences	2	128	187	128	0
Physics	2	128	148	217	70
Economics and ICT	1	9	12	16	78
Unspecified engineering and technology	15	420	686	841	100
Unspecified natural sciences	5	315	446	498	58
Total	47	2,272	3,051	3,704	63

However, a total of 15 units are assigned to the unspecified field of engineering and technology with a total of 841 researchers.

The number of researchers participating in the evaluation in 2021 by fields of R&D are presented in figure 3.1 by descending order of fields.

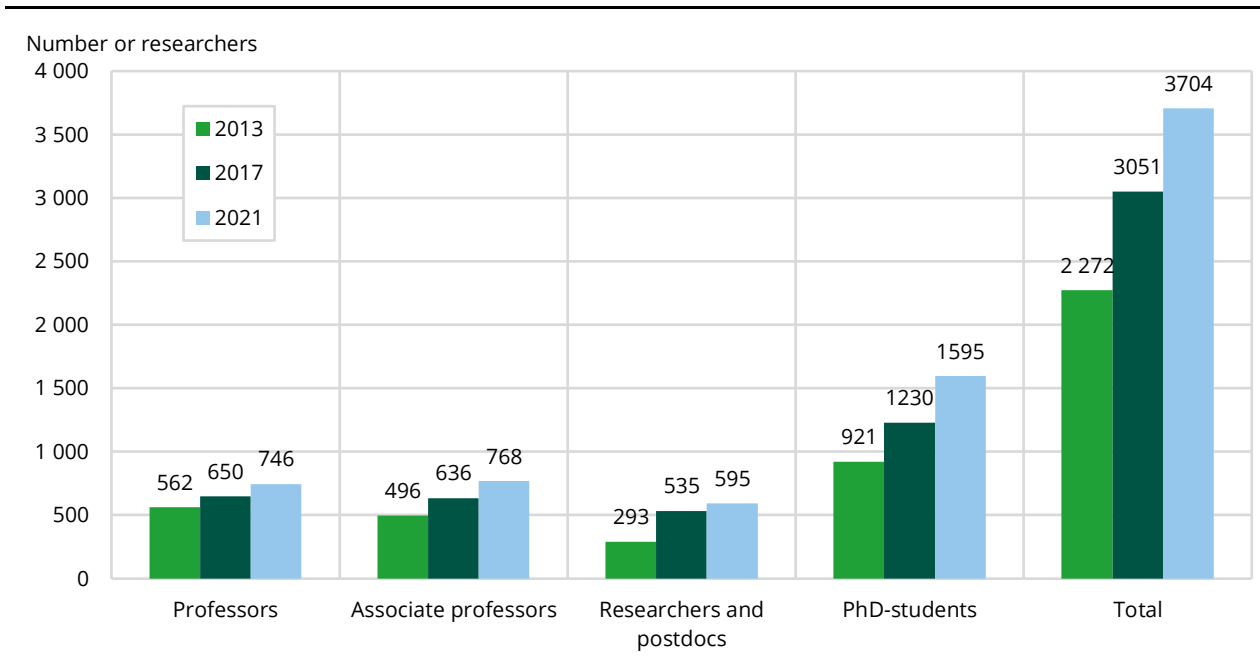
Figure 3.1 Number of researchers participating in the evalmit evaluation in the higher education sector by fields of R&D (assigned fields of the units) in 2021



Source: Statistics Norway

In total, there were about 750 professors, 770 associate professors, around 600 researchers and postdocs and almost 1 600 PhD-students. Although all of the personnel groups increased in the period, researchers and postdocs and PhD-students had the largest relative growth with about 103 and 73 per cent respectively.

Figure 3.2 Total number of researchers in the higher education sector by academic positions in 2013, 2017 and 2021. Units in the evalmit

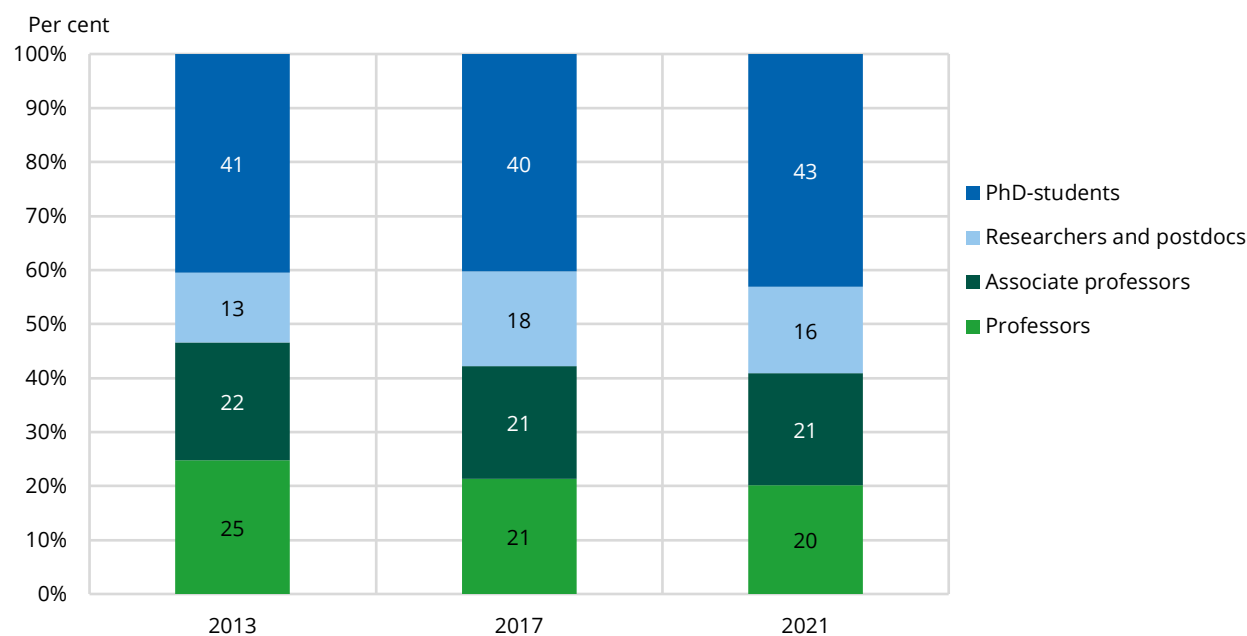


Source: Statistics Norway

The share of position groups was quite stable throughout the period from 2013 to 2021, but tenured staff (i.e. professors and associate professors) decreased from about 45 per cent in total in 2013, to 40 per cent in 2021. At the same time, researchers, postdocs, and PhD-students had an equivalent increase, from around 55 per cent to 60 per cent. If we look at the academic positions separately,

professors decreased 5 percentage point and associated professors only one percentage point. The share researchers and postdocs accounted for increased by 3 percentage point while PhD-students increased by 2 percentage points. The detailed 2021-figures of all units for both absolute and relative numbers are presented in Table 3.2 and Table 3.3.

Figure 3.3 Share of researchers by academic positions at university departments in 2013, 2017 and 2021. Units in the evalmit

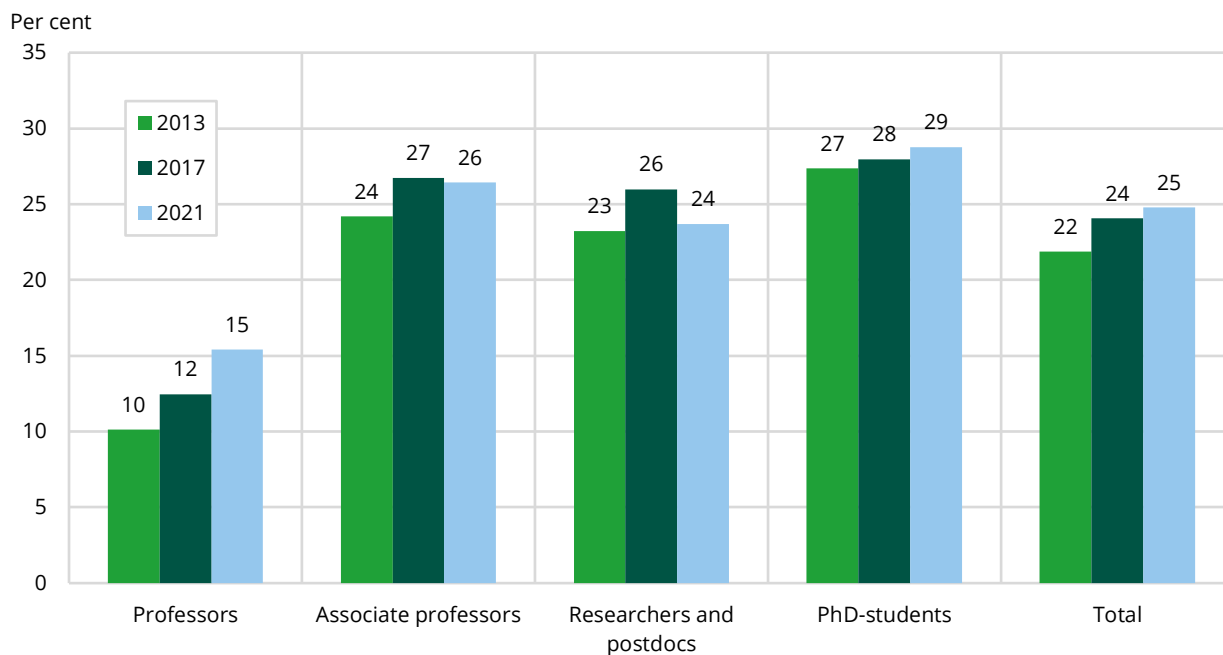


Source: Statistics Norway

For the units in the evaluation, the overall gender balance is 75 per cent men and 25 per cent women among the researchers (Figure 3.4). The share of women is substantially lower than in the total higher education where women account for 51 per cent, and for the personnel in all natural sciences units where women have a share of 37 per cent. However, in the field of engineering and technology, women account for 26 per cent of the research personnel, which is about the same level as in the evaluated units.

The gender balance varies among the position groups but approximately the same for both associate professors and researchers, where women account for about 25 per cent and almost 30 per cent of the PhD-students. However, only 15 per cent of the professor are women. At the bright side, the share of women among professors has increased most since 2013, when only 10 per cent were women. Statistics on these indicators for each unit are presented in Table 3.5.

Figure 3.4 Share of female researchers by academic position in 2013, 2017 and 2021. Units in the evalmit

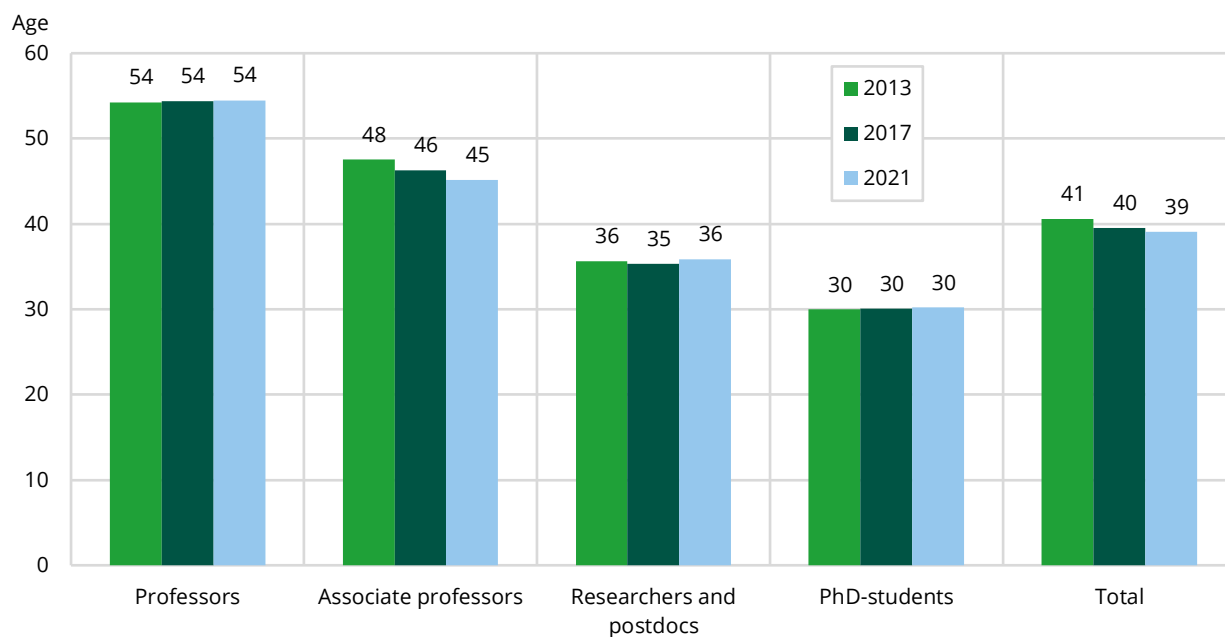


Source: Statistics Norway

The average age of the population of the units was 39 years in 2021, which was a decrease of two years since 2013. Overall, the average age for all positions have been quite stable over the period. The average age for professors was 54 years for all three years. However, associated professors decreased in age from 48 years in 2013, to 45 years old in 2021. The average age for the postdoc and researchers was 36 years and 30 years for the PhD-students (figure 3.5).

Compared with the total population of the higher education sectors, the population within this evaluation is younger. In the total population of the higher education sector, the average age was 45 years old in 2021, while professors were in average 56 years old. However, the average age of the total population in the higher education sector, within natural sciences and engineering and technology, was 40 years old for both major fields.

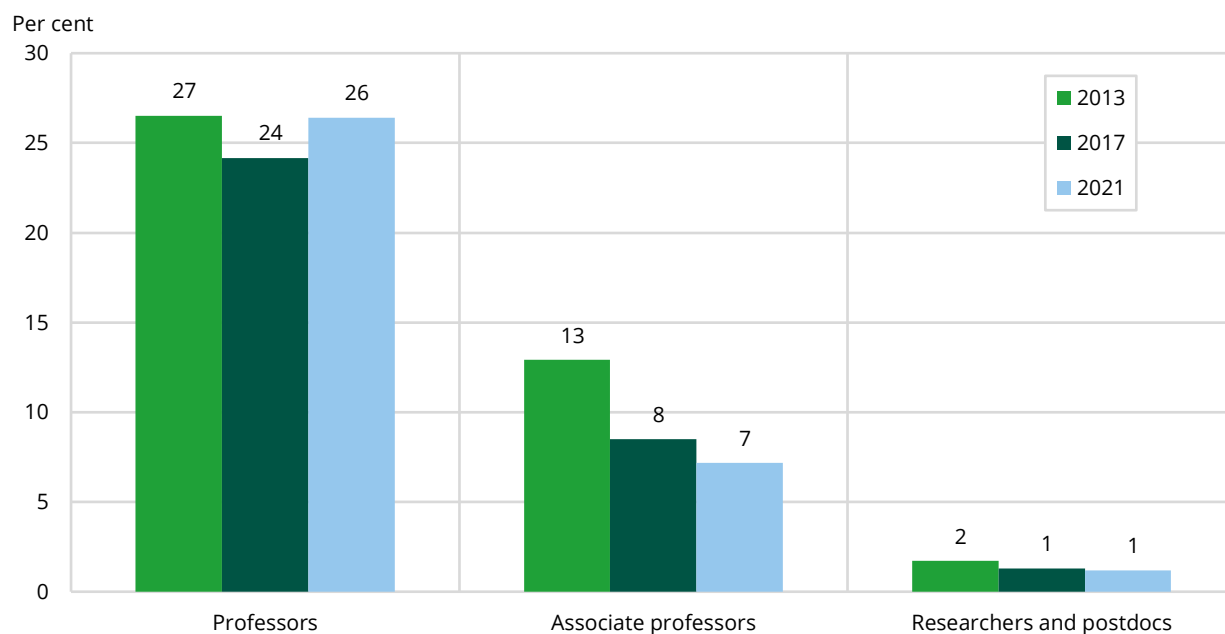
Figure 3.5 Average age of the researchers by academic position in 2013, 2017 and 2021. Units in the evalmit.



Source: Statistics Norway

The official retirement age in Norway is 67 years, but it is possible to retire at 62 years. Figure 3.6 shows the share of the population among the units which are 62 years and older. About 26 per cent of the population of the professors were at least 62 years. Among the associate professors, 7 per cent were 62 years or older. For detailed information of average age by position and share of professors aged 62 years or older at department level, this information is provided in Table 3.8.

Figure 3.6 Share of researchers aged 62 years and older by academic position in 2013, 2017 and 2021. Units in the evalmit

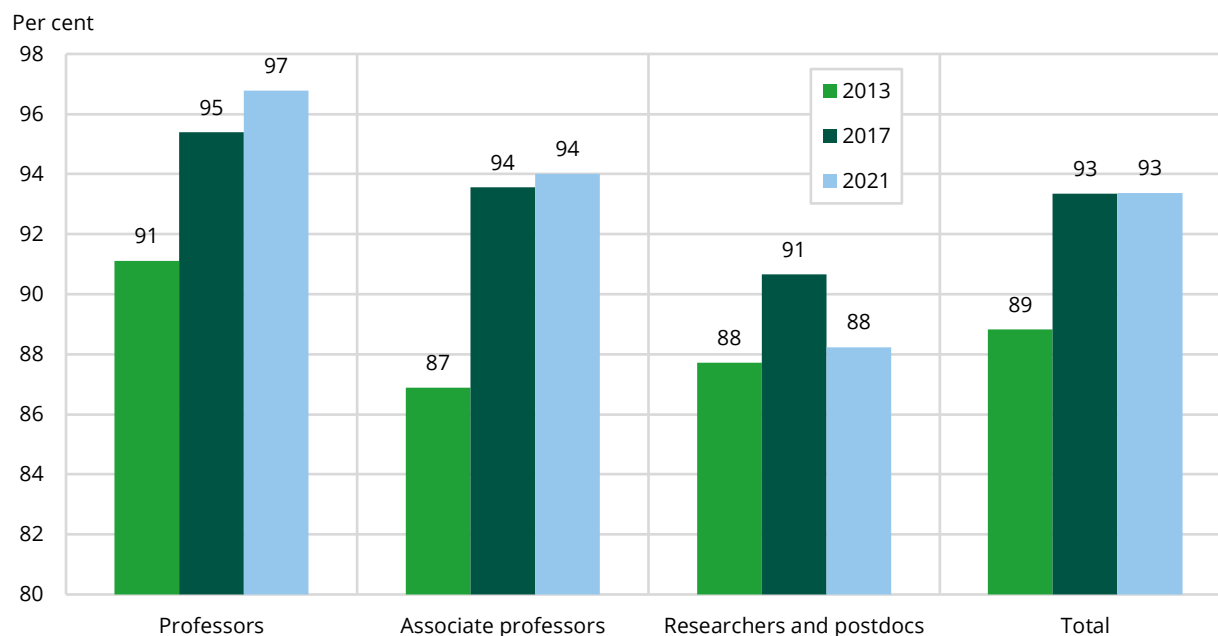


Source: Statistics Norway

Most of the professors and associate professors are doctoral holders, and as expected almost 100 per cent of these positions have a PhD-degree (figure 3.7). While 97 per cent of the professors, and 94 per cent of the associate professors had a PhD-degree in 2021, 88 per cent of the researchers

and postdocs had a PhD. In total, 93 per cent of these position had a PhD-degree. However, if we look at the density of doctoral holders in 2013, about 90 per cent of the staff had a Ph.D.-degree. The density of PhD-degrees has increased for both professors and associate professors since 2013 when about 90 per cent had a PhD-degree. The details at department level, are provided in Table 3.6.

Figure 3.7 Share of researchers with PhD-degree by academic position in 2013, 2017 and 2021. Units in the evaluation



Source: Statistics Norway

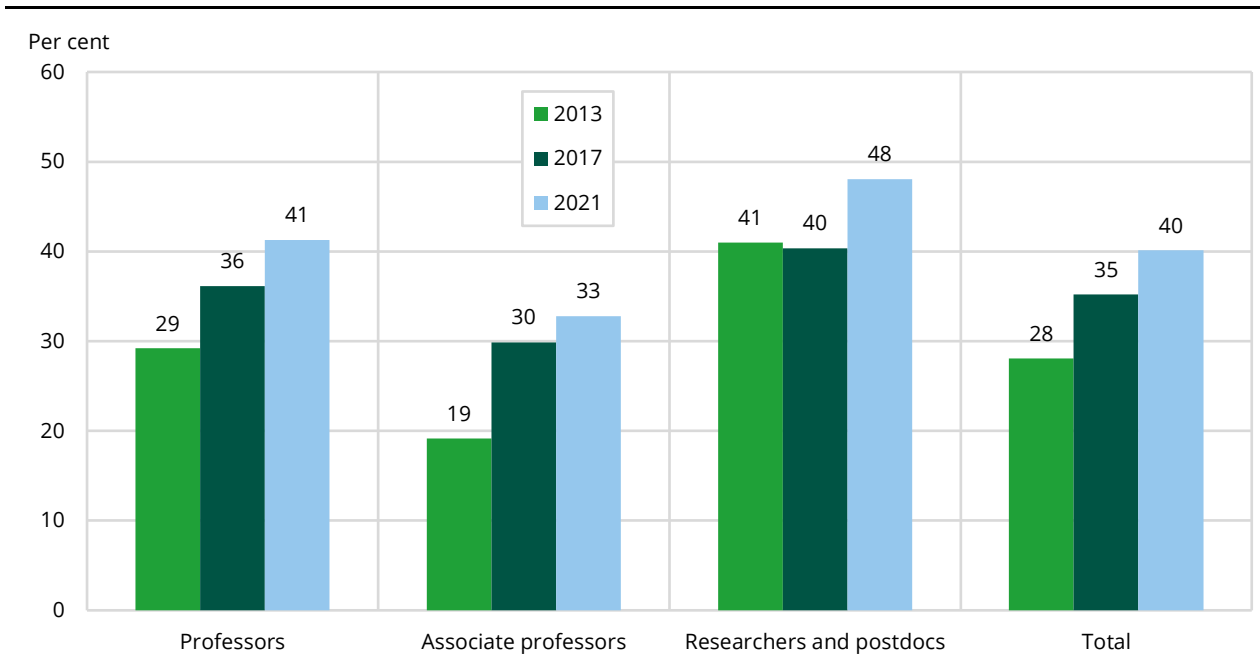
We are assuming that most of the foreign PhD-degree holders are foreign researchers. With this assumption, foreign researchers account for 40 per cent of the population in 2021. The share of foreign researchers (i.e. foreign PhD-holders) has increased quite rapidly from 2013, when the share was 28 per cent. Among the professors, the share was also 40 per cent in 2021, and had the same increased as the total population. Among the associate professors, the share of foreign citizens (i.e. foreign PhD-holders), was 33 per cent. The largest share of foreign citizens was among researchers and post. docs. where almost half of them, 48 per cent, had a foreign PhD-degree. Details at department level, are provided in table 3.7.

In addition to the researchers with a foreign PhD-degree, there are foreign PhD-students who completes their doctoral degree in Norway. In 2021, 44 per cent of all the PhD-students who were awarded a doctoral degree were foreign citizen, and within natural sciences and engineering and technology, the share was 63 and 59 per cent respectively. This means we can assume that foreign citizens account for about half of the research population within these fields.

The total share of foreign researchers in Norway was 32 per cent in 2021, and within natural sciences and engineering and technology, almost half of them (48 per cent) of the research population had a foreign PhD⁴.

⁴ «Hver tredje forsker i norsk akademie er innvanderer» (See: <https://www.ssb.no/teknologi-og-innovasjon/forskning-og-innovasjon-i-naeringslivet/statistikk/forskerpersonale/artikler/hver-tredje-forsker-i-norsk-akademie-er-innvanderer>). SSB-Table 13921)

Figure 3.8 Share of researchers with foreign PhD-degree by academic position in 2013, 2017 and 2021. Units in the evaluation.



Source: Statistics Norway

Table 3.2 shows all the units in the higher education sector included in the evaluation, and total number of researchers in 2013, 2017 and 2021, including the field of R&D they are assigned to, according to the maximum classification criteria (see section 2.4). A total of 15 units are assigned to the unspecified engineering and technical field, which means that the research is not assigned to one single field. A summary of the fields and numbers of units which are assigned to each field, are shown in Table 3.1.

Table 3.3 presents the number of researchers by academic position for each unit which is included in this evaluation. The following Table 3.4 is presenting the share each academic position constitutes. In both tables, PhD-students is by far the largest group, and constitute 43 per cent of the population, which is more than the professors and associate professors with about 20 per cent each. The smallest group consists of researchers and postdocs, accounting for 16 per cent of the population.

Table 3.5 presents the gender balance for each of the units by academic position in 2021. The share of female professors is only 15 per cent. This is lower than for the professors within both engineering and technology and natural sciences, which was 17 and 21 per cent respectively. The share of female professors among the units is also quite skewed and varies from zero female professors for six of the units to a share of 60 per cent.

The share of female associate professors for all the units is 26 per cent. This is the same as for whole population within engineering and technology in the higher education sector, but lower than for associate professors within natural sciences which was 39 per cent in 2021.

Table 3.2 Number of researchers in the units in the higher education sector by main field of R&D in 2013, 2017 and 2021

Institution, Department	Field of R&D in 2021	2013	2017	2021
Kristiania university college, School of Economics, Innovation and Technology	Unspecified engineering and technology	9	10	33
NMBU, Faculty of Science and Technology	Unspecified natural sciences	87	91	145
NTNU, Department of Architecture and Technology	Architecture	24	38	46
NTNU, Department of Civil and Environmental Engineering	Architecture	186	153	154
NTNU, Department of Computer Science	Information and communication technology	86	143	222
NTNU, Department of Electric Power Engineering	Electronics	49	49	83
NTNU, Department of Electronic Systems	Information and communication technology	68	80	99
NTNU, Department of Energy and Process Engineering	Environmental technology	115	167	188
NTNU, Department of Engineering Cybernetics	Information and communication technology	73	85	136
NTNU, Department of Geoscience and Petroleum	Petroleum and geosciences	81	110	88
NTNU, Department of ICT and Natural Sciences	Information and communication technology	16	16	25
NTNU, Department of Information Security and Communication Technology	Information and communication technology	54	69	100
NTNU, Department of Manufacturing and Civil Engineering	Unspecified engineering and technology	38	40	45
NTNU, Department of Marine Technology	Marine technology	96	109	113
NTNU, Department of Mathematical Sciences	Mathematics	106	118	154
NTNU, Department of Mechanical and Industrial Engineering	Unspecified engineering and technology	35	119	143
NTNU, Department of Structural Engineering	Unspecified engineering and technology	65	104	104
OsloMet, Department of Computer Science	Unspecified natural sciences	25	36	52
OsloMet, Department of Mechanical, Electronic and Chemical Engineering	Unspecified engineering and technology	14	17	28
UIA, Department of Information Systems	Library and information science	13	20	32
UIA, Faculty of Engineering and Science	Unspecified engineering and technology	116	164	206
UIB, Department of Physics and Technology	Physics	87	84	111
UIO, Department of Informatics	Informatics	148	174	219
UIO, Department of Mathematics	Mathematics	92	123	114
UIS, Department of Electrical Engineering and Computer Science	Information and communication technology	26	37	48
UIS, Department of Petroleum Engineering	Petroleum and geosciences	47	77	40
UIS, Dept. of Mechanical and Structural Engineering and Materials Science	Unspecified engineering and technology	22	34	39
UIT, Department of Building, Energy and Material Technology	Architecture and building		11	22
UIT, Department of Computer Science	Informatics	21	19	49
UIT, Department of Electrical Engineering	Electronics		9	16
UIT, Department of Industrial Technology	Unspecified engineering and technology		9	16
UIT, Department of Mathematics and Statistics	Mathematics	22	24	37
UIT, Department of Physics and Technology	Physics	41	64	106
UIT, Department of Technology and Safety	Unspecified engineering and technology	15	23	35
USN, Department of Business and IT	Social sciences	9	12	16
USN, Department of electrical engineering, IT and cybernetics	Unspecified engineering and technology	29	23	23
USN, Department of Microsystems	Unspecified engineering and technology	22	42	50
USN, Department of Process, Energy and Environmental Technology	Unspecified engineering and technology	31	33	42
USN, Department of Science and Industry systems	Unspecified engineering and technology		23	30
UIB, Department of Informatics	Informatics	71	90	103
UIB, Department of Mathematics	Unspecified natural sciences	55	64	70
OsloMet, Department of Built Environment	Architecture and building	6	19	21
Østfold University college, Faculty of Computer Science, Engineering and Economics	Unspecified engineering and technology	24	36	35
UIS, Department of Mathematics and Physics	Unspecified natural sciences	57	74	41
UIT, Department of Automation and Process Engineering	Unspecified engineering and technology		9	12
UIT, Department of Computer Science and Computational Engineering	Mathematics		19	23
Western Norway University of Applied Sciences, Faculty of Engineering and Science	Unspecified natural sciences	91	181	190
Total		2 272	3 051	3 704

Source: Statistics Norway

Table 3.3 Number of researchers by academic position and university department in 2021

Institution, department	Professors	Associate professors	Researchers and postdocs	PhD-students	Total
Kristiania university college, School of Economics, Innovation and Technology	7	17	5	4	33
NMBU, Faculty of Science and Technology	25	40	33	47	145
NTNU, Department of Architecture and Technology	10	17	2	17	46
NTNU, Department of Civil and Environmental Engineering	37	17	26	74	154
NTNU, Department of Computer Science	35	49	29	109	222
NTNU, Department of Electric Power Engineering	12	12	10	49	83
NTNU, Department of Electronic Systems	26	11	15	47	99
NTNU, Department of Energy and Process Engineering	32	14	42	100	188
NTNU, Department of Engineering Cybernetics	15	10	14	97	136
NTNU, Department of Geoscience and Petroleum	24	11	12	41	88
NTNU, Department of ICT and Natural Sciences	5	7	0	13	25
NTNU, Department of Information Security and Communication Technology	21	14	21	44	100
NTNU, Department of Manufacturing and Civil Engineering	6	20	3	16	45
NTNU, Department of Marine Technology	19	6	21	67	113
NTNU, Department of Mathematical Sciences	35	28	22	69	154
NTNU, Department of Mechanical and Industrial Engineering	19	21	20	83	143
NTNU, Department of Structural Engineering	20	8	30	46	104
OsloMet, Department of Built Environment	5	11	0	5	21
OsloMet, Department of Computer Science	13	23	4	12	52
OsloMet, Department of Mechanical, Electronic and Chemical Engineering	7	11	2	8	28
UIA, Department of Information Systems	12	8	2	10	32
UIA, Faculty of Engineering and Science	50	53	21	82	206
UIB, Department of Mathematics	22	10	13	25	70
UIB, Department of Informatics	18	14	27	44	103
UIB, Department of Physics and Technology	23	11	31	46	111
UIO, Department of Informatics	40	27	50	102	219
UIO, Department of Mathematics	26	13	30	45	114
UIS, Department of Electrical Engineering and Computer Science	10	9	4	25	48
UIS, Department of Mathematics and Physics	10	12	4	15	41
UIS, Department of Petroleum Engineering	7	7	7	19	40
UIS, Dept. of Mechanical and Structural Engineering and Materials Science	9	9	3	18	39
UIT, Department of Automation and Process Engineering	0	9	0	3	12
UIT, Department of Building, Energy and Material Technology	3	8	3	8	22
UIT, Department of Computer Science	10	9	8	22	49
UIT, Department of Computer Science and Computational Engineering	7	9	0	7	23
UIT, Department of Electrical Engineering	2	7	1	6	16
UIT, Department of Industrial Technology	2	5	1	8	16
UIT, Department of Mathematics and Statistics	7	10	4	16	37
UIT, Department of Physics and Technology	15	8	37	46	106
UIT, Department of Technology and Safety	7	13	1	14	35
USN, Department of Business and IT	6	10	0	0	16
USN, Department of Microsystems	11	11	12	16	50
USN, Department of Process, Energy and Environmental Technology	10	15	3	14	42
USN, Department of Science and Industry systems	14	12	1	3	30
USN, Department of electrical engineering, IT and cybernetics	6	8	0	9	23
Western Norway University of Applied Sciences, Faculty of Engineering and Science	36	89	21	44	190
Østfold University college, Faculty of Computer Science, Engineering and Economics	10	25	0	0	35
Total	746	768	595	1 595	3 704

Source: Statistics Norway

Table 3.4 Share of researchers by academic positions and university departments in 2021

Institution, department	Professors	Associate professors	Researchers and postdocs	PhD-students
Kristiania university college, School of Economics, Innovation and Technology	21	52	15	12
NMBU, Faculty of Science and Technology	17	28	23	32
NTNU, Department of Architecture and Technology	22	37	4	37
NTNU, Department of Civil and Environmental Engineering	24	11	17	48
NTNU, Department of Computer Science	16	22	13	49
NTNU, Department of Electric Power Engineering	14	14	12	59
NTNU, Department of Electronic Systems	26	11	15	47
NTNU, Department of Energy and Process Engineering	17	7	22	53
NTNU, Department of Engineering Cybernetics	11	7	10	71
NTNU, Department of Geoscience and Petroleum	27	13	14	47
NTNU, Department of ICT and Natural Sciences	20	28	0	52
NTNU, Department of Information Security and Communication Technology	21	14	21	44
NTNU, Department of Manufacturing and Civil Engineering	13	44	7	36
NTNU, Department of Marine Technology	17	5	19	59
NTNU, Department of Mathematical Sciences	23	18	14	45
NTNU, Department of Mechanical and Industrial Engineering	13	15	14	58
NTNU, Department of Structural Engineering	19	8	29	44
OsloMet, Department of Built Environment	24	52	0	24
OsloMet, Department of Computer Science	25	44	8	23
OsloMet, Department of Mechanical, Electronic and Chemical Engineering	25	39	7	29
UIA, Department of Information Systems	38	25	6	31
UIA, Faculty of Engineering and Science	24	26	10	40
UIB, Department of Mathematics	31	14	19	36
UIB, Department of Informatics	17	14	26	43
UIB, Department of Physics and Technology	21	10	28	41
UIO, Department of Informatics	18	12	23	47
UIO, Department of Mathematics	23	11	26	39
UIS, Department of Electrical Engineering and Computer Science	21	19	8	52
UIS, Department of Mathematics and Physics	24	29	10	37
UIS, Department of Petroleum Engineering	18	18	18	48
UIS, Dept. of Mechanical and Structural Engineering and Materials Science	23	23	8	46
UIT, Department of Automation and Process Engineering	0	75	0	25
UIT, Department of Building, Energy and Material Technology	14	36	14	36
UIT, Department of Computer Science	20	18	16	45
UIT, Department of Computer Science and Computational Engineering	30	39	0	30
UIT, Department of Electrical Engineering	13	44	6	38
UIT, Department of Industrial Technology	13	31	6	50
UIT, Department of Mathematics and Statistics	19	27	11	43
UIT, Department of Physics and Technology	14	8	35	43
UIT, Department of Technology and Safety	20	37	3	40
USN, Department of Business and IT	38	63	0	0
USN, Department of Microsystems	22	22	24	32
USN, Department of Process, Energy and Environmental Technology	24	36	7	33
USN, Department of Science and Industry systems	47	40	3	10
USN, Department of electrical engineering, IT and cybernetics	26	35	0	39
Western Norway University of Applied Sciences, Faculty of Engineering and Science	19	47	11	23
Østfold University college, Faculty of Computer Science, Engineering and Economics	29	71	0	0
Total	20	21	16	43

Source: Statistics Norway

Table 3.5 Share of female researchers by academic positions and university department in 2021

Institution, department	Professors	Associate professors	Researchers and postdocs	PhD-students	Total
Kristiania university college, School of Economics, Innovation and Technology	0	35	60	25	30
NMBU, Faculty of Science and Technology	20	25	36	40	32
NTNU, Department of Architecture and Technology	30	47	50	35	39
NTNU, Department of Civil and Environmental Engineering	14	35	27	31	27
NTNU, Department of Computer Science	17	22	24	38	29
NTNU, Department of Electric Power Engineering	17	0	0	18	13
NTNU, Department of Electronic Systems	12	36	20	23	21
NTNU, Department of Energy and Process Engineering	13	7	17	31	23
NTNU, Department of Engineering Cybernetics	20	10	21	18	18
NTNU, Department of Geoscience and Petroleum	8	18	33	27	22
NTNU, Department of ICT and Natural Sciences	0	29	0	31	24
NTNU, Department of Information Security and Communication Technology	10	29	10	36	24
NTNU, Department of Manufacturing and Civil Engineering	17	30	0	13	20
NTNU, Department of Marine Technology	16	33	10	21	19
NTNU, Department of Mathematical Sciences	20	25	27	16	20
NTNU, Department of Mechanical and Industrial Engineering	11	19	25	37	29
NTNU, Department of Structural Engineering	15	13	17	26	20
OsloMet, Department of Built Environment	60	27	0	0	29
OsloMet, Department of Computer Science	15	26	25	42	27
OsloMet, Department of Mechanical, Electronic and Chemical Engineering	43	18	50	50	36
UIA, Department of Information Systems	33	25	0	90	47
UIA, Faculty of Engineering and Science	12	32	29	24	24
UIB, Department of Mathematics	14	20	8	28	19
UIB, Department of Informatics	11	21	15	27	20
UIB, Department of Physics and Technology	13	18	23	33	24
UIO, Department of Informatics	18	33	34	39	33
UIO, Department of Mathematics	12	31	33	22	24
UIS, Department of Electrical Engineering and Computer Science	10	22	0	24	19
UIS, Department of Mathematics and Physics	10	17	25	27	20
UIS, Department of Petroleum Engineering	14	0	0	32	18
UIS, Dept. of Mechanical and Structural Engineering and Materials Science	11	44	0	17	21
UIT, Department of Automation and Process Engineering	0	22	0	0	17
UIT, Department of Building, Energy and Material Technology	33	13	67	63	41
UIT, Department of Computer Science	20	33	25	9	18
UIT, Department of Computer Science and Computational Engineering	14	22	0	29	22
UIT, Department of Electrical Engineering	50	14	0	17	19
UIT, Department of Industrial Technology	50	20	100	25	31
UIT, Department of Mathematics and Statistics	0	30	50	31	27
UIT, Department of Physics and Technology	20	25	30	33	29
UIT, Department of Technology and Safety	14	46	0	14	26
USN, Department of Business and IT	33	10	0	0	19
USN, Department of Microsystems	0	9	0	31	12
USN, Department of Process, Energy and Environmental Technology	20	13	0	43	24
USN, Department of Science and Industry systems	14	17	0	0	13
USN, Department of electrical engineering, IT and cybernetics	0	38	0	22	22
Western Norway University of Applied Sciences, Faculty of Engineering and Science	14	38	38	27	31
Østfold University college, Faculty of Computer Science, Engineering and Economics	30	24	0	0	26
Total	15	26	24	29	25

Source: Statistics Norway

Table 3.6 Share of professors, associate professors and postdoc/researchers with PhD-degree in 2021

Institution, department	Professors	Associate professors	Researchers and postdocs	Total
Kristiania university college, School of Economics, Innovation and Technology	100	100	100	100
NMBU, Faculty of Science and Technology	100	83	76	85
NTNU, Department of Architecture and Technology	80	24	0	41
NTNU, Department of Civil and Environmental Engineering	100	88	92	95
NTNU, Department of Computer Science	100	90	79	90
NTNU, Department of Electric Power Engineering	100	100	80	94
NTNU, Department of Electronic Systems	100	100	93	98
NTNU, Department of Energy and Process Engineering	94	100	95	96
NTNU, Department of Engineering Cybernetics	100	100	100	100
NTNU, Department of Geoscience and Petroleum	100	100	92	98
NTNU, Department of ICT and Natural Sciences	80	100	0	92
NTNU, Department of Information Security and Communication Technology	100	100	91	96
NTNU, Department of Manufacturing and Civil Engineering	83	95	100	93
NTNU, Department of Marine Technology	95	100	81	89
NTNU, Department of Mathematical Sciences	97	96	100	98
NTNU, Department of Mechanical and Industrial Engineering	100	100	95	98
NTNU, Department of Structural Engineering	100	100	97	98
OsloMet,, Department of Built Environment	100	100	0	100
OsloMet, Department of Computer Science	92	100	25	90
OsloMet,, Department of Mechanical, Electronic and Chemical Engineering	100	100	50	95
UIA, Department of Information Systems	100	88	50	91
UIA, Faculty of Engineering and Science	94	100	95	97
UIB, Department of Mathematics	100	100	100	100
UIB, Department of Informatics	100	100	100	100
UIB, Department of Physics and Technology	100	100	100	100
UIO, Department of Informatics	98	100	88	94
UIO, Department of Mathematics	89	92	97	93
UIS, Department of Electrical Engineering and Computer Science	100	89	100	96
UIS, Department of Mathematics and Physics	100	92	100	96
UIS, Department of Petroleum Engineering	100	100	100	100
UIS, Dept. of Mechanical and Structural Engineering and Materials Science	89	100	67	91
UIT, Department of Automation and Process Engineering	.	100	0	100
UIT, Department of Building, Energy and Material Technology	100	100	33	86
UIT, Department of Computer Science	90	89	38	74
UIT, Department of Computer Science and Computational Engineering	100	100	0	100
UIT, Department of Electrical Engineering	100	100	100	100
UIT, Department of Industrial Technology	100	100	100	100
UIT, Department of Mathematics and Statistics	100	80	50	81
UIT, Department of Physics and Technology	100	88	92	93
UIT, Department of Technology and Safety	100	92	100	95
USN, Department of Business and IT	67	80	0	75
USN, Department of Microsystems	100	100	83	94
USN, Department of Process, Energy and Environmental Technology	90	93	67	89
USN, Department of Science and Industry systems	93	92	100	93
USN, Department of electrical engineering, IT and cybernetics	100	100	0	100
Western Norway University of Applied Sciences, Faculty of Engineering and Science	97	96	57	90
Østfold University college, Faculty of Computer Science, Engineering and Economics	90	100	0	97
Total	97	94	88	53

Source: Statistics Norway

Table 3.7 Share of professors, associate professors, and postdoc/researchers with foreign PhD-degree in 2021

Institution, department	Professors	Associate professors	Researchers and postdocs	Total
Kristiania university college, School of Economics, Innovation and Technology	43	41	40	41
NMBU, Faculty of Science and Technology	28	28	36	31
NTNU, Department of Architecture and Technology	20	12	0	14
NTNU, Department of Civil and Environmental Engineering	19	47	35	30
NTNU, Department of Computer Science	40	37	45	40
NTNU, Department of Electric Power Engineering	25	42	40	35
NTNU, Department of Electronic Systems	54	9	60	46
NTNU, Department of Energy and Process Engineering	38	43	57	48
NTNU, Department of Engineering Cybernetics	40	10	43	33
NTNU, Department of Geoscience and Petroleum	50	36	58	49
NTNU, Department of ICT and Natural Sciences	40	29	0	33
NTNU, Department of Information Security and Communication Technology	67	50	52	57
NTNU, Department of Manufacturing and Civil Engineering	50	30	67	38
NTNU, Department of Marine Technology	11	17	38	24
NTNU, Department of Mathematical Sciences	43	50	73	53
NTNU, Department of Mechanical and Industrial Engineering	53	29	25	35
NTNU, Department of Structural Engineering	20	25	37	29
OsloMet, Department of Built Environment	40	64	0	56
OsloMet,, Department of Computer Science	46	30	25	35
OsloMet, Department of Mechanical, Electronic and Chemical Engineering	86	18	50	45
UIA, Department of Information Systems	42	25	0	32
UIA, Faculty of Engineering and Science	56	34	52	46
UIB, Department of Mathematics	46	60	62	53
UIB, Department of Informatics	83	43	63	64
UIB, Department of Physics and Technology	35	18	52	40
UIO, Department of Informatics	48	33	48	44
UIO, Department of Mathematics	42	62	63	55
UIS, Department of Electrical Engineering and Computer Science	10	44	25	26
UIS, Department of Mathematics and Physics	60	83	75	73
UIS, Department of Petroleum Engineering	43	0	29	24
UIS, Dept. of Mechanical and Structural Engineering and Materials Science	11	33	67	29
UIT, Department of Automation and Process Engineering	0	11	0	11
UIT, Department of Building, Energy and Material Technology	67	13	0	21
UIT, Department of Computer Science	30	56	38	41
UIT, Department of Computer Science and Computational Engineering	29	11	0	19
UIT, Department of Electrical Engineering	0	57	100	50
UIT, Department of Industrial Technology	50	40	100	50
UIT, Department of Mathematics and Statistics	57	30	50	43
UIT, Department of Physics and Technology	40	38	62	53
UIT, Department of Technology and Safety	43	31	100	38
USN, Department of Business and IT	33	50	0	44
USN, Department of Microsystems	64	18	33	38
USN, Department of Process, Energy and Environmental Technology	10	20	33	18
USN, Department of Science and Industry systems	43	25	100	37
USN, Department of electrical engineering, IT and cybernetics	33	25	0	29
Western Norway University of Applied Sciences, Faculty of Engineering and Science	39	24	24	27
Østfold University college, Faculty of Computer Science, Engineering and Economics	40	28	0	31
Total	41	33	48	23

Source: Statistics Norway

Table 3.8 Average age of researchers by professors, associate professors, researchers and postdoc, and share of professors 62 years and older, in 2021

Institution, department	Professors	Associate professors	Researchers and postdocs	Share professors aged 62 or older
Kristiania university college, School of Economics, Innovation and Technology	50	42	39	29
NMBU, Faculty of Science and Technology	56	47	37	36
NTNU, Department of Architecture and Technology	57	54	44	40
NTNU, Department of Civil and Environmental Engineering	54	45	38	14
NTNU, Department of Computer Science	55	45	38	20
NTNU, Department of Electric Power Engineering	56	42	38	33
NTNU, Department of Electronic Systems	57	50	36	38
NTNU, Department of Energy and Process Engineering	53	43	34	34
NTNU, Department of Engineering Cybernetics	51	44	36	7
NTNU, Department of Geoscience and Petroleum	59	47	42	50
NTNU, Department of ICT and Natural Sciences	45	43		0
NTNU, Department of Information Security and Communication Technology	57	42	36	24
NTNU, Department of Manufacturing and Civil Engineering	50	48	45	0
NTNU, Department of Marine Technology	53	41	35	26
NTNU, Department of Mathematical Sciences	55	43	32	26
NTNU, Department of Mechanical and Industrial Engineering	52	45	32	21
NTNU, Department of Structural Engineering	56	40	33	35
OsloMet, Department of Built Environment	50	41		0
OsloMet, Department of Computer Science	48	47	33	8
OsloMet, Department of Mechanical, Electronic and Chemical Engineering	46	48	31	0
UIA, Department of Information Systems	51	48	45	8
UIA, Faculty of Engineering and Science	57	46	37	42
UIB, Department of Mathematics	52	49	35	9
UIB, Department of Informatics	54	41	35	28
UIB, Department of Physics and Technology	56	48	36	30
UIO, Department of Informatics	57	44	38	30
UIO, Department of Mathematics	54	42	34	27
UIS, Department of Electrical Engineering and Computer Science	52	43	36	10
UIS, Department of Mathematics and Physics	49	40	34	20
UIS, Department of Petroleum Engineering	55	46	39	43
UIS, Dept. of Mechanical and Structural Engineering and Materials Science	51	42	48	0
UIT, Department of Automation and Process Engineering		42		0
UIT, Department of Building, Energy and Material Technology	59	51	35	33
UIT, Department of Computer Science	56	43	31	20
UIT, Department of Computer Science and Computational Engineering	61	41		57
UIT, Department of Electrical Engineering	50	42	38	0
UIT, Department of Industrial Technology	47	47	47	0
UIT, Department of Mathematics and Statistics	59	50	33	57
UIT, Department of Physics and Technology	55	39	34	27
UIT, Department of Technology and Safety	50	45	47	14
USN, Department of Business and IT	55	46		33
USN, Department of Microsystems	54	46	36	9
USN, Department of Process, Energy and Environmental Technology	57	44	37	40
USN, Department of Science and Industry systems	55	49	36	36
USN, Department of electrical engineering, IT and cybernetics	57	42		50
Western Norway University of Applied Sciences, Faculty of Engineering and Science	52	46	37	17
Østfold University college, Faculty of Computer Science, Engineering and Economics	55	47		30
Total	54	45	37	26

Source: Statistics Norway

4. R&D personnel in the institute sector

In this evaluation, ten research institutes from the Norwegian institute sector are included in the analysis. These are:

- Institute for Energy Technology
- NORCE Technology
- Norwegian Computing Center
- SIMULA Research Laboratory
- SINTEF Community
- SINTEF Digital
- SINTEF Energy
- SINTEF Industry
- SINTEF Manufacturing
- SINTEF Ocean (technology section)

Two of these institutes, SINTEF Digital and SINTEF Industry were also included in the evaluation of natural sciences ([Statistics for use in the evaluation of natural sciences in Norway](#) (Report 2023/15) (ssb.no)).

In the following part of this report, the personnel statistics of these research institutes will be presented aggregated for the group of institutes (Table 4.1–4.3) and for each institute separately (Table 4.4–4.8). The presented indicators are the same as for the higher education sector, except that for the research institutes we will present the researchers in one group only, as the research institutes do not have one standard classification of positions.

4.1. R&D personnel and gender balance in the institute sector

In 2021, almost 1 900 researchers were employed at the ten research institutes included in this evaluation. Since 2013, the population had a growth from about 1 500 researchers or 25 per cent. Most of the growth can however be linked to three institutes: SINTEF Industry, SINTEF Digital and SIMULA Research Laboratory, with a total increase of about 250 researchers. However, Institute for Energy Technology and Norce Technology had both a decrease of researchers in the same period.

The size of the research institutes varies quite a bit, from 52 researchers at SINTEF Manufacturing to SINTEF Industry who has almost 400 researchers which is by far the largest institute. The average number of researchers was 345 in 2021.

With 29 per cent women, among the institutes in this evaluation, the gender balance is lower than the sector average of 46 per cent. However, the share of female researchers has increased with three percentage points since 2013. The share of women varies between the institutes, from 20 per cent at Norce Technology to 44 per cent at SINTEF Community.

Table 4.1 Number of researchers and share of female researchers in 2013, 2017 and 2021. Research institutes included in the evaluation

	Number of researchers			Share of female researchers		
	2013	2017	2021	2013	2017	2021
Institute for Energy Technology	208	234	197	29	36	26
NORCE Technology	197	196	174	22	21	20
Norwegian Computing Center	58	65	78	36	28	31
SIMULA Research Laboratory	66	96	138	24	24	27
SINTEF Community	116	112	176	44	41	44
SINTEF Digital	235	216	311	18	18	25
SINTEF Energy	178	169	213	21	23	26
SINTEF Industry	294	278	395	30	32	32
SINTEF Manufacturing	29	32	52	14	25	25
SINTEF Ocean	117	133	142	15	23	25
Total	1,498	1,531	1,876	26	27	29

Source: Statistics Norway

Table 4.2 is showing the share of researchers with a PhD-degree and the share of researchers with a foreign PhD-degree. As expected, most of the researchers are PhD-holders as 68 per cent of them have a PhD-degree. This is an increase since 2013, when just more than half of them, 56 per cent, had a PhD-degree. The PhD-density varies quite a bit. At SINTEF Community, SINTEF Manufacturing about half of the researchers are PhD-holders while around 80 per cent had a PhD-degree at Norce Technology and SINTEF Industry.

As mentioned previously, a foreign PhD-degree is an indicator of a foreign citizenship. In 2021, 20 per cent, or one of five researchers had a foreign PhD-degree, and this share increased from 15 per cent in 2013. The highest share of foreign PhD-degrees was found at SIMULA Research Laboratory with 32 per cent. At SINTEF Industry and Institute for Energy Technology, one of four had a foreign PhD-degree as well.

Table 4.2 Share of researchers with PhD-degree and share of researchers with foreign PhD-degree. 2013, 2017 and 2021. Research institutes included in the evaluation

Institute	Researchers with PhD-degree			Researchers with foreign PhD-degree		
	2013	2017	2021	2013	2017	2021
Institute for Energy Technology	47	49	59	20	24	26
NORCE Technology	55	64	78	15	14	19
Norwegian Computing Center	62	72	73	10	9	10
SIMULA Research Laboratory	55	65	66	24	33	32
SINTEF Community	38	44	50	5	6	9
SINTEF Digital	54	60	61	12	18	21
SINTEF Energy	56	63	74	11	10	14
SINTEF Industry	73	77	80	21	22	25
SINTEF Manufacturing	48	53	54	10	6	6
SINTEF Ocean	50	60	63	13	14	13
Total	56	62	68	15	17	20

Source: Statistics Norway

The average age of the researchers is shown in Table 4.3, which was 43 years old. The average age was quite stable over time, at 43 years in 2013 and 44 years in 2017. Between the institutes, the average age is also quite similar, except at SIMULA Research Laboratory where the researchers are much younger than the rest of the institutes, with an average age of 36 years.

Table 4.3 also contains the share of researchers aged 62 years and older. As most of the researchers are younger, only a small proportion, 7 per cent, of the researchers are 62 years old and older. At a couple of institutes, SINTEF Community and SINTEF Manufacturing, 11 and 12 per cent of their researchers are 62 years old or older.

Table 4.3 Average age of researchers and share of researchers that are 62 years and older. 2013, 2017 and 2021. Research institutes included in the evaluation

Institute	Average age of researchers			Share of researchers 62 years and older		
	2013	2017	2021	2013	2017	2021
Institute for Energy Technology	46	45	44	10	8	7
NORCE Technology	41	43	45	5	7	6
Norwegian Computing Center	42	43	43		2	6
SIMULA Research Laboratory	34	35	36			
SINTEF Community	46	46	45	9	12	11
SINTEF Digital	42	44	43	6	7	7
SINTEF Energy	41	42	41	4	7	5
SINTEF Industry	43	45	45	5	8	9
SINTEF Manufacturing	44	47	43	3	9	12
SINTEF Ocean	44	44	45	13	7	9
Total	43	44	43	6	7	7

Source: Statistics Norway

4.2. R&D personnel data in the institutes sector per institute

In this chapter, more detailed statistics for each institute are provided in the following tables. These tables are not further commented upon.

Table 4.4 Personnel statistics for Institute for Energy Technology 2013, 2017 and 2021

Indicators	2013	2017	2021
Total researchers	208	234	197
Female researchers	60	84	52
Male researchers	148	150	145
Share of female researchers	29	36	26
Share of researchers with phd-degree	47	49	59
Share of female researchers with phd-degree	35	36	54
Share of male researchers with phd-degree	52	57	61
Share of researchers with foreign phd-degree	20	24	26
Average age, all researchers	46	45	44
Average age, female researchers	42	43	42
Average age, male researchers	47	46	45
Share of researchers 62 years or older	10	8	7

Source: Statistics Norway

Table 4.5 Personnel statistics for NORCE Technology, 2013, 2017 and 2021

Indicators	2013	2017	2021
Total researchers	197	196	174
Female researchers	44	41	35
Male researchers	153	155	139
Share of female researchers	22	21	20
Share of researchers with phd-degree	55	64	78
Share of female researchers with phd-degree	55	68	71
Share of male researchers with phd-degree	55	63	80
Share of researchers with foreign phd-degree	15	14	19
Average age, all researchers	41	43	45
Average age, female researchers	38	41	43
Average age, male researchers	43	44	46
Share of researchers 62 years or older	5	7	6

Source: Statistics Norway

Table 4.6 Personnel statistics for Norwegian Computing Center, 2013, 2017 and 2021.

Indicators	2013	2017	2021
Total researchers	58	65	78
Female researchers	21	18	24
Male researchers	37	47	54
Share of female researchers	36	28	31
Share of researchers with phd-degree	62	72	73
Share of female researchers with phd-degree	57	83	79
Share of male researchers with phd-degree	65	68	70
Share of researchers with foreign phd-degree	10	9	10
Average age, all researchers	42	43	43
Average age, female researchers	38	43	41
Average age, male researchers	44	43	43
Share of researchers 62 years or older	0	2	6

Source: Statistics Norway

Table 4.7 Personnel statistics for SIMULA Research Laboratory 2013, 2017 and 2021.

Indicators	2013	2017	2021
Total researchers	66	96	138
Female researchers	16	23	37
Male researchers	50	73	101
Share of female researchers	24	24	27
Share of researchers with phd-degree	55	65	66
Share of female researchers with phd-degree	38	61	59
Share of male researchers with phd-degree	60	66	68
Share of researchers with foreign phd-degree	24	33	32
Average age, all researchers	34	35	36
Average age, female researchers	29	31	32
Average age, male researchers	35	37	38
Share of researchers 62 years or older	0	0	0

Source: Statistics Norway

Table 4.8 Personnel statistics for SINTEF Community 2013, 2017 and 2021.

Indicators	2013	2017	2021
Total researchers	116	112	176
Female researchers	51	46	78
Male researchers	65	66	98
Share of female researchers	44	41	44
Share of researchers with phd-degree	38	44	50
Share of female researchers with phd-degree	37	46	50
Share of male researchers with phd-degree	38	42	50
Share of researchers with foreign phd-degree	5	6	9
Average age, all researchers	46	46	45
Average age, female researchers	40	44	42
Average age, male researchers	50	48	46
Share of researchers 62 years or older	9	12	11

Source: Statistics Norway

Table 4.9 Personnel statistics for SINTEF Digital 2013, 2017 and 2021.

Indicators	2013	2017	2021
Total researchers	235	216	311
Female researchers	43	38	79
Male researchers	192	178	232
Share of female researchers	18	18	25
Share of researchers with phd-degree	54	60	61
Share of female researchers with phd-degree	49	55	53
Share of male researchers with phd-degree	56	61	63
Share of researchers with foreign phd-degree	12	18	21
Average age, all researchers	42	44	43
Average age, female researchers	40	42	40
Average age, male researchers	43	44	44
Share of researchers 62 years or older	6	7	7

Source: Statistics Norway

Table 4.10 Personnel statistics for SINTEF Energy 2013, 2017 and 2021.

Indicators	2013	2017	2021
Total researchers	178	169	213
Female researchers	38	39	56
Male researchers	140	130	157
Share of female researchers	21	23	26
Share of researchers with phd-degree	56	63	74
Share of female researchers with phd-degree	53	54	75
Share of male researchers with phd-degree	56	66	74
Share of researchers with foreign phd-degree	11	10	14
Average age, all researchers	41	42	41
Average age, female researchers	36	36	38
Average age, male researchers	42	44	42
Share of researchers 62 years or older	4	7	5

Source: Statistics Norway

Table 4.11 Personnel statistics for SINTEF Industri 2013, 2017 and 2021.

Indicators	2013	2017	2021
Total researchers	294	278	395
Female researchers	87	90	126
Male researchers	207	188	269
Share of female researchers	30	32	32
Share of researchers with phd-degree	73	77	80
Share of female researchers with phd-degree	66	69	69
Share of male researchers with phd-degree	77	81	85
Share of researchers with foreign phd-degree	21	22	25
Average age, all researchers	43	45	45
Average age, female researchers	40	42	41
Average age, male researchers	45	46	46
Share of researchers 62 years or older	5	8	9

Source: Statistics Norway

Table 4.12 Personnel statistics for SINTEF Manufacturing 2013, 2017 and 2021.

Indicators	2013	2017	2021
Total researchers	29	32	52
Female researchers	4	8	13
Male researchers	25	24	39
Share of female researchers	14	25	25
Share of researchers with phd-degree	48	53	54
Share of female researchers with phd-degree	50	63	54
Share of male researchers with phd-degree	48	50	54
Share of researchers with foreign phd-degree	10	6	6
Average age, all researchers	44	47	43
Average age, female researchers	43	47	41
Average age, male researchers	44	47	43
Share of researchers 62 years or older	3	9	12

Source: Statistics Norway

Table 4.13 Personnel statistics for SINTEF Ocean 2013, 2017 and 2021

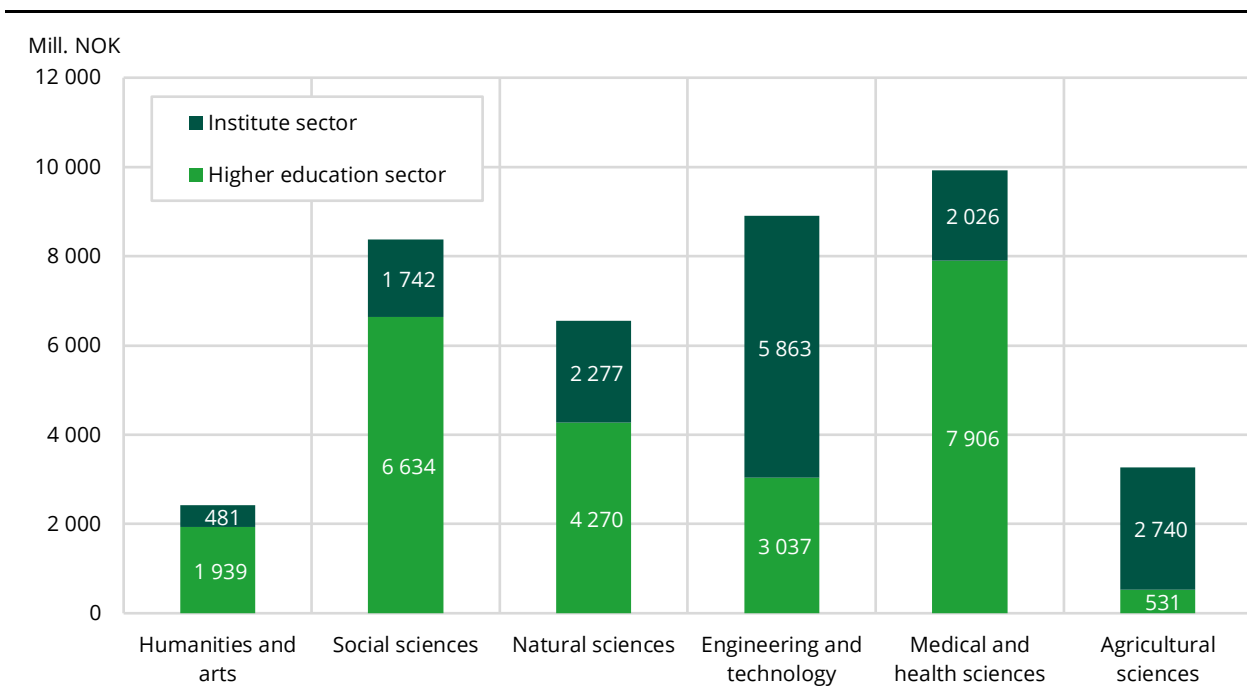
Indicators	2013	2017	2021
Total researchers	117	133	142
Female researchers	18	31	36
Male researchers	99	102	106
Share of female researchers	15	23	25
Share of researchers with phd-degree	50	60	63
Share of female researchers with phd-degree	50	71	69
Share of male researchers with phd-degree	49	57	60
Share of researchers with foreign phd-degree	13	14	13
Average age, all researchers	44	44	45
Average age, female researchers	39	42	42
Average age, male researchers	44	45	46
Share of researchers 62 years or older	13	7	9

Source: Statistics Norway

5. R&D expenditure in the higher education and institute sectors 2021

R&D expenditure are used to measure the input to the research system. In 2021, current R&D expenditure in the higher education sector and institutes sector amounted to about 39.4 billion NOK. About 24.3 billion NOK was used in the higher education sector and 15.1 billion NOK in the institute sector. Total R&D expenditure in engineering and technology amounted to 8,9 billion NOK and natural sciences amounted to 6.5 billion NOK in 2021. Adding these major fields together, the total current R&D expenditure amounted to almost 15.5 billion NOK in 2021.

Figure 5.1 Current expenditure on R&D in the institute and higher education sector by fields of R&D in 2021. Mill. NOK

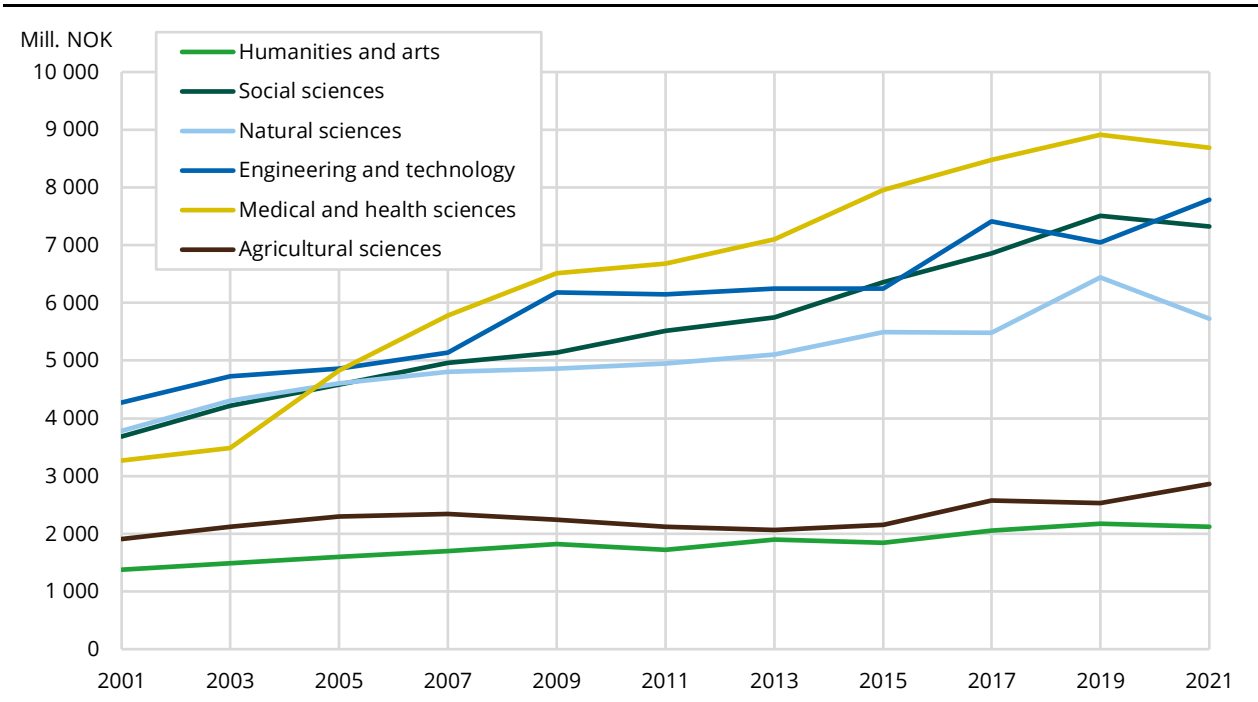


Source: Statistics Norway. [Table 13513](#) and [Table 13516](#)

5.1. Total R&D expenditures in academia

Figure 5.2 shows the current expenditure on R&D by fields of R&D for the higher education sector and the institute sector together in the period 2001 to 2021, in fixed prices, which is adjusted for inflation. Medical and health sciences is by far the largest field, and had the strongest growth, with almost 170 per cent from 2001 to 2021. Total growth for all fields in the same period was about 90 per cent. Engineering and technology (the dark blue line) was the second largest field, with a growth in R&D expenditure of 82 per cent. Natural sciences (light blue line) were the fourth largest field in 2021 and had a modest growth of about 50 per cent since 2001, which was the same as agricultural sciences and humanities.

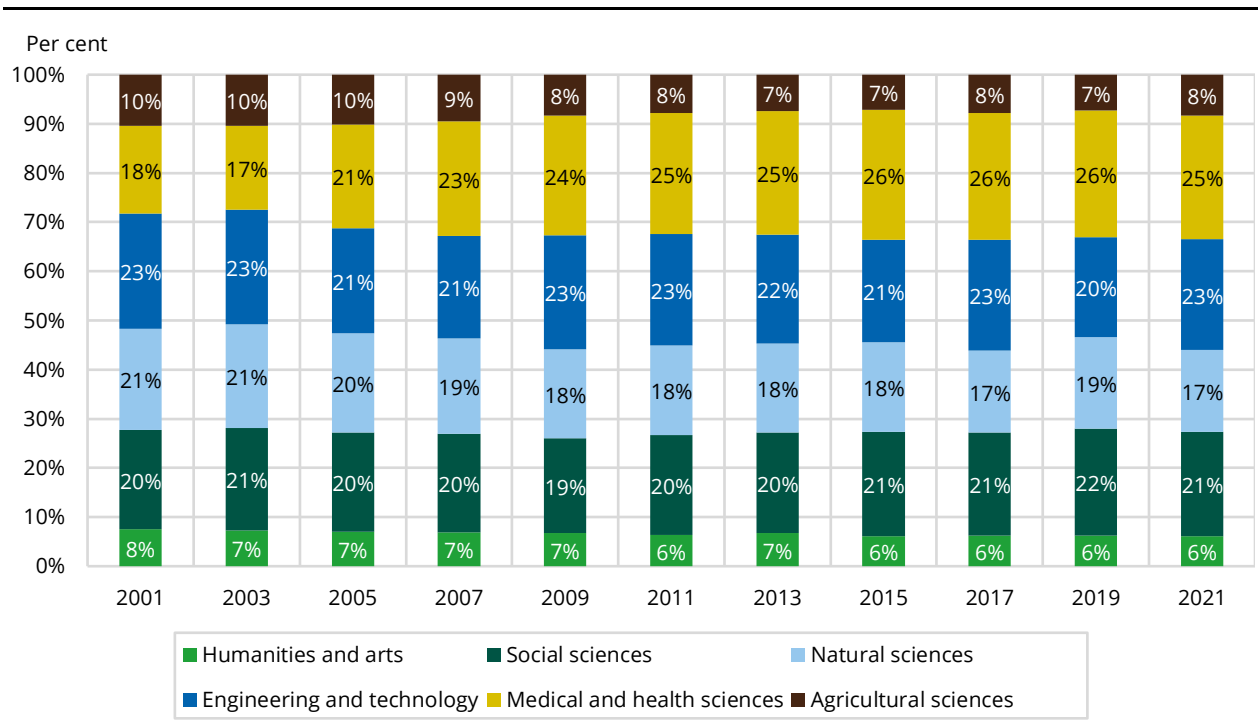
Figure 5.2 Current expenditure on R&D in the institute and higher education sector by fields of R&D in 2001-2021. Fixed 2015-prices. Mill. NOK



Source: Statistics Norway. [Table 13513](#)

Figure 5.3 illustrates the distribution of each R&D field as a percentage of the total over the 20-year period. Engineering and technology accounted for about 23 per cent of the total both in 2001 and in 2023, never dipping below 20 per cent. Natural sciences constituted 17 per cent in 2021, gradually declining from 21 per cent in 2001. Medical and health sciences were the field of R&D that increased the most, rising from 18 per cent in 2001 to 25 per cent in 2021.

Figure 5.3 Current expenditure on R&D in the institute and higher education sector by fields of R&D in 2001-2021. Share of total R&D



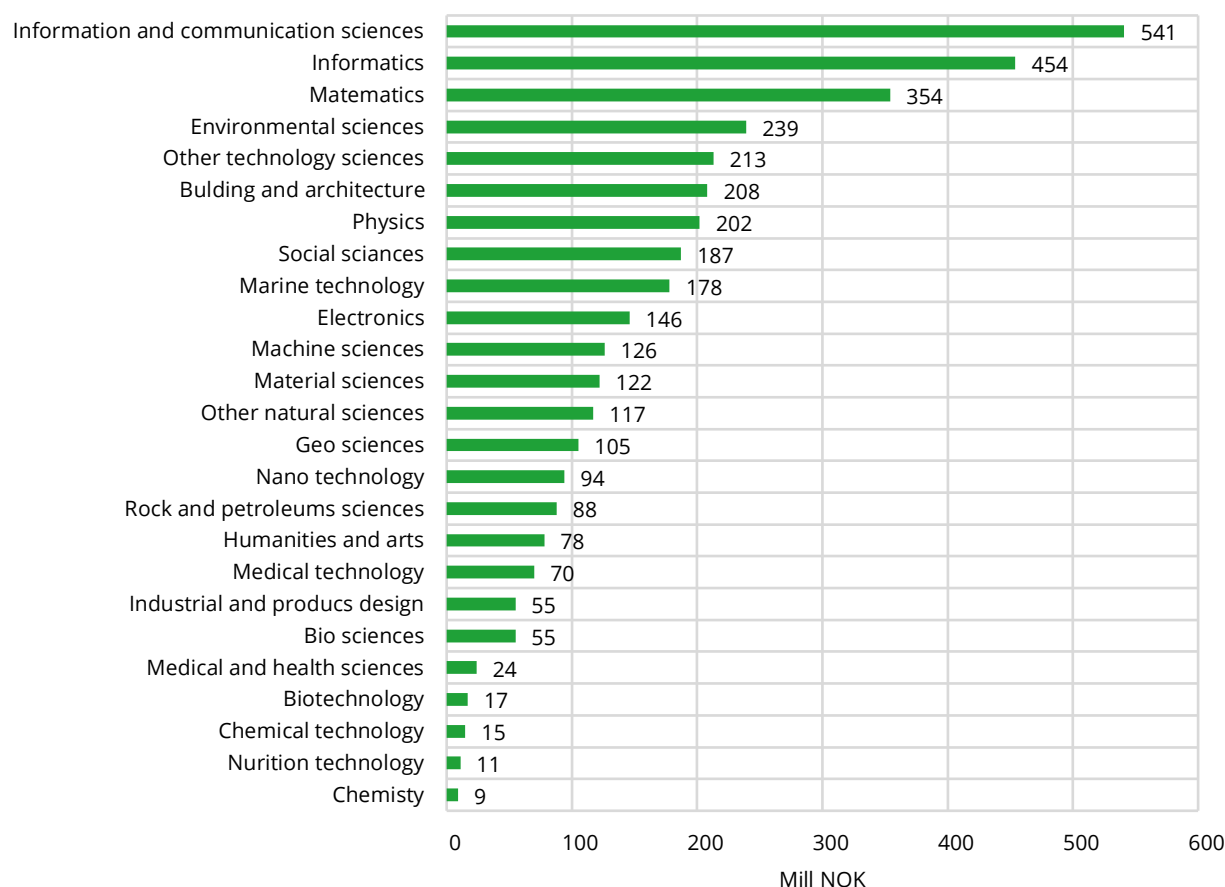
Source: Statistics Norway. [Table 13513](#)

5.2. R&D expenditures for the evaluated units in the higher education sector

In this chapter we look closer at the evaluated units in the higher education sector. The evaluated units performed R&D for a total of 3.7 billion NOK in 2021. In the following figures, the R&D expenditures is presented using the specific field classification. See further explanation about field classification in section 2.4. A vast majority of R&D was carried out within engineering and technology and natural sciences, a total of 57 and 35 per cent respectively. The last three percentages, which constitute almost 100 million NOK were within other fields. Figure 5.4 is showing the current R&D expenditure for the higher education units by specific field classification.

The largest subfield among the units was information and communication sciences with R&D expenditures of about 541 million NOK. Then following, the very closely related subfield informatics, which amounted to 454 million NOK. Together these two subfields constitute almost 1 billion NOK. Mathematics was the third largest field, accounting for about 350 million NOK. Then follows a wide range of other fields, mainly within technology and natural sciences.

Figure 5.4 Current R&D expenditure among HE units by specific field classification. Mill NOK. 2021



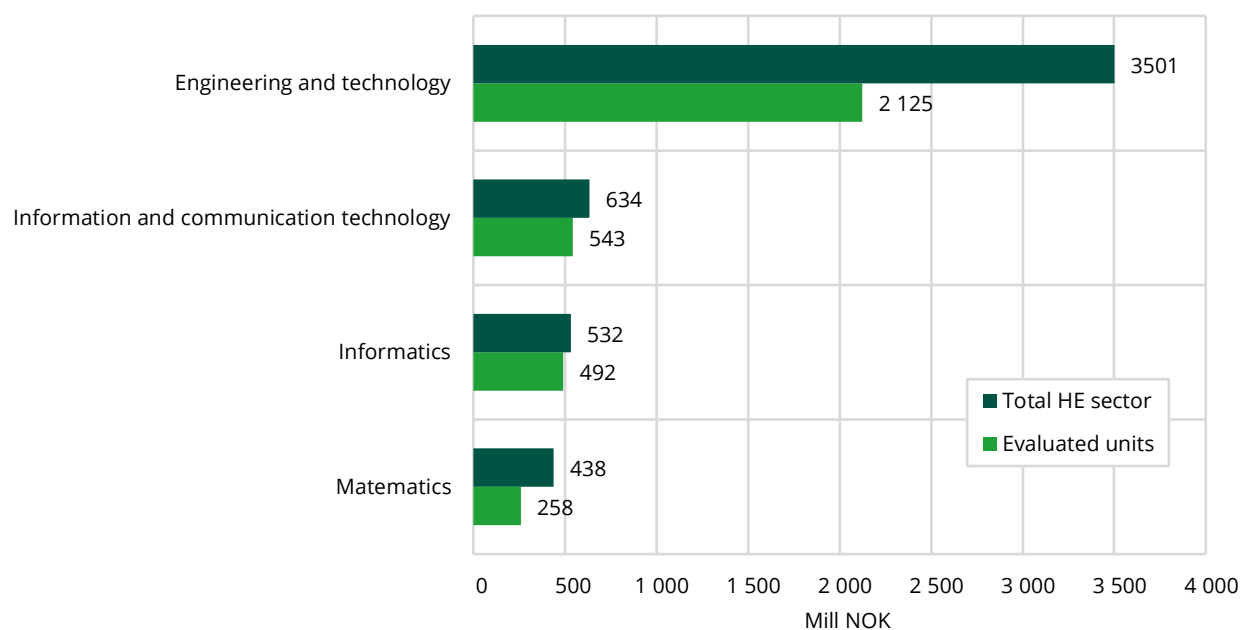
Source: Statistics Norway

Figure 5.5 shows the R&D expenditure for the units included in the evaluation by selected fields, compared to the total current expenditure of the same fields in the higher education sector in 2021. The figures are based on responses from the R&D survey by specific field classification, meaning that the R&D performed unit states the which fields of R&D they have carried out and how much in percentage of their total R&D. The figure shows how much the units in the evaluation cover the various fields compared to how much the fields make up overall.

For information and communication technology, the unit are covering about 540 million NOK, while the total R&D within this field constitutes 634 million NOK, i.e. around 86 per cent. When it comes to

informatics, the units R&D expenditure amounted to 492 million NOK, while the total expenditure within this field was 532 million NOK, which means that 92 per cent of the informatics field was covered by the units. Mathematics is not that well covered by the units, while about 60 per cent were covered (258 of 438 million NOK). The evaluated units cover about 2.1 billion NOK R&D within engineering and technology. However, the total current expenditure on R&D within this field of R&D in the higher education sector constitutes about 3.5 billion NOK. Hence, some technology fields are not covered by this evaluation. The fields which are not covered by this evaluation, are mainly biotechnology, nano technology and chemical engineering. These fields were covered by other evaluations.

Figure 5.5 Current R&D expenditure within relevant fields in total and among the evaluation units. Specific field classification. Mill. NOK 2021



Source: Statistics Norway

References

OECD (2015), Frascati Manual 2015: Guidelines for Collecting and Reporting Data on Research and Experimental Development, The Measurement of Scientific, Technological and Innovation Activities, OECD Publishing, Paris, <https://doi.org/10.1787/9789264239012-en>.

The Research Council of Norway (2021). Science & Technology Indicators for Norway 2021. <https://www.forskningsradet.no/contentassets/c13c9822d47542108d768dfb4a8479c4/sti-report-2021.pdf>

Rørstad, K., Wendt, K (2023): Statistics for use in the evaluation of biosciences in Norway Analysis of research personnel in 2013, 2017 and 2021. Statistics Norway https://www.ssb.no/teknologi-og-innovasjon/forskning-og-innovasjon-i-naeringslivet/artikler/statistics-for-use-in-the-evaluation-of-biosciences-in-norway-copy/_attachment/inline/d29de9b1-8ce3-4176-bf8c-fe6506d1be06:abb65bdfea1a56a9b8df2a591ad7f7aa4d72a255/RAPP2023-12.pdf

Rørstad, K., Wendt, K (2023): Statistics for use in the evaluation of natural sciences in Norway Analysis of research personnel in 2013, 2017 and 2021. Statistics Norway <https://www.ssb.no/teknologi-og-innovasjon/forskning-og-innovasjon-i-naeringslivet/artikler/statistics-for-use-in-the-evaluation-of-natural-sciences-in-norway>

Appendix A: R&D Personnel statistics for units in the higher education sector

Table A1.1 UIB, Department of Physics and Technology, Number of researchers and share of women

	Number of researchers			Share of women		
	2013	2017	2021	2013	2017	2021
Professors	24	24	23	12	12	13
Associate professors	6	8	11	17	12	18
Researchers and postdocs	23	26	31	30	23	23
PhD-students	34	26	46	32	35	33
Total	87	84	111	25	23	24

Source: Statistics Norway

Table A1.2 UIB, Department of Physics and Technology, PhD-statistics

	Share of researchers with phd-degree			Share of researchers with foreign phd-degree		
	2013	2017	2021	2013	2017	2021
Professors	92	96	100	32	43	35
Associate professors	83	100	100	20	38	18
Researchers and postdocs	83	96	100	42	40	52
Total	87	97	100	30	40	40

Source: Statistics Norway

Table A1.3 UIB, Department of Physics and Technology, Age statistics

	Average age			Share of researchers 62 years or older			Share with temporary position
	2013	2017	2021	2013	2017	2021	2021
Professors	52	54	56	12	29	30	0
Associate professors	51	48	48	17	0	9	0
Researchers and postdocs	35	34	36	0	0	0	55
PhD-students	29	29	29	0	0	0	100
Total	39	39	39	5	8	7	4

Source: Statistics Norway

Table A2.1 UIB, Department of Informatics, Number of researchers and share of women

	Number of researchers			Share of women		
	2013	2017	2021	2013	2017	2021
Professors	19	19	18	5	5	11
Associate professors	3	3	14	0	33	21
Researchers and postdocs	20	32	27	30	22	15
PhD-students	29	36	44	24	36	27
Total	71	90	103	20	24	20

Source: Statistics Norway

Table A2.2 UIB, Department of Informatics, PhD-statistics

	Share of researchers with phd-degree			Share of researchers with foreign phd-degree		
	2013	2017	2021	2013	2017	2021
Professors	95	100	100	56	63	83
Associate professors	67	100	100	0	33	43
Researchers and postdocs	80	94	100	56	73	63
Total	86	96	100	45	65	64

Source: Statistics Norway

Table A2.3 UIB, Department of Informatics, Age statistics

	Average age			Share of researchers 62 years or older			Share with temporary position
	2013	2017	2021	2013	2017	2021	2021
	Professors	50	53	54	11	16	28
Associate professors	56	51	41	33	0	7	29
Researchers and postdocs	34	36	35	0	0	0	85
PhD-students	29	28	30	0	0	0	100
Total	37	37	37	4	3	6	4

Source: Statistics Norway

Table A3.1 UIB, Department of Mathematics, Number of researchers and share of women

	Number of researchers			Share of women		
	2013	2017	2021	2013	2017	2021
Professors	17	19	22	12	16	14
Associate professors	12	9	10	17	33	20
Researchers and postdocs	5	11	13	0	9	8
PhD-students	21	25	25	48	32	28
Total	55	64	70	25	23	19

Source: Statistics Norway

Table A3.2 UIB, Department of Mathematics, PhD-statistics

	Share of researchers with phd-degree			Share of researchers with foreign phd-degree		
	2013	2017	2021	2013	2017	2021
Professors	94	100	100	38	42	45
Associate professors	100	100	100	42	56	60
Researchers and postdocs	100	100	100	20	45	62
Total	97	100	100	35	46	53

Source: Statistics Norway

Table A3.2 UIB, Department of Mathematics, Age statistics

	Average age			Share of researchers 62 years or older			Share with temporary position
	2013	2017	2021	2013	2017	2021	2021
	Professors	53	50	52	29	11	9
Associate professors	44	45	49	0	0	30	20
Researchers and postdocs	35	33	35	0	0	0	62
PhD-students	28	28	31	0	0	0	100
Total	40	38	41	9	3	7	7

Source: Statistics Norway

Table A4.1 UIO, Department of Informatics, Number of researchers and share of women

	Number of researchers			Share of women		
	2013	2017	2021	2013	2017	2021
Professors	36	38	40	11	13	18
Associate professors	16	17	27	38	35	33
Researchers and postdocs	30	40	50	23	32	34
PhD-students	66	79	102	24	33	39
Total	148	174	219	22	29	33

Source: Statistics Norway

Table A4.2 UIO, Department of Informatics, PhD-statistics

	Share of researchers with phd-degree			Share of researchers with foreign phd-degree		
	2013	2017	2021	2013	2017	2021
Professors	83	89	98	27	38	49
Associate professors	94	100	100	33	29	33
Researchers and postdocs	97	95	88	45	37	55
Total	90	94	94	32	34	44

Source: Statistics Norway

Table A4.3 UIO, Department of Informatics, Age statistics

	Average age			Share of researchers 62 years or older			Share with temporary position
	2013	2017	2021	2013	2017	2021	2021
Professors	54	56	57	25	29	30	0
Associate professors	46	44	44	6	6	4	4
Researchers and postdocs	37	38	38	0	0	2	82
PhD-students	32	31	31	0	0	0	99
Total	40	39	39	7	7	6	3

Source: Statistics Norway

Table A5.1 UIO, Department of Mathematics, Number of researchers and share of women

	Number of researchers			Share of women		
	2013	2017	2021	2013	2017	2021
Professors	38	35	26	11	9	12
Associate professors	5	8	13	20	25	31
Researchers and postdocs	17	29	30	12	24	33
PhD-students	32	51	45	34	25	22
Total	92	123	114	20	20	24

Source: Statistics Norway

Table A5.2 UIO, Department of Mathematics, PhD-statistics

	Share of researchers with phd-degree			Share of researchers with foreign phd-degree		
	2013	2017	2021	2013	2017	2021
Professors	92	91	88	49	41	48
Associate professors	80	100	92	25	62	67
Researchers and postdocs	88	97	97	60	71	66
Total	90	94	93	45	53	55

Source: Statistics Norway

Table A5.3 UIO, Department of Mathematics, Age statistics

	Average age			Share of researchers 62 years or older			Share with temporary position
	2013	2017	2021	2013	2017	2021	2021
Professors	55	56	54	34	31	27	0
Associate professors	51	39	42	20	0	0	0
Researchers and postdocs	34	33	34	6	0	0	90
PhD-students	29	29	27	0	0	0	100
Total	42	38	37	16	9	6	0

Source: Statistics Norway

Table A6.1 UIT, Department of Computer Science, Number of researchers and share of women

	Number of researchers			Share of women		
	2013	2017	2021	2013	2017	2021
Professors	3	4	10	0	25	20
Associate professors	6	6	9	17	0	33
Researchers and postdocs	3	2	8	0	0	25
PhD-students	9	7	22	0	0	9
Total	21	19	49	5	5	18

Source: Statistics Norway

Table A6.2 UIT, Department of Computer Science, PhD-statistics

	Share of researchers with phd-degree			Share of researchers with foreign phd-degree		
	2013	2017	2021	2013	2017	2021
Professors	67	75	90	0	0	33
Associate professors	100	83	89	33	40	62
Researchers and postdocs	67	100	38	0	0	100
Total	83	83	74	17	17	41

Source: Statistics Norway

Table A6.3 UIT, Department of Computer Science, Age statistics

	Average age			Share of researchers 62 years or older			Share with temporary position
	2013	2017	2021	2013	2017	2021	2021
Professors	54	58	56	0	25	20	0
Associate professors	44	49	43	0	17	11	0
Researchers and postdocs	37	40	31	0	0	0	100
PhD-students	33	30	31	0	0	0	100
Total	39	43	38	0	11	6	0

Source: Statistics Norway

Table A7.1 UIT, Department of Physics and Technology, Number of researchers and share of women

	Number of researchers			Share of women		
	2013	2017	2021	2013	2017	2021
Professors	10	11	15	30	36	20
Associate professors	2	3	8	50	0	25
Researchers and postdocs	8	19	37	12	47	30
PhD-students	21	31	46	29	29	33
Total	41	64	106	27	34	29

Source: Statistics Norway

Table A7.2 UIT, Department of Physics and Technology, PhD-statistics

	Share of researchers with phd-degree			Share of researchers with foreign phd-degree		
	2013	2017	2021	2013	2017	2021
Professors	100	100	100	40	45	40
Associate professors	100	100	88	0	33	43
Researchers and postdocs	88	95	92	71	61	68
Total	95	97	93	45	52	53

Source: Statistics Norway

Table A7.3 UIT, Department of Physics and Technology, Age statistics

	Average age			Share of researchers 62 years or older			Share with temporary position
	2013	2017	2021	2013	2017	2021	2021
Professors	52	53	55	20	27	27	0
Associate professors	38	41	39	0	0	0	0
Researchers and postdocs	40	35	34	0	0	0	73
PhD-students	30	29	30	0	0	0	100
Total	38	36	36	5	5	4	7

Source: Statistics Norway

Table A8.1 UIT, Department of Mathematics and Statistics, Number of researchers and share of women

	Number of researchers			Share of women		
	2013	2017	2021	2013	2017	2021
Professors	6	5	7	0	0	0
Associate professors	8	8	10	25	25	30
Researchers and postdocs	3	3	4	0	0	50
PhD-students	5	8	16	60	38	31
Total	22	24	37	23	21	27

Source: Statistics Norway

Table A8.2 UIT, Department of Mathematics and Statistics, PhD-statistics

	Share of researchers with phd-degree			Share of researchers with foreign phd-degree		
	2013	2017	2021	2013	2017	2021
Professors	83	100	100	40	60	57
Associate professors	88	75	80	29	17	38
Researchers and postdocs	100	100	50	67	67	100
Total	88	88	81	35	38	43

Source: Statistics Norway

Table A8.3 UIT, Department of Mathematics and Statistics, Age statistics

	Average age			Share of researchers 62 years or older			Share with temporary position
	2013	2017	2021	2013	2017	2021	2021
Professors	58	60	59	33	60	57	14
Associate professors	48	50	50	0	12	30	0
Researchers and postdocs	42	33	33	0	0	0	100
PhD-students	29	28	28	0	0	0	100
Total	45	43	41	9	17	19	3

Source: Statistics Norway

Table A9.1 UIT, Department of Technology and Safety, Number of researchers and share of women

	Number of researchers			Share of women		
	2013	2017	2021	2013	2017	2021
Professors	3	6	7	0	0	14
Associate professors	10	8	13	30	50	46
Researchers and postdocs	1	2	1	100	0	0
PhD-students	1	7	14	0	14	14
Total	15	23	35	27	22	26

Source: Statistics Norway

Table A9.2 UIT, Department of Technology and Safety, PhD-statistics

	Share of researchers with phd-degree			Share of researchers with foreign phd-degree		
	2013	2017	2021	2013	2017	2021
Professors	100	100	100	33	50	43
Associate professors	100	100	92	0	25	33
Researchers and postdocs	0	100	100	0	50	100
Total	93	100	95	7	38	38

Source: Statistics Norway

Table A9.3 UIT, Department of Technology and Safety, Age statistics

	Average age			Share of researchers 62 years or older			Share with temporary position
	2013	2017	2021	2013	2017	2021	2021
Professors	45	51	50	0	17	14	0
Associate professors	45	42	45	10	0	0	8
Researchers and postdocs	35	32	47	0	0	0	0
PhD-students	28	34	32	0	0	0	100
Total	43	41	41	7	4	3	3

Source: Statistics Norway

Table A10.1 UIT, Department of Electrical Engineering, Number of researchers and share of women

	Number of researchers			Share of women		
	2013	2017	2021	2013	2017	2021
Professors	0	3	2	0	33	50
Associate professors	0	4	7	0	25	14
Researchers and postdocs	0	0	1	0	0	0
PhD-students	0	2	6	0	0	17
Total	0	9	16	0	22	19

Source: Statistics Norway

Table A10.2 UIT, Department of Electrical Engineering, PhD-statistics

	Share of researchers with phd-degree			Share of researchers with foreign phd-degree		
	2013	2017	2021	2013	2017	2021
Professors	0	100	100	0	0	0
Associate professors	0	100	100	0	50	57
Researchers and postdocs	0	0	100	0	0	100
Total	0	100	100	0	29	50

Source: Statistics Norway

Table A10.3 UIT, Department of Electrical Engineering, Age statistics

	Average age			Share of researchers 62 years or older			Share with temporary position
	2013	2017	2021	2013	2017	2021	2021
Professors	0	50	50	0	0	0	0
Associate professors	0	42	42	0	0	14	14
Researchers and postdocs	0	0	38	0	0	0	100
PhD-students	0	30	33	0	0	0	100
Total	0	42	39	0	0	6	0

Source: Statistics Norway

Table A11.1 UIT, Department of Computer Science and Computational Engineering, Number of researchers and share of women

	Number of researchers			Share of women		
	2013	2017	2021	2013	2017	2021
Professors	0	10	7	0	10	14
Associate professors	0	4	9	0	25	22
Researchers and postdocs						
PhD-students	0	5	7	0	60	29
Total	0	19	23	0	26	22

Source: Statistics Norway

Table A11.2 UIT, Department of Computer Science and Computational Engineering, PhD-statistics

	Share of researchers with phd-degree			Share of researchers with foreign phd-degree		
	2013	2017	2021	2013	2017	2021
Professors	0	100	100	0	50	29
Associate professors	0	100	100	0	75	11
Researchers and postdocs						
Total	0	100	100	0	57	19

Source: Statistics Norway

Table A11.3 UIT, Department of Computer Science and Computational Engineering, Age statistics

	Average age			Share of researchers 62 years or older			Share with temporary position
	2013	2017	2021	2013	2017	2021	2021
Professors	0	58	61	0	30	57	14
Associate professors	0	39	41	0	0	0	0
PhD-students	0	28	32	0	0	0	100
Total	0	46	45	0	16	17	13

Source: Statistics Norway

Table A12.1 UIT, Department of Automation and Process Engineering, Number of researchers and share of women

	Number of researchers			Share of women		
	2013	2017	2021	2013	2017	2021
Professors						
Associate professors	0	6	9	0	17	22
Researchers and postdocs	0	1	0	0	0	0
PhD-students	0	2	3	0	50	0
Total	0	9	12	0	22	17

Source: Statistics Norway

Table A12.2 UIT, Department of Automation and Process Engineering, PhD-statistics

	Share of researchers with phd-degree			Share of researchers with foreign phd-degree		
	2013	2017	2021	2013	2017	2021
Professors						
Associate professors	0	100	100	0	17	11
Researchers and postdocs	0	100	0	0	0	0
Total	0	100	100	0	14	11

Source: Statistics Norway

Table A12.3 UIT, Department of Automation and Process Engineering, Age statistics

	Average age			Share of researchers 62 years or older			Share with temporary position
	2013	2017	2021	2013	2017	2021	2021
Associate professors	0	39	42	0	0	0	0
Researchers and postdocs	0	32	0	0	0	0	0
PhD-students	0	33	36	0	0	0	100
Total	0	37	41	0	0	0	0

Source: Statistics Norway

Table A13.1 UIT, Department of Building, Energy and Material Technology, Number of researchers and share of women

	Number of researchers			Share of women		
	2013	2017	2021	2013	2017	2021
Professors	0	3	3	0	33	33
Associate professors	0	5	8	0	20	12
Researchers and postdocs	0	1	3	0	0	67
PhD-students	0	2	8	0	100	62
Total	0	11	22	0	36	41

Source: Statistics Norway

Table A13.2 UIT, Department of Building, Energy and Material Technology, PhD-statistics

	Share of researchers with phd-degree			Share of researchers with foreign phd-degree		
	2013	2017	2021	2013	2017	2021
Professors	0	100	100	0	67	67
Associate professors	0	100	100	0	20	12
Researchers and postdocs	0	0	33	0	0	0
Total	0	89	86	0	33	21

Source: Statistics Norway

Table A13.3 UIT, Department of Building, Energy and Material Technology, Age statistics

	Average age			Share of researchers 62 years or older			Share with temporary position
	2013	2017	2021	2013	2017	2021	2021
Professors	0	55	59	0	0	33	0
Associate professors	0	57	51	0	20	0	0
Researchers and postdocs	0	50	35	0	0	0	67
PhD-students	0	30	33	0	0	0	100
Total	0	51	43	0	9	5	0

Source: Statistics Norway

Table A14.1 UIT, Department of Industrial Technology, Number of researchers and share of women

	Number of researchers			Share of women		
	2013	2017	2021	2013	2017	2021
Professors	0	1	2	0	0	50
Associate professors	0	5	5	0	20	20
Researchers and postdocs	0	0	1	0	0	100
PhD-students	0	3	8	0	0	25
Total	0	9	16	0	11	31

Source: Statistics Norway

Table A14.2 UIT, Department of Industrial Technology, PhD-statistics

	Share of researchers with phd-degree			Share of researchers with foreign phd-degree		
	2013	2017	2021	2013	2017	2021
Professors	0	100	100	0	100	50
Associate professors	0	100	100	0	60	40
Researchers and postdocs	0	0	100	0	0	100
Total	0	100	100	0	67	50

Source: Statistics Norway

Table A14.3 UIT, Department of Industrial Technology, Age statistics

	Average age			Share of researchers 62 years or older			Share with temporary position
	2013	2017	2021	2013	2017	2021	2021
Professors	0	37	47	0	0	0	0
Associate professors	0	45.4	46.6	0	0	20	0
Researchers and postdocs	0	0	47	0	0	0	100
PhD-students	0	32.3	31	0	0	0	100
Total	0	40.1	38.9	0	0	6	0

Source: Statistics Norway

Table A15.1 NMBU, Faculty of Science and Technology, Number of researchers and share of women

	Number of researchers			Share of women		
	2013	2017	2021	2013	2017	2021
Professors	24	19	25	4	11	20
Associate professors	27	31	40	19	26	25
Researchers and postdocs	14	15	33	36	47	36
PhD-students	22	26	47	45	38	40
Total	87	91	145	24	30	32

Source: Statistics Norway

Table A15.2 NMBU, Faculty of Science and Technology, PhD-statistics

	Share of researchers with phd-degree			Share of researchers with foreign phd-degree		
	2013	2017	2021	2013	2017	2021
Professors	75	95	100	6	17	28
Associate professors	78	87	83	10	22	33
Researchers and postdocs	86	87	76	50	54	48
Total	78	89	85	14	25	31

Source: Statistics Norway

Table A15.3 NMBU, Faculty of Science and Technology, Age statistics

	Average age			Share of researchers 62 years or older			Share with temporary position
	2013	2017	2021	2013	2017	2021	2021
Professors	57	55	56	42	32	36	4
Associate professors	51	51	47	11	6	15	0
Researchers and postdocs	41	40	37	14	7	0	82
PhD-students	30	31	31	0	0	0	100
Total	46	44	41	17	10	10	8

Source: Statistics Norway

Table A16.1 UIS, Department of Mathematics and Physics, Number of researchers and share of women

	Number of researchers			Share of women		
	2013	2017	2021	2013	2017	2021
Professors	15	18	10	13	6	10
Associate professors	13	12	12	8	33	17
Researchers and postdocs	10	12	4	60	17	25
PhD-students	19	32	15	32	50	27
Total	57	74	41	26	31	20

Source: Statistics Norway

Table A16.2 UIS, Department of Mathematics and Physics, PhD-statistics

	Share of researchers with phd-degree			Share of researchers with foreign phd-degree		
	2013	2017	2021	2013	2017	2021
Professors	100	100	100	53	44	60
Associate professors	85	100	92	27	58	91
Researchers and postdocs	90	92	100	44	73	75
Total	92	98	96	39	55	73

Source: Statistics Norway

Table A16.3 UIS, Department of Mathematics and Physics, Age statistics

	Average age			Share of researchers 62 years or older			Share with temporary position
	2013	2017	2021	2013	2017	2021	2021
Professors	54	55	49	20	39	20	0
Associate professors	49	42	40	23	0	0	8
Researchers and postdocs	35	35	34	0	0	0	100
PhD-students	29	30	29	0	0	0	100
Total	41	39	38	11	9	5	5

Source: Statistics Norway

Table A17.1 UIS, Department of Electrical Engineering and Computer Science, Number of researchers and share of women

	Number of researchers			Share of women		
	2013	2017	2021	2013	2017	2021
Professors	5	9	10	20	11	10
Associate professors	9	7	9	0	0	22
Researchers and postdocs	2	8	4	0	38	0
PhD-students	10	13	25	10	15	24
Total	26	37	48	8	16	19

Source: Statistics Norway

Table A17.2 UIS, Department of Electrical Engineering and Computer Science, PhD-statistics

	Share of researchers with phd-degree			Share of researchers with foreign phd-degree		
	2013	2017	2021	2013	2017	2021
Professors	100	100	100	0	11	10
Associate professors	78	86	89	14	0	50
Researchers and postdocs	100	63	100	0	40	25
Total	88	83	96	6	12	26

Source: Statistics Norway

Table A17.3 UIS, Department of Electrical Engineering and Computer Science, Age statistics

	Average age			Share of researchers 62 years or older			Share with temporary position
	2013	2017	2021	2013	2017	2021	2021
	Professors	48	49	52	0	0	10
Associate professors	50	51	43	33	29	11	0
Researchers and postdocs	35	34	36	0	0	0	50
PhD-students	29	30	30	0	0	0	100
Total	40	40	38	12	5	4	10

Source: Statistics Norway

Table A18.1 UIS, Dept. of Mechanical and Structural Engineering and Materials Science, Number of researchers and share of women

	Number of researchers			Share of women		
	2013	2017	2021	2013	2017	2021
Professors	6	8	9	17	12	11
Associate professors	7	9	9	29	44	44
Researchers and postdocs	0	7	3	0	29	0
PhD-students	9	10	18	44	30	17
Total	22	34	39	32	29	21

Source: Statistics Norway

Table A18.2 UIS, Dept. of Mechanical and Structural Engineering and Materials Science, PhD-statistics

	Share of researchers with phd-degree			Share of researchers with foreign phd-degree		
	2013	2017	2021	2013	2017	2021
Professors	100	100	89	17	12	12
Associate professors	86	78	100	17	29	33
Researchers and postdocs	0	57	67	0	50	100
Total	92	79	90	15	21	29

Source: Statistics Norway

Table A18.3 UIS, Dept. of Mechanical and Structural Engineering and Materials Science, Age statistics

	Average age			Share of researchers 62 years or older			Share with temporary position
	2013	2017	2021	2013	2017	2021	2021
	Professors	53	53	51	17	12	0
Associate professors	44	47	42	0	11	11	11
Researchers and postdocs	0	31	48	0	0	33	100
PhD-students	30	28	30	0	0	0	100
Total	41	40	39	5	6	5	13

Source: Statistics Norway

Table A19.1 UIS, Department of Petroleum Engineering, Number of researchers and share of women

	Number of researchers			Share of women		
	2013	2017	2021	2013	2017	2021
Professors	13	14	7	0	7	14
Associate professors	12	10	7	17	40	0
Researchers and postdocs	5	14	7	20	21	0
PhD-students	17	39	19	41	28	32
Total	47	77	40	21	25	18

Source: Statistics Norway

Table A19.2 UIS, Department of Petroleum Engineering, PhD-statistics

	Share of researchers with phd-degree			Share of researchers with foreign phd-degree		
	2013	2017	2021	2013	2017	2021
	Professors	100	100	100	31	43
Associate professors	83	100	100	40	40	-
Researchers and postdocs	80	93	100	50	8	29
Total	90	97	100	33	29	24

Source: Statistics Norway

Table A19.3 UIS, Department of Petroleum Engineering, Age statistics

	Average age			Share of researchers 62 years or older			Share with temporary position
	2013	2017	2021	2013	2017	2021	2021
	Professors	56	56	55	38	43	43
Associate professors	53	50	46	33	20	0	0
Researchers and postdocs	35	35	39	0	0	0	71
PhD-students	28	31	30	0	0	0	100
Total	43	39	39	19	10	8	5

Source: Statistics Norway

Table A20.1 UIA, Department of Information Systems, Number of researchers and share of women

	Number of researchers			Share of women		
	2013	2017	2021	2013	2017	2021
	Professors	3	6	12	0	0
Associate professors	4	7	8	25	43	25
Researchers and postdocs	1	0	2	100	0	0
PhD-students	5	7	10	40	43	90
Total	13	20	32	31	30	47

Source: Statistics Norway

Table A20.2 UIA, Department of Information Systems, PhD-statistics

	Share of researchers with phd-degree			Share of researchers with foreign phd-degree		
	2013	2017	2021	2013	2017	2021
	Professors	100	100	100	33	33
Associate professors	100	100	88	50	71	29
Researchers and postdocs	100	0	50	0	0	0
Total	100	100	91	38	54	32

Source: Statistics Norway

Table A20.3 UIA, Department of Information Systems, Age statistics

	Average age			Share of researchers 62 years or older			Share with temporary position
	2013	2017	2021	2013	2017	2021	2021
	Professors	52	55	51	0	17	8
Associate professors	52	50	48	25	14	0	12
Researchers and postdocs	55	0	45	0	0	0	100
PhD-students	34	39	37	0	0	0	100
Total	45	48	46	8	10	3	3

Source: Statistics Norway

Table A21.1 UIA, Faculty of Engineering and Science, Number of researchers and share of women

	Number of researchers			Share of women		
	2013	2017	2021	2013	2017	2021
Professors	30	37	50	13	14	12
Associate professors	36	50	53	28	28	32
Researchers and postdocs	13	25	21	46	36	29
PhD-students	37	52	82	38	27	24
Total	116	164	206	29	26	24

Source: Statistics Norway

Table A21.2 UIA, Faculty of Engineering and Science, PhD-statistics

	Share of researchers with phd-degree			Share of researchers with foreign phd-degree		
	2013	2017	2021	2013	2017	2021
Professors	87	97	94	54	67	60
Associate professors	81	98	100	28	31	34
Researchers and postdocs	85	84	95	18	38	55
Total	84	95	97	30	42	46

Source: Statistics Norway

Table A21.3 UIA, Faculty of Engineering and Science, Age statistics

	Average age			Share of researchers 62 years or older			Share with temporary position
	2013	2017	2021	2013	2017	2021	2021
Professors	56	57	57	27	32	42	2
Associate professors	47	46	46	11	10	9	6
Researchers and postdocs	38	37	37	0	4	0	81
PhD-students	32	31	32	0	0	0	100
Total	44	42	42	10	11	13	11

Source: Statistics Norway

Table A22.1 USN, Department of electrical engineering, IT and cybernetics, Number of researchers and share of women

	Number of researchers			Share of women		
	2013	2017	2021	2013	2017	2021
Professors	9	5	6	11	0	0
Associate professors	14	6	8	14	17	38
Researchers and postdocs	1	0	0	100	0	0
PhD-students	5	12	9	0	42	22
Total	29	23	23	14	26	22

Source: Statistics Norway

Table A22.2 USN, Department of electrical engineering, IT and cybernetics, PhD-statistics

	Share of researchers with phd-degree			Share of researchers with foreign phd-degree		
	2013	2017	2021	2013	2017	2021
Professors	78	100	100	43	40	33
Associate professors	86	100	100	33	0	25
Researchers and postdocs	0	0	0	0	0	0
Total	79	100	100	29	18	29

Source: Statistics Norway

Table A22.3 USN, Department of electrical engineering, IT and cybernetics, Age statistics

	Average age			Share of researchers 62 years or older			Share with temporary position
	2013	2017	2021	2013	2017	2021	2021
	Professors	57	60	57	33	40	50
Associate professors	45	46	42	0	0	0	12
Researchers and postdocs	52	0	0	0	0	0	0
PhD-students	31	32	31	0	0	0	100
Total	47	42	42	10	9	13	0

Source: Statistics Norway

Table A23.1 Western Norway University of Applied Sciences, Faculty of Engineering and Science, Number of researchers and share of women

	Number of researchers			Share of women		
	2013	2017	2021	2013	2017	2021
Professors	18	33	36	11	21	14
Associate professors	50	92	89	32	36	38
Researchers and postdocs	5	16	21	100	50	38
PhD-students	18	40	44	39	30	27
Total	91	181	190	33	33	31

Source: Statistics Norway

Table A23.2 Western Norway University of Applied Sciences, Faculty of Engineering and Science, PhD-statistics

	Share of researchers with phd-degree			Share of researchers with foreign phd-degree		
	2013	2017	2021	2013	2017	2021
Professors	89	94	97	19	29	40
Associate professors	86	93	96	16	27	25
Researchers and postdocs	60	81	57	33	38	42
Total	85	92	90	15	26	27

Source: Statistics Norway

Table A23.3 Western Norway University of Applied Sciences, Faculty of Engineering and Science, Age statistics

	Average age			Share of researchers 62 years or older			Share with temporary position
	2013	2017	2021	2013	2017	2021	2021
	Professors	53	54	52	17	12	17
Associate professors	48	46	46	10	10	7	13
Researchers and postdocs	38	45	37	0	12	5	57
PhD-students	34	31	32	0	0	0	100
Total	46	44	43	9	8	7	10

Source: Statistics Norway

Table A24.1 NTNU, Department of Civil and Environmental Engineering, Number of researchers and share of women

	Number of researchers			Share of women		
	2013	2017	2021	2013	2017	2021
Professors	30	28	37	3	4	14
Associate professors	71	20	17	32	40	35
Researchers and postdocs	14	30	26	14	23	27
PhD-students	71	75	74	37	41	31
Total	186	153	154	28	31	27

Source: Statistics Norway

Table A24.2 NTNU, Department of Civil and Environmental Engineering, PhD-statistics

	Share of researchers with phd-degree			Share of researchers with foreign phd-degree		
	2013	2017	2021	2013	2017	2021
Professors	93	100	100	14	21	19
Associate professors	89	95	88	16	21	53
Researchers and postdocs	86	80	92	8	33	38
Total	90	91	95	13	23	30

Source: Statistics Norway

Table A24.3 NTNU, Department of Civil and Environmental Engineering, Age statistics

	Average age			Share of researchers 62 years or older			Share with temporary position
	2013	2017	2021	2013	2017	2021	2021
Professors	53	52	54	23	14	14	0
Associate professors	48	46	45	15	5	6	0
Researchers and postdocs	39	36	38	7	3	4	54
PhD-students	32	30	31	0	0	0	100
Total	42	37	39	10	4	5	10

Source: Statistics Norway

Table A25.1 NTNU, Department of Information Security and Communication Technology, Number of researchers and share of women

	Number of researchers			Share of women		
	2013	2017	2021	2013	2017	2021
Professors	19	19	21	11	5	10
Associate professors	5	8	14	20	12	29
Researchers and postdocs	5	14	21	0	21	10
PhD-students	25	28	44	32	14	36
Total	54	69	100	20	13	24

Source: Statistics Norway

Table A25.2 NTNU, Department of Information Security and Communication Technology, PhD-statistics

	Share of researchers with phd-degree			Share of researchers with foreign phd-degree		
	2013	2017	2021	2013	2017	2021
Professors	89	100	100	59	63	67
Associate professors	100	100	100	40	50	50
Researchers and postdocs	100	100	90	100	64	58
Total	93	100	96	59	61	57

Source: Statistics Norway

Table A25.3 NTNU, Department of Information Security and Communication Technology, Age statistics

	Average age			Share of researchers 62 years or older			Share with temporary position
	2013	2017	2021	2013	2017	2021	2021
Professors	53	53	57	16	11	24	0
Associate professors	42	44	42	0	0	0	0
Researchers and postdocs	36	35	36	0	0	0	81
PhD-students	30	32	32	0	0	0	100
Total	40	40	39	6	3	5	7

Source: Statistics Norway

Table A26.1 NTNU, Department of Computer Science, Number of researchers and share of women

	Number of researchers			Share of women		
	2013	2017	2021	2013	2017	2021
Professors	26	25	35	12	12	17
Associate professors	19	34	49	21	21	22
Researchers and postdocs	6	32	29	0	25	24
PhD-students	35	52	109	23	44	38
Total	86	143	222	17	29	29

Source: Statistics Norway

Table A26.2 NTNU, Department of Computer Science, PhD-statistics

	Share of researchers with phd-degree			Share of researchers with foreign phd-degree		
	2013	2017	2021	2013	2017	2021
Professors	92	92	100	25	35	40
Associate professors	95	97	90	6	30	41
Researchers and postdocs	100	97	79	67	65	57
Total	94	96	90	22	42	40

Source: Statistics Norway

Table A26.3 NTNU, Department of Computer Science, Age statistics

	Average age			Share of researchers 62 years or older			Share with temporary position
	2013	2017	2021	2013	2017	2021	2021
Professors	53	54	55	23	16	20	0
Associate professors	46	45	45	11	3	0	8
Researchers and postdocs	38	37	38	0	3	3	69
PhD-students	32	32	31	0	0	0	100
Total	42	40	39	9	4	4	10

Source: Statistics Norway

Table A27.1 USN, Department of Business and IT, Number of researchers and share of women

	Number of researchers			Share of women		
	2013	2017	2021	2013	2017	2021
Professors	2	3	6	0	33	33
Associate professors	6	8	10	17	12	10
Researchers and postdocs						
PhD-students	1	1	0	0	100	0
Total	9	12	16	11	25	19

Source: Statistics Norway

Table A27.2 USN, Department of Business and IT, PhD-statistics

	Share of researchers with phd-degree			Share of researchers with foreign phd-degree		
	2013	2017	2021	2013	2017	2021
Professors	50	67	67	0	50	50
Associate professors	67	75	80	75	50	62
Researchers and postdocs						
Total	62	73	75	38	36	44

Source: Statistics Norway

Table A27.3 USN, Department of Business and IT, Age statistics

	Average age			Share of researchers 62 years or older			Share with temporary position
	2013	2017	2021	2013	2017	2021	2021
Professors	58	60	55	0	33	33	0
Associate professors	49	49	46	17	25	10	10
PhD-students	38	38	0	0	0	0	0
Total	50	51	49	11	25	19	6

Source: Statistics Norway

Table A28.1 USN, Department of Process, Energy and Environmental Technology, Number of researchers and share of women

	Number of researchers			Share of women		
	2013	2017	2021	2013	2017	2021
Professors	7	8	10	14	12	20
Associate professors	14	10	15	14	30	13
Researchers and postdocs	1	2	3	100	50	0
PhD-students	9	13	14	33	8	43
Total	31	33	42	23	18	24

Source: Statistics Norway

Table A28.2 USN, Department of Process, Energy and Environmental Technology, PhD-statistics

	Share of researchers with phd-degree			Share of researchers with foreign phd-degree		
	2013	2017	2021	2013	2017	2021
Professors	100	100	90	43	25	11
Associate professors	93	90	93	8	11	21
Researchers and postdocs	100	100	67	100	100	50
Total	95	95	89	23	25	18

Source: Statistics Norway

Table A28.3 USN, Department of Process, Energy and Environmental Technology, Age statistics

	Average age			Share of researchers 62 years or older			Share with temporary position
	2013	2017	2021	2013	2017	2021	2021
Professors	57	56	57	14	25	40	0
Associate professors	46	44	44	14	0	0	13
Researchers and postdocs	32	40	37	0	0	0	67
PhD-students	31	32	35	0	0	0	100
Total	44	42	44	10	6	10	5

Source: Statistics Norway

Table A29.1 USN, Department of Microsystems, Number of researchers and share of women

	Number of researchers			Share of women		
	2013	2017	2021	2013	2017	2021
Professors	9	12	11	0	0	0
Associate professors	5	9	11	40	22	9
Researchers and postdocs	3	7	12	0	0	0
PhD-students	5	14	16	40	14	31
Total	22	42	50	18	10	12

Source: Statistics Norway

Table A29.2 USN, Department of Microsystems, PhD-statistics

	Share of researchers with phd-degree			Share of researchers with foreign phd-degree		
	2013	2017	2021	2013	2017	2021
	Professors	89	92	100	38	45
Associate professors	100	100	100	60	11	18
Researchers and postdocs	100	86	83	0	33	40
Total	94	93	94	35	29	38

Source: Statistics Norway

Table A29.3 USN, Department of Microsystems, Age statistics

	Average age			Share of researchers 62 years or older			Share with temporary position
	2013	2017	2021	2013	2017	2021	2021
	Professors	48	51	54	11	8	9
Associate professors	41	49	46	0	11	9	9
Researchers and postdocs	31	34	36	0	0	0	75
PhD-students	28	31	30	0	0	0	100
Total	40	41	41	5	5	4	0

Source: Statistics Norway

Table A30.1 Østfold university college, Faculty of Computer Science, Engineering and Economics, Number of researchers and share of women

	Number of researchers			Share of women		
	2013	2017	2021	2013	2017	2021
	Professors	5	7	10	40	29
Associate professors	17	18	25	29	44	24
Researchers and postdocs						
PhD-students	2	11	0	50	45	0
Total	24	36	35	33	42	26

Source: Statistics Norway

Table A30.2 Østfold university college, Faculty of Computer Science, Engineering and Economics, PhD-statistics

	Share of researchers with phd-degree			Share of researchers with foreign phd-degree		
	2013	2017	2021	2013	2017	2021
	Professors	80	86	90	50	33
Associate professors	82	89	100	0	12	28
Researchers and postdocs						
Total	82	88	97	9	16	31

Source: Statistics Norway

Table A30.3 Østfold university college, Faculty of Computer Science, Engineering and Economics, Age statistics

	Average age			Share of researchers 62 years or older			Share with temporary position
	2013	2017	2021	2013	2017	2021	2021
	Professors	54	55	55	20	43	30
Associate professors	50	50	47	24	17	4	4
PhD-students	33	33	0	0	0	0	0
Total	50	46	49	21	17	11	9

Source: Statistics Norway

Table A31.1 NTNU, Department of ICT and Natural Sciences, Number of researchers and share of women

	Number of researchers			Share of women		
	2013	2017	2021	2013	2017	2021
Professors	2	1	5	0	0	0
Associate professors	9	12	7	11	8	29
Researchers and postdocs	1	0	0	0	0	0
PhD-students	4	3	13	0	67	31
Total	16	16	25	6	19	24

Source: Statistics Norway

Table A31.2 NTNU, Department of ICT and Natural Sciences, PhD-statistics

	Share of researchers with phd-degree			Share of researchers with foreign phd-degree		
	2013	2017	2021	2013	2017	2021
Professors	100	100	80	0	0	50
Associate professors	67	92	100	33	73	29
Researchers and postdocs	100	0	0	100	0	0
Total	75	92	92	25	62	33

Source: Statistics Norway

Table A31.3 NTNU, Department of ICT and Natural Sciences, Age statistics

	Average age			Share of researchers 62 years or older			Share with temporary position
	2013	2017	2021	2013	2017	2021	2021
Professors	53	42	45	50	0	0	0
Associate professors	47	45	43	11	17	0	0
Researchers and postdocs	35	0	0	0	0	0	0
PhD-students	40	30	29	0	0	0	100
Total	45	42	36	12	12	0	4

Source: Statistics Norway

Table A32.1 NTNU, Department of Architecture and Technology, Number of researchers and share of women

	Number of researchers			Share of women		
	2013	2017	2021	2013	2017	2021
Professors	4	10	10	50	30	30
Associate professors	9	13	17	33	38	47
Researchers and postdocs	2	5	2	50	40	50
PhD-students	9	10	17	44	50	35
Total	24	38	46	42	39	39

Source: Statistics Norway

Table A32.2 NTNU, Department of Architecture and Technology, PhD-statistics

	Share of researchers with phd-degree			Share of researchers with foreign phd-degree		
	2013	2017	2021	2013	2017	2021
Professors	75	90	80	0	22	25
Associate professors	56	38	24	60	60	50
Researchers and postdocs	100	100	0	100	20	0
Total	67	68	41	33	21	14

Source: Statistics Norway

Table A32.3 NTNU, Department of Architecture and Technology, Age statistics

	Average age			Share of researchers 62 years or older			Share with temporary position
	2013	2017	2021	2013	2017	2021	2021
Professors	56	58	57	25	30	40	10
Associate professors	52	47	54	33	8	29	0
Researchers and postdocs	37	40	44	0	0	0	50
PhD-students	32	32	32	0	0	0	100
Total	44	45	46	17	11	20	13

Source: Statistics Norway

Table A33.1 NTNU, Department of Electric Power Engineering, Number of researchers and share of women

	Number of researchers			Share of women		
	2013	2017	2021	2013	2017	2021
Professors	9	12	12	11	8	17
Associate professors	2	6	12	0	0	0
Researchers and postdocs	6	7	10	0	14	0
PhD-students	32	24	49	28	17	18
Total	49	49	83	20	12	13

Source: Statistics Norway

Table A33.2 NTNU, Department of Electric Power Engineering, PhD-statistics

	Share of researchers with phd-degree			Share of researchers with foreign phd-degree		
	2013	2017	2021	2013	2017	2021
Professors	100	92	100	11	18	25
Associate professors	100	100	100	0	33	42
Researchers and postdocs	83	100	80	60	14	50
Total	94	96	94	24	20	35

Source: Statistics Norway

Table A33.3 NTNU, Department of Electric Power Engineering, Age statistics

	Average age			Share of researchers 62 years or older			Share with temporary position
	2013	2017	2021	2013	2017	2021	2021
Professors	53	55	56	22	25	33	0
Associate professors	45	42	42	0	0	0	0
Researchers and postdocs	33	36	38	0	0	0	60
PhD-students	31	30	30	0	0	0	98
Total	36	39	36	4	6	5	7

Source: Statistics Norway

Table A34.1 NTNU, Department of Engineering Cybernetics, Number of researchers and share of women

	Number of researchers			Share of women		
	2013	2017	2021	2013	2017	2021
Professors	10	10	15	10	20	20
Associate professors	4	7	10	0	14	10
Researchers and postdocs	11	17	14	18	18	21
PhD-students	48	51	97	10	18	18
Total	73	85	136	11	18	18

Source: Statistics Norway

Table A34.2 NTNU, Department of Engineering Cybernetics, PhD-statistics

	Share of researchers with phd-degree			Share of researchers with foreign phd-degree		
	2013	2017	2021	2013	2017	2021
Professors	100	100	100	10	20	40
Associate professors	100	100	100	0	29	10
Researchers and postdocs	91	82	100	40	0	43
Total	96	91	100	20	12	33

Source: Statistics Norway

Table A34.3 NTNU, Department of Engineering Cybernetics, Age statistics

	Average age			Share of researchers 62 years or older			Share with temporary position
	2013	2017	2021	2013	2017	2021	2021
Professors	48	51	51	10	10	7	0
Associate professors	47	51	44	0	14	0	30
Researchers and postdocs	33	32	36	0	0	0	64
PhD-students	29	29	28	0	0	0	100
Total	33	34	33	1	2	1	7

Source: Statistics Norway

Table A35.1 NTNU, Department of Electronic Systems, Number of researchers and share of women

	Number of researchers			Share of women		
	2013	2017	2021	2013	2017	2021
Professors	19	22	26	16	14	12
Associate professors	7	11	11	14	9	36
Researchers and postdocs	5	13	15	20	38	20
PhD-students	37	34	47	14	15	23
Total	68	80	99	15	18	21

Source: Statistics Norway

Table A35.2 NTNU, Department of Electronic Systems, PhD-statistics

	Share of researchers with phd-degree			Share of researchers with foreign phd-degree		
	2013	2017	2021	2013	2017	2021
Professors	100	100	100	37	50	54
Associate professors	86	91	100	33	0	9
Researchers and postdocs	100	100	93	60	38	64
Total	97	98	98	39	35	46

Source: Statistics Norway

Table A35.3 NTNU, Department of Electronic Systems, Age statistics

	Average age			Share of researchers 62 years or older			Share with temporary position
	2013	2017	2021	2013	2017	2021	2021
Professors	54	53	57	16	5	38	0
Associate professors	51	56	50	29	27	27	0
Researchers and postdocs	33	33	36	0	0	0	67
PhD-students	29	30	30	0	0	0	100
Total	38	40	40	7	5	13	5

Source: Statistics Norway

Table A36.1 NTNU, Department of Mathematical Sciences, Number of researchers and share of women

	Number of researchers			Share of women		
	2013	2017	2021	2013	2017	2021
Professors	31	35	35	13	17	20
Associate professors	14	16	28	29	19	25
Researchers and postdocs	14	17	22	21	24	27
PhD-students	47	50	69	26	20	16
Total	106	118	154	22	19	20

Source: Statistics Norway

Table A36.2 NTNU, Department of Mathematical Sciences, PhD-statistics

	Share of researchers with phd-degree			Share of researchers with foreign phd-degree		
	2013	2017	2021	2013	2017	2021
Professors	94	94	97	48	42	44
Associate professors	86	94	96	42	80	52
Researchers and postdocs	100	100	100	86	47	73
Total	93	96	98	53	50	53

Source: Statistics Norway

Table A36.3 NTNU, Department of Mathematical Sciences, Age statistics

	Average age			Share of researchers 62 years or older			Share with temporary position
	2013	2017	2021	2013	2017	2021	
Professors	55	54	55	42	29	26	0
Associate professors	43	44	43	0	12	7	18
Researchers and postdocs	31	31	32	0	0	0	91
PhD-students	28	27	28	0	0	0	100
Total	39	38	37	12	10	7	2

Source: Statistics Norway

Table A37.1 NTNU, Department of Geoscience and Petroleum, Number of researchers and share of women

	Number of researchers			Share of women		
	2013	2017	2021	2013	2017	2021
Professors	24	20	24	8	10	8
Associate professors	8	13	11	12	15	18
Researchers and postdocs	8	24	12	12	21	33
PhD-students	41	53	41	22	30	27
Total	81	110	88	16	23	22

Source: Statistics Norway

Table A37.2 NTNU, Department of Geoscience and Petroleum, PhD-statistics

	Share of researchers with phd-degree			Share of researchers with foreign phd-degree		
	2013	2017	2021	2013	2017	2021
Professors	96	100	100	43	45	50
Associate professors	100	100	100	25	15	36
Researchers and postdocs	63	88	92	40	38	64
Total	90	95	98	35	33	49

Source: Statistics Norway

Table A37.3 NTNU, Department of Geoscience and Petroleum, Age statistics

	Average age			Share of researchers 62 years or older			Share with temporary position
	2013	2017	2021	2013	2017	2021	2021
Professors	60	61	59	46	50	50	0
Associate professors	47	49	47	25	15	0	0
Researchers and postdocs	36	38	42	0	0	8	67
PhD-students	29	30	30	0	0	0	100
Total	41	40	41	16	11	15	7

Source: Statistics Norway

Table A38.1 NTNU, Department of Structural Engineering, Number of researchers and share of women

	Number of researchers			Share of women		
	2013	2017	2021	2013	2017	2021
Professors	18	19	20	11	16	15
Associate professors	8	4	8	12	25	12
Researchers and postdocs	7	20	30	29	0	17
PhD-students	32	61	46	25	21	26
Total	65	104	104	20	16	20

Source: Statistics Norway

Table A38.2 NTNU, Department of Structural Engineering, PhD-statistics

	Share of researchers with phd-degree			Share of researchers with foreign phd-degree		
	2013	2017	2021	2013	2017	2021
Professors	89	95	100	6	22	20
Associate professors	100	100	100	12	25	25
Researchers and postdocs	100	100	97	14	30	38
Total	94	98	98	9	26	29

Source: Statistics Norway

Table A38.3 NTNU, Department of Structural Engineering, Age statistics

	Average age			Share of researchers 62 years or older			Share with temporary position
	2013	2017	2021	2013	2017	2021	2021
Professors	55	54	56	28	16	35	0
Associate professors	39	36	40	0	0	0	0
Researchers and postdocs	34	33	33	0	0	0	83
PhD-students	28	29	28	0	0	0	100
Total	38	34	36	8	3	7	4

Source: Statistics Norway

Table A39.1 NTNU, Department of Mechanical and Industrial Engineering, Number of researchers and share of women

	Number of researchers			Share of women		
	2013	2017	2021	2013	2017	2021
Professors	9	20	19	0	15	11
Associate professors	6	18	21	17	11	19
Researchers and postdocs	4	15	20	25	13	25
PhD-students	16	66	83	12	18	37
Total	35	119	143	11	16	29

Source: Statistics Norway

Table A39.1 NTNU, Department of Mechanical and Industrial Engineering, PhD-statistics

	Share of researchers with phd-degree			Share of researchers with foreign phd-degree		
	2013	2017	2021	2013	2017	2021
Professors	89	100	100	25	35	53
Associate professors	100	94	100	33	29	29
Researchers and postdocs	75	87	95	67	31	26
Total	89	94	98	32	30	35

Source: Statistics Norway

Table A39.1 NTNU, Department of Mechanical and Industrial Engineering, Age statistics

	Average age			Share of researchers 62 years or older			Share with temporary position 2021
	2013	2017	2021	2013	2017	2021	
Professors	59	53	52	56	15	21	0
Associate professors	46	47	45	0	17	5	10
Researchers and postdocs	38	35	32	0	0	0	85
PhD-students	29	30	31	0	0	0	100
Total	41	37	36	14	5	3	4

Source: Statistics Norway

Table A40.1 NTNU, Department of Manufacturing and Civil Engineering, Number of researchers and share of women

	Number of researchers			Share of women		
	2013	2017	2021	2013	2017	2021
Professors	10	8	6	10	12	17
Associate professors	5	18	20	40	33	30
Researchers and postdocs	3	2	3	0	0	0
PhD-students	20	12	16	25	42	12
Total	38	40	45	21	30	20

Source: Statistics Norway

Table A40.2 NTNU, Department of Manufacturing and Civil Engineering, PhD-statistics

	Share of researchers with phd-degree			Share of researchers with foreign phd-degree		
	2013	2017	2021	2013	2017	2021
Professors	100	75	83	20	33	60
Associate professors	100	89	95	20	31	32
Researchers and postdocs	67	50	100	0	100	67
Total	94	82	93	17	29	38

Source: Statistics Norway

Table A40.3 NTNU, Department of Manufacturing and Civil Engineering, Age statistics

	Average age			Share of researchers 62 years or older			Share with temporary position 2021
	2013	2017	2021	2013	2017	2021	
Professors	56	55	50	40	25	0	0
Associate professors	46	48	48	20	17	15	0
Researchers and postdocs	33	49	45	0	50	0	67
PhD-students	30	33	31	0	0	0	100
Total	40	45	42	13	15	7	0

Source: Statistics Norway

Table A41.1 NTNU, Department of Marine Technology, Number of researchers and share of women

	Number of researchers			Share of women		
	2013	2017	2021	2013	2017	2021
Professors	18	21	19	11	14	16
Associate professors	3	7	6	0	14	33
Researchers and postdocs	11	21	21	27	29	10
PhD-students	64	60	67	19	8	21
Total	96	109	113	18	14	19

Source: Statistics Norway

Table A41.2 NTNU, Department of Marine Technology, PhD-statistics

	Share of researchers with phd-degree			Share of researchers with foreign phd-degree		
	2013	2017	2021	2013	2017	2021
Professors	94	95	95	24	10	11
Associate professors	33	86	100	0	33	17
Researchers and postdocs	91	81	81	60	24	47
Total	88	88	89	31	16	24

Source: Statistics Norway

Table A41.3 NTNU, Department of Marine Technology, Age statistics

	Average age			Share of researchers 62 years or older			Share with temporary position
	2013	2017	2021	2013	2017	2021	
Professors	54	55	53	39	33	26	0
Associate professors	56	41	41	33	0	0	17
Researchers and postdocs	33	31	35	0	0	0	86
PhD-students	30	30	30	0	0	0	100
Total	35	35	35	8	6	4	8

Source: Statistics Norway

Table A42.1 NTNU, Department of Energy and Process Engineering, Number of researchers and share of women

	Number of researchers			Share of women		
	2013	2017	2021	2013	2017	2021
Professors	24	27	32	4	4	12
Associate professors	5	16	14	40	19	7
Researchers and postdocs	29	43	42	7	28	17
PhD-students	57	81	100	26	27	31
Total	115	167	188	17	23	23

Source: Statistics Norway

Table A42.2 NTNU, Department of Energy and Process Engineering, PhD-statistics

	Share of researchers with phd-degree			Share of researchers with foreign phd-degree		
	2013	2017	2021	2013	2017	2021
Professors	92	93	94	18	28	40
Associate professors	100	94	100	40	33	43
Researchers and postdocs	90	91	95	42	46	60
Total	91	92	95	29	35	48

Source: Statistics Norway

Table A42.3 NTNU, Department of Energy and Process Engineering, Age statistics

	Average age			Share of researchers 62 years or older			Share with temporary position
	2013	2017	2021	2013	2017	2021	2021
Professors	55	54	53	21	37	34	0
Associate professors	47	43	43	0	6	0	21
Researchers and postdocs	33	34	34	0	0	0	86
PhD-students	29	30	29	0	0	0	100
Total	36	36	36	4	7	6	4

Source: Statistics Norway

Table A43.1 Oslomet, Department of Mechanical, Electronic and Chemical Engineering, Number of researchers and share of women

	Number of researchers			Share of women		
	2013	2017	2021	2013	2017	2021
Professors	0	0	7	0	0	43
Associate professors	13	15	11	54	47	18
Researchers and postdocs	1	0	2	0	0	50
PhD-students	0	2	8	0	100	50
Total	14	17	28	50	53	36

Source: Statistics Norway

Table A43.2 Oslomet, Department of Mechanical, Electronic and Chemical Engineering, PhD-statistics

	Share of researchers with phd-degree			Share of researchers with foreign phd-degree		
	2013	2017	2021	2013	2017	2021
Professors	0	0	100	0	0	86
Associate professors	92	93	100	17	21	18
Researchers and postdocs	100	0	50	0	0	100
Total	93	93	95	14	20	45

Source: Statistics Norway

Table A43.3 Oslomet, Department of Mechanical, Electronic and Chemical Engineering, Age statistics

	Average age			Share of researchers 62 years or older			Share with temporary position
	2013	2017	2021	2013	2017	2021	2021
Professors	0	0	46	0	0	0	14
Associate professors	48	50	48	0	0	18	9
Researchers and postdocs	68	0	31	100	0	0	100
PhD-students	0	27	30	0	0	0	100
Total	49	47	41	7	0	7	4

Source: Statistics Norway

Table A44.1 Oslomet, Department of Computer Science, Number of researchers and share of women

	Number of researchers			Share of women		
	2013	2017	2021	2013	2017	2021
Professors	6	6	13	0	17	15
Associate professors	18	23	23	17	22	26
Researchers and postdocs	0	1	4	0	100	25
PhD-students	1	6	12	100	17	42
Total	25	36	52	16	22	27

Source: Statistics Norway

Table A44.2 Oslomet, Department of Computer Science, PhD-statistics

	Share of researchers with phd-degree			Share of researchers with foreign phd-degree		
	2013	2017	2021	2013	2017	2021
Professors	83	83	92	0	40	50
Associate professors	83	100	100	27	26	30
Researchers and postdocs	0	100	25	0	0	100
Total	83	97	90	17	27	35

Source: Statistics Norway

Table A44.3 Oslomet, Department of Computer Science, Age statistics

	Average age			Share of researchers 62 years or older			Share with temporary position
	2013	2017	2021	2013	2017	2021	2021
Professors	58	50	48	50	17	8	0
Associate professors	49	44	47	28	0	9	17
Researchers and postdocs	0	39	33	0	0	0	100
PhD-students	33	34	32	0	0	0	100
Total	50	43	43	32	3	6	12

Source: Statistics Norway

Table A45.1 Oslomet, Department of Built Environment, Number of researchers and share of women

	Number of researchers			Share of women		
	2013	2017	2021	2013	2017	2021
Professors	0	3	5	0	33	60
Associate professors	3	9	11	0	11	27
Researchers and postdocs	1	1	0	0	100	0
PhD-students	2	6	5	50	17	0
Total	6	19	21	17	21	29

Source: Statistics Norway

Table A45.2 Oslomet, Department of Built Environment, PhD-statistics

	Share of researchers with phd-degree			Share of researchers with foreign phd-degree		
	2013	2017	2021	2013	2017	2021
Professors	0	67	100	0	0	40
Associate professors	100	100	100	0	33	64
Researchers and postdocs	100	100	0	0	100	0
Total	100	92	100	0	31	56

Source: Statistics Norway

Table A45.3 Oslomet, Department of Built Environment, Age statistics

	Average age			Share of researchers 62 years or older			Share with temporary position
	2013	2017	2021	2013	2017	2021	2021
Professors	0	58	50	0	33	0	0
Associate professors	44	42	41	33	0	0	0
Researchers and postdocs	44	34	0	0	0	0	0
PhD-students	27	32	29	0	0	0	100
Total	38	41	40	17	5	0	5

Source: Statistics Norway

Table A46.1 USN, Department of Science and Industry systems, Number of researchers and share of women

	Number of researchers			Share of women		
	2013	2017	2021	2013	2017	2021
Professors	0	6	14	0	17	14
Associate professors	0	14	12	0	29	17
Researchers and postdocs	0	1	1	0	100	0
PhD-students	0	2	3	0	50	0
Total	0	23	30	0	30	13

Source: Statistics Norway

Table A46.2 USN, Department of Science and Industry systems, PhD-statistics

	Share of researchers with phd-degree			Share of researchers with foreign phd-degree		
	2013	2017	2021	2013	2017	2021
Professors	0	100	93	0	50	46
Associate professors	0	100	92	0	29	27
Researchers and postdocs	0	100	100	0	0	100
Total	0	100	93	0	33	37

Source: Statistics Norway

Table A46.3 USN, Department of Science and Industry systems, Age statistics

	Average age			Share of researchers 62 years or older			Share with temporary position
	2013	2017	2021	2013	2017	2021	
Professors	0	58	55	0	17	36	0
Associate professors	0	47	49	0	14	17	8
Researchers and postdocs	0	47	36	0	0	0	100
PhD-students	0	33	35	0	0	0	100
Total	0	49	50	0	13	23	10

Source: Statistics Norway

Table A47.1 Kristiania university college, School of Economics, Innovation and Technology, Number of researchers and share of women

	Number of researchers			Share of women		
	2013	2017	2021	2013	2017	2021
Professors	1	1	7	0	0	0
Associate professors	5	9	17	0	22	35
Researchers and postdocs	0	0	5	0	0	60
PhD-students	3	0	4	33	0	25
Total	9	10	33	11	20	30

Source: Statistics Norway

Table A47.2 Kristiania university college, School of Economics, Innovation and Technology, PhD-statistics

	Share of researchers with phd-degree			Share of researchers with foreign phd-degree		
	2013	2017	2021	2013	2017	2021
Professors	0	100	100	0	100	43
Associate professors	100	100	100	20	56	41
Researchers and postdocs	0	0	100	0	0	40
Total	83	100	100	17	60	41

Source: Statistics Norway

Table A47.3 Kristiania university college, School of Economics, Innovation and Technology, Age statistics

	Average age			Share of researchers 62 years or older			Share with temporary position
	2013	2017	2021	2013	2017	2021	2021
Professors	57	39	50	0	0	29	0
Associate professors	40	42	42	0	0	0	0
Researchers and postdocs	0	0	39	0	0	20	100
PhD-students	34	0	29	0	0	0	100
Total	40	42	42	0	0	9	0

Source: Statistics Norway

List of figures

Figure 1.1	The Norwegian system of education, research and innovation. Main Science, Technology and Innovation (STI) actors in Norway	9
Figure 3.2	Total number of researchers in the higher education sector by academic positions in 2013, 2017 and 2021. Units in the evalmit	15
Figure 3.3	Share of researchers by academic positions at university departments in 2013, 2017 and 2021. Units in the evalmit	16
Figure 3.4	Share of female researchers by academic position in 2013, 2017 and 2021. Units in the evalmit	17
Figure 3.5	Average age of the researchers by academic position in 2013, 2017 and 2021. Units in the evalmit.	18
Figure 3.6	Share of researchers aged 62 years and older by academic position in 2013, 2017 and 2021. Units in the evalmit	18
Figure 3.7	Share of researchers with PhD-degree by academic position in 2013, 2017 and 2021. Units in the evaluation	19
Figure 3.8	Share of researchers with foreign PhD-degree by academic position in 2013, 2017 and 2021. Units in the evaluation.....	20

List of tables

Table 2.2	Overview of administrative units in the institute sector. 2021	12
Table 3.5	Share of female researchers by academic positions and university department in 2021	24
Table 3.6	Share of professors, associate professors and postdoc/researchers with PhD-degree in 2021	25
Table 3.7	Share of professors, associate professors, and postdoc/researchers with foreign PhD-degree in 2021	26
Table 3.8	Average age of researchers by professors, associate professors, researchers and postdoc, and share of professors 62 years and older, in 2021	27
Table 4.4	Personnel statistics for Institute for Energy Technology 2013, 2017 and 2021	30
Table 4.5	Personnel statistics for NORCE Technology, 2013, 2017 and 2021	30
Table 4.6	Personnel statistics for Norwegian Computing Center, 2013, 2017 and 2021.....	31
Table 4.7	Personnel statistics for SIMULA Research Laboratory 2013, 2017 and 2021.....	31
Table 4.8	Personnel statistics for SINTEF Community 2013, 2017 and 2021.....	31
Table 4.9	Personnel statistics for SINTEF Digital 2013, 2017 and 2021.....	32
Table 4.10	Personnel statistics for SINTEF Energy 2013, 2017 and 2021.....	32
Table 4.11	Personnel statistics for SINTEF Industri 2013, 2017 and 2021.	32
Table 4.12	Personnel statistics for SINTEF Manufacturing 2013, 2017 and 2021.	33
Table 4.13	Personnel statistics for SINTEF Ocean 2013, 2017 and 2021.....	33
Table A1.1	UIB, Department of Physics and Technology, Number of researchers and share of women.....	39
Table A1.2	UIB, Department of Physics and Technology, PhD-statistics	39
Table A1.3	UIB, Department of Physics and Technology, Age statistics	39
Table A2.1	UIB, Department of Informatics, Number of researchers and share of women	39
Table A2.2	UIB, Department of Informatics, PhD-statistics.....	39
Table A2.3	UIB, Department of Informatics, Age statistics.....	40
Table A3.1	UIB, Department of Mathematics, Number of researchers and share of women	40
Table A3.2	UIB, Department of Mathematics, PhD-statistics	40
Table A3.2	UIB, Department of Mathematics, Age statistics	40
Table A4.1	UIO, Department of Informatics, Number of researchers and share of women.....	40
Table A4.2	UIO, Department of Informatics, PhD-statistics	41
Table A4.3	UIO, Department of Informatics, Age statistics	41
Table A5.1	UIO, Department of Mathematics, Number of researchers and share of women	41
Table A5.2	UIO, Department of Mathematics, PhD-statistics.....	41
Table A5.3	UIO, Department of Mathematics, Age statistics.....	41
Table A6.1	UIT, Department of Computer Science, Number of researchers and share of women...	42
Table A6.2	UIT, Department of Computer Science, PhD-statistics	42
Table A6.3	UIT, Department of Computer Science, Age statistics	42
Table A7.1	UIT, Department of Physics and Technology, Number of researchers and share of women.....	42
Table A7.2	UIT, Department of Physics and Technology, PhD-statistics.....	42
Table A7.3	UIT, Department of Physics and Technology, Age statistics.....	43
Table A8.1	UIT, Department of Mathematics and Statistics, Number of researchers and share of women.....	43
Table A8.2	UIT, Department of Mathematics and Statistics, PhD-statistics	43
Table A8.3	UIT, Department of Mathematics and Statistics, Age statistics	43
Table A9.1	UIT, Department of Technology and Safety, Number of researchers and share of women.....	43
Table A9.2	UIT, Department of Technology and Safety, PhD-statistics.....	44
Table A9.3	UIT, Department of Technology and Safety, Age statistics.....	44

Table A10.1 UIT, Department of Electrical Engineering, Number of researchers and share of women..... 44

Table A10.2 UIT, Department of Electrical Engineering, PhD-statistics..... 44

Table A10.3 UIT, Department of Electrical Engineering, Age statistics..... 44

Table A11.1 UIT, Department of Computer Science and Computational Engineering, Number of researchers and share of women..... 45

Table A11.2 UIT, Department of Computer Science and Computational Engineering, PhD-statistics 45

Table A11.3 UIT, Department of Computer Science and Computational Engineering, Age statistics . 45

Table A12.1 UIT, Department of Automation and Process Engineering, Number of researchers and share of women..... 45

Table A12.2 UIT, Department of Automation and Process Engineering, PhD-statistics 45

Table A12.3 UIT, Department of Automation and Process Engineering, Age statistics 46

Table A13.1 UIT, Department of Building, Energy and Material Technology, Number of researchers and share of women..... 46

Table A13.2 UIT, Department of Building, Energy and Material Technology, PhD-statistics 46

Table A13.3 UIT, Department of Building, Energy and Material Technology, Age statistics 46

Table A14.1 UIT, Department of Industrial Technology, Number of researchers and share of women..... 46

Table A14.2 UIT, Department of Industrial Technology, PhD-statistics 47

Table A14.3 UIT, Department of Industrial Technology, Age statistics 47

Table A15.1 NMBU, Faculty of Science and Technology, Number of researchers and share of women..... 47

Table A15.2 NMBU, Faculty of Science and Technology, PhD-statistics..... 47

Table A15.3 NMBU, Faculty of Science and Technology, Age statistics..... 47

Table A16.1 UIS, Department of Mathematics and Physics, Number of researchers and share of women..... 48

Table A16.2 UIS, Department of Mathematics and Physics, PhD-statistics..... 48

Table A16.3 UIS, Department of Mathematics and Physics, Age statistics..... 48

Table A17.1 UIS, Department of Electrical Engineering and Computer Science, Number of researchers and share of women..... 48

Table A17.2 UIS, Department of Electrical Engineering and Computer Science, PhD-statistics..... 48

Table A17.3 UIS, Department of Electrical Engineering and Computer Science, Age statistics..... 49

Table A18.1 UIS, Dept. of Mechanical and Structural Engineering and Materials Science, Number of researchers and share of women 49

Table A18.2 UIS, Dept. of Mechanical and Structural Engineering and Materials Science, PhD-statistics..... 49

Table A18.3 UIS, Dept. of Mechanical and Structural Engineering and Materials Science, Age statistics..... 49

Table A19.1 UIS, Department of Petroleum Engineering, Number of researchers and share of women..... 49

Table A19.2 UIS, Department of Petroleum Engineering, PhD-statistics..... 50

Table A19.3 UIS, Department of Petroleum Engineering, Age statistics..... 50

Table A20.1 UIA, Department of Information Systems, Number of researchers and share of women..... 50

Table A20.2 UIA, Department of Information Systems, PhD-statistics 50

Table A20.3 UIA, Department of Information Systems, Age statistics 50

Table A21.1 UIA, Faculty of Engineering and Science, Number of researchers and share of women. 51

Table A21.2 UIA, Faculty of Engineering and Science, PhD-statistics 51

Table A21.3 UIA, Faculty of Engineering and Science, Age statistics 51

Table A22.1 USN, Department of electrical engineering, IT and cybernetics, Number of researchers and share of women..... 51

Table A22.2 USN, Department of electrical engineering, IT and cybernetics, PhD-statistics 51

Table A22.3 USN, Department of electrical engineering, IT and cybernetics, Age statistics	52
Table A23.1 Western Norway University of Applied Sciences, Faculty of Engineering and Science, Number of researchers and share of women	52
Table A23.2 Western Norway University of Applied Sciences, Faculty of Engineering and Science, PhD-statistics	52
Table A23.3 Western Norway University of Applied Sciences, Faculty of Engineering and Science, Age statistics	52
Table A24.1 NTNU, Department of Civil and Environmental Engineering, Number of researchers and share of women.....	52
Table A24.2 NTNU, Department of Civil and Environmental Engineering, PhD-statistics.....	53
Table A24.3 NTNU, Department of Civil and Environmental Engineering, Age statistics	53
Table A25.1 NTNU, Department of Information Security and Communication Technology, Number of researchers and share of women	53
Table A25.2 NTNU, Department of Information Security and Communication Technology, PhD- statistics.....	53
Table A25.3 NTNU, Department of Information Security and Communication Technology, Age statistics.....	53
Table A26.1 NTNU, Department of Computer Science, Number of researchers and share of women.....	54
Table A26.2 NTNU, Department of Computer Science, PhD-statistics.....	54
Table A26.3 NTNU, Department of Computer Science, Age statistics.....	54
Table A27.1 USN, Department of Business and IT, Number of researchers and share of women	54
Table A27.2 USN, Department of Business and IT, PhD-statistics	54
Table A27.3 USN, Department of Business and IT, Age statistics	55
Table A28.1 USN, Department of Process, Energy and Environmental Technology, Number of researchers and share of women.....	55
Table A28.2 USN, Department of Process, Energy and Environmental Technology, PhD-statistics	55
Table A28.3 USN, Department of Process, Energy and Environmental Technology, Age statistics	55
Table A29.1 USN, Department of Microsystems, Number of researchers and share of women.....	55
Table A29.2 USN, Department of Microsystems, PhD-statistics	56
Table A29.3 USN, Department of Microsystems, Age statistics	56
Table A30.1 Østfold university college, Faculty of Computer Science, Engineering and Economics, Number of researchers and share of women	56
Table A30.2 Østfold university college, Faculty of Computer Science, Engineering and Economics, PhD-statistics	56
Table A30.3 Østfold university college, Faculty of Computer Science, Engineering and Economics, Age statistics	56
Table A31.1 NTNU, Department of ICT and Natural Sciences, Number of researchers and share of women.....	57
Table A31.2 NTNU, Department of ICT and Natural Sciences, PhD-statistics	57
Table A31.3 NTNU, Department of ICT and Natural Sciences, Age statistics	57
Table A32.1 NTNU, Department of Architecture and Technology, Number of researchers and share of women	57
Table A32.2 NTNU, Department of Architecture and Technology, PhD-statistics	57
Table A32.3 NTNU, Department of Architecture and Technology, Age statistics	58
Table A33.1 NTNU, Department of Electric Power Engineering, Number of researchers and share of women	58
Table A33.2 NTNU, Department of Electric Power Engineering, PhD-statistics.....	58
Table A33.3 NTNU, Department of Electric Power Engineering, Age statistics.....	58
Table A34.1 NTNU, Department of Engineering Cybernetics, Number of researchers and share of women.....	58
Table A34.2 NTNU, Department of Engineering Cybernetics, PhD-statistics	59

Table A34.3 NTNU, Department of Engineering Cybernetics, Age statistics 59

Table A35.1 NTNU, Department of Electronic Systems, Number of researchers and share of women..... 59

Table A35.2 NTNU, Department of Electronic Systems, PhD-statistics..... 59

Table A35.3 NTNU, Department of Electronic Systems, Age statistics..... 59

Table A36.1 NTNU, Department of Mathematical Sciences, Number of researchers and share of women..... 60

Table A36.2 NTNU, Department of Mathematical Sciences, PhD-statistics..... 60

Table A36.3 NTNU, Department of Mathematical Sciences, Age statistics..... 60

Table A37.1 NTNU, Department of Geoscience and Petroleum, Number of researchers and share of women 60

Table A37.2 NTNU, Department of Geoscience and Petroleum, PhD-statistics 60

Table A37.3 NTNU, Department of Geoscience and Petroleum, Age statistics 61

Table A38.1 NTNU, Department of Structural Engineering, Number of researchers and share of women..... 61

Table A38.2 NTNU, Department of Structural Engineering, PhD-statistics 61

Table A38.3 NTNU, Department of Structural Engineering, Age statistics 61

Table A39.1 NTNU, Department of Mechanical and Industrial Engineering, Number of researchers and share of women..... 61

Table A39.1 NTNU, Department of Mechanical and Industrial Engineering, PhD-statistics 62

Table A39.1 NTNU, Department of Mechanical and Industrial Engineering, Age statistics 62

Table A40.1 NTNU, Department of Manufacturing and Civil Engineering, Number of researchers and share of women..... 62

Table A40.2 NTNU, Department of Manufacturing and Civil Engineering, PhD-statistics..... 62

Table A40.3 NTNU, Department of Manufacturing and Civil Engineering, Age statistics 62

Table A41.1 NTNU, Department of Marine Technology, Number of researchers and share of women..... 63

Table A41.2 NTNU, Department of Marine Technology, PhD-statistics 63

Table A41.3 NTNU, Department of Marine Technology, Age statistics 63

Table A42.1 NTNU, Department of Energy and Process Engineering, Number of researchers and share of women 63

Table A42.2 NTNU, Department of Energy and Process Engineering, PhD-statistics 63

Table A42.3 NTNU, Department of Energy and Process Engineering, Age statistics 64

Table A43.1 Oslomet, Department of Mechanical, Electronic and Chemical Engineering, Number of researchers and share of women 64

Table A43.2 Oslomet, Department of Mechanical, Electronic and Chemical Engineering, PhD-statistics..... 64

Table A43.3 Oslomet, Department of Mechanical, Electronic and Chemical Engineering, Age statistics..... 64

Table A44.1 Oslomet, Department of Computer Science, Number of researchers and share of women..... 64

Table A44.2 Oslomet, Department of Computer Science, PhD-statistics 65

Table A44.3 Oslomet, Department of Computer Science, Age statistics 65

Table A45.1 Oslomet, Department of Built Environment, Number of researchers and share of women..... 65

Table A45.2 Oslomet, Department of Built Environment, PhD-statistics 65

Table A45.3 Oslomet, Department of Built Environment, Age statistics 65

Table A46.2 USN, Department of Science and Industry systems, PhD-statistics..... 66

Table A46.3 USN, Department of Science and Industry systems, Age statistics..... 66

Table A47.1 Kristiania university college, School of Economics, Innovation and Technology, Number of researchers and share of women 66

Table A47.2 Kristiania university college, School of Economics, Innovation and Technology, PhD-
statistics..... 66

Table A47.3 Kristiania university college, School of Economics, Innovation and Technology, Age
statistics..... 67