

Meet the SciVal team



SciVal



Agenda



SciVal's Ranking analyses capabilities



Rankings roadmap



Q&A

Global perspective on relevance of International Rankings



Students & Parents

Criteria used when choosing a university



University Management

Evaluating and benchmarking institutions locally and internationally



Policy Makers

Evaluating universities globally



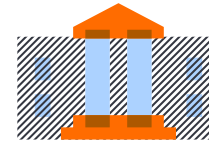
Corporates

Evaluating universities globally



Funders

Evaluating universities globally



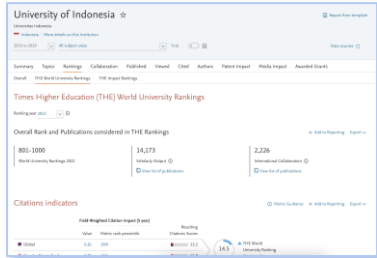
Government

Evaluating universities globally

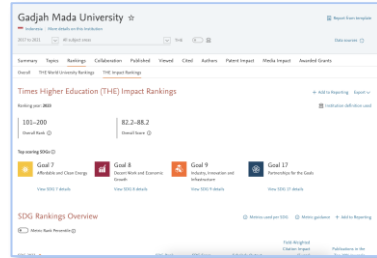
Challenges for universities related to the bibliometric datasets used in rankings

- Data being used to calculate rankings is hard to get
- It is difficult to benchmark with peers across the bibliometric data and especially on the subject level, making it harder to action on it
- Management-level reports around university rankings are often based on approximations of the data being used and the resultant indicators and scores, limiting their strategic value
- Methodologies are complex

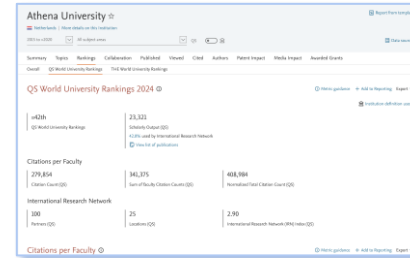
In 2021 we started a program to mitigate these challenges



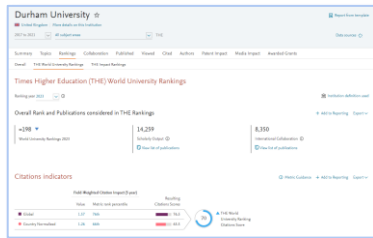
THE WUR 2022



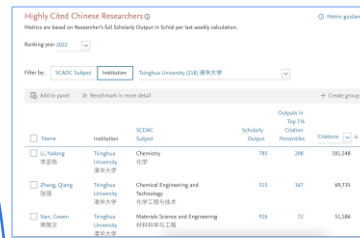
THE Impact Ranking



QS WUR

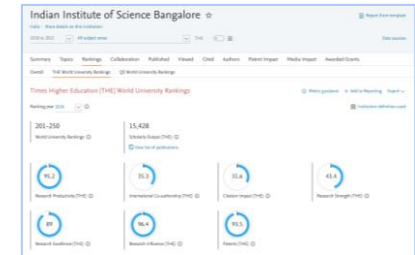


THE WUR 2023



Name	Institution	SCOPUS Output	Scholarly Output	Output in Top 1% Citations	Citations
Li Huiqing	Tsinghua University 清华大学	Chemistry	785	216	181,548
Zhang Qing	Tsinghua University 清华大学	Chemical Engineering and Technology	515	147	49,715
Chen Qianqian	Tsinghua University 清华大学	Materials Science and Engineering	928	72	53,386

HCCR



THE WUR 3.0

2021

2022

2023

2024



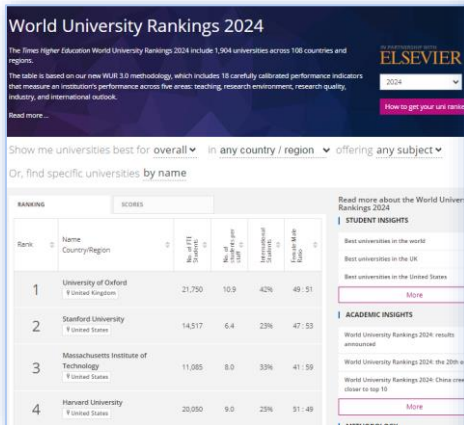
THE

World University Rankings

SciVal Rankings analysis

The bibliometric dataset from Elsevier

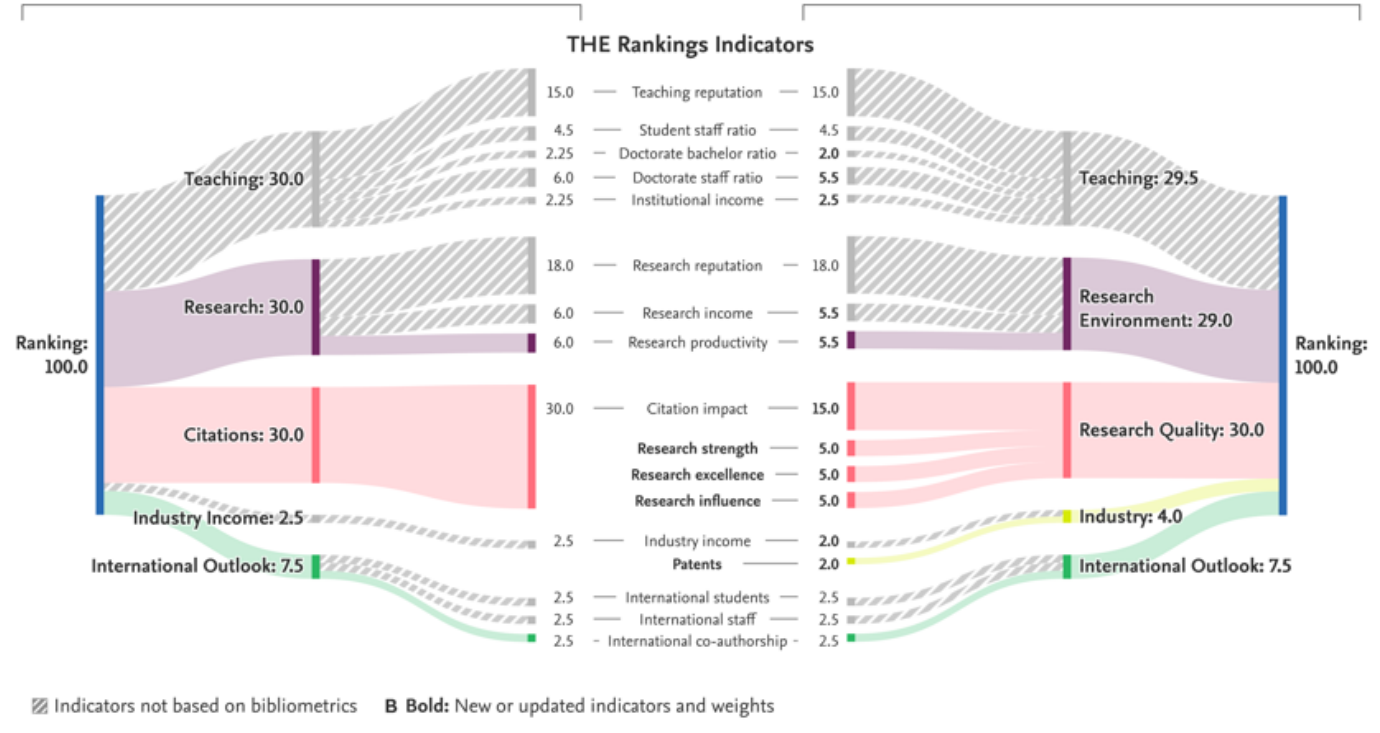
40% of the Overall ranking score (THE WUR)



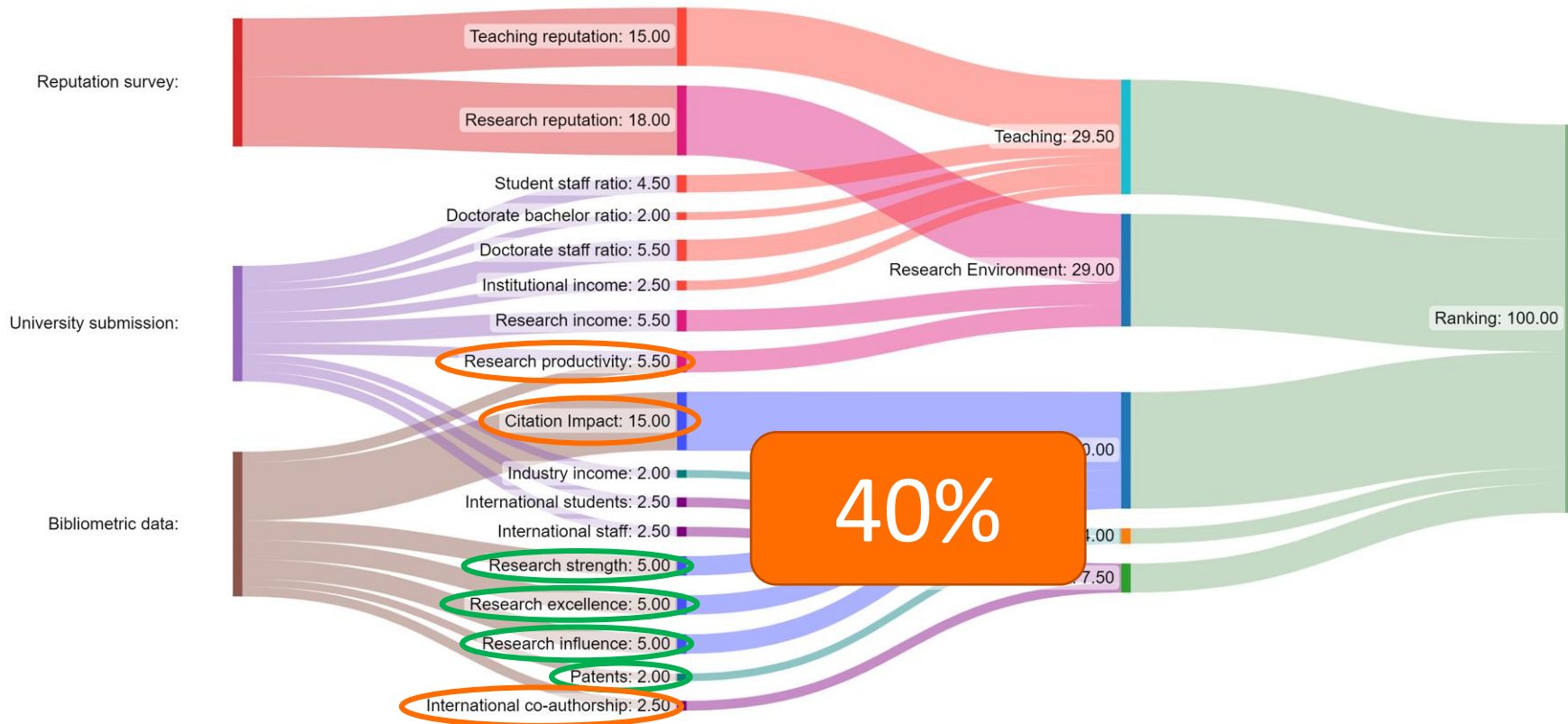
Bibliometrics-based Indicators Only

THE WUR (2.0) 2023 indicators (%)

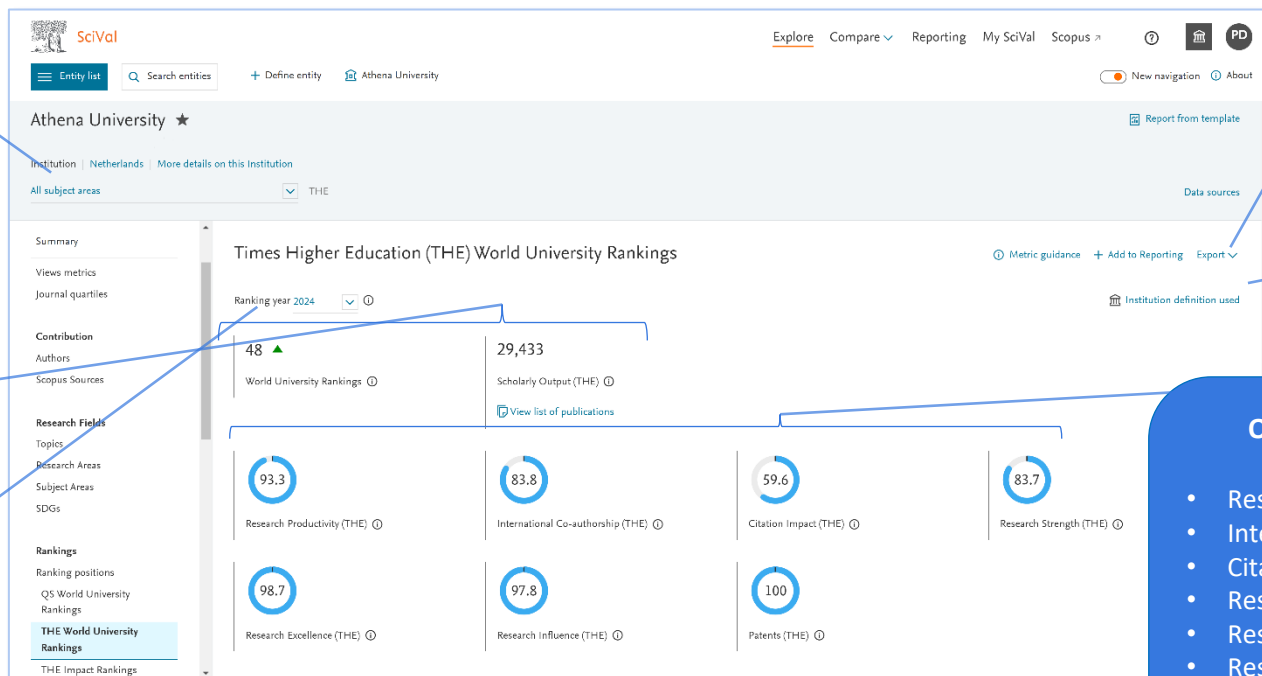
THE WUR (3.0) 2024 indicators (%)



THE WUR 3.0 Methodology



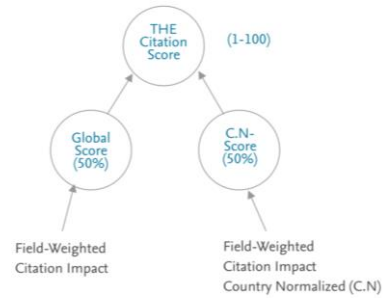
Gain an overview of all bibliometric scores and publications considered – 40% of Overall ranking score



* Research influence is generated by an algorithm controlled by THE and so details are not available in SciVal

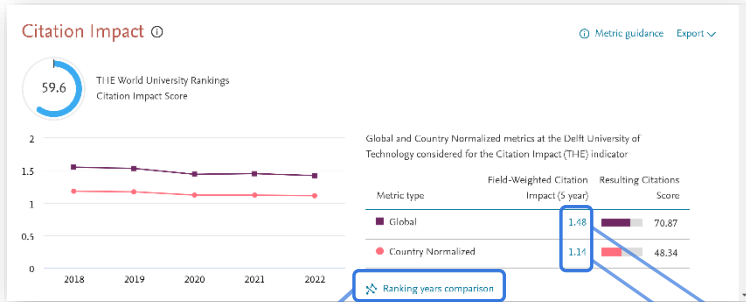
Analyze the drivers behind the Citation Score

15% of the Overall ranking score

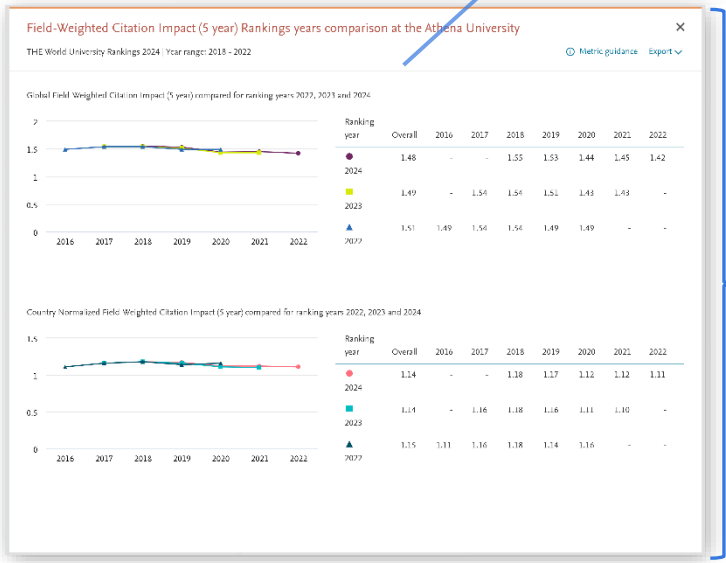


Citation Score with the underlying:

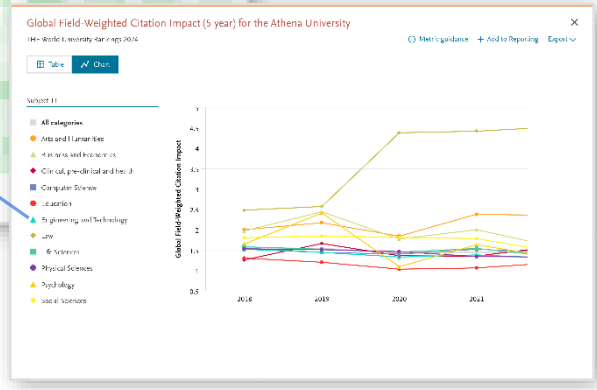
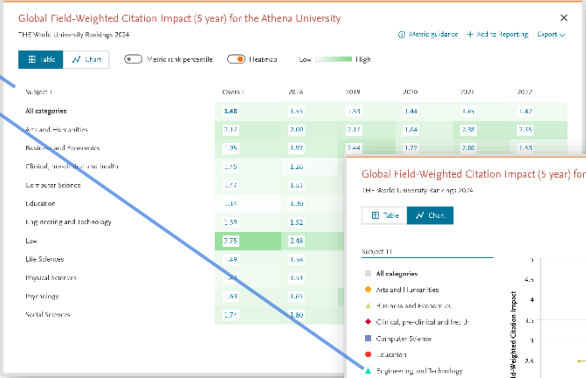
- Global FWCI (5yr) scores &
- Country-normalised FWCI (5yr) scores



Trends per THE subject area



Trend and comparison with previous years - FWCI (5 yr)



Analyze other bibliometric drivers

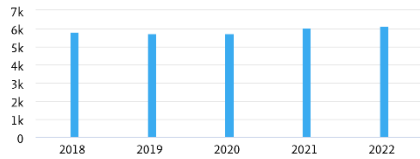
25% of the Overall ranking score

Research Productivity ⓘ

ⓘ Metric guidance Export ▾



THE World University Rankings
Research Productivity Score



29,433 Scholarly Output (THE)

number of publications at the Delft University of Technology considered for the Research Productivity Score (THE) indicator

[View list of publications](#)

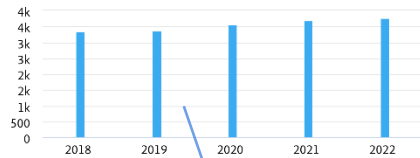
Scholarly Output used by THE
(around 19% of Research Environment indicator and 5.5% of the Overall Ranking Score)

International Co-authorship ⓘ

ⓘ Metric guidance Export ▾



THE World University Rankings
International Co-authorship Score



17,739 (60.27%)

number of publications at the Delft University of Technology with international collaboration considered for the International Co-authorship (THE) indicator

[View list of publications](#)

International Output used by THE
(1/3 of the International Outlook Indicator and 2.5% of Overall Ranking Score)

Publications at the Delft University of Technology
THE Ranking 2022

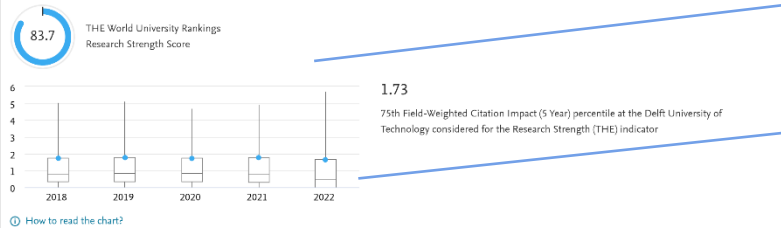
Author	Year	Title	Journal	Q1	Q2	Q3	Q4	Index
van den Broek, P.J.	2022	... in the
...

Analyze further
(in the publication modal or by exporting or creating a Publication Set)

Analyze other bibliometric drivers

25% of the Overall ranking score

Research Strength

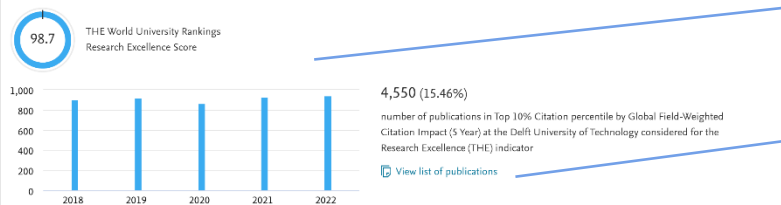


Research Strength Score
(1/6 of the Research Quality Indicator and 5% of Overall Ranking Score)

Box plots derived from the 5, 25, 50, 75 and 95 percentiles

Analyze further
(in the publication modal or by exporting or creating a Publication Set)

Research Excellence

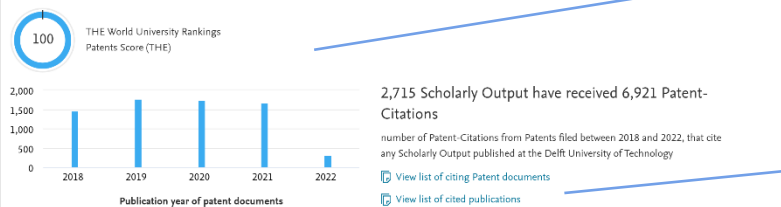


Research Excellence Score
(1/6 of the Research Quality Indicator and 5% of Overall Ranking Score)

Publications at the Delft University of Technology

Author	Year	Title	Year	Journal	Impact
van den Broek, P.J.M.	2022	Method for determining the optimal number of clusters in a mixture model	2022	Journal of Statistical Theory and Applications	0.50
van den Broek, P.J.M.	2021	Method for determining the optimal number of clusters in a mixture model	2021	Journal of Statistical Theory and Applications	0.50

Patents



Patents Score
(1/2 of the Industry Indicator and 2% of Overall Ranking Score)

View and analyze lists of patents or cited publications

Patents citing publications at the Delft University of Technology

Application/Class	IPC Class	Inventors	Applicant/Owner	Publication	Patent	Filed
Methods and systems for...	H04L 1/00	van den Broek, P.J.M.	Technische Universiteit Delft	2022	US	1017
Methods and systems for...	H04L 1/00	van den Broek, P.J.M.	Technische Universiteit Delft	2021	US	1017



QS

World University Rankings

SciVal Rankings analysis

The bibliometric dataset from Elsevier

25% of the Overall ranking score (QS WUR)

Citations per Faculty – 20%
International Research Network (IRN) – 5%



QS World University Rankings 2024: Top global universities

The 20th edition of the QS World University Rankings features 1,500 institutions across 104 locations and is the only ranking of its kind to emphasise employability and sustainability.

This year, we've implemented our largest-ever methodological enhancement, introducing three new metrics: Sustainability, Employment Outcomes and International Research Network. The results draw on ...

[Read more](#)

Register for free site membership to access direct university comparisons and more

[Register today!](#)

In partnership with
ELSEVIER



Find your perfect program!

Answer a few questions and our program matching tool will do the rest!

[Start Matching](#)



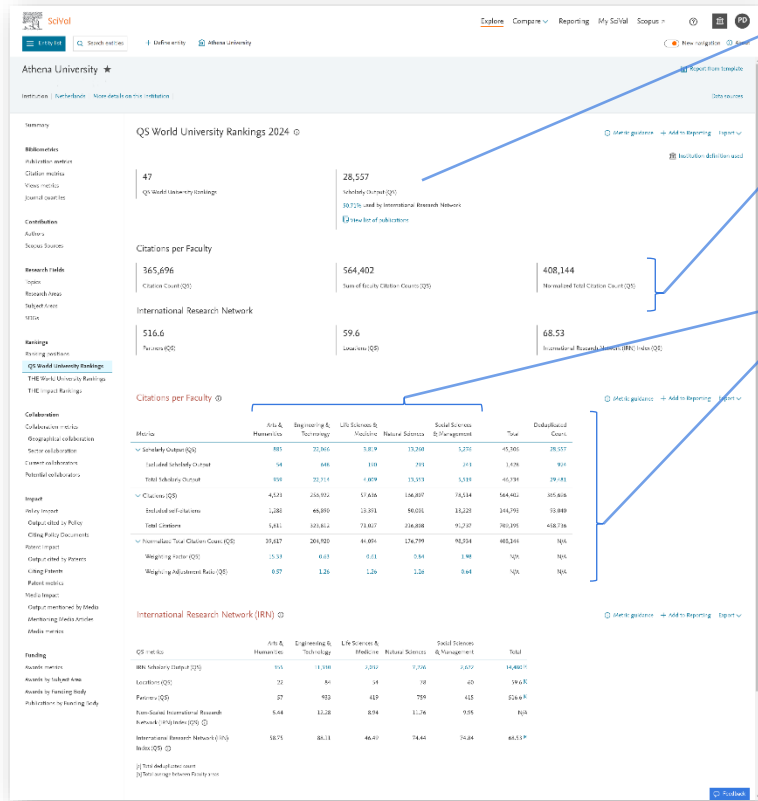
Published on 27 June 2023

Filter	Clear All	Quick View	Full View	University Search
Year 2024		Rank	University	Overall Score
Region		1	Massachusetts Institute of Technology (MIT) Cambridge, United States	100
Country/Territory		2	University of Cambridge Cambridge, United Kingdom	99.2



Analyze the bibliometric drivers behind Citations per Faculty, across all QS Faculty areas

20% of the Overall ranking



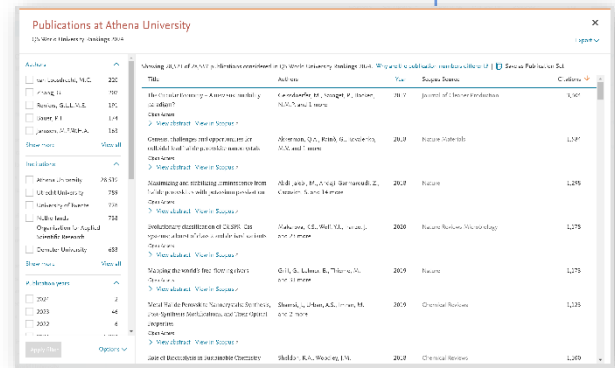
Scholarly Output used by QS

Underlying data used to calculate Citations per Faculty

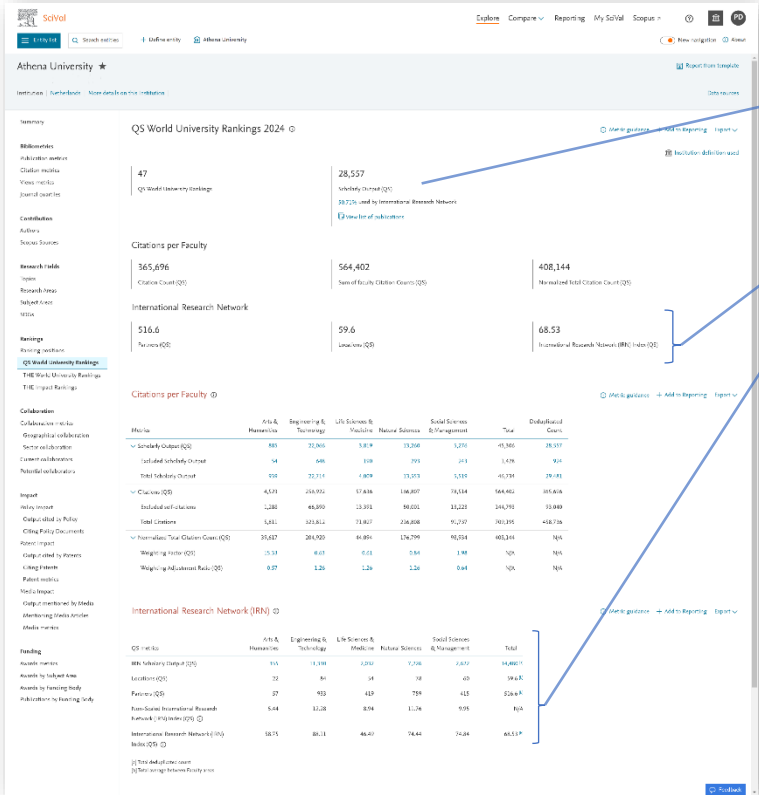
Citations per Faculty with the underlying data across all QS Faculty areas:

- Scholarly Output (QS)
- Citations (QS)
- Normalized Total Citation Count (QS)

Analyze further (in the publication modal or by exporting or creating a Publication Set)



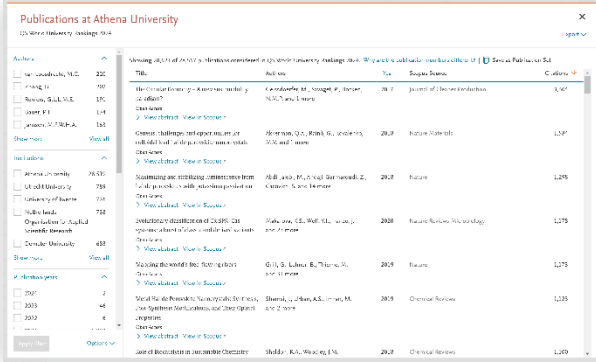
Analyze the bibliometric drivers behind the International Research network (IRN) 5% of overall ranking



Scholarly Output used by QS

Underlying metrics used in calculating the International Research Network

Analyze further (in the publication modal or by exporting or creating a Publication Set)



Comprehend metrics calculation in the metrics guidance

Explore
Compare
Reporting

International Research Network (IRN) ⓘ

QS metrics	Arts & Humanities	Engineering & Technology	Life Sciences & Medicine	Natural Sciences	Social Sciences & Management
IRN Scholarly Output (QS)	191	3,140	4,630	2,921	1,120
Locations (QS)	21	70	83	70	21
Partners (QS)	51	598	721	583	210
Non-Scaled International Research Network (IRN) Index (QS) ⓘ	5.34	11.09	12.76	11.13	8.12
International Research Network (IRN) Index (QS) ⓘ	56.92	75.43	67.59	69.58	59.12

[a] Total deduplicated count
 [b] Total average between Faculty areas

Metrics Guidance

Summary of calculation steps

It is calculated using the following formula by dividing the distinct count of international Locations (L) listed in considered publications, by the natural logarithm of the distinct count of international Partners (P) (higher education institutions) of those locations.

$$IRNIndex = \frac{L}{\ln(P)}$$

The IRN Index considers only sustained partnerships, determined as those which have resulted in 3 or more joint publications in the period considered. Only the relevant publication types are considered and QS affiliation cap is applied. IRN Index is normalized by QS five Faculty areas. Each faculty area value, taken singularly, is scaled and averaged. The total average value is again scaled to produce the final indicator score published from QS.

[Read QS official methodology](#)

Metrics Guidance

Summary of calculation steps

Scholarly Output

Gross Scholarly Output
Scopus® Scholarly Output of the previous five years of the ranking year.

Affiliation definition exclusion
Exclude certain affiliations such as UK Trusts and oversea hospitals.

Scopus ASJC Subject adjustments
If a journal is classified solely under Scopus ASJC Multidisciplinary Subject area (code 1000), then such papers don't feed into any of five faculty areas (which is not about paper exclusions, but rather ASJC to QS subject mapping). Still such papers counted in the various overall counts.

Document-type exclusion
Exclude some types of documents from the considered Scholarly Output.


Apply Institution Cap per QS faculty/subject area
Exclude Scholarly Outputs with more than a

Coming to SciVal soon... Sustainability

5% of overall ranking

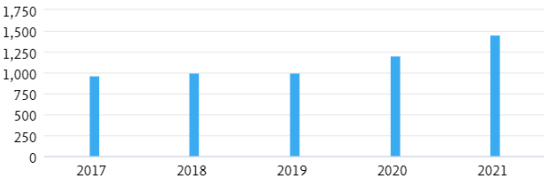
Sustainability ⓘ + Add to Reporting Export ▾

Note: The Scholarly Output mapped to each corresponding SDG is used to calculate 23% of the QS Sustainability Score, with a variable weighting per indicator and SDG. The remaining 77% uses non-bibliometric data.



88.9

QS World University Rankings
Sustainability Score



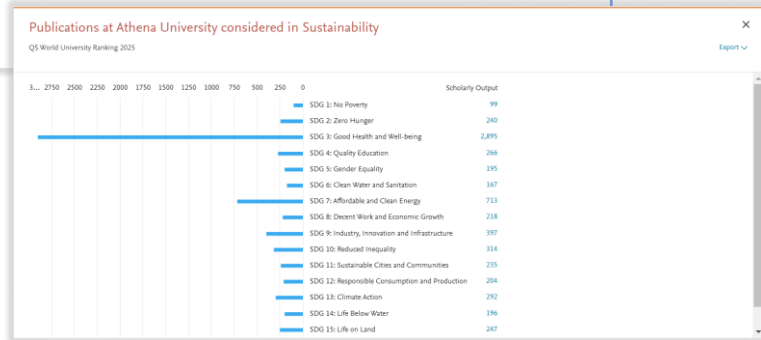
5,637

number of publications at Athena University considered for the Sustainability (QS) indicator

[View list of publications](#)

[View list of publications by SDGs](#)

Scholarly Output mapped to SDGs



Benchmark with peers and analyze trends

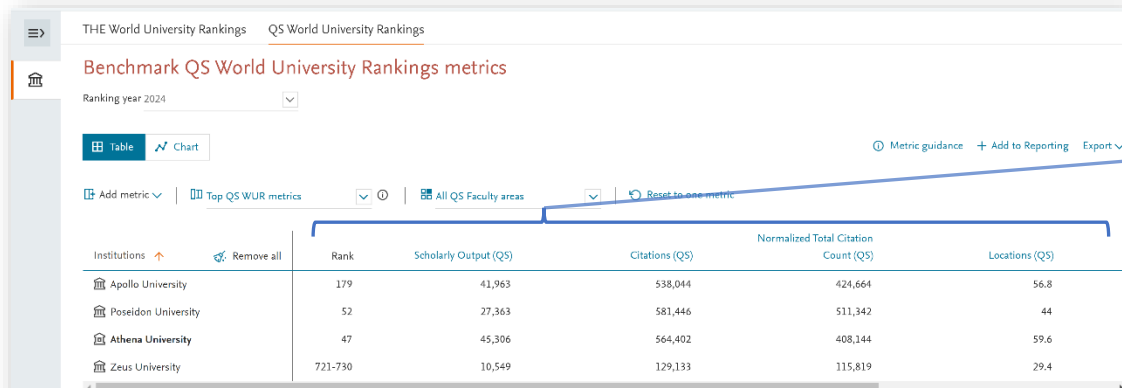
Analyses and information to understand performance and inform plans

Benchmark with peers across all QS bibliometric drivers and QS Faculty Area level for the 2024 and 2025 Rankings without the need to generate proxies and manually curate the bibliometric datasets

- Analyze, benchmark and produce **peer comparison reports** across all bibliometric drivers directly in Compare
- Benchmark **at the QS Faculty Area level** for deeper understanding of your university's position and to inform faculty and department level plans
- Analyze the trends in the bibliometric drivers **to enrich your understanding and inform plans accordingly**

Benchmark with peers and analyze trends

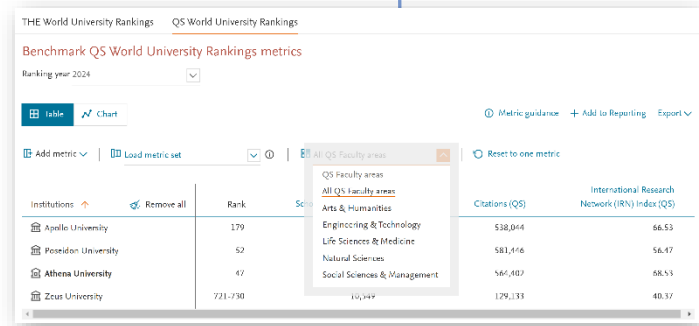
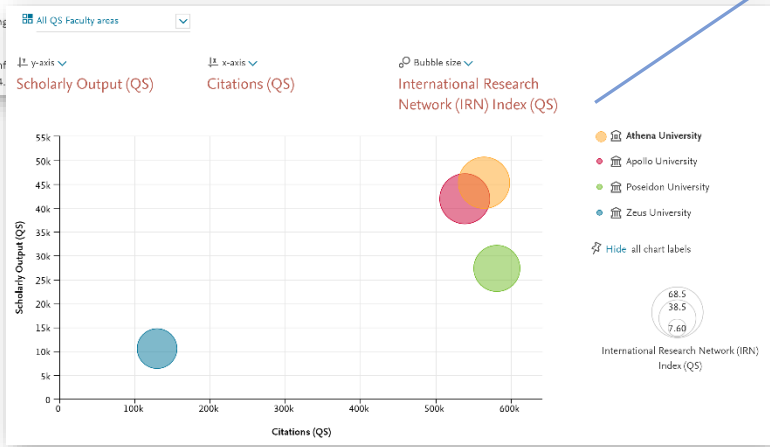
Analyses and information to understand performance and inform plans



Benchmark with peers across all bibliometric drivers

Benchmark with peers across all bibliometric drivers using chart

Compare on QS Faculty Area level



Benchmark publication strategies against peers

SciVal 10 Explore Compare Reporting My SciVal Scopus ? DG

Benchmark ranking metrics

Data sources

THE World University Rankings QS World University Rankings

Add metric | All QS WUR metrics | Engineering & Technology | Reset to one metric

Institutions	Rank	Scholarly Output (QS)	Excluded Scholarly Output	Total Scholarly Output	Citations (QS)
Athena University	383	43,932	372	44,304	301,106
Marie Curie University	206	5,188	215	5,403	77,241

Metrics details

Publications at Athena University

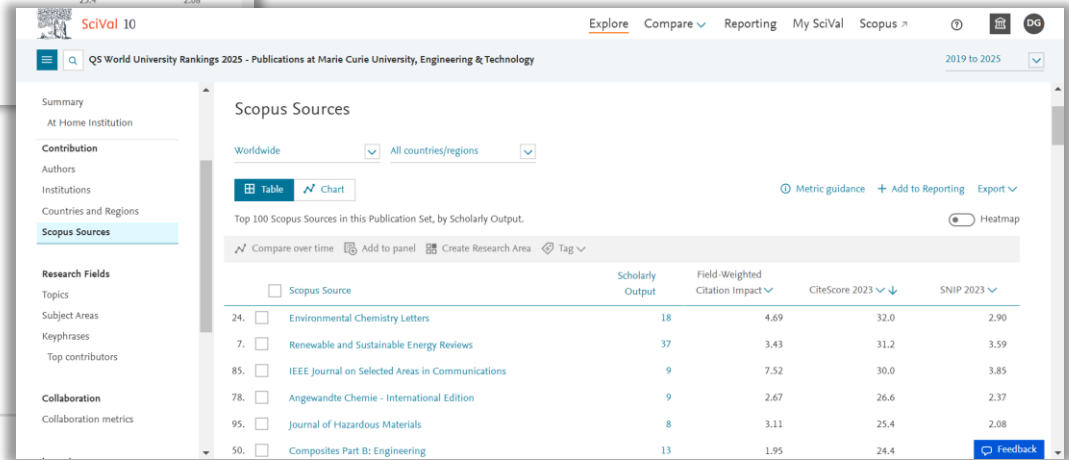
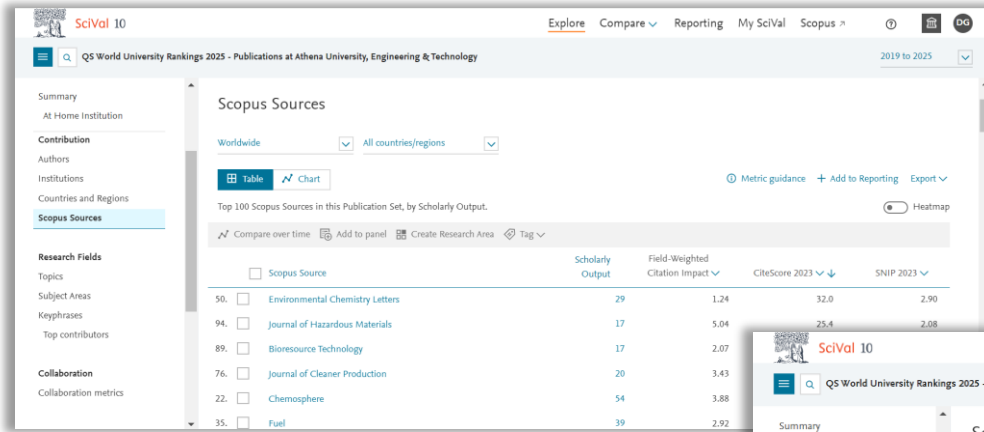
QS World University Rankings 2025

Showing 44,292 of 44,304 publications considered in QS World University Rankings 2025. Why are the publication numbers different? Save as Publication Set

Authors	Title	Year	Scopus Source	Citations
<input type="checkbox"/> Kumar, P.S., <input type="checkbox"/> Ravichandran, M.M., <input type="checkbox"/> Sathyamurthy, R., <input type="checkbox"/> Mohanavel, V., <input type="checkbox"/> Ramasamy, P.L.	A review on performance of nanofluids in various heat pipe solar collector	2024	Proceedings of the Institution of Mechanical Engineers, Part E: Journal of Process Mechanical Engineering	0
<input type="checkbox"/> Veerabatharan, N., Venkatesan, P., Mahendran, R.K.	Denoising and segmentation of brain image by proficient blended threshold and conserve edge scrutinize technique	2024	Computational Intelligence	1
<input type="checkbox"/> Anna University, <input type="checkbox"/> Sri Sivasubramaniya Nadar College of Engineering, Chennai	RETRACTED ARTICLE: Design and Optimization of Wearable-Microstrip Patch Antenna using Hybrid Fuzzy Flamingo Swarm Optimization Algorithm for RF Energy Harvesting	2024	Iranian Journal of Science and Technology - Transactions of Electrical Engineering	0

Apply filter Options

Benchmark publication strategies against peers





THE Impact Rankings

SciVal Rankings analysis

UN SDGs in SciVal and THE Impact Rankings

- **2023 SDG queries** are used in the **THE Impact Rankings methodology**
- **16 of the 17 SDGs** are available to analyze on SciVal as a subject classification or predefined Research Areas.
- Queries were **created by our data science teams** working with experts to create representations of each SDG to enable detailed analysis.
- **We are open and transparent about our methodologies.**
 - The queries and documentation supporting the **2023** search query methodology are [freely available in Digital Commons Data](#)
 - The queries and documentation supporting the **2020** search query methodology remain [freely available in Digital Commons Data](#)
- We continue to [collaborate and gather feedback with customers](#) and **the community** to help improve the queries in the future
- We have both the **2020 and 2021 SDGs in SciVal** so customers can compare the differences between the 2 sets of mappings



Goal 1:
End poverty in all its forms everywhere



Goal 2:
End hunger, achieve food security and improved nutrition and promote sustainable agriculture



Goal 3:
Ensure healthy lives and promote well-being for all at all ages



Goal 4:
Ensure inclusive and quality education for all and promote lifelong learning



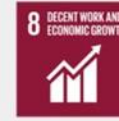
Goal 5:
Achieve gender equality and empower all women and girls



Goal 6:
Ensure access to water and sanitation for all



Goal 7:
Ensure access to affordable, reliable, sustainable and modern energy for all



Goal 8:
Promote inclusive and sustainable economic growth, employment and decent work for all



Goal 9:
Build resilient infrastructure, promote sustainable industrialization and foster innovation



Goal 10:
Reduce inequality within and among countries



Goal 11:
Make cities inclusive, safe, resilient and sustainable



Goal 12:
Ensure sustainable consumption and production patterns



Goal 13:
Take urgent action to combat climate change and its impacts



Goal 14:
Conserve and sustainably use the oceans, seas and marine resources



Goal 15:
Sustainably manage forests, combat desertification, halt and reverse land degradation, halt biodiversity loss



Goal 16:
Promote just, peaceful and inclusive societies



Goal 17:
Revitalize the global partnership for sustainable development



Analyze the drivers behind research metrics used in the THE Impact rankings

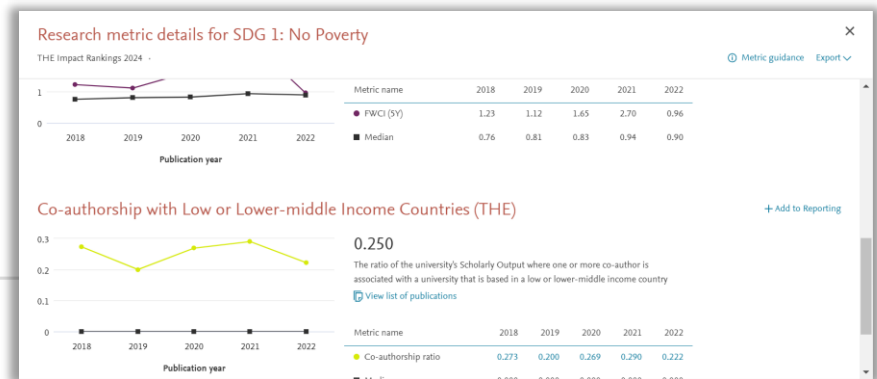
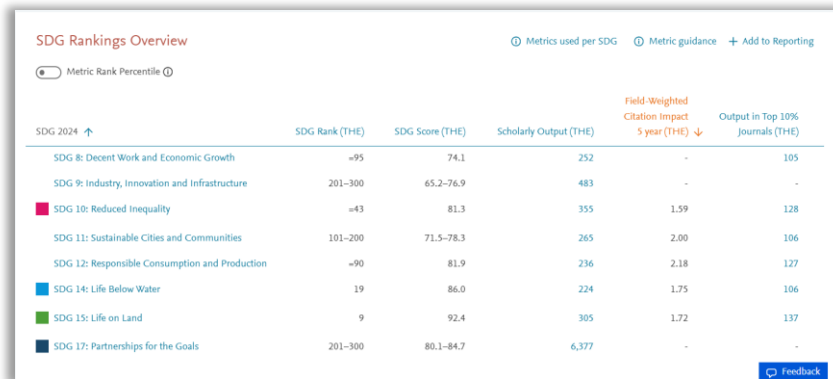
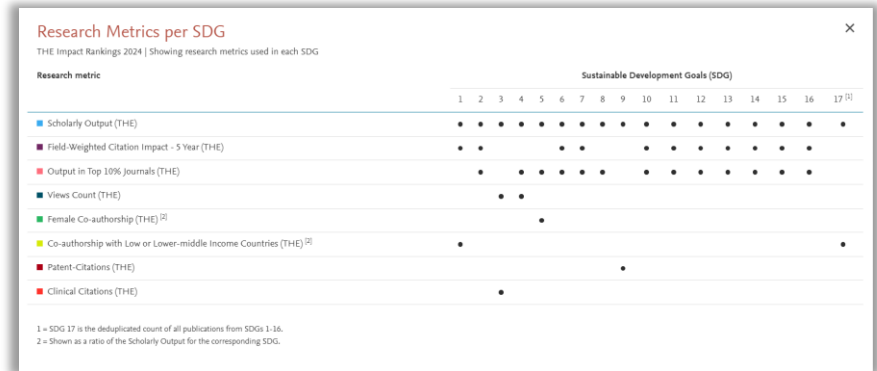
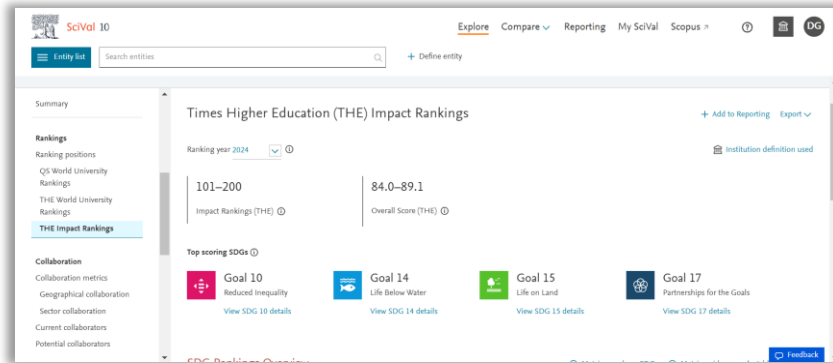
27% of the SDG Scores

Analyze, understand and generate insights based on the actual research metrics used in 27% of the THE Impact Rankings, rather than proxies developed in-house

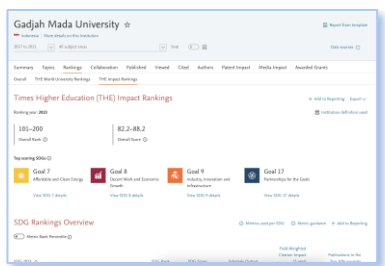
- Overview of the major research metrics used per SDG in the Impact rankings
 - Collated in a single page for SDGs a university participates in alongside the overall rank and score
- Visualize trends and complete in-depth analyses with research metrics for each publication year
- Analyze the underlying publications to identify leading researchers and collaboration opportunities, removing manual curation steps

Analyze the drivers behind actual research metrics used in the THE Impact rankings

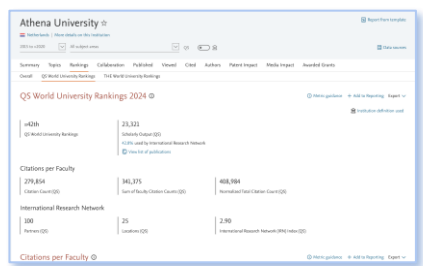
27% of the SDG Scores



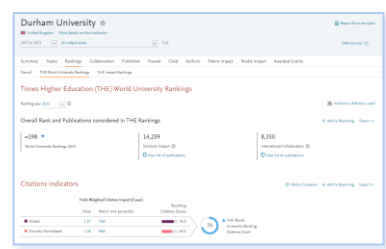
Our university ranking program continues



THE Impact Ranking



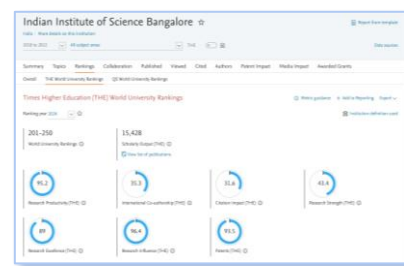
QS WUR



THE WUR 2023

Name	Institution	SCiAC Subject	Scholarly Output	Top 1% Citations	Researcher Citations
Li Yaling 李亚玲	Tsinghua University 清华大学	Chemistry	785	208	185,148
Zhang Qing 张清	Tsinghua University 清华大学	Chemical Engineering and Technology	515	107	49,735
Han Ciwen 韩词文	Tsinghua University 清华大学	Materials Science and Engineering	938	72	53,586

HCCR



THE WUR 3.0

“Tracker”



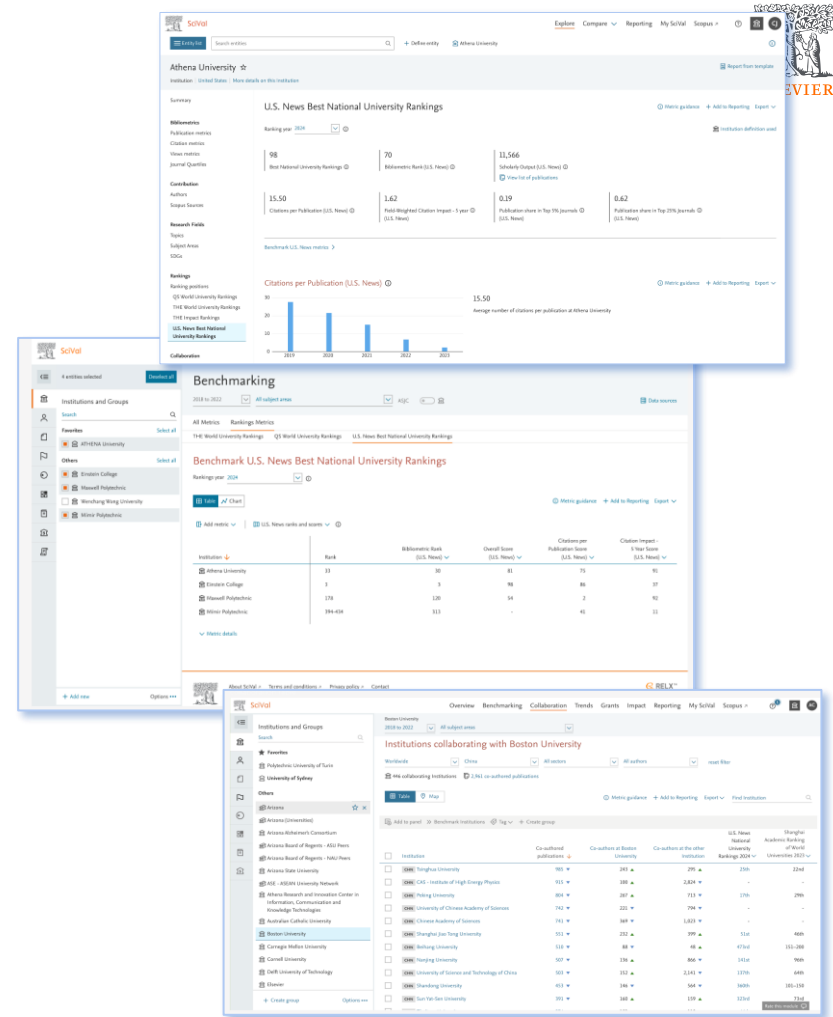
US News Rankings

▶ Best National University Rankings (Best Colleges)

- Scopus and SciVal data is used for the Best National University Rankings (Best Colleges rankings) methodology.
- The data contributes **4%** to overall ranking.
- Expected to launch in SciVal in September.

▶ Best Graduate School rankings

- Best Engineering Schools also use Scopus and SciVal based bibliometrics.
- The data contributes **10%** to overall ranking.
- Rankings announced on 18th June by USNews.



Rankings Metric Tracker - MVP

Rankings metrics and trackers comparison

→ World University Rankings 2024

Tickers data are quarterly updated. Latest updated as of 3 January 2024.

Metric	THE WUR 2024	Tracker 2023 (Q4)	Metric Rank Percentile	
			THE WUR 2024	Tracker 2023 (Q4)
Scholarly Output (THC)	15,000	18,900	82nd	64th
International Co-authorship (THC)	1,000	1,500	99th	58th
FWCI 5 Year - Global	1.42	1.45	75th	75th
FWCI 5 Year - Country Normalized (THC)	1.42	1.48	75th	75th
Research Citation Score - Global (THC)	63.42	63.42	-	-
Research Citation Score - Country Normalized (THC)	53.42	53.42	-	-
Citation Impact Score (THC)	53.42	53.42	-	-
7th percentile FWCI 5 Year (THC)	1.42	1.42	68th	75th
Output in top 10% citation percentile by Global FWCI 5 Year (THC)	2,857	2,900	50th	57th

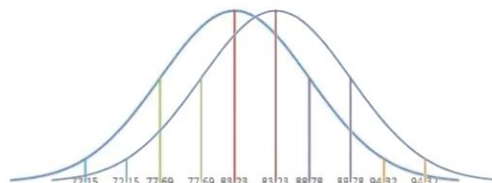
- Get a recent view on Rankings metrics to prepare for upcoming Rankings and set expectation and communication accordingly.
- Analyse the trend of the metrics with underlying publication and benchmark with peers.
- Augment the data to create an accurate model.

• Feature Scope

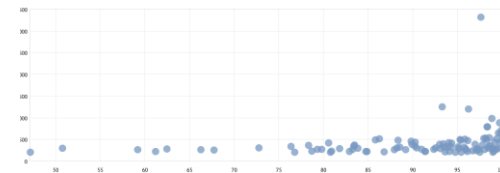
- University grouping and Clustering



- Score Simulation and modelling



- Tipping point (THE and QS)





ELSEVIER

Thank you

