



Rankings for Scientist

University, Subject,
Country, Region, World

Guatemala

Top 500 Scientists

AD Scientific Index 2024



Guatemala Top 500 Scientists

"AD Scientific Index 2024" World Scientist and University Rankings 2024

(Total 1.609.440 scientist, 219 country, 23.252 university)

"AD Scientific Index" (Alper-Doger Scientific Index):

This new index has been developed by **Prof. Dr. Murat ALPER** and **Associate Prof. Dr. Cihan DÖĞER** by using the **total** and the **last 6 years'** values of the **i10 index**, the **h-index** and the **citation** scores in Google Scholar. In addition, the **ratio of the last 6 years' value to the total value** of the above indices is used. Using a total of nine parameters, the "AD Scientific Index" "World Scientist and University Rankings" shows the ranking of an individual scientist in 12 subject areas (Agriculture & Forestry, Arts, Design & Architecture, Business & Management, Economics & Econometrics, Education, Engineering & Technology, History, Philosophy, Theology, Law / Legal Studies, Medicine & Health Sciences, Natural Sciences, Social Sciences, and Others), 256 branches, 23.252 employing institutions, 219 countries, 10 regions (Africa, Asia, Europe, North America, Oceania, Arab League, EECA, BRICS, Latin America, and COMESA), and the world. This allows researchers to see their academic rankings and follow the evolution of their rankings over time.

The h-index is calculated based on the number of times an article has been cited at least h times. In order to have a high h-index, an academic must have published a high number of articles and received a high number of citations. For example, an h-index value of 15 indicates that the academic has received at least 15 citations for each of the 15 articles published. To increase the h-index value from 15 to 16, the same academic would need to receive at least 16 citations for the 16 papers published. Several databases can be used to find the h-index value, including Google Scholar, Web of Science, Scopus and Publons, some of which are public and some of which require a subscription. These databases use different parameters to calculate h-indexes, including SCI-E or indexed journals, or non-indexed ancillary elements such as other journals, books or patents. Because the set of parameters used by each database is different from those used by others, each database may calculate different h-index values. Therefore, the h-indexes calculated by Google Scholar, Web of Science, Scopus and Publons may be different for the same researcher. For example, a researcher who has written more books than scientific papers may have a low h-index in the Web of Science despite having a high number of citations. Neither index is equivalent to the other because of their different scopes. Having a large number of publications indicates that the researcher is productive, but data alone may not be the true indicator of the researcher's success. For example, a researcher may have 10 publications that have received 400 citations. We can argue that this researcher is more successful than a researcher who has more than a hundred published papers that have received, let's say, 200 citations. Moreover, some valuable studies may not have been given the value they deserve for various reasons, such as the failure to use appropriate methods that would allow easy access through scientific channels. The high number of papers cited by other authors shows the value and extent of the contribution to the scientific literature.

The i10 index is another academic scoring system where the scores are calculated by Google

Scholar. In this scoring system, only scientific studies such as articles and books that have received 10 or more citations are taken into account. The number of studies cited ten or more times gives the i10 index value. The i10 index and h-index values calculated for the last six years do not indicate that the article was written and published in the last six years. Instead, these values show the citation power over the last 6 years, which indicates whether the paper is still effective.

Google Scholar provides both the total i10 index, h-index and citation counts as well as the values for the last 6 years through a voluntary system. In this system, researchers create their accounts, select their papers and upload the selected papers to the system. This service does not require a password and is free of charge. Here we present a newly developed index that we have developed based on the public Google Scholar profiles of scientists. We have named this new system "AD Scientific Index", which we have developed through a robust intellectual infrastructure and maximum efforts aimed at contributing to global scientific efforts.

Why is the "AD Scientific Index" needed? How is it different from other rankings?

The "AD Scientific Index" is the first and only study that shows the **total** and **six-year** productivity coefficients of scientists based on **h-index** and **i10 index** scores and **citations** in Google Scholar. In addition, the index provides a free academic environment where 23,252 universities, 219 countries and more than 1,600,000 scientists can express themselves in the widest possible way and emphasize equal opportunities. In other words, in addition to the ranking, the "AD Scientific Index" provides the results of numerous analyses by which academic progress can be assessed. **Another difference of the AD Scientific Index is that it first ranks the university or institution within all institutions, and then gives its ranking within similar institutions or within universities, private and public universities.** In addition to the indexing and ranking functions, AD Scientific Index enlivens the academic life and offers the user the possibility to carry out an efficient academic analysis to verify and detect incorrect and unethical profiles, plagiarism, falsification, distortion, duplication, fabrication, slicing, salamisation, unfair authorship and various manifestations of academic harassment. Such analyses also help to reveal the medium- and long-term results of various policies implemented by institutions, including those related to academic staff recruitment and retention policies, salary policies, academic incentives and the scientific working environment.

Some differences of the AD Scientific Index, World Scientist and University Rankings:

1. Showing the status of universities and institutions in total and in the last 6 years according to H Index, i10 index and number of citations. Only in AD Scientific Index...
Progress analysis of institutions in the last 6 years. Only in AD Scientific Index...
2. Comparison of public universities with public universities and showing the situation in total and in the last 6 years according to H Index, i10 index and number of citations. Only in AD Scientific Index...
3. Comparison of private universities with private universities and showing their status in total and in the last 6 years according to H Index, i10 index and number of citations. Only in AD Scientific Index...
4. Distribution analysis of the scientific ranking of the academic staff in the institution according to percentiles. Only in AD Scientific Index..
5. Showing the status of individuals according to H Index, i10 index and number of citations in total and in the last 6 years. Only in AD Scientific Index...
6. Showing the ranking of individuals by institution, country, region and branch in the

world. Only in AD Scientific Index...

7. Special interest and inclusion of the highest number of scientists in the fields of Social Sciences, Law, History, Theology, Philosophy, Art, Education, Economy and Business & Management: Only in AD Scientific Index
8. The ranking of individuals and institutions is constantly renewed, not once a year. Only in AD Scientific Index...

Subject Rankings: Which subjects are ranked in the AD Scientific Index?

Agriculture & Forestry: Agricultural Biotechnology, Agricultural Economics, Agricultural Engineering, Agricultural Mechanization, Agriculture, Crop Science, Entomology & Pesticides, Animal Science, Fisheries, Forestry, Horticulture, Plant Science, Poultry Production, Soil and Water Engineering and Conservation, Soil Sciences and Plant Nutrition. **Arts, Design & Architecture:** Architecture, Interior Architecture, Arts, Design, Urban Planning. **Business & Management:** Business Administration, Communication, Decision Science and Operations Management, Entrepreneurship, Human Resource Management, Marketing, Public Administration, Public Relations and Advertising, Strategic Management. **Economics & Econometrics:** Accounting & Finance, Banking and Insurance, Economics, International Trade. **Education:** Education, Educational Administration, Educational Technology, Educational Psychology, Elementary Teacher Education, Foreign Language Education, Guidance and Counseling, Mathematics and Science Education, Sociology of Education, Special Education. **Engineering & Technology:** Aerospace Engineering, Automotive Engineering, Bioengineering, Biomaterials and Tissue Engineering, Biomedical Engineering, Chemical Engineering, Civil Engineering, Computer Science, Earth Sciences, Electrical & Electronic Engineering, Electrical & Information Engineering, Energy Engineering, Environmental Science & Engineering, Food Science and Engineering, Geomatics Engineering, Industrial & Manufacturing Engineering, Marine Engineering, Mechanical Engineering, Mechatronics Engineering, Metallurgical & Materials Engineering, Meteorology & Atmospheric Sciences, Mining Engineering, Nanoscience and Nanotechnology, Nuclear Engineering, Petroleum Engineering, Textile Engineering. **History, Philosophy, Theology, Law / Law and Legal Studies.** **Medical and Health Sciences:** Anatomy, Anesthesiology and Reanimation, Audiology and Speech Pathology, Bacteriology, Biochemistry, Biophysics, Biostatistics, Cardiology, Cardiovascular Surgery, Chest Diseases, Child and Adolescent Psychiatry, Clinical Pathology, Dentistry, Dermatology and Venereology, Emergency Medicine, Endocrinology, Epidemiology and Public Health and Metabolism, Family Medicine, Forensic Medicine, Gastroenterology, General Surgery, Geriatrics, Health Sciences, Hematology, Histology and Embryology, Immunology, Infectious Diseases, Internal Medicine, Medical Biochemistry, Medical Biology, Medical Education, Medical Genetics, Medical Microbiology, Medical Oncology, Medical Parasitology, Medical Physics, Medical Physiology, Medical Virology, Microbiology, Molecular Biology, Mycology, Neonatology, Nephrology, Neurology, Neuroscience, Neurosurgery, Nuclear Medicine, Nursing and Midwifery, Nutrition and Dietetics, Obstetrics and Gynecology, Occupational Medicine, Ophthalmology, Optometry, Orthopedics and Traumatology, Otorhinolaryngology, Parasitology, Pathology, Pediatric Cardiology, Pediatric Endocrinology and Metabolism, Pediatric Gastroenterology, Pediatric Hematology, Pediatric Infectious Diseases, Pediatric Intensive Care, Pediatric Nephrology, Pediatric Neurology, Pediatric Pulmonology, Pediatric Rheumatology, Pediatric Surgery, Pediatrics and Child Health, Perinatology, Pharmacology, Pharmacy & Pharmaceutical Sciences, Physical Medicine, Physiology, Physiotherapy, Plastic Surgery, Podiatry, Psychiatry, Radiation Oncology, Radiology, Rheumatology, Sports Medicine, Thoracic Surgery, Urology, Veterinary Sciences, Virology. **Natural Sciences:** Biological Science, Chemical Sciences,

Geography, Mathematical Science, Molecular Biology & Genetics, Physics. **Social Sciences:** Anthropology, Archeology, Child Development, Demography, Higher Education Studies, Housing, International Relations, Journalism and Media, Library and Information Science, Linguistics and Literature, Open and Distance Education, Political Science, Psychology, Social Policy, Social Science, Social Work, Sociology, Tourism & Hospitality, Transportation Science & Technology.

How are History, Theology, Philosophy, Law and Social Sciences ranked? How do we avoid comparing apples and pears?

In classical rankings, some disciplines are advantaged and some are disadvantaged. Unlike other rankings, we have made some choices to reduce the disadvantage of these disadvantaged disciplines: Most importantly, we used Google Scholar, which does not ignore books, theses and other published sources, because this database takes into account publications in other databases, books, theses and other types of scientific contributions, in addition to publications in certain groups of journals such as SCI, SCI-E, SSCI, AHCI. Secondly, we have paid special attention to the fields of Social Sciences, Law, History, Theology, Philosophy, Art, Education, Economy and Business & Management, and created separate headings and sub-headings. Thirdly, we have made a significant difference by ranking individuals within all disciplines while at the same time ranking these disadvantaged disciplines (Social Sciences, Law, History, Theology, Philosophy, Art, Education, Economy and Business & Management) within themselves. We presented the ranking in these fields as institution, country, continent and world. Fourth, we started to highlight the issue of exempting CERN and some epidemiological studies. We have the highest number of scientists in these fields. At the same time, the importance we attach to this issue will increase.

How often is the ranking done? If I register today, when will my ranking appear in the system?

Individuals and institutions/universities are usually ranked every day or at the latest every two days. New entries, deletions, corrections and changes are usually visible in all web areas after one day or at the latest three days. In other words, all entries can be viewed up to date after two working days at the latest. H index, i10 index and citation numbers in profiles are updated every 30-45 days.

Data Update, Data Collection, How often is the data updated? :

H index, i10 index and citation numbers in profiles are updated every 30-60 days. Data is collected from Google Scholar. The aim is to standardise names, institutions and industries as much as possible. Non-standardised data, including wide variations in information and the use of abbreviations and a variety of languages, have caused difficulties. Updates and new rankings will be available through the current list of profiles and the pool of academics, which would grow with new subscriptions. By performing data mining and reviewing the information obtained, many profiles have been excluded from the index. In addition, some profiles were excluded during the regular data cleaning process. Data cleansing requires a regular process that must be carried out meticulously. We welcome your input in cleaning the data and ensuring accuracy.

Identifying the subjects/departments to which scientific fields would belong may seem easy in some industries and in a number of countries. However, it may cause considerable confusion in some other countries, regions and schools. We would like to emphasise that the following fields, including engineering, natural and environmental sciences, biology and biochemistry, materials

science, chemistry and social sciences, may exist in quite different spectrums in different countries. Therefore, we would like to emphasise that the standardisation of subjects and branches has not been easy. In order to carry out the standardisation, we have accepted the official names of the institutions and academic branches as they appear on the university website. We developed this strategy in order to at least partially standardise this complex situation.

Expansion Policy and Add to the list?:

The number of universities in countries and the number of academics in universities are gradually increasing within our means. The current list of registered academics includes 1.609.440 individuals, making it the largest ranked database. Frequent updates will be limited to new individual and institutional registrations in addition to our existing lists. In general, we do not aim for an infinite expansion in the number of people, as we have reached a manageable number that will provide healthy results. Addition to the list is limited to new individual and institutional registrations.

Profile information and ethical responsibility:

The ethical responsibility for accurate profile information rests entirely with the individual scientist. However, we believe that it would be prudent for institutions, countries, and even professional societies to conduct periodic reviews of the profiles of scientists affiliated with their organisation, as misleading information can damage the reputation of the organisation or country. Organisations should also review profiles to identify and report on scientists who are not affiliated with the institution. In order to avoid damage to the reputation of the institution, institutions should take the necessary corrective and preventive action against published scientist profiles that are unethically arranged.

Is it compulsory to register to find out your ranking?

You do not need to register to find out your individual ranking, you will be ranked more or less the same as a scientist with a similar H index, i10 index and citation count. Scientists with scores similar to yours are definitely on the list. However, you need to register to be included in the ranking with all its elements. We would also like to emphasize once again that not being included in this list does not devalue a scientist, it just means that the scientist is not on this list, or sometimes that the scientist did not choose to be on this list.

Ranking Criteria:

H-index rankings

Ranking of scientists by the university, country, region, and in the world was performed based on the "total h-index". The "total h-index" was used in rankings by the branch and the subbranch.

The ranking criteria based on the "**total h-index**" scores were used in the following order: 1. Total h-index scores, 2. Last 6 years' h-index scores, 3. Total i10 index scores, 4. Total number of citations). Ranking based on the **last 6 years h-index** scores was performed using criteria in the following order: 1. Last 6 years' h-index scores, 2. Total h-index scores, 3. Last 6 years' i10 index scores, 4- Number of citations in the last 6 years.

i10 Index Productivity Rankings

i10 Index Productivity Rankings is a unique service offered only by "AD Scientific Index". It is a ranking system derived from the i10 index to show the productivity of scientists in publishing high-value scientific articles. It shows the number of articles with 10 or more citations, not the total number of articles of the scientist. Productivity Rankings is a tool that lists the most productive scientists in a given field, discipline, university and country, and can guide the development of meaningful incentives and academic policies. The world, regional and university rankings of scientists in this table are calculated on the basis of the overall i10 index. You can also see the **"last 6 years i10 index"**.

The ranking criteria for the **total i10 index** were used in the following order: 1. Total i10 index scores, 2. Last 6 years' i10 index scores, 3. Total h-index scores, and 4. Total number of citation . Ranking based on the **last 6 years' i10 index** scores was performed using the criteria in the following order: 1. Last 6 years' i10 index scores, 2. Total i10 index scores, 3. Last 6 years' h-index scores and 4. Number of citations in the last 6 years.

Citation Rankings

Citation Rankings is a unique service offered only by "AD Scientific Index". It is a ranking system derived from the number of citations to scientific articles of scientists. The Citation Rankings is a tool that lists the scientists whose scientific publications are most highly valued in a given field, discipline, university and country, and like the i10 index, this ranking can guide the development of meaningful incentives and academic policies. You can also see the **"last 6 years citation counts"**.

Ranking based on the **total number of citations** was performed using the criteria in the following order: 1. Total number of citations, 2. Number of citations in the last 6 years , 3. Total i10 index scores and 4. Total h-index scores. Ranking based on the total number of **citations in the last 6 years** was performed using the criteria in the following order: 1: Number of citations in the last 6 years, 2. Total number of citations, 3: Last 6 years' i10 index scores and 4. Last 6 years' h-index scores

Studies that influence the order of ranking because of a high number of citations received, in a manner similar to CERN:

We started a procedure to add an asterisk as ***"i"*** at the end of the names of the authors when a scientific paper of interest included many authors such as CERN, ATLAS, ALICE, CMS, Statistical Data, Guideline, Updates etc. scientific papers. We think that new criteria will be defined to be implemented for such studies. Until further criteria are described, we marked such studies with a ***"i"*** sign. **List without CERN, Statistical Data etc.**

Why are the last 6 years' ratios / total ratios important?

The h-index, the i10 index and the ratio of citations in the last 6 years to the total number of citations are important unique features of the AD Scientific Index, showing both the development of the individual performance of the scientist and the impact of the institutional policies of the universities on the overall scientific picture.

Institution analysis with AD Scientific Index

"AD Scientific Index" is the only source where you can evaluate all these institutions according to Total H Index, Last 6 Years H Index, Total i10 Index, Last 6 Years i10 Index, Total Citations and Last 6 Years Citations and analyse the latest developments of the institution. AD Scientific Index is the only analysis system that can analyse the number of scientists in institutions by subject and the top 10%, 20%, 30%, 40%, 50%, 50%, 60%, 70%, 80%, 90% and 90% of the world. Examples of Utah State University analyses are below:

a. Utah State University ranking among ALL UNIVERSITIES in the country, continent and world by 6 parameters:

{{REPLACE_IMG_1}}

b. Utah State University ranking among ALL PUBLIC UNIVERSITIES in the country, continent and world according to 6 parameters:

{{REPLACE_IMG_2}}

c. Utah State University ranking in ALL INSTITUTIONS (university, institute, hospital, company) in the country, continent and world:

{{REPLACE_IMG_3}}

d. Analysis of Utah State University scientists' achievement status by percentiles and subject:

{{REPLACE_IMG_4}}

Ranking Criteria for Universities:

We have a ranking that includes **all universities, private universities, public universities, institutions, hospitals, companies**, as well as a ranking that includes only the relevant categories. For example, a private university: You can see its ranking in the country, the region and the world among all institutions, all private universities and all universities.

For global university rankings, ranking organisations use the following parameters: quality of education, employment rates of graduates, quality of faculties within an individual university, international collaborations, number of alumni and staff awarded Nobel Prizes and Fields Medals, number of highly cited researchers selected by Clarivate Analytics, total number of research papers, number of articles published in Nature and Science journals, number of articles indexed in Science Citation Index-Expanded (SCIE) and Social Science Citation Index (SSCI), and number of highly cited research articles. Each ranking organisation develops a ranking methodology that assigns different weightings to selected elements of these parameters. Experienced ranking organisations evaluate 2000-3000 universities for the ranking.

AD Scientific Index performs rankings using a single parameter, the number of "Valued and Productive Scientists" employed by a given university. This parameter, selected after years of observation, is calculated using the total H-index and i10-index values together with the number

of citations, and the total H-index and i10-index values of the last 6 years together with the number of citations received in the last 6 years. We rank more than 22,350 universities in this way. Careful examination will reveal that most of the other parameters are representations of the natural academic products of 'valued and productive academics'. Institutions employing a high number of Valued and Productive Scientists, for example scientists in the first top 10%, top 20%, top 40%, top 60%, top 80% and later ranks, will naturally produce a higher number of academic outputs listed as the parameters above. "The AD Scientific Index is the only university ranking system that analyses the distribution of scientists in an institution according to the 10, 20, 30, 40, 50, 60, 70, 80 and 90 percentiles.

The ranking of institutions starts by identifying the scientists in the top 10, 20, 30, 40, 50, 60, 70, 80 and 90 per cent of the institution. Institutions with more scientists in these bands are ranked higher. If there is an equal number of scientists in a range, the next range is considered. If the number is still equal, the institution with the higher number of individual scientists is ranked higher.

A comparison of the AD Scientific Index scores of institutions with the scores of other ranked institutions will show a high degree of consistency between the scores. We use our methodology to rank institutions of different characteristics and sizes from different countries and all continents, and achieve very successful results through the ranking figures obtained. Given the ongoing processes of data entry and data cleansing for over 22,500 universities, we expect that data entry issues such as incomplete entries or human errors in data entry made by either the universities or our team will be resolved and lead to improved accuracy of results over time.

The AD Scientific Index top university rankings will not only list the areas in which a university is the best or has room for improvement, but will also reflect the results of the institutions' science policies. This report reveals the ability of institutions to attract highly-regarded researchers and the ability of institutions to promote progress and retain researchers.

Institution analysis with AD Scientific Index

"AD Scientific Index" is the only source where you can evaluate all these institutions according to Total H Index, Last 6 Years H Index, Total i10 Index, Last 6 Years i10 Index, Total Citations and Last 6 Years Citations and analyse the latest developments of the institution.

University Subject Rankings BETA VERSION

Following the same logic as the University/Institution rankings, we provide country, continent and world subject rankings of more than 23,000 universities/institutions in the following fields: Agriculture and Forestry, Art, Design and Architecture, Business and Management, Economics and Econometrics, Education, Engineering and Technology, History, Philosophy, Theology, Law / Legal Studies, Medicine and Health Sciences, Natural Sciences, Social Sciences and Others. {{REPLACE_1}} This study is ranked according to the Total H Index and is currently in **Beta version**. The world, region, country and university subject area ranking is in beta version as the 'others' subject area ({{REPLACE_2}}) excludes the scientist profile whose branch is unidentified, not yet edited or not yet identified, so the ranking will change as the 'others' fields are edited. Please note. In this ranking, the ranking is not based on whether the institution has a faculty related to the branch, but on whether there are scientists in that branch. University Subject Rankings have features that can be an equivalence parameter between countries. In addition to the general ranking of the university, the ranking of some faculties may be better or worse than

the general average of the university. For this purpose, University Subject Rankings of the "AD Scientific Index" can be used as a ranking criterion in equivalence procedures.

Ranking Criteria for Countries:

As described in the university ranking section, it is not easy to obtain and standardize data from about 23,252 universities for the 219 country ranking. Therefore, we based our ranking system on the number of meritorious scientists. Four criteria are used to rank the countries. The first one is the number of scientists in the top 3% list. The second and third criterion are the number of scientists in the Top 10%, Top 20%, Top 40%, Top 60%, Top 80%, and later ranks. The fourth one is the number of scientists listed in the AD Scientific Index. In the case of equalities after applying all these four criteria, the world rank of the meritorious scientist of that country is used.

Top 100 Institutions

You can list the top 100 institutions among more than 23,200 universities, private universities, public universities, institutions, hospitals and companies in any country, region and the world.

Top 100 Scientists

The Top 100 Scientists ranking is based on total h-index scores. The Top 100 Scientists can be ranked globally or specifically for the following regions: Africa, Asia, Europe, North America, Oceania, Arab League, EECA, BRICS and Latin America, based on total h-index scores without any breakdown by subject area. The top 100 rankings in the world, continent or region include the standardised subject areas of Agriculture & Forestry, Arts, Design & Architecture, Business & Management, Economics & Econometrics, Education, Engineering & Technology, History, Philosophy, Theology, Law & Legal Studies, Medical & Health Sciences, Natural Sciences and Social Sciences. Subjects listed as 'other' are not included in the rankings by region and subject. Therefore, you may wish to specify your subject and field and contribute to the standardisation of your performance. Identifying the subjects/departments to which scientific fields would belong may seem easy in some sectors and in a number of countries. However, it may cause considerable confusion in some other countries, regions and schools. We would like to emphasise that the following fields, including engineering, natural and environmental sciences, biology, biochemistry, materials science, biotechnology, chemistry and social sciences, may exist in quite different spectrums in different countries. Therefore, we would like to emphasise that the standardisation of subjects and branches was not easy. In order to carry out the standardisation, we have accepted the official names of the institutions and academic branches as they appear on the university website. We developed this strategy to at least partially standardise this complex situation. We also started a procedure of adding an asterisk as an "i" at the end of the authors' names when a scientific paper of interest had many authors, such as the scientific papers of CERN.

Compare And Choose Universities/Institutions

A comprehensive and reliable resource for your academic preferences and choices at all levels. You can find relevant data in "AD Scientific Index" to compare 22,710 universities and institutions from 219 countries. The number of scientists and publications, academic interests, and other detailed analysis results concerning universities and institutions will help you make your choices. For comparisons, **click**

Academic collaboration

Scientific fields of interest specified in the profiles of scientists are available for other scientists from different countries and institutions to enable academic collaboration.

Comparisons of Ranking Systems

In addition to the rankings of scientists, which consist of many tables and graphs of trend analyses that are provided for the first time, this comprehensive system offers several data and analysis results that, within the limits of the inherent advantages and limitations, will provide important added value to branches and institutions. We would like to emphasise that comparisons should not be made between two branches, each of which has a different potential to produce scientific publications. For example, it is not correct to expect the same number of articles from completely different fields such as law, social sciences, music, physics or biochemistry. Ranking comparisons should not overlook the inherent potential of fields to produce publications. For this reason, we try to focus on observations within the same subject/field and on recent productivity. The ranking is made only among the profiles in the "AD Scientific Index" and we would like to remind again that the fact that a person is not in the "AD Scientific Index" does not reflect the academic value of the person in a negative way, it only shows that he is not in the system.

Data Cleaning and the Redlist

Data cleansing is a dynamic process that we perform systematically on an ongoing basis. Despite our best efforts, we may not be completely accurate and we welcome your contributions to the Red List notifications. Rarely, some scientists are placed on the Red List due to innocent mistakes made in good faith and without unethical behaviour. Most errors are the result of inadequate periodic profile checks. To avoid such an undesirable situation, researchers should regularly check their profiles and institutions should systematically check the profiles of their staff. Use redlist@adscientificindex.com to report an inappropriate profile, death, or any other condition that would require the profile to be removed.

Limitations of the "AD Scientific Index": Missing or Inaccurate Profiles or Missing Institution Names

This index is a comparative platform developed by ranking accessible and verified profiles. First and foremost, not being included in this index for various reasons does not mean that the academician is not valued or that only those academicians listed in the index are the valued ones. This should be noted carefully. A meritorious scholar may not have been included in this index because he or she does not have a Google Scholar profile or we do not have access to that profile for various reasons. The unavailability of verified Google Scholar profiles of scholars working at well-known and respected academic institutions in their respective countries may prevent us from finding institutions and scholars' profiles. Because updating profiles in the system and collecting data from open sources requires effort, and because the data is being collected for the first time, it is not possible for the index to be completely error-free.

Google Scholar profiles are created and published by scholars themselves on a voluntary basis. An individual may not have created a profile for a variety of reasons and will therefore not be listed in the AD Scientific Index. It is important to remember that a profile may not exist or be public at the time of our search, some profiles may only be public at certain times, the

information in the profile may not be consistent, there may be more than one profile belonging to the same person, profiles may not be verified, the name of the institution may be missing, surnames or names of institutions may change, profile owners may have died, or known or unforeseen problems may occur. Profiles whose owners have died will be removed from the system. The list is continually updated and corrected.

If we discover or are informed of unethical situations in profile information that go beyond the bounds of decency, the person will be removed from the list. As individuals are responsible for the accuracy of their profiles, organisations should also include the need to review academic staff profiles in their agenda.

Articles with thousands of authors, such as CERN studies in the field of physics, or scientific studies with more than one author in classification studies in medicine or statistical studies, raise debates about the requirements for the amount of article content that belongs to an author. As such papers may lead to inequality of opportunity, a separate grouping system may be needed in the future. To minimise this problem, it is also possible to sort using the "List without CERN, Statistical Data, etc" option. This is a feature found only in the AD Scientific Index.

The pros and cons of "ranking" systems such as Web of Science, Scopus, Google Scholar and similar others are well known, and the limitations of such systems have long been recognised in the scientific community. Therefore, interpreting this study beyond these limitations may lead to erroneous results. The AD Scientific Index needs to be evaluated with all of the above potential limitations in mind.

Possible reasons why a scientist is not on this list...

Since its foundation, AD Scientific Index has expanded at a rapid pace to include relevant individuals, regions, universities, countries, and continents. Currently, it includes 1.609.440 scientists and academicians from 219 countries and 23.252 universities and institutions. We are in continuous pursuit of comprehensiveness with close observations for the accuracy, cleanliness, reliability, and up-to-dateness of the data so as to ensure sustainability. During each update, all data with several types of increases in figures are subject to reviews for controls. So far, we have excluded almost 200,000 items of data for several reasons during the several stages of list development.

Reasons why a name is not on the list:

- No Google Scholar profile available,
- Notification that the person does not wish to be listed,
- The Google Scholar profile is not PUBLIC,
- Change of Google Scholar profile address
- The information in the profile is incomplete or irrelevant,
- A change in the profile's PUBLIC status,
- Some publications do not belong to the profile,
- Inappropriateness found and deleted during the review of a complaint about the profile
- Opening of the personal profile outside the period of periodic data expansion for the organisation
- The address is not clear or reliable,
- Deletions due to various notifications of non-compliance by the researcher's institution
- Deletion of previously listed profiles due to inaccessibility of profiles during updates,

- Also, due to various errors, a name may not appear in the list or may have been deleted.

Deleted Profiles

Profiles can be deleted for various reasons. Some profiles are deleted according to the controls made for data cleaning and ensuring the timeliness of the data, including ethical violation applications, sharing publications belonging to someone else, including publications belonging to someone else due to name similarity, preventing the profile from being public, profiles that are sometimes open and sometimes closed, profiles containing elements that undermine trust, profiles that are closed or inaccessible during the data renewal period. These profiles can register after correcting their data.

Inappropriate or unethical profiles

Inappropriate or unethical profiles will be deleted without warning and payment will not be refunded, even if the fee has been paid.

How can individuals find out their ranking if they are not already included in the list?

You do not need to be included in a relevant list to find out your ranking. The ranking will be the same as those of other academicians or scientists with similar scores in the list. However, there is only one way to get on the list: using the [registration page of the website](#). You can use the individual or institutional registration option from this [page](#). **We do not respond to individual registration requests sent by e-mail.**

May 25, 2021 Total 417.605 scientist, 167 country, 9.525 university

June 18, 2021 Total 700.093 scientist, 182 country, 11.350 university

June 5, 2022 Total 948.737 scientist, 216 country, 15.652 university

October 1, 2022 Total 1.082.054 scientist, 19.490 university

April 1, 2023 Total 1.350.571 scientist, 218 country, 21.500 university

Could this work have been designed in another way?

It is not possible to measure the research capacity of a university or a researcher accurately on the basis of a few parameters. Assessments should include many other types of data, such as patents, research funding, incentives, published books, teaching intensity, congress presentations, and graduate and postgraduate teaching positions. A common criticism is why the Web of Science h-index is not used. Since it is not possible to access h-indexes such as Web of Science, Scopus or Publons, or data such as patents, awards, etc. for all individuals and all institutions, we chose Google Scholar, which suits our different methodology. We are aware that this choice has many pros and some cons. However, no matter which database is chosen, they all have their pros and cons, and the other options do not allow for analysis beyond approximately 2000-3000 institutions for comparison. Our methodology yields the same results as other ranking systems that use a large number of parameters. Except for a few countries with unique differences, the results are the same.

The Concept of Predatory:

A journal or an academic service cannot be considered predatory only because it is not free. The concept of predatory is used for describing any unethical action including those with factitious, spurious, exaggerated, or deceptive quality, performed in return for a fee. Any predatory activity is misleading and unfair. As an institution that does not receive any governmental, institutional, or financial support and with the aim of maintaining the sustainability of our academic services and the preservation of editorial independence, we have reached the following figures of 1.609.440 academicians and 23.252 universities included in our database completely free of charge through the extensive efforts of a large team within the scope of expanding our data in terms of countries, branches, and universities. Our expansion continues at a certain pace. However, we charge a small service fee from those, who prefer to be included in the system faster, without compromising ethical principles.

A methodology that increases transparency and visibility.

The "AD Scientific Index" not only provides ranking services, but also shines a light on ethical violations by presenting publicly available data, thus paving the way for ethical violations to be resolved. By carrying the torch in this way, we are improving controllability, transparency and accountability at both individual and corporate levels. These efforts have led individuals and institutions to focus on academic profiles, and tens of thousands of academics have revised and rearranged their profiles, removing inaccurate data. As well as stressing the need for academics to regularly review the information in their profiles, we also emphasise the need for institutions to review the profiles of their academic staff. You are always welcome to contribute by reporting incorrect data via the Red List link.

How will the new rankings be updated in the "AD Scientific Index"?

The current profile list will only expand with new individual and institutional registrations. We prefer not to work with instant data online, as data processing with simultaneous data entry may bring the risk of data pollution. Although it is difficult and time-consuming to check all profiles whose numerical values increase with each data extraction, we perform such checks on a regular basis. Therefore, please do not send an email requesting an update when the data in your profile changes. We delete all suspicious, unethical or questionable score increases directly without warning. However, you can always contribute by reporting an inappropriate profile that was accidentally overlooked by sending an email.

How can I be included in the "AD Scientific Index"?

First of all, you must have a Google Scholar profile and this profile must be set to PUBLIC. If you do not have a Google Scholar profile, you can create a profile at <https://scholar.google.com/> and add your published scientific articles. It is the liability of the scientist to ensure the accuracy and the ethical aspects of the profile. Furthermore, it is recommended that institutions would check the profiles of respective employees. We would like to remind you that you should check your profile regularly and keep it updated. Published scientific papers added to your profile may cause ethical issues if they do not belong to you.

Is there a specified lower limit for the h-index and i10 index scores or the number of citations to be included in "AD Scientific Index"?

For REGISTRATION, no lower limits have been specified for the number of citations or the h-index or i10-index scores to be included in the "AD Scientific Index".

Fee Policy

For the sustainability and independence of this system, which has been developed by the labor of many people without any institutional or financial support, we request a small contribution as a transaction fee. With the contribution of many scientists from different fields, the "AD Scientific Index" is systematically updated for continuous improvement. In parallel with the continuous increase in the number of universities and scientists registered in the index, we are improving the methodology, software, data accuracy and data cleaning procedures every day with the contributions of a large team. Free changes: University/institution changes (by emailing info@adscientificindex.com with evidence). Paid changes: It is in two forms as Registered Member and Premium Member membership.

What are the features of Registered Member?

Registered Member: Total H Index Rankings, Last 6 years H Index Rankings, Last 6 years / Total H Index, Total i10 Index Rankings, Last 6 years i10 Index Rankings, Last 6 years / Total i10 Index, Total Citation Rankings, Last 6 years Citation Rankings, Last 6 years / Total Citation, Subject Rankings: Etc. Engineering & Technology / Food Science and Engineering, AD Scientific Index ID, ORCID ID, Researchgate, Awards & Achievements, Email, University / Institution Rankings, Web Of Science Researcher ID, Scopus Author ID, Academic Degree, Institutional Web Address, Office, Company or Private Business link, Books - E-books, Lecture Notes

For information regarding **Registered Membership**: <https://www.adscientificindex.com/pricing/>

What are the differences of Premium Member?

Premium Member: In addition to Registered User Features, Ability to enter and make changes with password, All Education Information, All Work Experience, All Publications, All Articles and links, All Published Books and Book Chapters, All Presentations, All Courses, All Projects, All Editorial, Refereeing and Scientific Committee, Patents / Designs, Academic Grants and Awards, Artistic Activities, All Certificates / Courses / Trainings, Association and Community Memberships, Ability to hide picture, Ability to show the areas you want, Change of subject, Many comparisons on the dashboard and many other features

For information regarding **Premium Membership**: <https://www.adscientificindex.com/pricing/>

Institutional Registration

For information regarding institutional registration: <https://www.adscientificindex.com/pricing/>

Data Policy:

All data here is taken from Google Scholar and the data provided during registration, and no information that has not been made public with the co

Table I. Number of scientists in Guatemala top 500 according to Country

#	Country	Country Region Rank	Country World Rank	Scientists in Guatemala Top 500	Total Institutions	Total Scientist
1	Guatemala	19	138	366	16	368

Table II. All Types Institutions in Guatemala top 500

#	Institution	Country Rank	Region Rank	World Rank	Country	Type of Institution	Founded	Scientists in Guatemala Top 500	Scientists in World Top 3%	Scientists in World Top 10%	Scientists in World Top 20%	Scientists in World Top 30%
1	Universidad de San Carlos de Guatemala	1	473	6435	Guatemala	Public	1676	103	0	1	1	4
2	Universidad Rafael Landívar	2	492	6679	Guatemala	Private	1961	83	0	1	1	1
3	Universidad del Valle de Guatemala	3	597	7951	Guatemala	Private	1966	48	0	0	2	3
4	Universidad Francisco Marroquín	4	743	9789	Guatemala	Private	1971	59	0	0	1	1
5	Centro Guatemalteco de Investigación y Capacitación de la Caña de Azúcar	5	965	12196	Guatemala	Private	1992	3	0	0	0	0
6	Universidad Galileo	6	1046	13346	Guatemala	Private	2000	25	0	0	0	0
7	Centro Universitario de Occidente Universidad de San Carlos de Guatemala	7	1248	15503	Guatemala	Public	1970	9	0	0	0	0
8	Universidad de Occidente	8	1377	16999	Guatemala	Public	1974	6	0	0	0	0
9	Universidad del Istmo de Guatemala	9	1478	17878	Guatemala	Private	1997	5	0	0	0	0
10	Universidad Panamericana de Guatemala	10	1483	17902	Guatemala	Private	1998	4	0	0	0	0
11	FLACSO Guatemala Facultad Latinoamericana de Ciencias Sociales	11	1516	18212	Guatemala	Private	1957	1	0	0	0	0

#	Institution	Country Rank	Region Rank	World Rank	Country	Type of Institution	Founded	Scientists in Guatemala Top 500	Scientists in World Top 3%	Scientists in World Top 10%	Scientists in World Top 20%	Scientists in World Top 30%
12	Universidad Rural de Guatemala	12	1717	20735	Guatemala	Private	1988	2	0	0	0	0
13	Asociación de Investigación y Estudios Sociales ASIES	13	1770	21302	Guatemala	Private	1980	1	0	0	0	0
14	Universidad Mariano Gálvez de Guatemala	14	1803	21586	Guatemala	Private	1966	9	0	0	0	0
15	Universidad San Pablo de Guatemala	15	1812	21667	Guatemala	Public	2006	6	0	0	0	0
16	Universidad Da Vinci de Guatemala	16	1917	22359	Guatemala	Private	2012	2	0	0	0	0

Table III. All Universities in Guatemala top 500

#	University	Country Rank	Region Rank	World Rank	Country	Type of Institution	Founded	Scientists in Guatemala Top 500	Scientists in World Top 3%	Scientists in World Top 10%	Scientists in World Top 20%	Scientists in World Top 30%
1	Universidad de San Carlos de Guatemala	1	391	4367	Guatemala	Public	1676	103	0	1	1	4
2	Universidad Rafael Landívar	2	409	4543	Guatemala	Private	1961	83	0	1	1	1
3	Universidad del Valle de Guatemala	3	500	5483	Guatemala	Private	1966	48	0	0	2	3
4	Universidad Francisco Marroquín	4	633	6878	Guatemala	Private	1971	59	0	0	1	1
5	Centro Guatemalteco de Investigación y Capacitación de la Caña de Azúcar	5	831	8791	Guatemala	Private	1992	3	0	0	0	0
6	Universidad Galileo	6	898	9743	Guatemala	Private	2000	25	0	0	0	0
7	Centro Universitario de Occidente Universidad de San Carlos de Guatemala	7	1084	11454	Guatemala	Public	1970	9	0	0	0	0
8	Universidad de Occidente	8	1201	12778	Guatemala	Public	1974	6	0	0	0	0
9	Universidad del Istmo de Guatemala	9	1298	13528	Guatemala	Private	1997	5	0	0	0	0
10	Universidad Panamericana de Guatemala	10	1303	13549	Guatemala	Private	1998	4	0	0	0	0
11	FLACSO Guatemala Facultad Latinoamericana de Ciencias Sociales	11	1332	13768	Guatemala	Private	1957	1	0	0	0	0

#	University	Country Rank	Region Rank	World Rank	Country	Type of Institution	Founded	Scientists in Guatemala Top 500	Scientists in World Top 3%	Scientists in World Top 10%	Scientists in World Top 20%	Scientists in World Top 30%
12	Universidad Rural de Guatemala	12	1520	15960	Guatemala	Private	1988	2	0	0	0	0
13	Asociación de Investigación y Estudios Sociales ASIES	13	1565	16314	Guatemala	Private	1980	1	0	0	0	0
14	Universidad Mariano Gálvez de Guatemala	14	1594	16494	Guatemala	Private	1966	9	0	0	0	0
15	Universidad San Pablo de Guatemala	15	1603	16572	Guatemala	Public	2006	6	0	0	0	0
16	Universidad Da Vinci de Guatemala	16	1700	17226	Guatemala	Private	2012	2	0	0	0	0

Table IV. Public Universities in Guatemala top 500

#	University	Country Rank	Region Rank	World Rank	Country	Founded	Scientists in Guatemala Top 500	Scientists in World Top 3%	Scientists in World Top 10%	Scientists in World Top 20%	Scientists in World Top 30%
1	Universidad de San Carlos de Guatemala	1	262	3248	Guatemala	1676	103	0	1	1	4
2	Centro Universitario de Occidente Universidad de San Carlos de Guatemala	2	609	6890	Guatemala	1970	9	0	0	0	0
3	Universidad de Occidente	3	673	7485	Guatemala	1974	6	0	0	0	0
4	Universidad San Pablo de Guatemala	4	872	9170	Guatemala	2006	6	0	0	0	0

Table V. Private Universities in Guatemala top 500

#	University	Country Rank	Region Rank	World Rank	Country	Founded	Scientists in Guatemala Top 500	Scientists in World Top 3%	Scientists in World Top 10%	Scientists in World Top 20%	Scientists in World Top 30%
1	Universidad Rafael Landívar	1	138	1198	Guatemala	1961	83	0	1	1	1
2	Universidad del Valle de Guatemala	2	181	1627	Guatemala	1966	48	0	0	2	3
3	Universidad Francisco Marroquín	3	248	2271	Guatemala	1971	59	0	0	1	1
4	Centro Guatemalteco de Investigación y Capacitación de la Caña de Azúcar	4	340	3213	Guatemala	1992	3	0	0	0	0
5	Universidad Galileo	5	367	3677	Guatemala	2000	25	0	0	0	0
6	Universidad del Istmo de Guatemala	6	577	5697	Guatemala	1997	5	0	0	0	0
7	Universidad Panamericana de Guatemala	7	581	5713	Guatemala	1998	4	0	0	0	0
8	FLACSO Guatemala Facultad Latinoamericana de Ciencias Sociales	8	596	5835	Guatemala	1957	1	0	0	0	0
9	Universidad Rural de Guatemala	9	689	7095	Guatemala	1988	2	0	0	0	0
10	Asociación de Investigación y Estudios Sociales ASIES	10	715	7272	Guatemala	1980	1	0	0	0	0
11	Universidad Mariano Gálvez de Guatemala	11	728	7359	Guatemala	1966	9	0	0	0	0
12	Universidad Da Vinci de Guatemala	12	775	7732	Guatemala	2012	2	0	0	0	0

Table VI. Young Universities in Guatemala Top 500

#	University	Country Rank	Region Rank	World Rank	Country	Founded	Scientists in Guatemala Top 500	Scientists in World Top 3%	Scientists in World Top 10%	Scientists in World Top 20%	Scientists in World Top 30%
1	Centro Guatemalteco de Investigación y Capacitación de la Caña de Azúcar	5	831	8791	Guatemala	1992	3	0	0	0	0
2	Universidad Galileo	6	898	9743	Guatemala	2000	25	0	0	0	0
3	Universidad de Occidente	8	1201	12778	Guatemala	1974	6	0	0	0	0
4	Universidad del Istmo de Guatemala	9	1298	13528	Guatemala	1997	5	0	0	0	0
5	Universidad Panamericana de Guatemala	10	1303	13549	Guatemala	1998	4	0	0	0	0
6	Universidad Rural de Guatemala	12	1520	15960	Guatemala	1988	2	0	0	0	0
7	Asociación de Investigación y Estudios Sociales ASIES	13	1565	16314	Guatemala	1980	1	0	0	0	0
8	Universidad San Pablo de Guatemala	15	1603	16572	Guatemala	2006	6	0	0	0	0
9	Universidad Da Vinci de Guatemala	16	1700	17226	Guatemala	2012	2	0	0	0	0

Table VII. Institutions in Guatemala top 500

#	Institution	Country Rank	Region Rank	World Rank	Country	Founded	Scientists in Guatemala Top 500	Scientists in World Top 3%	Scientists in World Top 10%	Scientists in World Top 20%	Scientists in World Top 30%
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Table VIII. Companies in Guatemala top 500

#	Company	Country Rank	Region Rank	World Rank	Country	Founded	Scientists in Guatemala Top 500	Scientists in World Top 3%	Scientists in World Top 10%	Scientists in World Top 20%	Scientists in World Top 30%
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Table IX. Hospitals in Guatemala top 500

#	Hospital	Country Rank	Region Rank	World Rank	Country	Founded	Scientists in Guatemala Top 500	Scientists in World Top 3%	Scientists in World Top 10%	Scientists in World Top 20%	Scientists in World Top 30%
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