

World's Top Universities in Nanoscience and Nanotechnology in 2019

2019-07-11 According to the ranking published by ShanghaiRanking Consultancy in 2019, Nanyang Technological University, Massachusetts Institute of Technology (MIT), and Tsinghua University ranked first to third, respectively. As for the top ten universities in the ranking, the United States, China, and Singapore have had the most share.

In recent years, the number of nano-related articles has significantly increased, which reflects the scientific community's attention to this field of science and technology. Various organizations rank universities using different methodologies to aid governments, decisionmakers, and investors in terms of funding and budgeting research activities, among which <u>ShanghaiRanking</u> Consultancy, focusing on higher education, has been the official publisher of the world university rankings since 2009 as an independent organization.

According to the recently updated <u>ranking</u> published by this organization, <u>Nanyang</u> <u>Technological University</u> from <u>Singapore</u>, <u>Massachusetts Institute of Technology (MIT)</u> from the United States, and <u>Tsinghua University</u> from <u>China</u> have held the top three ranks with 310.8, 286.7, and 286.3 points, respectively, followed by <u>Peking University</u> from <u>China</u> with 281.7, <u>Georgia Institute of Technology</u> with 280.2, <u>Stanford University</u> with 276.7, and <u>University of California (Berkeley)</u> with 272.8 points from the <u>United States</u>. There is no change in this ranking for Nanyang Technological University and MIT in comparison to 2018. However, Georgia Institute of Technology which held the third rank last year, had a fall of two steps, possessing the fifth rank while Tsinghua University showed a three-steps growth in the ranking, taking the place of Georgia Institute of Technology. Considering the top ten universities, Chinese universities showed an eight-step growth while <u>United States</u> universities had a fall of eight steps during the last year.

It should be noted that quantitative, as well as qualitative indicators, have been taken into consideration for this ranking. The number of papers authored by an institution in an academic subject during the period of 2013-2017 is a quantitative indicator, according to which Tsinghua University has ranked first. However, in qualitative indicators which include

the ratio of citation of papers to the average citations of articles, international collaboration, and the number of papers published in top Journals, Nanyang Technological University has been on the top of the Chinese universities. A final score is achieved by adding scores for all indicators.

It is worth mentioning that among the top ten universities in the world, five universities have been from the <u>United States</u>, three from <u>China</u>, and two from <u>Singapore</u>, and considering the top 100 universities, the <u>United States</u> ranks first with 31 universities followed by <u>China</u> with 30, <u>South Korea</u> with 8, the <u>United Kingdom</u> with 5, <u>Australia</u> with 4, and <u>Germany</u> with 3 universities. <u>China</u>, the <u>United States</u>, and <u>Germany</u> have had the largest share of top universities in Asia, America, and Europe, respectively, where there has been no African institute among 300 leading universities.