



Indian Institute of Technology Guwahati  
भारतीय प्रौद्योगिकी संस्थान गुवाहाटी  
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# ज्ञानवर्षा

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## IIT Guwahati gains rank #41 Globally in the 'Research Citations per Faculty' category of the QS World University Rankings 2022

Indian Institute of Technology Guwahati, has broken into the top 50 institutes and secured 41st rank globally (56th in 2021) in the 'Research Citations per Faculty' category, of the QS World University rankings 2022 announced today, 8th June 2021. Along with this, the Institute has gained rank 395 in World University Ranking globally. This marks an huge improvement of 75 places by the IIT Guwahati, which was ranked 470 in the 2021 edition of the QS World University rankings.

The main reason for this increase is the strong improvement in the 'Citations per Faculty' category where IIT Guwahati has improved from 77.9 in the year 2021 (Global Rank 56) to 94.8 in 2022 (Global Rank 41).

Speaking on this occasion, Prof. T. G. Sitharam, Director, IIT Guwahati, said, "I congratulate the faculty, students and staff of IIT Guwahati for this

remarkable growth in this performance which clearly shows that despite the pandemic, the institute has been working tirelessly to make such a global impact. The institute has improved in Research Citations per Faculty indicating the visibility of research activities of the institute as well as in the Academic Reputation as the major contributors in this increase"

Prof. Parameswar K. Iyer, Dean Public Relations, Branding and Ranking, IIT Guwahati, mentioned, "The ranking of IIT Guwahati has been improving consistently across International and National agencies due to the concerted efforts the institute has been making over the past several years. This has impacted on various aspects of institutional growth, including Internationalization, enhancing the reputation (perception), promoting research and technology transfers, which are now becoming visible and being recognized both nationally and globally."



The QS World University rankings 2022 announced today were based on six metrics; Academic Reputation, Employers Reputation, Faculty Student ratio, Citation per Faculty, International Faculty and International Students.

IIT Guwahati has also been ranked in 12 different subject categories by the QS World University rankings announced earlier this year with a break into the 51-100 range in Petroleum Engineering. The subjects that IIT Guwahati finds mention are Engineering and Technology, Chemical Engineering, Mechanical, Aeronautical and Manufacturing Engineering, Electrical and Electronics Engineering, Computer Science and Information Systems, Chemistry, Physics and Astronomy, Natural Sciences, Biological Sciences, Mathematics, Petroleum Engineering and Environmental Studies (2021 onwards).

## Visit of the CEM of BTR

Visit of Shri Pramod Boro, Chief Executive Member (CEM) of Bodoland Territorial Region (BTR) to IIT Guwahati. Shri Boro was welcomed by Prof. T. G. Sitharam to the Institute, later he visited the Center for Nanotechnology and interacted with the faculty members and researchers at the centre



## IIT Guwahati team paves the way for better water management policies in India through Virtual Water Analysis

Indian Institute of Technology Guwahati researchers have paved the way for better water management policies in India. Dr. Anamika Barua, Professor, Department of Humanities and Social Science, IIT Guwahati, in collaboration with scientists from the University of Zaragoza, Spain, used ecological economics to study the socio-political factors governing 'Virtual Water Flow', an emerging concept at the science-policy interface, with particular reference to India.

Virtual Water (VW) is the water involved in the production and trade of food and non-food commodities and services. It is that 'invisible' water that has been consumed throughout the lifecycle of the product or service.

The concept of VW was first conceived in the 1990s to understand how water-stressed countries could provide their people with essential items such as water-intensive products like food, clothing, and shelter, which can define its trade characteristics. For example, a country with limited water resources would rather import water-intensive cotton than use their precious water in cultivating it.

The results of this unique research have been published in the Journal of Cleaner Production, Journal of Water Resources Research, and Journal of Water. Along with Dr. Barua, and her research scholar Ms Mimika Mukherjee, the papers have been co-authored by Prof. Rosa Duarte, Department of Economic Analysis, University of Zaragoza, Spain, and Dr Suparana Katyaini, School of Livelihoods and Development, Tata Institute of Social Sciences, Hyderabad.

Explaining the research, Dr. Anamika Barua, Professor, Department of Humanities and Social Science, IIT Guwahati, said, "Virtual water flows assessment is aimed to induce sustainable use that can lead to water security."

Given the persistent challenge of water scarcity in India and the complexity of water management in the country, Dr Barua's research helps in bridging the knowledge governance gap to mitigate water scarcity through VW flows assessment.



“The integration of scientific knowledge with policies for enhancing sustainability continues to be challenging in India because of the slow-paced exchange between science and policy spheres,” said the lead researcher.

This study from IIT Guwahati addresses this science-policy gap on water scarcity by first analysing the water flows hidden in agriculture products moving between the various states of India. This is then linked to the regional water scarcity situation and some existing elements of water policy to understand the gaps in knowledge and governance to mitigate water scarcity in the country.

The team found that some VW flows between states are unsustainable as water through agricultural products flows from highly water-scarce states in North to other highly water-scarce states in West and South. Such unsustainable flows are driven by a larger population and by arable land. In contrast, sustainable flows, i.e., from low to high water scarcity zones/states can help combat water scarcity.

This work showed that in states with chronic water scarcity, planning and implementation of sustainable agriculture are crucial for achieving water and food security. It also found that the pressure on the freshwater resources in water-parched states can be reduced by diversifying the production areas through the use of VW flows analysis to produce agro-climatically suitable food grains.

“A deeper policy engagement would be particularly relevant for the sustainable future of developing and emerging economies grappling with the challenges of water scarcity and fragmented environmental governance systems,” said Prof Barua.

The VW flow analysis can help in framing evidence-based water policies and in establishing the link between the hydrological-economic-institutional aspect of water scarcity.

The IIT Guwahati study is also linked to UN’s Sustainable Development Goal (SDG) 12 on ensuring sustainable production patterns and to SDG 6 that aims to increase water-use efficiency across all sectors to substantially reduce the number of people suffering from water scarcity by 2030.



Dr. Anamika Barua, Professor, Department of Humanities and Social Science, IIT Guwahati







Plantation drive on the occasion of World Environment Day



## COVID19 Vaccination Centre was inaugurated at IIT Guwahati campus

A COVID19 Vaccination Centre was inaugurated at IIT Guwahati campus by the Hon'ble Deputy Commissioner of Kamrup District. Inauguration of the centre not only will be of immense benefit to the residents of the campus, but all also the populace of the adjoining area. The institute is thankful to the DC, Kamrup, NHM Assam, CMO Assam for this initiative.





## Celebration of International Yoga Day at IIT Guwahati

IIT Guwahati celebrated the 7th international yoga day (IDY) on 21 June 2021. Due to the ongoing pandemic, this event was organized online using MS TEAMS. The objective of organizing the international yoga day was to highlight the importance and contribution of yoga in the wellbeing of one and all.

The program started with the welcome address by Prof. Dasu, Dean, Students Affairs. He welcomed the hon'ble Director of the Institute, Deans, Associate Deans, Faculty and Staff members, Students, and Yoga experts.

Prof. Sitharam, Director of the institute in his addressed emphasized the importance of the message of the Ministry of Ayush, "Be with Yoga, Be at Home!" to all participants. He highlighted the benefits of yoga, that can help everyone in this fight against this pandemic with stronger mind and body. He enlightened the participants with the efforts of the honorable prime minister of India, Shri. Narendra Modi-ji for observing the international yoga day in front of more than 180 countries. He encouraged everyone to start yoga at the early stage of life to get benefited from it. He highlighted various contributions of yoga in the mechanics of life that can help strengthen people's physical and mental health. He congratulated and thanked everyone on the 7th international yoga day and advised every to practice yoga. The common yoga protocol suggested by the handbook international yoga day, Ministry of Ayush was demonstrated by the yoga experts, Mr. Jitumoni Sarma and Mrs. Meena Goswami. They started with the prayer, followed by yogic postures and pranayama. The majority of yoga demonstrated by them are as follows.

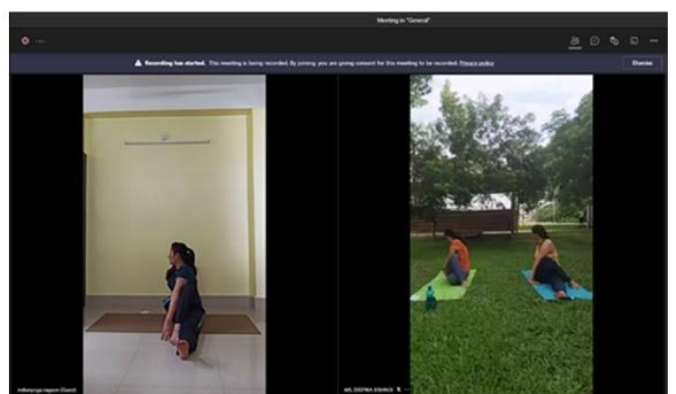
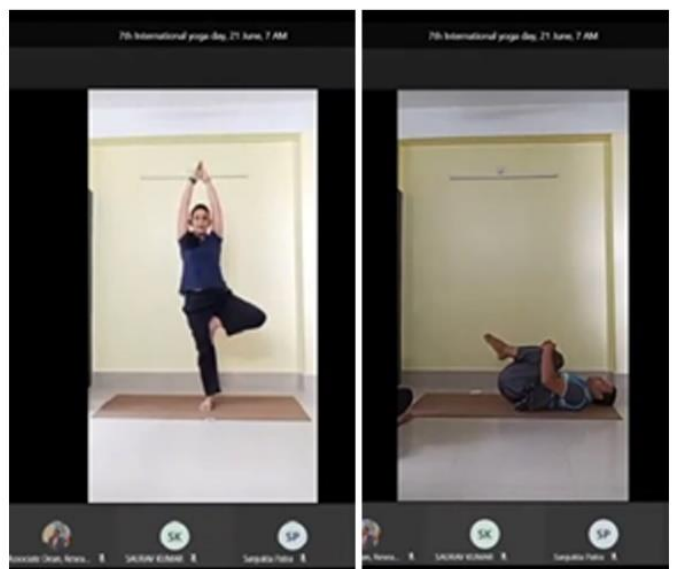
*yogic sukshma vyayama involving neck, shoulder, and knee bending exercises, padasana, vrikshasana, pada-hastasana, dandasana, bhadrasana, vajrasana, sasankasana, uttana mandukasana, vakrasana, bhujangasana, salabhasana, setu bandhasana, uttanpadasana, ardha halasana, pawanmuktasana, savasana, kapalbhati, anulom vilom, bhramarari pranayama*

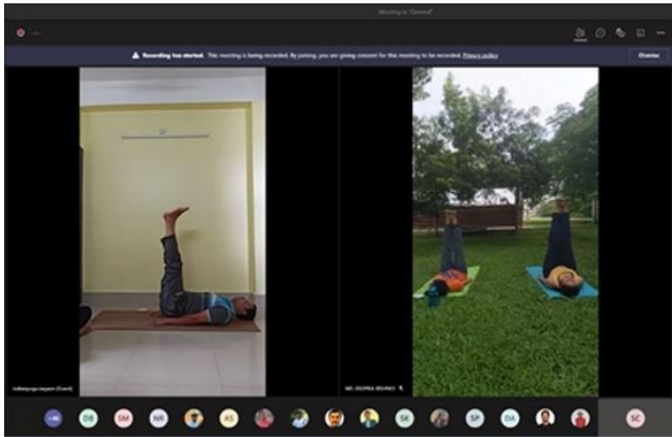
The experts demonstrated meditation practice to the participants. The demonstration is concluded with the prayer. During the demonstration, the experts explained the procedure and benefits of asanas.

The 7th International Yoga Day concluded with the vote of thanks presented by Prof. Sharma, Chairman, Sports Board. He thanked the Director, Deans, Associate Deans, Head of the Departments and Centers, Registrar and his team, participants, student volunteers, faculty and staff members of Gymkhana sports.



Prof Sitharam delivering the welcome address





Prof Sharma with the vote of thanks

## Awards & honours



Prof. Anamika Barua, Dept. of Humanities and Social Sciences joined the Editorial Board of PLOS Climate, a new Open Science journal to empower urgent action against climate change by making climate research from around the world available to all.







Signing of MoU between NESAC (North East Space Applications Centre) & IIT Guwahati



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