

UAE Backs Ambitious Fifth Cycle of Rain Enhancement Projects

The fifth cycle of grants for the United Arab Emirates Research Program for Rain Enhancement Science will be announced on the 23rd of January. This is part of an initiative set up by the UAE presidential office to encourage ambitious rain enhancement projects. Grants of up to \$1.5 million will be offered to successful proposals, hoping to aid water security worldwide.

What is the UAEREP?

The [UAEREP](#), otherwise known as the United Arab Emirates Research Program for Rain Enhancement Science, is a global research initiative in the field of rain enhancement. It was created in 2015 by the United Arab Emirates Ministry of Presidential Affairs.

There are a few key objectives for this program. The first is to advance technology, knowledge, and implementation of rain enhancement, as well as to encourage new investments in the research of this field. The second key goal is to increase rainfall and water security worldwide.

A team of researchers, scientists, and experts review many different proposals before deciding which will be offered money. Proposals are chosen based on a range of criteria including overall scientific merit, significance, innovation, approach, team, resources, budget, and more. The idea is to award grants to projects that have a good chance of enhancing the field.

What is rain enhancement?

Rain enhancement is an important science that has been around since the 1940s. It is especially important for countries where rainfall is sparse, such as the UAE.

Rain enhancement encompasses different technologies, including cloud seeding which is a type of weather modification that changes the amount or type of rain falling from clouds. Cloud seeding employs various methods, such as dispersing salts, electric charges or infrared laser pulses into clouds.

Cloud seeding in the UAE has become one of the nation's strategies to address water challenges. Because of the country's hot climate, water security is an important topic that must be addressed in the future. The UAE is one of the first countries in the world to use cloud seeding technology.

Who has previously won this grant?

Previous cycles have seen grants awarded to a number of different projects. The first cycle, announced in January 2016, awarded grants to projects that explored nanotechnology, cloud seed optimisation, and using innovative algorithms and sensors to identify clouds best suited for seeding.

Over the next few years, grants were awarded to numerous projects with a focus on innovative technologies and practical applications. During the fourth cycle of grants, Dr. Bradley Baker received a grant under his research proposal titled “Enhancing rainfall in the UAE via hygroscopic seeding with nano seeding material.”

This year marks the fifth cycle of the programme. It is anticipated that awards will be granted to innovative projects, aiming to improve rain enhancement methods and bolster water security in countries like the UAE.