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ARMENIAN
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ArAS Newsletter

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LOCAL NEWS

PhD Thesis Defense Held at Byurakan Astrophysical Observatory

The Byurakan Astrophysical Observatory (BAO) hosted another significant academic event as two young researchers successfully defended their PhD theses before the Observatory's professional council.

Anahit Samsonyan presented her dissertation titled "*Investigation of the Dusty Starburst Galaxies and Active Galactic Nuclei through the Infrared [CII] 158 μm Emission Line.*" Her research, guided by Dr. Ararat G. Yeghikyan (Doctor of Physical and Mathematical Sciences, NAS RA, BAO). She offers new insights into the role of infrared emissions in understanding galactic evolution.

Gurgen Paronyan defended his thesis on *"X-Ray Properties of Active Galactic Nuclei,"* under the supervision of Dr. Areg M. Mickaelian (Candidate of Phys.-Math. Sciences, NAS RA, BAO). His work delves into the high-energy phenomena occurring in active galactic nuclei, contributing valuable findings to the field of extragalactic astronomy.

Anahit Samsonyan & Gurgen Paronyan. BAO. 2025

These successful defenses reflect the ongoing commitment of the Byurakan Astrophysical Observatory to fostering scientific excellence and supporting the next generation of Armenian astronomers.

INTERNATIONAL NEWS

The 18th National Conference on Astronomy and Astrophysics of Iran

On February 5-7, the 18th National Conference on Astronomy and Astrophysics of Iran was held in Shiraz, Islamic Republic of Iran. The event was attended by Areg Mickaelian, founding president of the Armenian Astronomical Society (ArAS) and director of the Byurakan Astrophysical Observatory (BAO), along with Gayane Baleyan, head of BAO's public relations department.

During the conference, A. Mickaelian presented a talk on "The Study of Active Galaxies at Byurakan Astrophysical Observatory," while G. Baleyan introduced the public and educational programs of ArAS and BAO, as well as the activities of the South West and Central Asian Regional Office of Astronomy for Development (ROAD).

Notably, since 2015, BAO has served as the Southwest and Central Asian Regional Office of the International Astronomical Union (IAU ROAD), fostering astronomical cooperation and development in the region. The center includes five countries: Armenia, Georgia, Iran, Tajikistan, Kazakhstan, and Turkey.

As part of the conference, a Memorandum of Understanding (MoU) was signed between the Iranian and Armenian Astronomical Societies. This agreement marks an important step toward expanding international relations and strengthening collaboration in the field of astronomy.

International Day of Women and Girls in Science

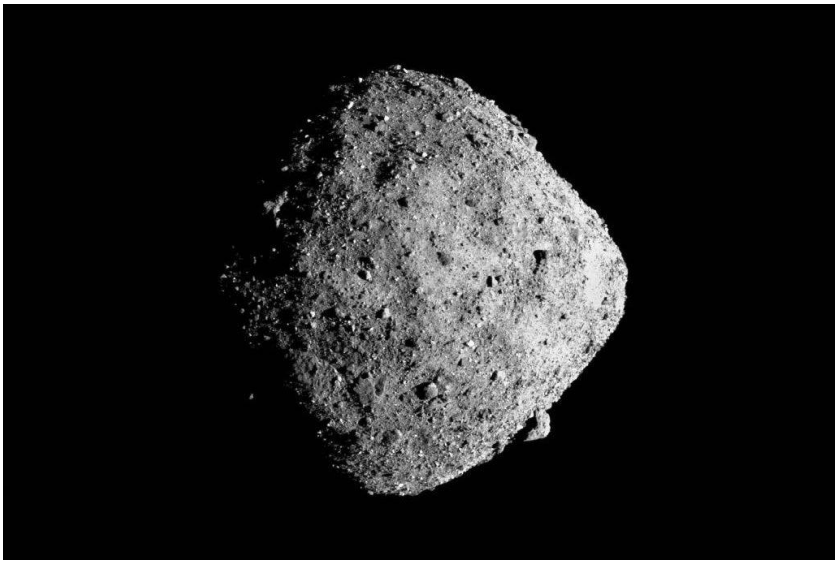
2025 marks a monumental milestone in the global movement for gender equality and women's empowerment: the 10th anniversary of the International Day of Women and Girls in Science (IDWGS). The anniversary is a reminder of the progress made and the ongoing work needed to ensure women and girls have equal opportunities to thrive in science.
Gender equality in science is not just a matter of fairness; it is essential for building a better and more innovative future for all.

Despite the strides made over the past decades, women and girls continue to face systemic barriers and biases that hinder their full participation in scientific careers. These challenges are especially prevalent in underrepresented fields, where cultural, social, and institutional obstacles persist. The path to closing the gender gap in science requires a multi-faceted approach.

OTHER NEWS

NASA Scientists Discover Life's Building Blocks in Asteroid Bennu Samples

In a groundbreaking announcement, NASA scientists revealed that samples collected from asteroid Bennu contain a rich array of amino acids and water-related minerals — offering tantalizing clues about the early chemistry that may have given rise to life on Earth.



We learn from the Astronomy magazine that the findings, detailed in two research papers published in *Nature*, were shared during a press conference held by NASA on January 29. The results stem from the OSIRIS-REx mission, which returned to Earth in 2023 carrying 121.6 grams (4.3 ounces) of dust and rock collected from Bennu in 2020.

Among the most significant discoveries: Bennu's samples contain 14 of the 20 amino acids that form biological proteins — key components for life as we know it. While these molecules are not themselves evidence of life, they serve as its foundational ingredients. Their presence lends strong support to the idea that asteroids like Bennu may have delivered life's precursors to a young Earth billions of years ago.

In addition to amino acids, scientists also identified clays and brines in the samples — indicators of prolonged interactions with water. These minerals suggest that water once flowed on or within Bennu, providing a crucial piece in the puzzle of how water and organic molecules coexisted and evolved in the early solar system.

"Asteroids provide a time capsule into our home planet's history, and Bennu's samples are pivotal in our understanding of what ingredients in our solar system existed before life started on Earth," said Nicky Fox, Associate Administrator of NASA's Science Mission Directorate.

The OSIRIS-REx mission, the first U.S. mission to retrieve an asteroid sample, marks a major milestone in planetary science. While the engineering feat of collecting and returning the sample was remarkable, the real scientific journey has just begun — and Bennu's secrets are already reshaping our understanding of the origins of life.

ArAS News *is the electronic newsletter of the Armenian Astronomical Society. It was distributed to all ArAS members from the beginning of 2002, 4 times a year, typically at the end of each trimester. In 2009-2014, 8 issues annually and since 2015, 12 issues annually have been released.*

ArASNews publishes information materials on ArAS, Byurakan Astrophysical Observatory and the Armenian astronomy in general, reports on ArAS Annual Meetings and participation of the Armenian astronomers in important international meetings, articles on occasion of anniversaries of famous Armenian astronomers and ArAS members, acceptance of new ArAS members, achievements of the Armenian astronomers, astronomical education in Armenia, Armenian archaeoastronomy, as well as science articles (reviews) on important studies.

So, if you want to share your studies with the scientific community, send us your articles to ***melin.asryan@gmail.com****. They will be reviewed for the publication in ArAS Newsletters next issues.*

ArAS Newsletter issues are available online.