

CURRICULUM VITAE

Professor, Dr. Elchin Khalilov



Academician, Full Professor, Doctor of Geological and Mineralogical Sciences

EXECUTIVE SUMMARY & CURRENT STANDING

- **National High-Level Talent (Category "B") of the People's Republic of China** – Recipient of the prestigious Ministry of Science and Technology "Torch Program" for High-Level Talent Introduction (2021).
- **Recipient of the National "Torch Program" Grant** – Awarded by the Ministry of Industry and Information Technology of the PRC (2025–2028; funding: 3 million RMB) for the flagship project: *"MAGVORTEX Water Activation: Fundamental Research on the Enhancement of Hybrid Purification and the Application of Biotechnology in Environmental Sciences."*
- **Laureate of the WestLake Friendship Award (2025)** – The highest governmental honor conferred by Zhejiang Province upon distinguished foreign scholars for outstanding scientific contributions.

ACADEMIC TITLES & DISTINCTIONS

- Academician (foreign member) the National Academy of Sciences of Tajikistan (Tajikistan, 2026);
- Academician, Asian Academy of Sciences (Hong Kong, China, 2025);
- Academician, Russian Engineering Academy (Russia, 2025);
- Academician, Russian Academy of Natural Sciences (Russia, 2008);
- Academician, International Academy of Sciences / International Council for Scientific Development (Austria, 2001);

PERSONAL DATA

Date and Place of Birth: April 26, 1959, Baku, Azerbaijan.

Born into a family of distinguished scientists; son of the renowned Azerbaijani geologist Professor, Dr. Nusrat Khalilov, Honored Geologist of Azerbaijan, and recipient of the Presidential Scholarship of the Republic of Azerbaijan.

EDUCATION

- **1981:** Graduated from the Azerbaijan Institute of Oil and Chemistry named after M. Azizbekov, specializing in Geophysics.
 - **1985:** Defended Ph.D. dissertation in Geotectonics at the Institute of Geology, National Academy of Sciences of Azerbaijan.
 - **1990:** Awarded the degree of Doctor of Geological and Mineralogical Sciences ([D.Sc.](#)) by Lomonosov Moscow State University, following the defense of a doctoral thesis on Earthquake and Volcanic Eruption Prediction.
 - **2011:** Conferred the academic title of **Full Professor** by the Supreme Attestation Commission under the President of the Republic of Azerbaijan.
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PROFESSIONAL EXPERIENCE & LEADERSHIP

- **1981–1989:** Southern Branch, Institute of Geophysics, Ministry of Geology of the USSR. Advanced from Engineer to Head of the Laboratory of Modern Geodynamics.
 - **1989–1993:** Elected President of the International Scientific and Technical Complex (ISTC) "Intergeo-Tethys."
 - **1993–2014:** Appointed by Presidential Decree of the Republic of Azerbaijan as **Director General** of the State Scientific-Research Center "GEOS".
 - **2002–2021:** Director, Institute of Earthquake Forecasting and Studieng (part-time).
 - **2006–2010:** Chairman of the Expert Council on Earth Sciences, Supreme Attestation Commission under the President of Azerbaijan (the highest state body conferring academic degrees and titles).
 - **2014–2021:** President, ISTC "Intergeo-Tethys" (Baku, Azerbaijan).
 - **2021:** Selected as a winner of the Ministry of Science and Technology's "Torch Program" for High-Level Talent Introduction, securing the esteemed **National High-Level Talent (Category "B")** status, the highest designation for foreign experts in China.
 - **Since September 2022:** Distinguished Professor at Wenzhou University (China). Concurrently leads multiple major research initiatives and serves as Head of the "ZEOMAG" Research Laboratory.
 - **Since 2024:** Appointed as **Advisor to the President of Wenzhou University** for International Scientific Cooperation.
 - **November 22, 2025:** Elected **President** of the Asian Academy of Sciences (Hong Kong, PRC), an institution uniting over 200 prominent scientists from 25 Asian nations, including Nobel Laureate in Physics (2015) Professor Takaaki Kajita (Japan).
 - **2025:** Recipient of the **WestLake Friendship Award** (Zhejiang Province, PRC), recognizing exceptional scientific achievements during his tenure at Wenzhou University.
 - **2025: Recipient of the National "Torch Program" Grant** – Awarded by the Ministry of Industry and Information Technology of the PRC (2025–2028; funding: 3 million RMB) for the flagship project: *"MAGVORTEX Water Activation: Fundamental Research on the Enhancement of Hybrid Purification and the Application of Biotechnology in Environmental Sciences."*
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SCIENTIFIC AND PUBLIC SERVICE

- **1986–1989:** Deputy Chairman of the Council of Young Scientists and Specialists, Central Committee of the Communist Youth Union of Azerbaijan; Member of the Council of Young Scientists of the USSR.
 - **1984:** Recipient of the Lenin Komsomol Prize of Azerbaijan in Science and Technology (the highest accolade for young scientists).
 - **1988–1999:** Deputy Chairman of the Union of Inventors of Azerbaijan.
 - **1991–1995:** Elected Deputy of the Baku City Council of People's Deputies and Chairman of the Standing Deputy Commission on Ecology of Baku.
 - **1999–2014:** Chairman of the Permanent Commission on Extreme Phenomena, Presidium of the National Academy of Sciences of Azerbaijan.
 - **2006–2010:** Chairman of the Expert Council on Earth Sciences, Supreme Attestation Commission under the President of Azerbaijan.
 - **2007:** Co-Chairman of the International Symposium "*Natural Cataclysms and Global Problems of Modern Civilization*" (Baku, September 24–27, 2007), with participants from 30 countries.
 - **2011:** Chairman of the International Congress – World Forum "*Natural Cataclysms and Global Problems of Modern Civilization*" (Istanbul, Turkey, September 21–23, 2011), attended by scientists from 40 countries. Co-Chairmen included Academician Nikolay Laverov (Vice-President, Russian Academy of Sciences), Academician Atta-ur-Rahman (President, Pakistan Academy of Sciences), and Academician Walter Kofler (President, International Academy of Sciences "Health and Ecology," Austria).
 - **2024:** Chairman of the International Forum "*COP-29 of the United Nations: Strengthening the Role of Scientists from All Over the World in Solving Pressing Problems of Modern Civilization. Environmental Protection and the Green Agenda.*"
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SCIENTIFIC ACHIEVEMENTS & INTELLECTUAL PROPERTY

Professor Khalilov is the author of **over 300 peer-reviewed scientific publications**, including 11 monographs and books.

He holds the distinction of being the author of the **first officially registered scientific discovery in the history of Azerbaijan**. His inventive portfolio comprises **106 patents**, with over 40% classified as international (including PCT, EUROPATENT, Eurasian, and national patents of China, Indonesia, and Pakistan).

KEY RESEARCH FOCUS AREAS FROM 2022

- Development of cutting-edge **MagVortex** technology for the environmental remediation of water bodies, specifically targeting the elimination of toxic cyanobacteria.
- **MAGVORTEX Water Activation:** Fundamental research into hybrid purification enhancements and the application of biotechnology for environmental sustainability.
- Enhancement of crop yields and optimization of irrigation water usage through the controlled modulation of water biological activity via complex-structured magnetic fields.

- Novel methodologies for the protection of aquatic ecosystems and biodiversity.
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MAJOR AWARDS AND HONORS

- **(1984)** Lenin Komsomol Prize of Azerbaijan in Science and Technology.
 - **(2002)** Gold Badge named after Nobel Laureate Ivan Pavlov – Highest Award of the International Academy of Sciences / International Council for Scientific Development (Austria).
 - **(2003)** Silver Medal of the Russian Academy of Natural Sciences "To the Author of a Scientific Discovery," named after Nobel Laureate Pyotr Kapitsa (Moscow, Russia).
 - **(2007)** Medal of the International Academy of Ecology and Environmental Sciences (Moscow, Russia).
 - **(2008)** Medal of the Pakistan Academy of Sciences.
 - **(2019)** Gold Medal "Health and Ecology" of the International Academy of Sciences (Austria).
 - **(2021) National High-Level Talent (Category "B")** – People's Republic of China.
 - **(2023)** Johann Wolfgang von Goethe Medal of the European Academy of Natural Sciences (Germany) for contributions to global science.
 - **(2025)** Recipient of the **National "Torch Program" Grant** (Ministry of Industry and Information Technology, PRC, 2026–2028, 3 million RMB) for the project: *"MAGVORTEX Water Activation: Fundamental Research on the Enhancement of Hybrid Purification and the Application of Biotechnology in Environmental Sciences."*
 - **(2025) WestLake Friendship Award** – The highest governmental honor of Zhejiang Province (PRC) for foreign scientists.
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