

## **About the Khwarizmi International Award**

Khwarizmi International Award (KIA) has been founded in 1987 in memory of Muhammad Musa Khwarizmi the Iranian Moslem mathematician and astronomer after the victory of the Islamic Revolution of Iran. This scientific competition is recognized as the most prestigious annual award that has been held successfully for four decades in the Islamic Republic of Iran.

KIA is organized annually by the Iranian research Organization for Science and Technology (IROST) to acknowledge the efforts made by researchers, innovators and inventors from across the globe and to appreciate their outstanding research work and contributions to different fields of science and technology. The laureates of the KIA are selected from among the internationally distinguished scientists and researchers contributing to the advancement of science and technology.

In the last 36 years, many organizations, including private and public, scientific and economic, and national and international joined the long list of the sponsors of the KIA which by itself serves as another proof of the competitiveness and success of these awards.

## **About Muhammad Musa Khwarizmi**

Muhammad Musa Khwarizmi was a Persian-Muslim mathematician, astronomer, astrologer, and geographer. He was born in Persia of that time and died around 850. He studied and wrote many books and treatises. His Algebra was the first book on the systematic solution of linear and quadratic equations. Consequently, Khwarizmi is to be considered to be the father of algebra. His contributions not only made a great impact on mathematics but on language as well. The word algebra is derived from al-Jabr, one of the two operations used to solve quadratic equations, as described in his book.

## Fields of Participation

- **Advanced Industries and Intelligent Technology Management** (industry 4.0, AI in industrial designs, electric cars, hydrogen production and renewable energies, etc.)
- **Aerospace** (telecommunication satellites, remote sensing, etc.)
- **Animal Sciences and Veterinary Medicine**
- **Basic Medical Sciences**
- **Basic Sciences**
- **Biotechnology** (gene technology, neural technologies, cell and tissue engineering, etc.)
- **Chemical Technology**
- **Civil Eng., Architecture and Urban Development** (design and production of sustainable materials, earthquake-resistant structures, smart city, etc.)
- **Computational Intelligence and Quantum Technology** (AI, computational neuroscience, cognitive science, etc.)
- **Electrical and Computer Eng.** (electronics, telecommunications, medical engineering, smart systems, nanorobots, metaverse, etc.)
- **Food Security** (waste management, smart manufacturing processes, etc.)
- **Green Technologies** (green chemistry, rare elements and strategic metals, renewable energies, sensors, etc.)
- **Industrial and Technology Management**
- **Information Technology** (cybersecurity, virtual reality, cloud computing, IoT, smart medicine, bioinformatics, etc.)
- **Materials Eng., Metallurgy and New Energies** (batteries, graphene, implants, sensors, etc.)
- **Mechanical Eng.** (mechatronics, robots, energy management and efficiency, etc.)
- **Medical Sciences**
- **Nanotechnologies**
- **Water Crisis, Agriculture and Natural Resources** (smart farming, technologies solving water crisis land use planning, etc.)