

ANATOLIA "THE LAND WHERE SCIENCE WAS BORN AND FLOURISHED"



FEZA GÜRSEY

Feza Gürsey was born on April 7, 1921, in Istanbul, to Reşit Süreyya Gürsey, a military physician, and Remziye Hisar, a chemist and a pioneering female Turkish scientist. He graduated from Galatasaray High School in 1940, and received his degree in Mathematics - Physics from Istanbul University in 1944.

Through a scholarship of the Turkish Ministry of Education he received while he was an assistant in Istanbul University, he pursued a doctorate degree at the Imperial College London in the United Kingdom. He completed his work on Application of Quaternions to Quantum Field Theory in 1950. After spending the period from 1950 to 1951 in postdoctoral research at Cambridge University, he worked as an assistant at Istanbul University, where he married Suha Pamir, also a physics assistant, in 1952, and in 1953 he acquired the title of associate professor.

During 1957-1961 he worked at Brookhaven National Laboratory, Institute for Advanced Study in Princeton, New Jersey, and Columbia University. In 1960s, he worked on the Nonlinear Chiral Lagrangian, and produced results of relevance to Quantum Chromodynamics.

Returning to Turkey in 1961, he accepted the title of professor from Middle East Technical University (METU) and took part in the establishment of METU Department of Theoretical Physics. Continuing his work as a lecturer at METU until 1974, he formed a research group.

Being offered a position at Yale University in 1965, he started to work in both Yale University and METU, until 1974, when he decided to give up his position in METU and settle in the United States to continue with Yale. During these years, he took part in the formulation of E(6) grand unified theories.[3]

Gürsey died in 1992, in New Haven, Connecticut. He is survived by his son, Yusuf Gürsey. The Feza Gürsey Institute, founded by the joint effort of Boğaziçi University and TÜBİTAK in Turkey, is named in his honor.

AHMET NİHAT BERKER

Ahmet Nihat Berker (born 20 September 1949 in Istanbul), is a Turkish scientist, theoretical chemist, physicist and emeritus professor of physics at MIT. Currently, he is the acting Dean of Engineering and Natural Sciences in Kadir Has University, Turkey. He is the son of a notable scientist and engineer Ratip Berker, who was deceased on October 17, 1997. His wife, Bediâ Erim Berker is a professor of chemistry at Istanbul Technical University, and one of his sons, Selim Berker is a professor of epistemology in the department of philosophy at Harvard University His younger son, Ratip Emin Berker, is a student at Robert College in Istanbul.

Acedemic life:

After graduating from Robert College at first place in 1967, Nihat Berker received B.S. degrees in physics -Turkey.

Research areas: and chemistry from MIT in 1971. He received his M.S. and Ph.D. degrees in physics from University of Illinois at Urbana-Champaign in 1972 and 1977, respectively. He was an assistant professor during 1979-82, associate professor during 1982-88, and professor of theoretical physics during 1988-04 at MIT. From 1999 to 2004, he served as a professor and dean of the School of Sciences and Letters at The Istanbul Technical University. After losing the president (rector) elections in ITU, he left the Technical University of Istanbul for a professor position at Koç University. He became emeritus professor of Physics at MIT in 2004. He was an adjunct professor of Boğaziçi Üniversitesi in Bebek-Istanbul between 1996 and 2004, as well. During 2005-2009, he served as a professor of physics at Koç University, Rumelifeneri, Sarıyer, Istanbul. From 2009 until his resignation in September 11, 2016, he was the president of Sabancı University in Tuzla, Istanbul Nihat Berker is best known for his research in statistical mechanics, especially on phase transitions applying renormalization group theory, with applications to surface physics and materials with defects.

CAHİT ARF

One of the healthiest evaluations of mathematical works is to see if they are permanent. The fact that Arf's math in 1940 is still being used today shows that his works have passed the test of permanence ...

Cahit Arf was born in Thessaloniki which, in 1910, was a part of the Ottoman Empire. However, the Balkan War was fought by Serbia, Bulgaria, Greece, and Montenegro against the Ottoman Empire when Arf was two years old. Montenegro declared war on Turkey on 8 October 1912, and the other members of the Balkan league declared war on Turkey 10 days later. The Balkan allies were soon victorious. The Bulgarians defeated the main Ottoman forces, advancing towards Istanbul (then called Constantinople), and the Greeks occupied Thessaloniki. With the outbreak of fighting, Arf's family escaped to Istanbul.

Arf won a scholarship to continue his education in Paris and he returned to France, graduating from the École Normale Supérieure after spending two years there.

Returning to Istanbul to be a school teacher rather than to complete his doctorate, Arf taught at the Galatasaray High School during 1932

In 1937 he went to the University of Göttingen to study for his doctorate under the supervision of Helmut Hasse. He completed his doctoral studies in 1938 obtaining, among other results, the theorem now known as the Hasse-Arf theorem. He had studied at Göttingen through the very difficult period leading up to World War II but Hasse asked him to remain there for another year to continue his work and during this period Arf's work produced what are today called the Arf invariants. Arf played a prominent role in establishing TÜBİTAK in 1971, the Scientific and Technical Research Council of Turkey. He served as its president for many years from the time that it was established. From 1985 until 1989 he was the president of the Turkish Mathematical Society.

Arf died after a heart attack and was buried in Istanbul, following a ceremony at Istanbul University.

AZİZ SANCAR

Born: 8 September 1946, Savur, Turkey

Affiliation at the time of the award: University of North Carolina, Chapel Hill, NC, USA
Prize motivation: "for mechanistic studies of DNA repair"

Life

Aziz Sancar was born in Savur in southeast Turkey in a lower middle class family. His parents had no education but considered education important for their children. Sancar studied at Istanbul University and at the University of Texas, Dallas, where he received his doctorate in 1977. He is a professor at the University of North Carolina School of Medicine, Chapel Hill. Aziz Sancar is married to Gwen Boles Sancar who also is a professor in biochemistry and biophysics.

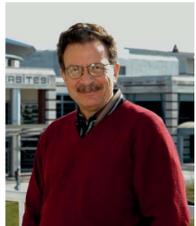
Work

Living cells have DNA molecules that carry an organism's genes. For the organism to live and develop, its DNA cannot change. DNA molecules are not completely stable, and they can be damaged. In 1983, through studies of bacteria, Aziz Sancar showed how certain protein molecules, certain repair enzymes, repair DNA damaged by ultraviolet (UV) light. These discoveries have increased our understanding of how the living cell works, the causes of cancer and aging processes.

20. CENTURY ANATOLIAN SCIENTISTS



FEZA GÜRSEY
Born: 7 Nisan 1921
Died: 13 Nisan 1992



AHMET NİHAT BERKER
Born: 20 Eylül 1949
Died: Lives



CAHİT ARF
Born: 11 Ekim 1910
Died: 26 Aralık 1997



AZİZ SANCAR
Born: 8 Eylül 1946
Died: Lives

KORKMAZ YIGİT ANATOLIAN HIGH SCHOOL
Physics Teacher: **HATİCE KIRMACI**