Kai Siegbahn

Siegbahn was born in Lund, Sweden, son of Manne Siegbahn the 1924 physics Nobel Prize winner. Siegbahn earned his doctorate at the Stockholm University in 1944. He was professor at the Royal Institute of Technology 1951–1954, and then professor of experimental physics at Uppsala University 1954–1984, which was the same chair his father had held.[2] He shared the 1981 Nobel Prize in Physics with Nicolaas Bloembergen and Arthur Schawlow. Siegbahn received half the prize "for his contribution to the development of high-resolution electron spectroscopy" while Bloembergen and Schawlow received one quarter each "for their contribution to the development of laser spectroscopy".[3]

Siegbahn referred to his technique as Electron Spectroscopy for Chemical Analysis (ESCA); it is now usually known as X-ray photoelectron spectroscopy (XPS). In 1967 he published a book, ESCA; atomic, molecular and solid state structure studied by means of electron spectroscopy.[4]

He was a member of several academies and societies, including the Royal Swedish Academy of Sciences, and was president of the International Union of Pure and Applied Physics from 1981 to 1984.[5]

Siegbahn married Anna Brita Rhedin in 1944. The couple had three sons (two physicists and a biochemist).[5][6]

Siegbahn died on 20 July 2007 at the age of 89.[1] At the time of his death he was still active as a scientist at the Ångström Laboratory at Uppsala University.

Björkén Prize

The Björkén Prize (Swedish: Björkénska priset) is a scientific award given by Uppsala University. It is awarded for outstanding research in science and the theoretical branches of medicine. The prize was established in 1893 from a donation given by university lecturer John Björkén [sv] (1833–1893). Björkén was a physician and medical assistant professor in surgery and obstetrics at Uppsala. The prize was first awarded in 1902 on the day of his death.[1][2][3]

The Björkén Prize is alternately awarded for achievement in four different fields:

- Botany, zoology, and landscape planning
- Chemistry, mineralogy, metallurgy, and geology
- Physics, mechanics, and engineering science
- Theoretical disciplines of medical sciences

Tycho Tullberg

Tycho Fredrik Hugo Tullberg (9 October 1842 – 24 April 1920) was a Swedish zoologist, artist and sculptor. He was a great-grandson of Carl Linnaeus and conducted studies on a wide range of animals including springtails, rodents, molluscs and whales. Access to Norwegian whaling stations allowed him to examine the development of the baleen of blue whales in specimens that were killed. The woodpecker Campethera tullbergi is named after him.

Tullberg was born in Uppsala where his father Otto Frederik Tullberg was a musician and Hebraist. His mother Sofia Lovisa Christina Ridderbjelke was the granddaughter of Carl Linnaeus. After schooling at the cathedral school he went to the University of Uppsala in 1863. He also worked as a drawing teacher at the Folkskollärarseminariet. He received a doctorate in 1869 for his studies on the Scandinavian Collembola, particularly the genus Podura. He became an associate professor of zoology in 1871. In 1875 he described the mollusc Neomenia carinata. In 1877 he studied the foot of the mollusc Mytilus edulis for which he received the Flormanska prize. Tullberg suggested that the Proboscoidea evolved in Africa. He worked in collaboration with the Vadsø whaling station where he was able to examine the anatomy of whales that had been brought in by whalers. His study of the growth of the baleen in blue whales has been considered as unique. He also studied the evolution of rodents.[1] He became a professor in 1882 and retired in 1907.[2][3][4]

As a descendant of Linnaeus he took a great deal of interest in Linnaeus and produced a collection of all the portraits of him in 1907. He was also involved in establishing the Swedish Linnean Society in 1917 serving as its chairperson until his death.[3][5]

Tullberg produced numerous animal and landscape paintings and wood carvings of animals. In 1860 he received an award for a lion carved in wood. A bust of Linnaeus that he made was exhibited in 1916. His drawings and etchings are preserved at Uppsala University.[3]

Tullberg married Fanny Hägglöf in 1878. He is buried in Uppsala Old Cemetery.

Subrahmanyan Chandrasekhar

Subrahmanyan Chandrasekhar (/ˌtʃəndrəˈʃeɪkər/ CHƏN-drə-SHAY-kər;[4] Tamil: சுப்பிரமணியன் சந்திரசேகர், romanized: Cuppiramaṇiyaṉ Cantiracēkar; 19 October 1910 – 21 August 1995)[5] was an Indian-American theoretical physicist who made significant contributions to the scientific knowledge about the structure of stars, stellar evolution and black holes. He also devoted some of his prime years to fluid dynamics, especially stability and turbulence, and made important contributions. He was awarded the 1983 Nobel Prize in Physics along with William A. Fowler for theoretical studies of the physical processes of importance to the structure and evolution of the stars. His mathematical treatment of stellar evolution yielded many of the current theoretical models of the later evolutionary stages of massive stars and black holes.[6][7] Many concepts, institutions and inventions, including the Chandrasekhar limit and the Chandra X-Ray Observatory, are named after him.[8]

Born in the late British Raj, Chandrasekhar worked on a wide variety of problems in physics during his lifetime, contributing to the contemporary understanding of stellar structure, white dwarfs, stellar dynamics, stochastic process, radiative transfer, the quantum theory of the hydrogen anion, hydrodynamic and hydromagnetic stability, turbulence, equilibrium and the stability of ellipsoidal figures of equilibrium, general relativity, mathematical theory of black holes and theory of colliding gravitational waves.[9] At the University of Cambridge, he developed a theoretical model explaining the structure of white dwarf stars that took into account the relativistic variation of mass with the velocities of electrons that comprise their degenerate matter. He showed that the mass of a white dwarf could not exceed 1.44 times that of the Sun – the Chandrasekhar limit. Chandrasekhar revised the models of stellar dynamics first outlined by Jan Oort and others by considering the effects of fluctuating gravitational fields within the Milky Way on stars rotating about the galactic centre. His solution to this complex dynamical problem involved a set of twenty partial differential equations, describing a new quantity he termed "dynamical friction", which has the dual effects of decelerating the star and helping to stabilize clusters of stars. Chandrasekhar extended this analysis to the interstellar medium, showing that clouds of galactic gas and dust are distributed very unevenly.

Chandrasekhar studied at Presidency College, Madras (now Chennai) and the University of Cambridge. A long-time professor at the University of Chicago, he did some of his studies at the Yerkes Observatory, and served as editor of The Astrophysical Journal from 1952 to 1971. He was on the faculty at Chicago from 1937 until his death in 1995 at the age of 84, and was the Morton D. Hull Distinguished Service Professor of Theoretical Astrophysics.

British Raj

The British Raj (/rɑːdʒ/ RAHJ; from Hindustani rāj, 'reign', 'rule' or 'government')[11] was the rule of the British Crown on the Indian subcontinent,[12] lasting from 1858 to 1947.[13] It is also called Crown rule in India,[14] or direct rule in India.[15] The region under British control was commonly called India in contemporaneous usage and included areas directly administered by the United Kingdom, which were collectively called British India, and areas ruled by indigenous rulers, but under British paramountcy, called the princely states. The region was sometimes called the Indian Empire, though not officially.[16] As India, it was a founding member of the League of Nations and a founding member of the United Nations in San Francisco in 1945.[17] India was a participating state in the Summer Olympics in 1900, 1920, 1928, 1932, and 1936.

This system of governance was instituted on 28 June 1858, when, after the Indian Rebellion of 1857, the rule of the East India Company was transferred to the Crown in the person of Queen Victoria[18] (who, in 1876, was proclaimed Empress of India). It lasted until 1947 when the British Raj was partitioned into two sovereign dominion states: the Union of India (later the Republic of India) and Dominion of Pakistan (later the Islamic Republic of Pakistan and People's Republic of Bangladesh in the 1971 Proclamation of Bangladeshi Independence). At the inception of the Raj in 1858, Lower Burma was already a part of British India; Upper Burma was added in 1886, and the resulting union, Burma, was administered as an autonomous province until 1937, when it became a separate British colony, gaining its independence in 1948. It was renamed Myanmar in 1989. The Chief Commissioner's Province of Aden was also part of British India at the inception of the British Raj and became a separate colony known as Aden Colony in 1937 as well.

Simon van der Meer

Simon van der Meer (24 November 1925 – 4 March 2011) was a Dutch particle accelerator physicist who shared the Nobel Prize in Physics in 1984 with Carlo Rubbia for contributions to the CERN project which led to the discovery of the W and Z particles, the two fundamental communicators of the weak interaction.[1][2]

Biography

One of four children, Simon van der Meer was born and grew up in The Hague, the Netherlands, in a family of teachers.[3] He was educated at the city's gymnasium, graduating in 1943 during the German occupation of the Netherlands. He studied Technical Physics at the Delft University of Technology, and received an engineer's degree in 1952. After working for Philips Research in Eindhoven on high-voltage equipment for electron microscopy for a few years, he joined CERN in 1956 where he stayed until his retirement in 1990.[4][5][6]

Van der Meer was a relative of Nobel Prize winner Tjalling Koopmans – they were first cousins once removed.[7][8] In the mid-1960s, Van der Meer married Catharina M. Koopman; they had a daughter and a son.

Van der Meer invented the technique of stochastic cooling of particle beams.[14] His technique was used to accumulate intense beams of antiprotons for head-on collision with counter-rotating proton beams at 540 GeV centre-of-mass energy or 270 GeV per beam in the Super Proton Synchrotron at CERN. Such collisions produced W and Z bosons which could be detected for the first time in 1983 by the UA1 experiment, led by Carlo Rubbia. The W and Z bosons had been theoretically predicted some years earlier, and their experimental discovery was considered a significant success for CERN. Van der Meer and Rubbia shared the 1984 Nobel Prize for their decisive contributions to the project.

Van der Meer and Ernest Lawrence are the only two accelerator physicists who have won the Nobel prize.[16]

Apart from his Nobel Prize, Van der Meer also became a member of the Royal Netherlands Academy of Arts and Sciences in 1984.[17]

Hearst Tower (Manhattan)

The **Hearst Tower** is a skyscraper at the southwest corner of 57th Street and Eighth Avenue, near Columbus Circle, in the Midtown Manhattan neighborhood of New York City, New York, U.S. It is the world headquarters of media conglomerate Hearst Communications, housing many of the firm's publications and communications companies. The Hearst Tower consists of two sections, with a total height of 597 feet (182 m) and 46 stories. The six lowest stories form the **Hearst Magazine Building** (also known as the **International Magazine Building**), designed by Joseph Urban and George B. Post & Sons, which was completed in 1928. Above it is the Hearst Tower addition, designed by Norman Foster and finished in 2006.

The building's main entrance is on Eighth Avenue. The original structure is clad with stone and contains six pylons with sculptural groups. The tower section above has a glass-and-metal facade arranged as a diagrid, or diagonal grid, which doubles as its structural system. The original office space in the Hearst Magazine Building was replaced with an atrium during the Hearst Tower's construction. The tower is certified as a green building as part of the Leadership in Energy and Environmental Design (LEED) program.

The Hearst Magazine Building's developer William Randolph Hearst acquired the site for a theater in the mid-1920s, in the belief that the area would become the city's next large entertainment district, but changed his plans to construct a magazine headquarters there. The original building was developed as the base for a larger tower, which was postponed because of the Great Depression. A subsequent expansion proposal during the 1940s also failed. The New York City Landmarks Preservation Commission designated the facade of the original building as a city landmark in 1988. After Hearst Communications considered expanding the structure again during the 1980s, the tower stories were developed in the first decade of the 21st century.

Hearst Tower

Hearst Tower revives a dream from the 1920s, when publishing magnate William Randolph Hearst envisaged Columbus Circle as a new media quarter in Manhattan. Hearst commissioned a six-storey Art Deco block on Eighth Avenue, anticipating that it would eventually form the base for a tower, though no such scheme was ever advanced. Echoing a retrofit approach developed in the Reichstag and the Great Court at the British Museum, the challenge in designing such a tower at seventy years remove was to establish a creative dialogue between old and new.

The new tower rises above the old building to a height of forty-four-storeys, linked on the outside by a skirt of glazing that encourages an impression of the tower floating weightlessly above the base. At the base of the tower, the main spatial event is a lobby that occupies the entire floor plate of the old building and rises up through six floors. Like a bustling town square, this dramatic space provides access to all parts of the building. It incorporates the main elevator lobby, the Hearst staff cafeteria and auditorium, and mezzanine levels for meetings and special functions. Structurally, the tower has a triangulated ‘diagrid’ form – a highly efficient solution that uses 20 per cent less steel than a conventionally framed structure. With the corners cut back between the diagonals, it creates a distinctive facetted silhouette on the Manhattan skyline.

The building is also significant in environmental terms. It was built using 85 per cent recycled steel, its heating and air-conditioning equipment utilises outside air for cooling and ventilation for nine months of the year, and it consumes 25 per cent less energy than an equivalent office building that complies minimally with the respective state and city codes. As a result, it was the first office building in Manhattan to achieve a gold rating under the US Green Building Council's Leadership in Energy and Environmental Design (LEED) programme in 2006. Since earning that prestigious honor, the building also received LEED Platinum certification in 2012 for the operations and maintenance of its existing building. As a company, Hearst places a high value on the quality of the working environment - something it believes will become increasingly important to its staff in the future - and it is hoped that Hearst's experience may herald the construction of more environmentally sensitive buildings in the city.

the hearst tower

Built in 1928 by William Randolph Hearst, the Hearst Building is a distinguished Landmark building located on the west side of Manhattan.In 2003, architect Norman Foster was hired to construct a 46 story tower on top of the original building which would headquarter all of the Hearst Corporation's numerous publications and communications companies. The bottom portion of the building, originally built as the base of a skyscraper postponed by the great depression, is a NYC Landmark, and was going to be preserved and restored as part of the tower's construction.

This was the first skyscraper construction project to break ground following the events of 9/11 and so special considerations were being taken to accommodate blast resiliency measures. The Hearst Tower project was also the first true "green" skyscraper built in Manhattan, designation that demanded a high level of forethought as to how to improve the historic façade's energy efficiency.

Our challenge was to design a window to replace the existing steel double hungs in the landmarked portion of the building that meet the need for blast resiliency and energy efficiency while maintaining the original landmark profiles.

The resulting design expands on our Tilt and Turn series windows to incorporate a heavier sash and frame to support the weight of a1 ¼"laminated glazing with Starfire heat strengthened glass for the interior lite. This glass package is meets the blast resistance requirement for the project without sacrificing performance or clarity and despite their weight every sash is operable with an easy turn of the handle and maintains the narrow landmark sightlines of the original steel windows.

This was one of the first projects Skyline was involved with that had a blast requirement specified by the project architect. The Landmark portion of the building now has clean modern windows to match the steel and glass tower above that meet or exceed all criteria set forth by the project team.

Norman Foster’s Hearst Tower, NY- One of The Greenest Skyscrapers!

A building whose cleaning mechanism costs $3 million, can be green in many ways. A testimony to this is the Hearst Tower, a massive 46 story building with an unusual combination of stone cast base building, 6 stories high, and a 40-story high glass and steel framed diagrid giant on top. The building was designed by Sir Norman Foster and constructed by Turner constructions for $500 million. The original base of the tower designed by Joseph Urban and George B’s post and sons has been preserved as a landmark and the new tower added on top has been built 80 years after it was put off due to the great depression. The building houses all the offices of Hearst Corporation like cosmopolitan, Marie Claire, Harper’s Bazaar, Esquire, etc. making it the world headquarters of the conglomerate.

Apart from the jagged glass facade that makes it looks space-aged and its renowned architect panel, the building is said to be one of the greenest skyscrapers in the world. Its integration of user-friendly design and low energy consumption rate is so seamless, that it makes the building’s design a success both economically and statistically.

To start with, the building’s exoskeleton, the steel frame is 85% recycled material and the building as a whole uses 26% less energy than the minimum standards for New York. The building uses radiant cooling systems which uses polyethylene pipes running beneath the floors that use recycled rainwater collected from the roof that is sent to the basement and is also used to water the plants and the staggering water sculpture in the atrium called the ‘Icefall’ with a backdrop of ‘Riverline’s’, a 21m fresco painting by Richard Long. The water sculpture is another means to cool the temperature in and around the atrium creating a microclimate and helping in cutting down on the mechanical cooling systems. The fact that the building is LEED-certified can be proven by another design aspect in the atrium, the heat conductive flooring material and the open plan of the atrium that lets in enough light during the day, cutting off the requirement of any mechanical means and as night falls the light sensors on the ceiling activates the mechanical ones appropriately.

240 Central Park South

240 Central Park South is on the southeastern side of Columbus Circle in the Midtown Manhattan neighborhood of New York City.[4][5] It has lot dimensions of 189 feet (58 m) on Central Park South (59th Street) to the north; 215 feet (66 m) on Broadway to the west; and 145 feet (44 m) on 58th Street to the south.[5][6][7][a] The land lot covers 36,475 square feet (3,388.6 m^2).[8] Gainsborough Studios and 220 Central Park South are to the east; Central Park is across Central Park South; 2 Columbus Circle, Deutsche Bank Center, and Trump International Hotel and Tower are across Columbus Circle; and Central Park Tower and 1790 Broadway are across 58th Street.[4] Entrances to the New York City Subway's 59th Street–Columbus Circle station, served by the 1, A, B, C, and D trains, are directly outside the building.[9]

In the late 19th and early 20th centuries, Central Park South was developed as Manhattan's "Gold Coast", with many prestigious hotels and apartment buildings being erected on its route.[10][11] The site of 240 Central Park South was previously owned by George Ehret, a brewer who had become one of New York City's largest real estate owners by the 1920s, behind only the Astor family. Ehret combined seventeen lots on the site between 1881 and 1908.[12][13] He had intended to build a "roadhouse or hotel" on his land.[12][13][14] By 1927, the Ehret lot was one of only two undeveloped blockfronts on Broadway between Columbus Circle and Times Square.[15] Shortly afterward, Ehret's lot and the neighboring Engine Company 23 firehouse on 233 West 58th Street were developed, with a two-story building being erected on the site to cater to the area's automobile industry

240 Central Park South was designed by Mayer & Whittlesey, a partnership between Albert Mayer and Julian Whittlesey,[5][16] in a mixture of the Art Deco, Moderne, and Modern Classical architectural styles.[17] Cynthia Wiley and Eleanor Robertson Paepcke were the landscape architects.[18][19][20] The building was constructed by the J. H. Taylor Construction Company and managed by the J. H. Taylor Management Corporation; both companies were operated by the Mayer family.[21][22] Sarah Tobias, renting manager of J. H. Taylor Management Corporation, was involved in the inclusion of interior design elements.[23] Various contractors were hired for the windows, materials, elevators, floor and wall coverings, furnishings, hardware, electrical installation, plumbing, and heating and air conditioning.

240 Central Park South

An innovative luxury building built in 1941, 240 Central Park South is a pre-war high-rise that sits across the street from Columbus Circle and Central Park. Noted for being the first apartment building to make extensive use of private balconies, 240 Central Park South was landmarked by the city of New York in 2002 and has a fully restored orange-beige exterior and renovated green roof. 240 Central Park South also has a landscaped courtyard, a canopied entrance, and excellent views of the park, not to mention all of the luxuries that one would expect based on its prestigious address.

The 321 studio, one-bedroom, and two-bedroom luxury apartments in 240 Central Park South were designed in the pre-war style of large rooms and oversized windows. Due to 240 Central Park South's distinctive horseshoe building design, most of these luxury apartments have balconies, corner windows, and exposures facing more than one direction. Some even have wood-burning fireplaces. 240 Central Park South features a doorman, a landscaped roof-deck, and an ideal location in Manhattan's highly exclusive Central Park South neighborhood.

Building Facts

Building Overview

Property Type: **Rental**

Building Size: **Highrise**

Access: **Attended Elevator**

Service Level: **Full Time Doorman**

Year Built: **1940**

Building Era: **Pre-war**

Year Last Altered: **1986**

Building Class: **D6**