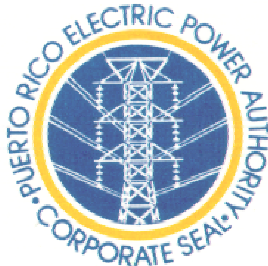


TECHNOLOGICAL MUSEUM
DR. MODESTO IRIARTE BEAUCHAMP
PUERTO RICO ELECTRIC POWER AUTHORITY



“Dedicated to the memory of those who have devoted their lives to the generation of electricity, for a better life quality to all”



Dr. Modesto Iriarte Beauchamp

He was born in Barrio Barcelona, Mayagüez, Puerto Rico on August of 1923.

In the face of the advance that was experienced in the field of generation of electric power from nuclear methods during the decade of the '50, the Authority selects him in order to study this novel system of electrical generation.

He was one of the pioneers in the nuclear field. In June of 1956, the Authority sends him to the University of Michigan in order to study the Doctorate in Nuclear Engineering, which he finishes in two years, graduating in June of 1958. He is the first Puerto Rican student to obtain the degree of Doctor in Nuclear Engineering from the University of Michigan, and maybe the first in the whole American nation.

The Authority chooses the Dr. Modesto Iriarte to be part of the design group of the future BONUS Station. He took part in the installation and setting during the initial stage of the power station. He was one of the first Senior Operators graduates for the Atomic Energy Commission during the initial start-up of the BONUS Station.

During this time, Dr. Iriarte was a Professor Ad Honorem in the Master Program in Nuclear Engineering at the Puerto Rico Nuclear Center in the CAAM.

He was recruited also by the University of Puerto Rico in order to work in the Puerto Rico Nuclear Center and develop the Decommission Plan of the Nuclear Reactor of the School. Then he collaborated in the development of alternating sources of energy and directed the operation of the Seismic Net.

From 1985-1993 presided over the Board of Directors of the Electric Power Authority, to which he was chosen again in December of 2000. He has been Member of Board for 16 years.



Rincón Historical Museum

Theme I: The World of the Indigenous Taíno

This section is at the entrance of the museum like initial element to the historical process of the town of Rincón and to the island from Puerto Rico. In this section are included cabinets, panels and posters, being the main showcase a historical display of an indigenous "cacicazgo" at the moment of contact. The display explains visually the diverse facets of the taíno community before the moment of the contact with the European world.

Theme II: The Moment of Contact

The year of 1492 changes the panorama of life for the aborigines of the "New World." The key person for this important historical moment is the Genoave Admiral Christopher Columbus. In this section you will find cabinets, photos and stamps with chronological information of his life, trips, discoveries, and the personalities that surrounded him in his feats, and the monuments to Columbus in Puerto Rico. In the central cabinet a model to natural scale of a Spanish armor of the time is included and also the medieval weapons used for the Spaniards, a scale model of a viking ship (first Europeans that crossed

the Atlantic), the three ships insignia of the Admiral Columbus, the Pinta, the Niña and the Santa María.

Theme III: The System of Lighthouses from Puerto Rico and Rincón

In the period of Spanish Administration, the coasts were important for the entrance and exit of goods and products. As an element of protection, a system of Lighthouses was established to provide protection, that included fifteen structures along the four sides of the Island and its three near bigger islands at that moment (Vieques, Culebras and Mona.) The module recreates information of the system by means of educational panels including wooden saints and original samples that represent the religious invocations of the Puerto Rican marines in the last two centuries and a poster of San Telmo, boss of the navigators.

Theme IV: The Town of Rincón

As part of the Museum a section is dedicated to the town of Rincón and their relationship to the called Zone of the Discovery. In this section is included the geographical localization of Rincón and the towns of the zone. By means of eight educational panels information is offered of the towns of the zone and their shields, photos of the town of Rincón, and their statistical and historical more important data to the moment. In a wooden cabinet, is a traditional wood work by Hernández of the Patrona of the Town, Santa Rosa de Lima.

Theme V: Rincón and Puerto Rico in the European Cartography

Maps have always been an important mean to know the history of a region. The moment of the European Encounter with America, was the topic of novelty for

European houses that prepared navigating maps or charts. In this section are included a wide and varied collection of original maps and facsimiles of the World, America, The Caribbean and Puerto Rico.

Technological Museum

Theme I. The BONUS Plant

By means of an initial module, the near room to the Controls Room and a near room to the end west, are explained the process of construction and operation of the Plant. By means of educational panels, you/he/she/it are placed the plant in the geographical space of plant west from Puerto Rico. A historical chronology of the production of the electric power in the country settles down and offers data of the plant. The information is supplemented with a scale model of the Plant and a series of pieces and instruments used in the plant.

Theme II: Albert Einstein and the Nuclear Energy

Albert Einstein is considered as the most important theoretical scientist of our century. Two of his theoretical formulas opened the door for the development of the knowledge of the atom to the point of developing the nuclear armaments by other theoretical and scientists. Due to this, and the whole influence that his knowledge has had on our century, an important area is dedicated to him in the exhibition. By means of photos and data, Einstein comes to life.

Theme III: Science and the Nuclear Energy

This section includes a variety of Charts of Nuclides and of the Elements next to a panel on the atom. They are supplemented with 3 showcases of ships of United States and Russia, that use nuclear reactors for

locomotion. Also are included a series of panels on the nuclear armaments of United States, the drawings of the Atomic Bomb and a photo of the first atomic test in Trinity, New Mexico, United States.

Theme IV: Space and the Nuclear Energy

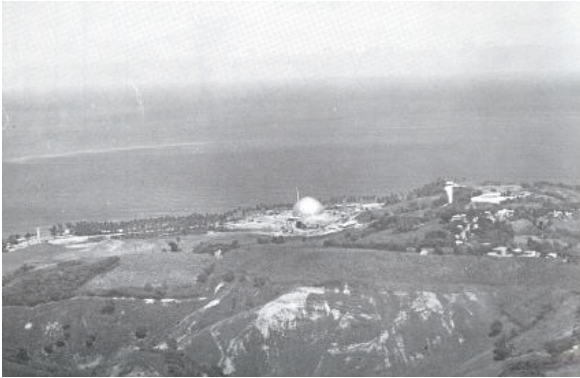
Thanks to the studies on radioastronomy, we have the knowledge on the nuclear energy and its various manifestations in the space. In the section are included a great variety of educational panels on the recent studies carried out around the world, color photos of objects of the Sidereal Space, technical and scientific data of the Solar System and their components, charts and graphic of the spectrum and a mural of a segment of the Sun. The exhibition with a series of scale models is supplemented.

Theme V: The Energy as Topic in the Philately of United States

This segment contains a series of new and used stamps and covered with first day that have as theme the energy. The stamps are organized in chronological order, classified and cataloged according to the Scott International System with their data of emission, amount and type of stamp.

Theme VI: The Production of the Nuclear Energy

This section is made up of a series of panels that presents the biography in Spanish and English of the main scientific, related to the energy world.



GENERAL DATA ON THE BONUS STATION

The BONUS station (BOiling water NUclear Superheater) was a combined project of the Atomic Energy Commission of the United States (AEC) and the Puerto Rico Water Resources Authority (PRWRA) (now Department of Energy (DOE) and Puerto Rico Electric Power Authority (PREPA), respectively). The decision in order to build the BONUS station was taken upon completing the studies and a preliminary design of the plant under a contract of the AEC with PRWRA. The primary objective of the project was to demonstrate the production of energy using superheated vapor in a nuclear reactor. In second term, the plant was built in order to prove the economic aspects of operating a nuclear plant in remote places in an area of high cost of fuel. The AEC was responsible for the design and the construction of the reactor and the related auxiliary equipment. PRWRA was responsible to provide for and develop the site, the design and the construction of the generating part and to provide facilities for the transmission of electric power.

The nuclear reactor was led to criticality (sustain the nuclear fission chain reaction) on April 13, 1964. Then it continued a series of tests in upward scale of power and

complexity, first like a boiling water reactor and then like a boiling water reactor with integrated superheater, until September of 1965 when it reached complete power of 50 thermal megawatts with vapor of 900°F. Then it operated intermittently due to testings, inspections and repairs, besides other occasional scrams by the highly sensitive protection systems. The plant operated in this form until it completed its demonstration purpose and was drawn back from service in the year 1968.

The BONUS project required continuous sampling of vegetation and milk in the town of Rincón, before and during the operation of the plant. The analysis of the samples demonstrated that in no occasion during the normal operation or in extraordinary incidents, an increase in radioactivity attributable to BONUS was detected. During their operation the plant never exceeded the norms of emission for radioactive matter promulgated for the protection of the health and the atmosphere. All this information could be corroborated with wide documentation available from the AEC and PREPA, particularly the report Start- Up Activities at the BONUS Plant (April 1964 to December 1965) and Reactor Operations at the BONUS Plant (January, 1966 until August, 1968).