

## **A BRIEF HISTORY OF THE PHYSICS DEPARTMENT**

In 1955, and for some time before that, The College of New Jersey was known as Trenton State Teachers College. Other previous names of the Institution were Trenton State Normal School, dating back to its founding in 1855 and then New Jersey State Teachers College at Trenton. In June of 1996, president Dr. Harold W. Eickhoff brought about the change in the name of the Institution to “The College of New Jersey.” This set off a law suit with Princeton University, which formerly used that name. But they settled in lieu of a state law that limited the use of the title “of New Jersey” to state institutions.

In the years before 1968, Trenton State College had a broad based Department of Science engaged in the training of science teachers and providing general education in all areas of science to the college population. Prior to 1959, the members of the Science Department included Dr. Victor Crowell, EdD, Dr. Fred Pregger, EdD (1955), Alan Lutz, Charles Harp, and Judson Fink (1958) as the staff primarily involved in the astronomy, meteorology, geology, and physics curriculum. In addition, the Science Department consisted of several biologists and chemists, notably of whom were Dr. James Cruise, Dr. Shirley Troxel, and Herbert Treuting. Victor Crowell was then chairman of the Science Department, which was housed on the second floor of Green Hall. In 1959, Dr. Herbert A. Moses was hired as the first faculty member with a PhD in physics.

In 1959, the Department initiated a graduate program in Science Education funded by a grant from the Dreyfus Foundation. The program was aimed at increasing the subject matter knowledge of teachers in the field. The College decided to terminate this program about twenty years later in effort to concentrate on upgrading the undergraduate programs.

Between 1960 and 1963, Dr. Cruise departed for the University of Toronto and was replaced by Dr. Joseph Vena; Dr. Troxel retired and was replaced by Dr. Howard Nechamkin. Other new faculty were Paul S. Hiack (1961), N. Frank Kolp (1962), Raymond Palmer (1962), George Hamilton (1963), and Otto Heck (1963). In 1963, the Science Department and Mathematics Department moved into a newly constructed building called the Science and Mathematics Building. This building was later named Crowell Hall after Victor Crowell's retirement in 1969. Dr. Crowell passed away a few years later. Raymond J. Pfeiffer (1964), and James T. Schreiber (1966) became the next additions to the Department. In 1969, Dr. Ronald Gleeson joined the Department and became the second person to hold a PhD in physics. Also David Letcher, who working for a PhD in Environmental Meteorology from Cornell, was added to the staff. He later completed his doctorate. In the interim, Paul Hiack received his EdD from Columbia University in 1967.

In 1968, under the direction of the newly formed Department of Higher Education, Trenton State College proposed an expansion from a strictly teacher

training institution to a multipurpose institution with a liberal studies option. A blue ribbon study-commission established by the Department of Higher Education deemed Trenton State College one of the two state colleges capable of developing a diversified program in the sciences. At this time Virgil Gillenwater was president of TSC and he initiated the division of the Science Department into separate Biology, Chemistry and Physics Departments, with majors in each area. Dr. Pregger then became chairman of the Physics Department, which offered two tracks for majors: Liberal Studies and Teacher Preparation in Physics.

A few years later, Dr. Gerald Nicholls (a 1965 alumnus), who obtained a PhD in Health Physics, joined the staff and worked to bring about the offering of a track in health physics. Over the next 15 or so years, the Department graduated several majors in this field.

About 1969, Dr. Milton Rothman, who had worked at the Princeton Plasma Lab, joined the Department. He retired about 8 years later and passed away in 2001.

Meanwhile, in 1973, Frank Kolp received his EdD from Temple University and in 1975, R. J. Pfeiffer received his PhD from the University of Pennsylvania, thereby becoming the College's first resident astronomer and astrophysicist. At about this time, the Department welcomed Dr. Fred Goldstein, a geologist, who was housed in the geography department.

In 1984, on the basis of a survey done of local industry, a Scientific Computer Programming Track was added, mostly due to the efforts of Dr. Ronald Gleeson, who had recently obtained a master's degree in computer science from Stevens Institute of Technology. Somewhat later, a track in Earth Science was added primarily for those interested in becoming teachers.

In 1980, Dr. Nicholls left the College to take a position with the New Jersey Department of Environmental Protection. In 1985, Dr. Letcher left the Department and joined the Business School for a career in teaching computers in business and Jim Schreiber retired to start his own real estate business. At that time, the demand for health physicists was decreasing as a result of the demise of the nuclear power industry. The Department then decided not to hire another health physicist and discontinued the track in health physics.

In 1982, Dr. Pregger decided to retire as chair of the Department and Judson Fink was elected to take his place. Professor Fink served as chair until he resigned for health reasons in August 1983. He was then succeeded by Dr. Paul Hiack. Later, with the retirement of Fred Pregger, Herb Moses, and Judson Fink, the Department added Dr. Romulo Ochoa (1992) and Dr. Danielle Dalafave (1995) to the staff. These new faculty were hired to expand the research activities of the Department in the area of solid state and material science.

In 1997, Dr. Martin Becker, a geo-paleontologist and Dr. Thulsi Wickramasinghe, an astrophysicist and cosmologist, joined the Department in order

to expand the geology and astronomy offerings and to diversify the ongoing research.

In the fall of 2002, the Department moved into its new facilities in the newly constructed Science Complex and the former Science Building, Crowell Hall, was demolished. After serving as Department Chairman for many years, Dr. Paul S. Hiack retired in 2003. For Dr. Hiack's many years of service regarding the maintenance of the Department's astronomical facilities, the College's new planetarium was named in his honor. Dr. Romulo Ochoa was then elected to chair the Department and his tenure was followed by Dr. Kolp's.

In September of 2003, Fred Goldstein took a medical leave for 2 years and then retired. He was temporarily replaced by Dr. Fred Hoffmeister, a mineralogist. In 2006, Dr. Byron Perizek replaced Dr. Hoffmeister and become the department's first geophysicist and Dr. Marty Becker resigned to take a position at William Paterson State College. He was replaced by Dr. Margaret Benoit, a 1999 alumna, who received a PhD in geophysics from Pennsylvania State University and did a postdoc at MIT. Her area of research is in seismology. The next year, Dr. Nate Magee, a cloud physicist, joined the department. He replaced Dr. Perizek, who departed to take a position at Penn State's DuBois campus. In April 2008, the Department was saddened to learn of the death of retired faculty member, Judson Fink.

Dr. Frank Kolp, retired at the end of the academic year 2008-2009. Dr. Magee then volunteered and was elected to serve as interim chair of the Department, while a search for a senior faculty member to be chair was undertaken. In the fall of 2009, Dr. Michael Kavic, whose expertise was in string theory and theoretical cosmology, became a visiting professor in the Department for two years.

In the fall of 2010, Dr. Paul Wiita, who was professor of Physics and Astronomy at Georgia State University, was invited to take over the chairmanship of the Department. Dr. Wiita brought with him an expertise in blazars and active galactic nuclei, thereby bringing the Department's astronomy and astrophysics group to three.

In the summer of 2011, the Department learned of the passing of professors emeriti, Dr. Herb Moses and Fred Goldstein..

In the fall of 2011, the Department was successful in recruiting Dr. David McGee, Professor of Physics at Drew University, to be a member of the faculty. Dr. McGee brought with him and active research program in condensed matter.

In 2012, Dr. Tuan Nguyen, a research biophysicist at the University of Pittsburgh, was recruited to join the Department and set up a biophysics research lab.

The structure of the Physics Department and its educational goals has been

somewhat the same since its inception. The Department remains distinctive in its conservative approach to education, commitment to excellence in teaching, and individual attention given students. Furthermore, the Department's programs are realistic in that they are geared to the needs of the student and were never intended to compete with research oriented facilities of major universities. However, the department now has research as an essential activity of its faculty and students have the opportunity to participate in this research. The programs give students a solid background in physics which can be applied to a career in industry, teaching ,or enables the student to pursue further study at the graduate level.

The Physics Department learning goals link particularly well with the mission of the college in providing the student with the ability to seek out information and integrate it with existing knowledge in the pursuit of the solution to a problem. The members of the Department are true teaching scholars in their respective fields of research.

If there is anyone who would like to provide more details or information that is lacking in this document, contact Dr. Pfeiffer at [Pfeiffer@tcnj.edu](mailto:Pfeiffer@tcnj.edu).



The above photo shows the Faculty and Staff of the Department of Physics at the College of New Jersey and five of the Graduating Majors of 1999. The latter includes Margaret Benoit (front center) who is currently a faculty member.