



PROFESSIONAL RESUME

Nicholaos Tsoupas

ADDRESS: Home: 8 Ocean Avenue, Center Moriches, New York 11934
Tel.: (631) 909-3388

Office: Brookhaven National Laboratory, Bldg. 911-B
Upton, New York 11973
Tel.: (631) 344-4979
E-mail: tsoupas@bnl.gov

PERSONAL: Date of Birth: November 29, 1946
Citizenship: U.S.

EDUCATION:

1975 - Ph.D. in Nuclear Physics, Ohio State University, Columbus, Ohio

1971 – M.S. in Physics, Ohio University, Athens, Ohio

1969 – B.S. in Physics, University of Athens, Athens, Greece

EMPLOYMENT:

1985 – Present Physicist, Brookhaven National Laboratory
Adjunct Professor, SUNY at Farmingdale until 1990
Adjunct Professor, SJCNY
Non Salary Adjunct Professor, Stony Brook University

1981 – 1985 Research Associate, Yale University
Adjunct Professor, University of New Haven
Adjunct Professor, University of SCSU

1979 – 1981 Post-Doctoral Fellow, Rutgers University

1977 – 1979 Air Force Technology Center, and Nuclear Research Center
“Democritus”, in Greece. (Compulsory military service)

1975 – 1977 Post-Doctoral Research Associate, Massachusetts Institute
of Technology.

FIELDS OF EXPERTISE:

Accelerator Physics:

- a) Design of mass spectrometers, and special purpose magnets for beam focusing and detection of charged particles.
- b) Design of nuclear particle accelerators, and beam transport lines for transport of charged particles.
- c) Design of accelerators and gantries for cancer radiation therapy

Computational Physics:

- a) Development of computer codes for tracking charged particles in electromagnetic fields.
- b) Development of algorithms to solve problems in physics by using computers.
- c) Computer Languages used: BASIC, FORTRAN, C++ ;
Computer platforms used: MS-Windows and Unix.

Nuclear Physics:

- a) Design and building of proportional and ionization gas, liquid and solid state counters for the detection of atomic and nuclear radiation.
- b) Instrument control, signal processing and display of data by using computers.

INVENTIONS:

**ACHROMATIC AND UNCOUPLED MEDICAL GANTRY
PATENT Application for UNITED STATES PATENT**

PUBLICATIONS:

Over 200 publications in journals and many contributions to scientific conferences.