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Form AEC-313 8-64 10 CFR 30	UNITED STATES ATOMIC ENERGY COMMISSION APPLICATION FOR BYPRODUCT MATERIAL LICENSE	Form approved: Budget Bureau No. 38-R027																																																			
INSTRUCTIONS. - Complete Items 1 through 16 if this is an initial application or an application for renewal of a license. Information contained in previous applications filed with the Commission with respect to Items 8 through 15 may be incorporated by reference provided references are clear and specific. Use supplemental sheets where necessary. Item 16 must be completed on all applications. Mail two copies to: U.S. Atomic Energy Commission, Washington, D.C., 20545, Attention: Isotopes Branch, Division of Materials Licensing. Upon approval of this application, the applicant will receive an AEC Byproduct Material License. An AEC Byproduct Material License is issued in accordance with the general requirements contained in Title 10, Code of Federal Regulations, Part 30, and the Licensee is subject to Title 10, Code of Federal Regulations, Part 20.																																																					
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TRAINING AND EXPERIENCE OF EACH INDIVIDUAL NAMED IN ITEM 4 (Use supplemental sheets if necessary)

B. TYPE OF TRAINING	WHERE TRAINED	DURATION OF TRAINING	ON THE JOB (Circle answer)	FORMAL COURSE (Circle answer)
a. Principles and practices of radiation protection	ORINS COURSE	4 weeks	Yes No	(Yes) No
b. Radioactivity measurement standardization and monitoring techniques and instruments	SAME	"	Yes No	(Yes) No
c. Mathematics and calculations basic to the use and measurement of radioactivity	SAME	"	Yes No	(Yes) No
d. Biological effects of radiation	SAME	"	Yes No	(Yes) No

9. EXPERIENCE WITH RADIATION (Actual use of radioisotopes or equivalent experience.)

ISOTOPE	MAXIMUM AMOUNT	WHERE EXPERIENCE WAS GAINED	DURATION OF EXPERIENCE	TYPE OF USE
C ¹⁴	50 millicuries	Lab. experiments teaching	1 semester	instructional
S ³⁵	50 "	Radiochemistry course	"	"
Co ⁶⁰	10 "	"	"	"

10. RADIATION DETECTION INSTRUMENTS (Use supplemental sheets if necessary.)

TYPE OF INSTRUMENTS (Include make and model number of each)	NUMBER AVAILABLE	RADIATION DETECTED	SENSITIVITY RANGE (mr/hr)	WINDOW THICKNESS (mr/cm ²)	USE (Monitoring, surveying, measuring)
Geiger Counter (N.C.)	3	β		1.6 mg/cm ²	Measuring
Survey Meter (N.C. Model 2612)	4	β	0.2 up 20 mr/hr	1.4 mg/cm ²	Monitoring
Scintillation Counter	2	γ			Measuring
Liquid Scintillation Counter (Baird Atomic) Model 24376	1	β			Measuring

11. METHOD, FREQUENCY, AND STANDARDS USED IN CALIBRATING INSTRUMENTS LISTED ABOVE

Calibration of instruments done by qualified personnel of the Health Physics Division of Puerto Rico Nuclear Center.

12. FILM BADGES, DOSIMETERS, AND BIO ASSAY PROCEDURES USED. (For film badges, specify method of calibrating and processing, or name of supplier.)

Film badges and dosimeters provided by Health Physics Division of Puerto Rico Nuclear Center in our campus.

INFORMATION TO BE SUBMITTED ON ADDITIONAL SHEETS IN DUPLICATE

13. FACILITIES AND EQUIPMENT. Describe laboratory facilities and remote handling equipment, storage containers, shielding, fume hoods, etc. Explanatory sketch of facility is attached. (Circle answer) — Yes — No —

14. RADIATION PROTECTION PROGRAM. Describe the radiation protection program including control measures. If application covers sealed sources, submit leak testing procedures where applicable, name, training, and experience of person to perform leak tests, and arrangements for performing initial radiation survey, servicing, maintenance, and repair of the source.

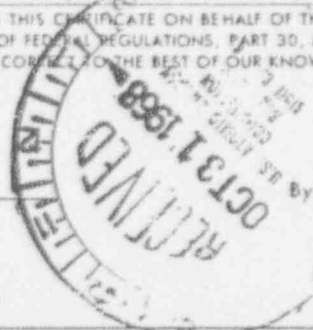
Health Physics Division of the Puerto Rico Nuclear Center.

15. WASTE DISPOSAL. If a commercial waste disposal service is employed, specify name of company. Otherwise, submit detailed description of methods which will be used for disposing of radioactive wastes and estimates of the type and amount of activity involved.

CERTIFICATE (This item must be completed by applicant)

16. THE APPLICANT AND ANY OFFICIAL EXECUTING THIS CERTIFICATE ON BEHALF OF THE APPLICANT NAMED IN ITEM 1, CERTIFY THAT THIS APPLICATION IS PREPARED IN CONFORMITY WITH TITLE 10, CODE OF FEDERAL REGULATIONS, PART 30, AND THAT ALL INFORMATION CONTAINED HEREIN, INCLUDING ANY SUPPLEMENTS ATTACHED HERETO, IS TRUE AND CORRECT TO THE BEST OF OUR KNOWLEDGE AND BELIEF.

Date October 8, 1968



Applicant named in item 4

Jose R. Martinez
Dean of Arts and Sciences
Title of certifying official

WARNING.— 18 U. S. C., Section 1001; Act of June 25, 1948; 62 Stat. 749; makes it a criminal offense to make a willfully false statement or representation to any department or agency of the United States as to any matter within its jurisdiction.

13. FACILITIES AND EQUIPMENT: We have laboratory equipped with hoods, lead shields, remote control equipment and all the equipment that is necessary in a laboratory where radioactive materials are handled.

15. WASTE DISPOSAL: Health Physics Division of the Puerto Rico Nuclear Center.

CS208

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8-64
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1. (a) NAME AND STREET ADDRESS OF APPLICANT. (Institution, firm, hospital, person, etc. Include ZIP Code.)		(b) STREET ADDRESS(ES) AT WHICH BYPRODUCT MATERIAL WILL BE USED (If different from 1 (a). Include ZIP Code.)	
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Biochemical and similar laboratory studies in plants and microorganisms.
Chemical research and similar laboratory studies. Instructional and teaching purposes in radiochemistry course.

Certified No. 517376

06208

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Dean of Arts and Sciences

Title of certifying official

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