MichiganTech

Michigan Technological University

Office of Compliance, Integrity, and Safety

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Houghton, Michigan 49931-1295
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Materials Licensing Branch
United States Nuclear Regulatory Commission
2443 Warrenville Road
Lisle, Illinois 60532

June 1, 2012

To Whom It May Concern:

Please accept the enclosed application of Dr. Guiliang Tang, Associate Professor in Biological Sciences at Michigan Technological University, for authorized user status (DRU). Our license number is 21-00278-02. Dr. Tang is requesting authorization to use P-32 in his research at MTU. Although he has indicated a request for specific possession limits, we are not requesting any changes in our licensed isotopes or activity limits. We will reallocate existing amounts to accommodate Dr. Tang's needs.

Sincerely,

Allen Niemi

Dr. Allen Niemi, Director
Occupational Safety and Health
AN
Enc.

Application for DRU status at Michigan Technological University

Name: Guiliang Tang (Dept. of Biological Sciences)
Date: 05/22/2012

I. Educational Training and Professional Experience

1983 B.Sc. in Anhui Agricultural University, China.
1991 M.Sc. in Anhui Agricultural University, China.
1995-2001 Ph.D. Dept. of Plant Science, Weizmann Institute of Science, Israel
2000-2005 Post-doctor, Dept. of Biochemistry & Molecular Pharmacology, University of Massachusetts Medical School, MA.
2005-2011 Assistant Professor, Department of Plant and Soil Sciences, College of Agriculture, University of Kentucky, KY.
2011-2011 Associate Professor, Department of Plant and Soil Sciences, College of Agriculture, University of Kentucky, KY.
2011-present Associate Professor, Department of Biological Sciences, Michigan Technological University, MI

II. Radiation safety Training

University of Kentucky, KY (2005-2011)
University of Massachusetts Medical School, MA (2000-2005)

III. Radiation working experience

University of Kentucky, KY (2005-2011)

Phosphorus-32: 5 ul of ^{32}P-dATP (6000 Ci/mmol, 10 mCi/ml) was used to label small RNA in each experiment. The labeled small RNA was used to hybridize microRNA array membrane. In addition, 1 ul of ^{32}P-dATP was used to raiolabeled DNA probe for microRNA Northern blots. Lab inventory was about 10 mCi.

University of Massachusetts Medical School, MA (2000-2005)

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IV. Radionucleotide Possession Limit

P-32 10 mCi

V. Statement of Purpose for the DRU Designation

I am requesting for DRU status in order to carry out microRNA (miRNA) research experiments in my laboratory that involve radioactive work. This includes miRNA and mRNA Northern blots and miRNA array. Use of radioactive material is crucial for the research in our laboratory. I have more than 10 years working experience of using radioactive material in my previous universities. I will be responsible for the radioactive facility and processing in my laboratory on the approval of my application. I will maintain inventory for the radioactive material. The graduate students in the lab will be hand-trained before they start to work on the radioactive work.

Sincerely yours,

Guiliang Tang

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Guiliang Tang
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JUN 01 2012

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