

American National Standard

for Radiation Instrumentation

Performance Verification of Liquid-Scintillation Counting Systems



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American National Standard Performance Verification of Liquid-Scintillation Counting Systems

National Committee on Radiation Instrumentation, N42

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Secretariat

The Institute of Electrical and Electronics Engineers Inc.

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Abstract: ANSI N42.15-1990, *American National Standard Performance Verification of Liquid-Scintillation Counting Systems*, provides designers and users with tests and procedures to assure that a liquid-scintillation counting system is producing reliable data. This standard does not cover the calculation of sample activity for quenched unknown samples, sample preparation, efficiency correlation, (quench correction) procedures, or identification of unknown radionuclides.

Keywords: calculation of sample activity, liquid-scintillation counting systems, tests and procedures for liquid-scintillation counting systems, quenched unknown samples

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Foreword

(This Foreword is not a part of ANSI N42.15-1990, American National Standard Performance Verification of Liquid-Scintillation Counting Systems.)

The intent of this standard is to provide designers and consumers with tests and procedures to assure that a liquid-scintillation counting system is producing reliable data.

This standard is the responsibility of the Accredited Standards Committee N42 on Radiation Instrumentation. Committee N42 delegated the development of the standard to its Subcommittee N42.2. Drafts were reviewed by members of Committee N42, Subcommittee N42.2, and other interested parties, and the comments received were utilized in producing the standard as finally approved and issued. The standard was approved by Committee N42 letter ballot of November 22, 1989.

At the time it approved this standard, the Accredited Standards Committee on Radiation Instrumentation, N42, had the following members:

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