

# American National Standard

## performance verification of liquid-scintillation counting systems

ANSI N42.15-1980



american national standards institute, inc.

January 30, 1981

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# **American National Standard Performance Verification of Liquid-Scintillation Counting Systems**

Secretariat for N42  
Institute of Electrical and Electronics Engineers, Inc

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## Foreword

(This Foreword is not a part of ANSI N42.15-1980, 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 American National Standards Committee N42 on Radiation Instrumentation. Committee N42 delegated the development of the standard to its Subcommittee N42.2, which in turn assigned the task to its Working Group N42.2.3. Drafts were reviewed by the members of Committee N42, Subcommittee N42.2, and Working Group N42.2.3, as well as by other interested parties, and the comments received were utilized in producing the standard as finally approved and issued. The standard was approved by N42 letter ballot of January 26, 1977, with modifications as submitted to the N42 membership on July 5, 1977.

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

**Louis Costrell, *Chairman***

**David C. Cook, *Executive Secretary***

### *Organization Represented*

### *Name of Representative*

|                                                                     |                                    |
|---------------------------------------------------------------------|------------------------------------|
| American Conference of Governmental Industrial Hygienists . . . . . | Jesse Liebermann                   |
| American Industrial Hygiene Association . . . . .                   | <i>Vacant</i>                      |
| American Nuclear Society . . . . .                                  | Frank W. Manning                   |
| Health Physics Society . . . . .                                    | J. B. Horner Kuper                 |
|                                                                     | Robert L. Butenhoff ( <i>Alt</i> ) |
| Institute of Electrical and Electronics Engineers . . . . .         | Louis Costrell                     |
|                                                                     | D. C. Cook ( <i>Alt</i> )          |
|                                                                     | A. J. Spurgin ( <i>Alt</i> )       |
|                                                                     | J. Forster ( <i>Alt</i> )          |
| Instrument Society of America . . . . .                             | M. T. Slind                        |
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| National Electrical Manufacturers Association . . . . .             | Theodore Hamburger                 |
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|                                                                     | D. J. Knowles ( <i>Alt</i> )       |
| U.S. Department of the Army, Materiel Command . . . . .             | Abraham E. Cohen                   |
| U.S. Department of Commerce, National Bureau of Standards . . . . . | Louis Costrell                     |
| U.S. Civil Defense Preparedness Agency . . . . .                    | Carl R. Siebentritt, Jr            |
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|                                                                     | E. J. Vallario                     |

At the time this standard was approved Subcommittee N42.2 had the following members:

**Carl W. Seidel, *Chairman***

**J. M. Robin Hutchinson, *Secretary***

|                  |                   |                   |
|------------------|-------------------|-------------------|
| Ron Althardt     | Allen Goldstein   | Gerald Martin, Jr |
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| Roger Ferris     | Y. Kobayashi      | Patricia Vacca    |
| James Gibbs      | William MacIntyre | S. S. Yaniv       |
|                  | W. B. Mann        |                   |

At the time this standard was approved the members of Working Group N42.3 were:

**Roger Ferris, *Chairman***

**B. M. Coursey  
James Gibbs  
D. L. Horrocks**

**S. M. Kim  
Y. Kobayashi  
L. Zeigler**