



Model 71A
Capacitance/Inductance Meter

**Instant readings
of capacitance and
inductance at
1 Mc/s...with
an accurate
DC analog of
the measured
value**

- Measures 3-terminal capacitance from 0 to 1000 pF; basic accuracy, 1%; resolution, 0.01 pF
- Measures 2-terminal inductance from 0 to 1000 μH; basic accuracy, 1%; resolution, 0.01 μH
- Ideal for semiconductors
 - DC bias to ±200V
 - 1 Mc/s crystal controlled test frequency
 - 15 mV test level
- Accommodates both high and low Q devices
- DC analog output; linearity, 0.1%

The Model 71A provides Continuous Measurement of C and L with the speed and convenience of a VTVM. DC analog output is capable of at least 4-digit resolution with appropriate DVM; permits rapid plots of such functions as capacitance vs. voltage of varactor diodes or linearity of variable capacitors on scope or X-Y plotter. Also useful for automatic go/no-go testing, sorting, batching, or matching.

Price: \$735.00

Full technical details on request.

**BOONTON
ELECTRONICS**
CORPORATION

ROUTE 287 AT SMITH RD, PARSIPPANY, N. J.
TELEPHONE: 201-887-5110 TWX: 510-235-6747

ments M_a expressed in amperes $\times$ square meters. The appropriate expressions for torque in the two cases are $M_a H \sin \theta$ and $M_a B \sin \theta$, respectively. Dimensionally these two expressions are identical, reducing to the dimension of torque ML^2T^{-2} as it is frequently given. (This is identical with the dimension of energy!)

The present trend is to disparage the use of M_a in favor of M_m and regard M_a as subjected to a torque when in a magnetic flux of density B (or μH). It would have been more consistent with this trend to have magnetic moment values expressed in terms of amperes $\times$ square meters since the expression for the Bohr magneton in SI is $\mu_B = eh/4\pi m_e = 9.2732 \times 10^{-24} \text{ Am}^2$. However, since it has been customary to express magnetic moment in energy per unit field, this past practice was followed.

Interdisciplinary information

The recent survey of information networks published in *PHYSICS TODAY* (Jan. 1966) performs a most valuable service in apprising AIP members of some major problems of literature organization, and in informing physicists of government (and AIP) plans to deal with those problems. Thanks are due particularly to Dr. Pepinsky for calling attention to the fact that all plans now being implemented are on too small a scale to be truly effective, as well as for suggesting a full-sized division of APS to deal with information problems.

The purpose of this letter is to increase the scale of Pepinsky's suggestion. Because of the interdisciplinary nature of much of today's research, I believe that such an increase is necessary and will become more so in the future. This statement needs no amplification. An information-handling system set up to cover all of physics may be satisfactory to most physicists for a while—but within a few years it probably will not be.

Therefore I respectfully suggest that an APS division for documentation ought to consider of utmost importance the promoting of similar divisions in other professional societies, such as the American Chemical Socie-

A more subtle inconsistency appears in the values because the unit for angle has been suppressed in giving the unit for magnetic moment. A better practice is to express magnetic moment in joules per tesla-radian and thus assign dimension to angle.¹ The dimension of torque is then changed from that given above to $ML^2T^{-2} \text{ rad}^{-1}$. Thus its dimensional identity with energy is eliminated, and torque multiplied by angle, which is equivalent to energy, has the dimension of energy.

Reference

1. A. G. McNish, "Dimensions, Units and Standards," *Physics Today*, 10, 19 (1957).

A. G. McNish

National Bureau of Standards
Institute for Basic Standards

ty, the American Mathematical Society, societies for psychology and psychiatry, and perhaps such humanities societies as those in history and economics (econometricists, for example, deal in higher mathematics).

The next step, of course, would be for the various divisions, preferably in cooperation with the American Library Association, to organize a cross-disciplinary Society for Information and Documentation. While remaining part of their sponsoring organizations, the divisions would also be members of the new society. The function of that society, like the function of the Encyclopedists, would be to do for information developed by the parent societies what present AIP programs attempt to do for information about physics.

Only through such a large-scale organization can we hope to handle the growing flood of information in such a way that any person, of whatever background and education, can locate any desired piece of information even if he lacks familiarity with the literature most likely to contain it.

Herbert Malamud

Director of physics research
Radiation Research Corporation