## SYMPOSIUM ON TENSION TESTING OF NON-METALLIC MATERIALS

## INTRODUCTION

## By A. C. Webber<sup>1</sup>

One of the simplest physical tests which can be made on any material, is, at first glance, a measure of the tensite pull required to break it. Perhaps it is in part this simplicity, both of concept and of execution, which has made tensile properties a common denominator in testing of materials, especially in the field of metals.

Among the non-metallic materials, however, there is such a diversity of structure and properties, that there has evolved a variety of methods for measurement of tensile properties. New materials have been developed for which older techniques are inadequate, new technical

tools have been applied to the problem, new understanding of the structure of materials has brought a more meaningful interpretation of results and each of these factors has contributed to the terminology and nomenclature of tension testing.

Subcommittee 4, of E-1, on Tension Testing, has arranged this symposium with the objective of providing:

- 1. An accurate summary of present practices in fields where tension testing is most widely used.
- 2. A critical appraisal of their merits and deficiencies.
- An opportunity to compare techniques and terminology among the various fields.
- 4. A guide to future development and standardization.

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