

**Report On ASTM E5 Division II Subcommittees**  
**December 2007**  
**By**  
**Jesse J. Beitel – Third Vice-Chairman**

**ASTM E5.21 Smoke & Combustion Products – Dr. Marcelo M. Hirschler**

E5.21 has several active task groups and four inactive task groups. It is looking for chairs for a task group on ASTM E 906, OSU heat release calorimeter, and for a chair on a task group on ASTM E 1623, intermediate scale calorimeter, ICAL. Although neither standard needs action, it is likely that the ICAL will need action soon.

The subcommittee is working primarily on the revision of two standards: ASTM E 1354, cone calorimeter, and ASTM E 1678, radiant smoke toxicity test method. A number of ballot items were issued for each one of them in the first half of 2007. Most of the items received some negatives. All subcommittee negatives were either declared not persuasive or accommodated by making changes and reballoting (editorial or substantive changes). The subcommittee ran out of time to address several of the negatives on ASTM E 1354 in June and they were dealt with by administrative letter ballot, following the overwhelming support of the subcommittee (by 12/1/2) to undertake such balloting. Several items received negatives and comments again at main committee ballot and these will be discussed in December 2007.

The subcommittee also completed a revision of ASTM E 800, guide on measurement of combustion products.

The subcommittee also started making revisions of ASTM E 1474 and ASTM E 1740, applications of the cone calorimeter, and has balloted further revisions. Once the revisions of ASTM E 1354 are completed, some of the changes will be incorporated also into these cone applications standards.

The subcommittee is planning to revise ASTM E 2102, mass loss cone, to change the chimney to one that has proven more suitable in practice.

**ASTM E5.22 – Surface Burning – Robert H. White**

New TG chairs includes Randy Laymon for TG 1 (E84 Operators) and Jason Bragg for TG 6 (E970). Earlier in the year, Dwayne Sloan became the chair of TG 4 (E162).

For the past six-month period, the subcommittee had three subcommittee ballots and items on the two main committee ballots.

An active area of balloting continues to be the mounting of specimens in the E 84 tests. A new standard [E2579-07](#) Standard Practice for Specimen Preparation and Mounting of Wood Products to Assess Surface Burning Characteristics was approved. TG 9 on new methods for non-foam thermoplastic will continue work on other products after the transfer of the proposed standard – Test method for evaluating the fire test response of deck structures to burning brands to SC 5.14. Balloted items included ones revising the two LIFT standards (E1317-97a(2002)/E1321-97a(2002)) that are up for their 5-year review. A review of the analysis of the WTC recommendations did not identify any item within the scope of Subcommittee E5.22.

### **ASTM E5.23 – Combustibility – Paul A. Hough**

#### Report of Task Group Meeting E05.23.01 - Measuring Low Levels of Heat Release

Tom Fritz prepared a draft document which was to be an Annex to E 1354. There was considerable discussion as to whether an Annex to E 1354, a stand alone practice or a stand alone test method is needed. The consensus was that a stand alone test method would be best. The Annex will be revised in order to change it to a test method & the Chair will circulate prior to the next meeting.

Information on uncertainty of the current E 1354 method for materials that have low levels of heat release (15 Mj/m<sup>2</sup>) or less was provided. The data indicated that the uncertainty was about 7 Mj/m<sup>2</sup> which is the same as for other materials. As a percentage this is a major problem when looking at low levels. The overwhelming way to affect the uncertainty is by improving the oxygen analyzer. Additional testing on low level materials with some of the suggested improvements and the new uncertainty calculations will be rerun before the next meeting.

#### Report of Task Group E05.23.02 - Alternate Method for Non-Combustibility

The Task Group reviewed a draft revision to ASTM E136 that includes a new Method B and additional sets of pass/fail criteria. The revision of E136 will go for subcommittee ballot in the next ballot cycle.