

**DEPARTMENT OF COMMERCE****National Institute of Standards and Technology****Announcement of Meeting and Opportunity To Join the Virtual Cement and Concrete Testing Laboratory Consortium**

**AGENCY:** National Institute of Standards and Technology, Commerce.

**ACTION:** Notice of public meeting.

**SUMMARY:** The National Institute of Standards and Technology (NIST) invites interested parties to attend the kick-off meeting of the Virtual Cement and Concrete Testing Laboratory consortium on November 30 and December 1, 2000 to be held at the offices of W.R. Grace & Co. in Cambridge, MA. Meetings will be held Thursday afternoon and Friday morning. The goals of this consortium are to develop an enhanced version of a Virtual Cement and Concrete Testing Laboratory and to further the state-of-the-art in the materials science of cement-based materials. The consortium will be supervised and administered by NIST. Consortium research and development will be conducted by NIST staff members along with at least one technical representative from each participating member company. Membership fees for participation in the consortium are Forty Thousand (\$40,000) per year. The initial term of the consortium is intended to be three years. NIST has made available further information on the consortium, including the presentations made at the initial June 14–15 consortium planning meeting, at <http://www.bfml.nist.gov/862/vcctl>

**DATES:** The meeting will take place on November 30, 2000 from 1 PM to 5 PM and on December 1, 2000 from 8 AM to 1 PM in Cambridge, MA.

**ADDRESSES:** The meeting will be held at the offices of W.R. Grace & Co.-Conn., 62 Whittemore Avenue, Cambridge, MA 02140.

**FOR FURTHER INFORMATION CONTACT:** Dale P. Bentz, Chair, Virtual Cement and Concrete Testing Laboratory Consortium, National Institute of Standards and Technology, 100 Bureau Drive, Stop 8621, Gaithersburg MD, 20899, USA; Telephone (301) 975–5865; Fax (301) 990–6891; E-mail: [dale.bentz@nist.gov](mailto:dale.bentz@nist.gov).

**SUPPLEMENTARY INFORMATION:****Consortium Goals**

The goals of this consortium are to develop an enhanced version of the Virtual Cement and Concrete Testing

Laboratory and to further the state-of-the-art in the computational materials science of cement-based materials. These goals will be pursued using a combined experimental/computer modeling approach with strong technical supervision and support being provided by the consortium members and the consortium oversight board (one membership per participating company). The developed Virtual Laboratory should result in a substantial reduction in the extensive resources currently employed for the physical testing of cement-based materials and should also expedite the research and development process significantly.

More details on the planned activities are provided in the Virtual Cement and Concrete Testing Laboratory Consortium membership agreement. A preliminary list of topics that will be addressed by the consortium include: (1) Cement hydration and the influence of alkalis, slag, and limestone additions; (2) measurement and modeling of rheological properties including the influence of entrapped and entrained air voids; and (3) prediction of the elastic/visco-elastic properties of cement-based materials.

**Background**

Over the past twelve years, researchers in the Building Materials Division of NIST have made tremendous strides in the modeling of microstructure and the computation of performance properties of cement-based materials. Currently, NIST is recognized as the undisputed world leader in the “Computational Materials Science of Concrete.” Recently, much of this NIST research has been integrated into a prototype Virtual Cement and Concrete Testing Laboratory (VCCTL), which will be made available over the Internet in November or December of 2000. The purpose of the VCCTL is to reduce the necessary number of physical tests and expedite the R&D process.

The center of the prototype VCCTL is the NIST 3–D cement hydration and microstructure development model (CEMHYD3D). Using the web-based interface, a user may create an initial microstructure containing cement, gypsum, mineral admixtures, and inert fillers following a specific particle size distribution, hydrate the microstructure under a variety of curing (temperature and saturation) conditions, and evaluate the properties of the simulated microstructures for direct comparison to experiment. Furthermore, hydrated microstructures may be degraded using an NIST-developed leaching algorithm, and diffusion coefficients for chloride ions in concrete predicted based on

concrete mixture proportions. As the consortium proceeds, the prediction of rheological properties (viscosity and yield stress) of the fresh materials and elastic properties (elastic modulus, creep, and relaxation) of the hardened materials will be incorporated into the VCCTL.

The Virtual Cement and Concrete Testing Laboratory Consortium is to be chaired by Dale P. Bentz of NIST.

Dated: October 18, 2000.

**Raymond G. Kammer,**

*Director.*

[FR Doc. 00–27433 Filed 10–24–00; 8:45 am]

**BILLING CODE 3510–13–M**

**COMMODITY FUTURES TRADING COMMISSION****Sunshine Act Meeting****AGENCY HOLDING THE MEETING:**

Commodity Futures Trading Commission.

**TIME AND DATE:** 1:00 p.m., Monday, October 30, 2000.

**PLACE:** 1155 21st St., NW., Washington, DC, Lobby Level Hearing Room.

**STATUS:** Open.

**MATTERS TO BE CONSIDERED:**

- Final rules for a regulatory framework for Multilateral Transaction Execution Facilities, Intermediaries and Clearing Organizations.
- Final rules relating to Intermediaries of Commodity Interest Transactions.
- Final rules for a New Regulatory Framework for Clearing Organizations.
- Final rules on the Exemption for Bilateral Transactions.

**CONTACT PERSON FOR MORE INFORMATION:**

Jean A. Webb, 202–418–5100.

**Jean A. Webb,**

*Secretary of the Commission.*

[FR Doc. 00–27501 Filed 10–20–00; 5:06 pm]

**BILLING CODE 6351–01–M**

**COMMODITY FUTURES TRADING COMMISSION****Sunshine Act Meeting**

**TIME AND DATE:** 11 a.m., Friday, November 3, 2000.

**PLACE:** 1155 21st St., NW., Washington, DC, 9th Floor Conference Room.

**STATUS:** Closed.

**MATTERS TO BE CONSIDERED:** Surveillance Matters.