THE UNIVERSITY of WISCONSIN MADISON

New Webinar!

Foundry Sand Recycling Forum

RMRC

Using Foundry Sand in Transportation and Civil Infrastructure Applications

Online Workshop: October 16–November 20, 2008

Six one-hour interactive Web sessions on consecutive Thursdays

9:00 a.m. Pacific Time; 10:00 Mountain; 11:00 Central; 12:00 Eastern

Earn up to

ACCEPTED
8 Professional Development Hours
NATIONWIDE

Federal Highway Administration

Discover the Benefits of Foundry Sand Use in Specific Infrastructure Applications

Foundry sand is a manufactured structural sand used as a molding medium in the metalcasting process. U.S. foundries recycle sand internally but must discard millions of tons of unusable sand annually. This discarded sand then becomes locally available aggregate resources.

This online workshop will focus on using foundry sand in specific infrastructure applications, including:

- **Hot mix asphalt**
- **Controlled low strength material**
- **Bases and subgrades**
- **Structural fills, embankments, and retaining structures**

For each application the instructors will discuss civil engineering issues such as index properties, design guidelines, testing requirements, and specifications, along with case studies and environmental assessments.

Who Should Attend

- ☑ **Design engineers**
- ☑ **Geotechnical/Soils Engineers**
- ☑ **Regulatory review professionals**
- ☑ **Contracting service personnel**
- ☑ **Construction contractors**
- ☑ **Public sector professionals**
- ☑ **Dam owners**
- ☑ **Biologists**
- ☑ **Planners**

How to Enroll

http://epd.engr.wisc.edu/webK479

Click on the "Enroll Now" button and complete the form.

Webinar Session Topics

October 16, 2008
Characterizing Engineering Properties of Foundry Sands
- Characterizing engineering behavior—do foundry sands behave like sand?
- Measuring properties for embankments, structural fill, and backfill
- Measuring properties for pavement design

Dr. Craig H. Benson

October 23, 2008
Designing Hot Mix Asphalt with Foundry Sand
- Creating mix designs
- Controlling the mix at the plant
- Constructing HMA with foundry sand

Dr. Hussain U. Bahia

October 30, 2008
Designing Controlled Low Strength Material (Flowable Fill) with Foundry Sand
- Engineering CLSM with foundry sand
- Ensuring adequate set time and final strength
- Constructing with CLSM containing foundry sand

Dr. Tuncer B. Edil

November 6, 2008
Designing Pavements Using Foundry Sand in Base and Subbase
- Defining engineering properties for pavement design
- Evaluating pavements constructed with foundry sand bases and subbase
- Constructing with foundry sand as base or subbase

Dr. Tuncer B. Edil

November 13, 2008
Using Foundry Sand for Embankments, Retaining Structures, and Structural Fill
- Determining the shear strength for design
- Characterizing interaction with geosynthetics
- Evaluating drainage and raveling

Dr. Craig H. Benson

November 20, 2008
Evaluating Environmental Suitability of Foundry Sands for Infrastructure Construction
- Selecting the approach testing methods
- Demonstrating environmental acceptability for your project
- Negotiating environmental permitting

Dr. Craig H. Benson

Webinar Sponsors

This webinar's sponsors include the Recycled Materials Resource Center at the University of New Hampshire and the University of Wisconsin–Madison, and grant sponsorship from the Federal Highway Administration.

Experienced Instructors

Hussain U. Bahia PhD is a professor of civil and environmental engineering at the University of Wisconsin–Madison and an associate with the university's Asphalt Research Program. His research focuses on the characterization of construction materials with emphasis on rheology and durability of asphalt binders and asphalt concrete mixtures.

Craig H. Benson PhD, PE is professor and chair, Department of Civil and Environmental Engineering, University of Washington in Seattle, and co-director of the university's Recycled Materials Resource Center. For the last 20 years Dr. Benson has been conducting experimental and analytical research in geoenvironmental engineering. This research has included laboratory studies, large-scale field experiments, and computer modeling.

Tuncer B. Edil PhD is a professor of civil and environmental engineering at the University of Wisconsin–Madison and research director of the university's Recycled Materials Resource Center. His current research focuses on construction of highways over poor subgrades and use of environmental by-products such as shredded tires, foundry sand, and coal combustion fly ash in highway construction.

Webinar Schedule

You can participate in the live, interactive Web conferencing sessions on six Thursdays this fall. The six one-hour interactive Web sessions, October 16–November 20, 2008, begin at 9:00 a.m. Pacific Time (10:00 Mountain; 11:00 Central; 12:00 Eastern).

By e-mail, you will be able to communicate directly with the instructors and the other Web conference participants during the time between the live, online sessions. For at least one month after each session you will also have Internet access to watch and hear archived sessions for further review.

Getting Started Online

You will receive instructions, personal support and a chance to test your Web conferencing connection in advance of the first session. Professionally trained university staff will provide any technical support and assistance you need.

The University of Wisconsin–Madison has more than 35 years of experience in delivering courses via live, interactive teleconferencing. Our Web conferencing service, called WisLine Web, combines the ease of an audioconference call with the power of visually interactive Web-based materials. Everyone who logs in can share the visual content and interact with each other either by voice or through the interactive tools of an application.

You can join a Web conference from anywhere you have access to the Internet and an additional phone line. You simply dial in to the phone conference and point your browser to the pre-assigned URL to enter the WisLine Web conference center. There's more information about WisLine Web at http://www.uwex.edu/ics/wlw/index.html

General Information

Fee of $395 covers the full series, or enroll for $85 per session you want to attend. Webinar fee includes instruction, webinar materials, certificate and Web conferencing services, including domestic long distance phone charges. International calls will be billed separately. Webinar notes are distributed only to participants.

Team discounts are available when four or more people enroll from the same organization. Call Edie Vitale 608-263-3646 for more details.

Earn PDH by participating in this webinar. You will earn up to 8 Professional Development Hours (PDH) if you complete all sessions and accompanying assignments, or 1 PDH per session attended.

If you must cancel, please notify us by October 9, and we will refund your fee. ***Cancellations received after this date and no-shows are subject to a $150 administrative fee.*** You may enroll a substitute at any time before the webinar starts.

How to Enroll

Web: http://epd.engr.wisc.edu/webK479

Click on the "Enroll Now" button and complete the form.

Or,

Phone: 800-462-0876 or 608-262-1299

E-mail: custserv@epd.engr.wisc.edu

Fax: 800-442-4214 or 608-265-3448

and indicate:

Course #K479

Using Foundry Sand in Transportation and Civil Infrastructure Applications

Six one-hour interactive Web sessions on consecutive Thursdays

Fee: $395 – full series of six online sessions; or $85 per session for one to five sessions

Note: If you are not attending all six sessions, be sure to indicate which dates you will attend.

October 16, 2008 – Session 1
October 23, 2008 – Session 2
October 30, 2008 – Session 3
November 6, 2008 – Session 4
November 13, 2008 – Session 5
November 20, 2008 – Session 6

For More Information

Call toll-free **800-462-0876** and ask for

Program Director: Philip R. O'Leary
oleary@engr.wisc.edu

Program Associate: Edie Vitale
vitale@epd.engr.wisc.edu

Or email **custserv@epd.engr.wisc.edu**

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