Welcome to the 15th Arizona Pavements/Materials Conference 2018: Staying Ahead of the Performance Curve

Tempe, Arizona
November 15-16, 2018
Welcome to the 15th Arizona Pavements/Materials Conference

Following up with last year’s theme on “Embracing Pavement Technologies”, the theme for the 2018 Pavement/Materials Conference is focused on “Staying ahead of the Performance Curve”. This year’s agenda features:

- Innovation in Concrete Pavements
- Geotech to the Rescue - Challenges and Solutions
- Asphalt Performance Testing
- FHWA Mobile Asphalt Lab I-40 Case Study
- Connect 202 South Mountain
- FHWA’s Incentive for Innovation
- Technology Updates
- Design, Build and Operate
- The Path to Autonomous Vehicles

**Location**

This two-day conference sponsored by Arizona State University (ASU), Arizona Department of Transportation (ADOT), Federal Highway Administration (FHWA), Arizona’s industry and local governments will be held at **Arizona State University, Tempe Campus** (1290 S. Normal Ave., Tempe, AZ 85281) on **November 15-16, 2018** in the Memorial Union (MU). The MU serves as the central meeting and conference center for the ASU community.

Speaker presentations will take place in the **Ventana Ballroom** and **Pima Auditorium**. Exhibitors, Luncheons, Refreshment Breaks and Welcome Reception will be located in the **Arizona Ballroom**.

**Parking at ASU**

Visitor parking is available in the following parking structures

- **Fulton Center** Structure (Foundation Building) located at University Drive and College Avenue (NE Corner)
- **Rural Road** Structure located at Rural Road and Terrace Road (SW corner)
- **Apache Blvd.** Structure located at Apache Blvd and Normal Avenue (NW corner)

The cost of parking is included in your registration fee. Please bring your parking ticket to the registration table when you arrive to obtain a validation ticket.

ASU parking locations and maps are located at https://cfo.asu.edu/pts-visitor-tempe.

**Accommodations**

Visit our website https://pavement.engineering.asu.edu for a list of hotels conveniently located within walking distance of the campus. Call the hotel directly to make your reservation. ASU and government rates may be available.
# 2018 Conference Program

## DAY 1 | AGENDA  THURSDAY, NOVEMBER 15, 2018

<table>
<thead>
<tr>
<th>Time</th>
<th>Event</th>
</tr>
</thead>
<tbody>
<tr>
<td>8:00-10:00am</td>
<td>REGISTRATION, EXHIBIT VIEWING - Continental Breakfast - Arizona Ballroom 221</td>
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<tr>
<td></td>
<td><strong>OPENING SESSION:</strong> Ventana Ballroom 241</td>
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<tr>
<td></td>
<td>Moderator: Paul Burch, PE, ADOT and Kamil Kaloush, PhD, PE, ASU</td>
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<tr>
<td>10:00-10:30am</td>
<td>ASU Welcome Address</td>
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<tr>
<td></td>
<td>Ram Pendyala, PhD, Interim Director, School of Sustainable Engineering and the Built Environment, Arizona State University</td>
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<tr>
<td>10:30-11:00am</td>
<td>FHWA Overview</td>
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<td>Peter Osborn, Director, Field Services West, Federal Highway Administration</td>
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<tr>
<td>11:00-11:30am</td>
<td>ADOT Overview</td>
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<td>Dallas Hammit, Deputy Director for Transportation/State Engineer, Arizona Department of Transportation</td>
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<tr>
<td>11:30-12:00pm</td>
<td>MAG Overview</td>
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<td>Eric Anderson, Executive Director, Maricopa Association of Governments</td>
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<td>12:00-1:30pm</td>
<td>LUNCH: Arizona Ballroom 221 (Community Service Awards Luncheon/Founders Award Presentation)</td>
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<td>Moderator: David Martin, President, Arizona Chapter-Associated General Contractors</td>
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<td>1:30-2:00pm</td>
<td>TRACK 1</td>
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<td><strong>SESSION 1:</strong> GEOTECH TO THE RESCUE-CHALLENGES AND SOLUTIONS</td>
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<td></td>
<td>Ventana Ballroom 241</td>
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<td></td>
<td>Moderator: Paul Burch, PE, ADOT</td>
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<td>Geotechnical Challenges Related to the TBM for the Alaska Way Viaduct Replacement Project</td>
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<td>Barry Sel, PE, FHWA Resource Center</td>
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<td>2:00-2:30pm</td>
<td>Pavement Reconstruction Challenges and Innovations on I-40 West of Flagstaff</td>
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<td>Tad Niemyjski and Brent Conner, ADOT</td>
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<td>2:30-3:00pm</td>
<td>SR 77 Safety and Slope Stability</td>
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<td>Brent Conner, Geotechnical Design Services Supervisor, ADOT</td>
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<td>3:00-3:30pm</td>
<td>BREAK: Arizona Ballroom 221</td>
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<td>3:30-4:30pm</td>
<td><strong>GENERAL SESSION:</strong> Ventana Ballroom 241</td>
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<td>Moderator: Kevin Robertson, ADOT</td>
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<tr>
<td>4:30-6:00pm</td>
<td>Perspectives on Asphalt Pavement Preservation</td>
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<td>Mark Ishee, Ergon Asphalt &amp; Emulsions, Jeff Smith, Cactus Asphalt, Paul Burch, ADOT</td>
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<td></td>
<td>Q &amp; A</td>
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<td><strong>WELCOME RECEPTION - STUDENT POSTER SESSION</strong></td>
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<td>Turquoise Ballroom</td>
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<td>Moderator: Joe Phillips, Terracon</td>
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<td>Door Prizes, Refreshments, Complimentary Bar</td>
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<td></td>
<td>All Conference attendees are invited to attend.</td>
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</tbody>
</table>
2018 Conference Program

DAY 2 | AGENDA  FRIDAY, NOVEMBER 16, 2018

7:00-8:00am
REGISTRATION, EXHIBIT VIEWING, Continental Breakfast - Arizona Ballroom 221

8:00-8:30am
GENERAL SESSION: DESIGN BUILD AND OPERATE  Ventana Ballroom 241
Moderator: Tom Buick, Consultant

8:30-9:00am
US 550 Case Study
Paul Brasher, NMDOT

8:30-9:00am
I-10 SPS2 Test Sections
Larry Scofield, PE, International Grooving and Grinding Association

9:00-9:30am
Connect 202 South Mountain (Pavement Design)
Doug LaMont, WSP; Kevin Turner, KT Consulting; Steve Mishler, ADOT

9:30-10:00am
Prime Factors for Successful Preservation Treatments
Larry Galehouse, National Center for Pavement Preservation, Michigan State University

10:00-10:30am
BREAK: Arizona Ballroom 221

10:30-11:00am
SESSION 3: ASPHALT PERFORMANCE & PRESERVATION  Ventana Ballroom 241
Moderator: Anthony Sarhan, PE, FHWA

FHWA’s Density Demonstrations in Arizona and other States
Tim Aschenbrener, PE, FHWA Resource Center

FHWA Mobile Asphalt Testing Trailer: Recent Experience in Arizona
Amir Golalipour, PhD, Project Manager, FHWA/ESC Inc.

ADOT’s SPR 742 Project
Akshay Gundla, Graduate Research Associate, ASU/Staff Engineer, Applied Research Associates

11:00-11:30am
LUNCH: Arizona Ballroom 221
(Sponsors/Exhibitors Awards Luncheon/ Student Poster Competition Presentation/Witczak Endowment Presentation)
Moderator: Steve Trussell, Arizona Rock Products Association

The Path to Autonomous Vehicles
W.H. (Bill) Sowell, MBA, PhD, Vice President-Business Development, Eberle Design, Inc. & Reno A&E

11:30-12:00pm
Scrap Tire Recycling and the Use of Crumb Rubber
Dawn Helms, CRM/Jeff Smith, Cactus Asphalt

Lime and Liquid Anti-Stripping Agents
Richard Steger, PE, Platform Manager, Ingevity Pavement Technologies

Use of Bio-Binder in Pavement Construction
Ellie Fini, PhD, ASU

12:00-2:00pm
END OF CONFERENCE: Grand Prize Drawing
The 2018 conference has several sponsorship packages available, providing sponsors with a choice of exposure related to financial commitment.

- **Reception Sponsor $4,000** (one available) (FMV = $825.00)
  - Three (3) conference registrations (**provide names**)
  - Opportunity to provide your sign displayed at the reception refreshment station
  - Acknowledgement sign on reception tables
  - Signage at the conference
  - Recognition in the conference program *
  - Your logo and link to your website on the conference Website
  - Acknowledgement during the opening session
  - Award recognition during conference Sponsor luncheon

- **Platinum Level Sponsor $3,000** (unlimited) (FMV = $550.00)
  - Two (2) conference registrations (**provide names**)
  - Acknowledgement sign on luncheon tables
  - Signage at the conference
  - Recognition in the conference program *
  - Your logo and link to your website on the conference Website
  - Award recognition during conference Sponsor luncheon

- **Gold Level Sponsor $2,000** (unlimited) (FMV = $275.00)
  - One (1) conference registration (**provide name**)
  - Signage at the conference
  - Recognition in the conference program *
  - Your logo and link to your website on the conference website
  - Award recognition during the conference Sponsor luncheon

- **Conference Bag Sponsor $1,500** (no longer available)
  - Your name imprinted on conference bags
  - Signage at the conference
  - Recognition in the conference program *
  - Your logo and link to your website on the conference website
  - Award recognition during the conference Sponsor luncheon

- **Lanyard Sponsor $1,500** (one available)
  - Your name imprinted on lanyards
  - Signage at the conference
  - Recognition in the conference program *
  - Your logo and link to your website on the conference website
  - Award recognition during the conference Sponsor luncheon

- **Witczak Endowment Sponsor $1,500** (no longer available)
  - Signage at the conference
  - Recognition in the conference program *
  - Your logo on the conference website
  - Award recognition during the conference Sponsor luncheon

- **Silver Level Sponsor $1,000** (unlimited)
  - Signage at the conference
  - Recognition in the conference program *
  - Your logo and link to your website on the conference Website
  - Award recognition during the conference Sponsor luncheon

- **Bronze Level Sponsor $500** (unlimited)
  - Signage at the conference
  - Recognition in the conference program *
  - Your logo on the conference website
  - Award recognition during the conference Sponsor luncheon

*If paid before print deadline.

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**Sponsorship Agreement**

- **Level of Sponsorship:**
  - [ ] Silver Level Sponsor $1,000
  - [ ] Platinum Level Sponsor $3,000
  - [ ] Gold Level Sponsor $2,000
  - [ ] Conference Bag Sponsor $1,500
  - [ ] Lanyard Sponsor $1,500
  - [ ] Reception Sponsor $4,000

- **Company Name:**
- **Contact Person:**
- ****Attendee(s):**
- **Address:**
- **Email:**
- **Phone:**

- **Payment Method:**
  - [ ] Check (made payable to ASU Foundation)
  - [ ] Visa
  - [ ] MasterCard
  - [ ] American Express

- **Card #:**
- **Expiry Date:**
- **CCV code:**
- **Name on Card:**

All funds will be deposited into an account with the ASU Foundation, a separate non-profit organization that exists for the benefit of ASU. Due to the value of benefits received, only payments in excess of fair market value (FMV) may be considered a charitable contribution. Conference sponsorships and proceeds will be used toward facilitating the Arizona Pavements/Materials Conference as well as funding undergraduate and graduate student projects, activities and a scholarship endowment with the ASU Foundation for A New American University. 30001468

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Attn: Judy Reedy
Arizona State University, School of Sustainable Engineering and the Built Environment
PO Box 873005
Tempe, AZ 85287-3005

Questions: Contact judy.reedy@asu.edu
(480) 965-1713
Participating as an exhibitor at the 2018 Arizona Pavements/Materials Conference will demonstrate your level of support and commitment to the pavements / materials industry.

The undersigned hereby applies for space as an Exhibitor at the Arizona Pavements/Materials Conference. There are a limited number of exhibit spaces available for the conference on a first come/first serve basis.

The exhibitor registration fee of $950 includes one six foot table with two chairs and electricity in the Arizona Ballroom plus registration to the conference for two (2) people.

Register to be an Exhibitor - $950.00

- My check for $950.00 is enclosed payable to Arizona State University.
- I wish to pay with a credit card at the conference website https://pavement.engineering.asu.edu

Company Name: ____________________________________________________________

Name of attendees: (1) _______________________________________________________

(2) __________________________________________________________

Address: _________________________________________________________________

City/State/Zip: _____________________________________________________________

Email: _________________________________________________________________

Phone: ________________________________________________________________

Exhibit space is limited. Tables will be assigned on a first come/first serve basis. All payments for exhibiting are due at the time of registration.

Please indicate here if you would like a vegetarian lunch.  Attendee #1  Attendee #2

Requests for a vegetarian lunch will not be taken at the conference.

Attn: Judy Reedy
Pavements/Materials Conference
Arizona State University
PO Box 873005
Tempe, AZ 85287-3005
Fax: (480) 965-0557
Email: judy.reedy@asu.edu

Location: Arizona State University,
Memorial Union Building, 2nd Floor
Arizona Ballroom,
1290 S. Normal Avenue, Tempe, AZ 85281

Send completed form to:
15th Arizona Pavements/Materials Conference • Staying Ahead of the Performance Curve
Early registration deadline is October 12, 2018
(Use this form if paying with a check or Purchase Order – Register online if paying with a credit card. https://pavement.engineering.asu.edu)

Attendee Information

Name:__________________________________________________________

Company:_____________________________________________________

Address:_______________________________________________________

City/State/Zip:_________________________________________________

Email:_________________________________________________________

Phone:_________________________________________________________

Date:_________________________________________________________

Registration Fee Includes:
Entry to technical sessions, Thursday and Friday continental breakfasts, luncheons, refreshment breaks, Welcome Reception Thursday evening and parking during the conference. Presentations will be posted on the website after the conference. https://pavement.engineering.asu.edu

Cancellation Policy
Registrants unable to attend are encouraged to send a substitute at no additional charge. No refunds will be issued after Oct. 12, 2018.

Attendee Profile

Consulting Engineer  Contractor  Equipment Manufacturer
Materials Testing Laboratory  Materials Producer  Other
Materials Supplier  Federal Government  State Government
County Government  City Government  Full-Time Student

Registration Fees

<table>
<thead>
<tr>
<th>Registration Fees</th>
<th>Thru Oct.12, 2018</th>
<th>After Oct.12, 2018</th>
</tr>
</thead>
<tbody>
<tr>
<td>CONFERENCE REGISTRATION (2 days)</td>
<td>$275.00</td>
<td>$325.00</td>
</tr>
<tr>
<td>FULL-TIME STUDENT (2 days)</td>
<td>$25.00</td>
<td>$25.00</td>
</tr>
</tbody>
</table>

Method of Payment
(Please check one)

- Check Enclosed (made payable to Arizona State University)
- PO # __________________________

If paying with a credit card, please register online at
https://pavement.engineering.asu.edu

In order to assist with conference planning, please check the conference events you will attend (Open to all attendees):

Day 1 Lunch  Indicate here for vegetarian meal.
Day 1 Welcome Reception
Day 2 Lunch  Indicate here for vegetarian meal.

Please Note: Request for a vegetarian lunch must be made on this registration form. Requests will not be taken at the conference.

Submit this form to:

Attn: Judy Reedy
School of Sustainable Engineering and the Built Environment
Arizona State University
PO Box 873005, Tempe, AZ 85287-3005
Fax: (480) 965-0557
Email: judy.reedy@asu.edu

pavement.engineering.asu.edu
As part of the Arizona Pavements/Materials Conference, three individuals who have made significant contributions to the advancement of the pavement/materials technology and programs in Arizona will be recognized and honored with a Pavements/Materials Conference Community Service Award to be presented during the luncheon on the first day of the conference, November 15, 2018.

One award will recognize a person working in the public sector - federal, state, local government agencies. The second award will recognize a person working in the private sector - contractors, consultants, material supplies, equipment suppliers, etc. and the third award will recognize someone in academia.

The basis for an award should be one or more of the following attributes:

• Exceptional contributions to technology enhancement relating to pavements/materials
• Excellence in implementing advanced technology into practice
• Excellence in bridging the gap between research and practice
• Exceptional contributions to the advancement of paving/materials programs in Arizona

The only restrictions on nominations are (1) recipients of the awards must conduct work in or reside in Arizona, and (2) members of the Award Selection Committee are not eligible.

Please use this form to submit your nomination by October 19, 2018. The Awards Selection Committee needs a concise paragraph outlining the basis for the nomination, emphasizing the notable contributions of the nominee to the pavements/materials program and/or industry in Arizona.

Nominations may be submitted at the conference website under the Service Awards tab or by completing this form and submitting it to:

Attn: Judy Reedy
School of Sustainable Engineering and the Built Environment
Arizona State University
PO Box 873005
Tempe, AZ 85287-3005
Fax: (480) 965-0557
Email: judy.reedy@asu.edu

https://Pavement.engineering.asu.edu

2017 Community Service Award Recipients

Mounir El Asmar, ASU
Bruce Kay, Ninyo & Moore
Wylie Bearup, ASU