# CENTER FOR AGGREGATES RESEARCH

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ICAR's 11th symposium emphasizes performance as a measurement of quality

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 to r.: John Allen, Thomas Ransdell, Dallas Little, Richard Barksdale, Robin Graves, David Fowler, Robert O'Brien, and Charles Pryor.

S mite the rocks with the rod of knowledge and fountains of unstinted wealth will gush forth."

-Ashbel Smith, M.D., first Chairman of the Board of Regents of the University of Texas System (1881-1886)

The participants at ICAR's Eleventh Annual Symposium gained a wealth of knowledge about aggregates. Held in Austin, Texas, April 27-30, 2003, the meeting brought attendees representing industry, academia, and government up to date on technical issues and research. These participants, in turn, helped to define future research projects for the Center.

Several ICAR researchers presented their ongoing and completed projects. For those interested in more detail, many interim and final reports can be printed from ICAR's website at: http://www.icar.utexas.edu



#### SPEAKERS AND TOPICS

Keynote speakers included: B. Frank McCullough, professor emeritus, The University of Texas at Austin, member of the ICAR Advisory Board, and former Director of Center for Transportation Research; Michael L. Hines, Vice President, Engineering, Koch Performance Roads, Inc; and Thomas R. Bohuslav, P.E., Director, Construction Division, Texas Department of Transportation.

Performance-based specifications served as a theme for this year's meeting. For both portland cement concrete and asphalt concrete, experts presented their findings on needs analysis, development, and field application of performance-based specifications. Others presented analyses of aggregates' influence on performance and sophisticated techniques for measurement and prediction of performance. Other topics included field evaluations of thick-lift granular bases, pervious concrete, alkali-silica reaction, and concrete workability. Each participant received a CD-ROM of the proceedings, available for a nominal fee by contacting ICAR.

After more than a decade of highly focused research on aggregates, the Center and its collaborators continue to increase both the quantity and quality of findings that benefit the aggregates industry. Several attendees commented, "Best symposium ever."

# ICAR's Technical Advisory Committee (TAC) to meet



Luck Stone's Randy Weingart, I. and Martin Marietta Aggregates' David Jahn provide invaluable expertise as members of ICAR's TAC.

The TAC, short for Technical Advisory Committee, is a group of experts from industry, government, and academia. The TAC evaluates proposed research topics, ranks the competing ideas, and recommends program content to the ICAR Board. This body receives ideas from ICAR's task forces, DOTs, members of the industry, and researchers as they attempt to ensure that scarce funding addresses the most important research issues.

This year, the TAC will meet in Austin, Texas, July 28-29. In addition to input received from the task force meetings held during the recent symposium, ICAR invites suggestions for research topics from industry and any interested party.

Please contact ICAR's Managing Associate Director, Dr. Joe Allen, at 512-471-4498 or icar@mail.ce.utexas.edu.

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TAC MEMBERSHIP

# 11th Symposium Exhibitors

John B. Long Co. LPT Group Gilson Company, Inc. InterSystems Samplers Phoenix Process Equipment Company Bowser-Morner Testing Laboratories Rainhart Company HMA Lab Supply Inc.



#### CO-SPONSORS FOR ICAR'S 11TH ANNUAL SYMPOSIUM:

National Stone, Sand, & Gravel Association

Aggregates Foundation for Technology, Research, and Education

The University of Texas at Austin

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Texas Aggregates and Concrete Association Vulcan Materials Company Spence Concrete Company TXI Lattimore Materials Company Capitol Aggregates, Ltd. Martin Marietta Materials Hanson Aggregates Central

# Distinguished Researcher Award



Past holders of the distinction present to congratulate Professor Barksdale, far right, included, from I. to r.: William Sheftick, Bowser-Morner Testing Laboratories; Charles Machemehl, Jr., Georgia Crushed Stone Association and Vulcan Materials Company; and Stephen W. Forster, FHWA.

rofessor emeritus Richard Barksdale of Georgia Tech received the ICAR/AFTRE Distinguished Researcher Award. His 40-plus years of research in geotechnical and materials engineering include the characterization of granular base materials, the estimation of rutting, and the performance of stone columns. He currently serves on ICAR's Technical Advisory Committee and chairs ICAR's Task Force on Pavement Design and Performance. Educated at Georgia Tech and Purdue University, Professor Barksdale retired after more than 30 years of teaching. His acceptance speech emphasized the value of handson experience and observation in the field.



Prof. Barksdale, l., with Erol Tutumluer, a possible future ICAR/AFTRE Distinguished Researcher?



Professor Dallas Little lead a workshop on mechanistic design. "We're extremely pleased with the feedback that we received from the workshop participants. Their insight will enable us to fine-tune the highly technical content to meet both government and industry researchers' needs. We definitely plan to offer this workshop again."

--Dallas Little, Ph.D., P.E., Associate Director, ICAR



Exhibitor Bob Durr of Rainhart company was delighted to hear positive comments about his company's equipment during Barkdale's Distinguished Researcher acceptance speech.



Panelist Sheila Beshears, Illinois DOT



### ICAR SYMPOSIUM INTRODUCES TWO NEW SEMINARS

CAR enhanced its symposium's curriculum this year by offering a seminar on mechanistic design and another on field evaluation of material parameters. Many participants commented on the usefulness of the well-designed workshops and recommended offering similar learning opportunities in future symposia.

GOVERNMENT OFFICIAL PANEL RECEIVES HIGH MARKS FROM PARTICIPANTS

 everal participants mentioned that one of the most valuable  $\bigcirc$  aspects of the symposium remains the chance to get to know problems that people from other states experience. The annual panel of state and federal highway officials provides an excellent forum for exchange of experiences and ideas of experts from states and organizations representing a wide variety of geographical regions. This year, seven panelists presented their states' unique perspectives concerning aggregates then fielded questions from the audience. In addition to the nineteen officials from twelve departments of transportation, participants included representatives of the National Institute of Standards and Technology, AASHTO, and the FHWA. ICAR encourages officials from all regions to attend the event.









# HIGH SPIRITS











ICAR's 11th Annual Symposium





















#### ICAR'S 12<sup>TH</sup> ANNUAL SYMPOSIUM

#### WHO SHOULD ATTEND?

Industry producers, researchers, sales personnel, & engineers

Construction contractors

DOT employees involved in research, design, & construction

University researchers & professors

AGGREGATES: ASPHALT CONCRETE, PORTLAND CEMENT CONCRETE, BASES & FINES

#### HOSTED BY

International Center for Aggregates Research

The University of Texas/ Texas A& M

Aggregates Foundation for Technology, Research, & Education

National Stone, Sand, & Gravel Association

#### APRIL 4-7, 2004 · DENVER, COLORADO

ICAR's **12**TH SYMPO-SIUM will feature presentations on current aggregates issues in concrete, asphalt, and unbound pavement layers. In addition to these topi<u>cal</u> areas, we will have papers on new testing procedures, characterization of materials for various uses, and the application of new techniques to field practice.



WESTIN TABOR CENTER HOTEL

Director

PLAN NOW TO JOIN US IN Denver for the only national forum bringing together state and federal officials, producers, and contractors to discuss aggregates issues, to speed the transition from research to field use, and to point the way for meaningful future research.

Again this year we will offer seminars on topics such as mechanistic design for pavements and introduction of aggregates to the virtual concrete testing laboratory

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