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BULLETIN

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Luminescence Imaging ...

25 Luminescence Imaging of Surface Cracks and Surface-Density Gradients in Alumina

Luminescence imaging is a practical real-time, nondestructive alternative to Archimedes density measurements for detecting density and density gradients in polycrystalline Al_2O_3 that can be used in ceramic production or process development environments.

C.H. Schilling, V. Garcia, C.P. Li and R. Jankowiak

31 Direct Observation of Detrimental Defects in Ceramics

An optical microscopy in the transmission mode technique reveals that large pores exist in commercial Al_2O_3 and Si_3N_4 and that they are directly related to the strength variation of these ceramics.

Hiroya Abe, Tadashi Hotta, Makio Naito, Nobuhiro Shinohara and Keizo Uematsu

35 CLSM for Ceramic Green Microstructure

Confocal laser scanning microscopy is a new, powerful characterization method for determining the microstructure of a ceramic green body.

Yutaka Saito, Satoshi Tanaka, Nozomu Uchida and Keizo Uematsu

39 High Volume Mineral Additive for Eco-Cement

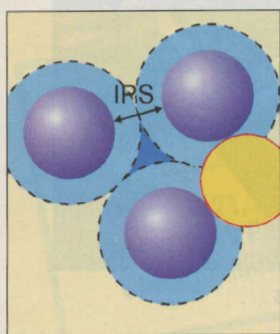
High-volume mineral additive cement has higher compressive strength than ordinary cement and uses inexpensive industrial byproducts and waste materials as the mineral additives.

Konstantin Sobolev and Metin Arikin

44 IPS, A Viscosity-Predictive Parameter

Several restrictions must be considered when using interparticle spacing (IPS) as a tool to predict the viscosity of suspensions.

F.S. Ortega, R.G. Pileggi, A.R. Studart, V.C. Pandolfelli and B. Myhre



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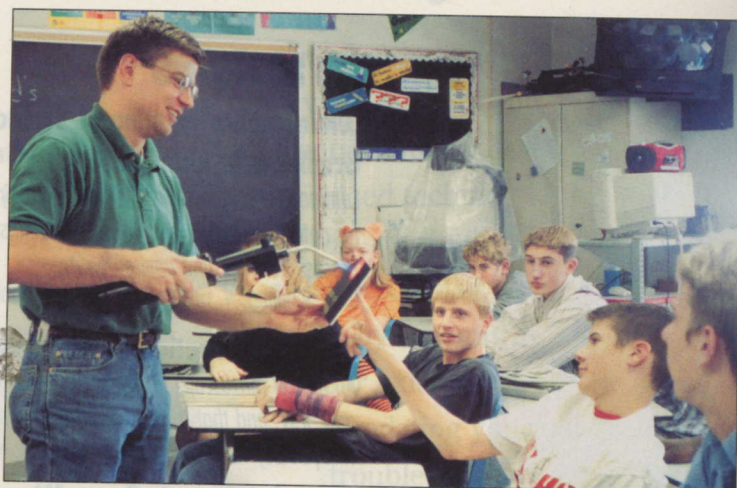


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ACerS 104th Annual Meeting
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April 28–May 1, 2002

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and Exposition, Nashville,
Tenn., April 27–30, 2003



global news . . .

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