THE WORLD RESOURCE FOR CERAMICS AND GLASS TECHNOLOGY

\$7.50 February 2004

www.ceramicbulletin.org

NovaTest: Biophotonics

System for Toxicity Testing / 14

ACerS 2004 Meetings Guide / 17

Focus on Processing:

Machining, Grinding, Drilling / 39

AMERICAN CERAMIC SOCIETY



www.ceramicbulletin.org

**Volume 83. Number 2. February 2004** 

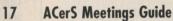
## feature articles

- Feature Articles Online at www.ceramicbulletin.org 13
  - ANN Model Predicts Floor Tile Properties
  - Degiring of Aqueous Gelcasting Slurries
  - Mg MMC Closed Die Forgings for Automotive Applications
  - Model-Based Control of Glassmelting Furnaces and Forehearths
    - NovaTest: A Biophotonics System for Rapid In-Vitro Toxicity Testing

Larry L. Hench and loan Notingher

Digital Library of Ceramic Microstructures: Part 1, 16 Digital Library

R.R. Wills, M.H. Peirson, M.K. Ferber, V. Tennery, J. Sankar, S. Yarmolenko, N.N. Thadhani, M. Velez and M. Karakus



56th Pacific Coast Regional Meeting and Basic Science Division Fall Meeting 33 **Call for Papers** 



- global news
- technology briefs
- nano news
- 8 envirotech
- 10 names in the news
- 12 glass facts

## products

focus on processing: Machining, Grinding, Drilling

novatest...

### departments

- 42 business services
- career opportunities/classified ads 48
- advertisers/editorial index 48

# **ACerS news & activities**

- member news
- 37 president's letter
- 38 calendar

Mg MMC ...

AMERICAN CRAMIC SOCIETY BULLETIN COVERS NEWS AND ACTIVITIES OF THE SOCIETY AND ITS MEMBERS, INCLUDES ITEMS OF INTEREST TO THE CERAMIC COMMUNITY, AND PROVIDES THE MOST CURRENT INFORMATION CONCERNING ALL ASPECTS OF CERAMIC TECHNOLOGY, INCLUDING R&D, MANUFACTURING, ENGINEERING AND MARKETING.

AMERICAN CRAMIC SOCIETY BULLETIN (ISSN NO. 0002-7812). ©2004. PRINTED IN THE UNITED STATES OF AMERICA. THE BULLETIN IS PUBLISHED MONTHLY AS A "DUAL-MEDIA" MAGAZINE IN PRINT AND ELECTRONIC FORMAT (WWW.CERAMICBULLETIN.ORG). EDITORIAL AND SUBSCRIPTION OFFICES: 735 CERAMIC PLACE, WESTERVILLE, OH 43081-8720. SUBSCRIPTION INCLUDED WITH AMERICAN CERAMIC SOCIETY MEMBERSHIP. NONMEMBER SUBSCRIPTION RATES: NORTH AMERICA, 1 YEAR \$75; INTERNATIONAL, 1 YEAR \$131. RATES

INCLUDE SHIPPING CHARGES. INTERNATIONAL REMAIL SERVICE IS STANDARD OUTSIDE OF NORTH AMERICA.

SINGLE ISSUES, JANUARY-NOVEMBER: MEMBER \$6.00 PER ISSUE, NONMEMBER \$7.50 PER ISSUE; POSTAGE/HANDLING FOR JANUARY-NOVEMBER ISSUES: NORTH AMERICA, \$3 FOR FIRST ISSUE AND \$1 FOR EACH ADDITIONAL ISSUE; OUTSIDE NORTH AMERICA, \$6 FOR FIRST ISSUE AND \$2 FOR BICH ADDITIONAL ISSUE. DECEMBER ISSUE (PRICES INCLUDE POSTAGE/HANDLING): NORTH AMERICA—MEMBER \$20, NONMEMBER \$25; DUTSIDE OF NORTH AMERICA—MEMBER \$26, NONMEMBER \$31.

POSTMASTER: PLEASE SEND ADDRESS CHANGES TO AMERICAN CERAMIC SOCIETY BULLETIN, P.O. BOX 6136, WESTERVILLE, OH 43086-6136

PERIODICAL POSTAGE PAID AT WESTERVILLE, OHIO, AND ADDITIONAL MAILING OFFICES. ALLOW SIX WEEKS FOR ADDRESS CHANGES

ACSBA7, Vol. 83, No. 2, PP 1-48. ALL FEATURE ARTICLES ARE COVERED IN CURRENT CONTENTS.