

ACADEMY OF DENTAL MATERIALS NEWSLETTER

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Ann-Marie Neme, Secretary ADM

May 2003

Message from the President

Dear members,

I'm pleased to announce to you that as of January 2003 the distribution problems of our journal Dental Materials have been solved and by now all missing issues replaced. Elsevier has apologized for the distribution delays and problems encountered last year which were due to a new Elsevier dispatch system introduced at the beginning of 2002, whilst using an 'offline' system of delivery of members address labels to the warehouse. It has now been agreed that Elsevier and the ADM will use an online system of delivery of labels to the warehouse starting April 2003. I would like to sincerely thank Mrs. Nicola Garvey, the publishing Editor of Elsevier in London, which has personally taken care of our complaints and greatly contributed to speed up the process of bringing the journal back on track. As a repair measure, Elsevier will increase the number of issues to be published in 2004 to 10 issues / year at no extra costs, which will greatly help reducing the waiting time for authors who wish to see their paper in an issue. Also, Elsevier provides now free electronic access to Dental Materials, hosted on ScienceDirect, to all the members of the Academy of Dental Materials. Access to the Journal is the following URL: available at www.sciencedirect.com (then go to Dental Materials). At the top of the tables of contents there is a link to 'articles in press'. These are proofs (containing the corrected corrections) which have been uploaded prior to being assigned a specific issue and page span. This information is invaluable for contributors wishing to have their papers appear as quickly as possible after acceptance. This promotional access is currently available to everybody in the world but will later this year be switched to a password protected access which only members will be provided with. Full length papers not printed yet can already be referred to, viewed and downloaded in PDF format.

Several other improvements will occur for the journal Dental Materials such as the migration to a fully electronic workflow in terms of editorial process, production process and distribution which will be implemented by 2005. Thus, Elsevier will

provide, online submission by authors, online refereeing, automatic handover of accepted manuscript's electronic files to Production.

As of 2004, a new style award winning typographic model will be introduced to Dental Materials and the board is considering a more "fashion looking" coverage page. Elsevier has offered their designers free of charge to investigate in this direction. First layouts will be submitted to the board during the IADR in Göteborg. We will keep you informed.

At this point, I wish to thank all ADM members for their patient and loyalty towards the Academy during last year's turmoil linked to the journal distribution problems. I sincerely thank David Watts (Editor), Ron Sakaguchi (Associate Editor) and Jim Drummond (past President) for their tremendous efforts and work dialoging with Elsevier's officials.

I hope to see as many members as possible during our next annual meeting described below which will address the topic of "Interfaces" for which world class speakers will share the latest scientific information in different areas.

Thank you and best regards,
Susanne Scherrer (President)
<susanne.scherrer@medecine.unige.ch>

Annual meeting 2003 (Oct.28-30)

The next ADM meeting in 2003 is going to be held in Charleston, South Carolina (USA), at the Westin Francis Hotel, Oct. 28-30, on the topic of Interfaces: models and dynamics.

The purpose of this 3-day meeting is to address the important issue of interfaces in tooth structures, ceramic composites, fiber-composites, as well as at the dentin-resin junction. Marshall will cover the structure-property relations at the dentin-enamel junction (DEJ) which are critical to tooth function and evaluate the DEJ as a biomimetic model for joining mechanical dissimilar biomaterials. Jack Mecholsky will outline the synthetic toughened procedure to develop biomimetic composites based on the principles of natural laminated composite structures. Kevin Knowles will provide an understanding of interfaces by means of transmission electron microscopy in structural ceramic composites (particulate, fiber or lamellar) and their ability to deflect cracks. *Walter McDonough* will address the glass-fiber/resin interface with the microbond test and chemical analysis. *Joe Antonucci* will explain the chemistry of silane and interface in dental polymers and composites. Finally, *Paulette Spencer* will discuss the molecular dynamics at the dentin-adhesive interface and show a chemical map of the dentin-hybrid-adhesive interface.

- 1. Dentin-enamel junction (DEJ)-Biomimetical model for material tissue interface: Sally Marshall, Univ. of California San Francisco (USA), Dept. of Restorative Dentistry.
- 2. Biomimetic designed interfaces & composites: John J. Mecholsky, Univ. of Florida Gainesville (USA), Material Science & Engineering.
- 3. Interfaces in structural ceramics: Kevin Knowles, Univ. of Cambridge, Dept. Materials Science & Metallurgy, UK.
- 4. Glass-Fiber/resin interfacial strength: the microbond test and chemical evaluation: Walter McDonough, NIST Polymer Div., Gaithersburg, USA.
- 5. Chemistry of silane: interface in dental polymers and composites: Joe Antonucci, NIST, Polymer Div., Gaithersburg, USA
- 6. Molecular dynamics at the dentin/adhesive interface: Paulette Spencer, Univ. of Missouri Kansas City, Dept. Oral Biology, USA

Please consult the ADM's web site for submission of **poster abstracts** (deadline June 1) and for registration.

www.academydentalmaterials.org

You should have received by now the meeting booklet via regular mail.

Student Awards and Fellowships

Requests for Student Award plaques have been coming in steadily in recent months. You may be unaware that your school or institution could participate in this award free of charge. You simply have to complete the plaque request form

(http://www.academydentalmaterials.org/docs/AD MStudent_Form.pdf) that is available on the website and send it to Dr Richard Curtis, The Guy's, King's and St Thomas's Hospitals Medical and Dental Institute, King's College London, Dental Biomaterials Science, Floor 17, Guy's Tower, Guy's Campus, St Thomas' Street, LONDON SE1 9RT, UK. Alternatively, you can complete the version of the document in MS Word format and send to Dr. Curtis as an attachment to an email (richard.curtis@kcl.ac.uk), simply email the information directly or fax the document to

Fax: +44 (0) 20 7955 2963. We leave the criteria to you to select the awardee from your institution. Needless to say, to be considered for this award the candidate should have shown a particular competence for the subject of Dental Materials. Some institutions have been participating in the program for a considerable number of years and are held in high regard by many. If you didn't request a student award plaque this year and would still like to do so then you can complete the that is available on the (http://www.academydentalmaterials.org/docs/AD MStudent Form.pdf) or if the date of your award ceremony has now passed then simply make a note to do so for next year. Please make sure you remember to provide all the details requested particularly the current qualifications of the awardee and the exact name of the institution that you wish to have engraved on the plaque.

Additionally, if you know of members or researchers who may be interested in becoming Fellows of the Academy either send their contact details or ask them to directly send an email or letter to richard.curtis@kcl.ac.uk. Images of both the Fellowship Plaque and Student Award Plaque are also available from the website.



Dr. Robert G. Craig

Sad News

Dr. Robert G. Craig, the Marcus L. Ward Professor Emeritus of Dentistry and past chair of the Department of Dental Materials at the University of Michigan from 1967 through 1987, passed away April 24. He was 79.

He was a distinguished scholar, researcher, administrator, and teacher, who had a direct impact on the practice of dentistry worldwide. He was also a very sincere and caring human being. During his 36-year career with the School of Dentistry, his main research interests focused on

the biocompatibility of materials, properties of polymers, surface effects of materials, and experimental stress analysis.

Dr. Craig distinguished himself nationally and internationally as a dental scholar, researcher, administrator, and teacher. He authored more than 260 publications in scientific journals, including two leading textbooks in dental materials. The 11th edition of one of his books, Restorative Dental Materials, was published last year. He was making revisions for the 8th edition to another book, Dental Materials: Properties and Manipulation, at the time of his death.

Dr. Craig is survived by his wife, Georgine, and three daughters. Cara Voss (administrative assistant to the Dean at the University of Michigan, and originally Bob's secretary) is collecting emails from friends and passing them along to his wife and daughters. (cvoss@umich.edu). Respectfully,

John M. Powers



David Watts

Souder award winner 2003

The Academy is very proud to announce that the 2003 winner of the Souder award is David Watts. David Watts is Professor of Biomaterials at the University of Manchester, UK. He graduated with BSc in Chemistry and Physics from the University of Wales (Aberystwyth) in 1967 and gained his PhD in Polymer science in 1970. His research has focussed on the structure-property relationships of polymers used in Dentistry and particularly upon the nature and effects of setting reactions.

Notable amongst this work are his contributions to our understanding of the mechanisms of light activated polymerizations and to the study of 'shrinkage strain kinetics' with which his name is particularly associated. Professor Watts is Editor in Chief of 'Dental Materials', the professional journal of the Academy of Dental Materials. The award will be given out to David at the IADR opening ceremony in Göteborg. You may check

under the DMG web page of Steve Bayne all about this award. http://www.dent.unc.edu/bayne/dmg/hp-dmg.htm

Membership Dues payments Note that dues for the ADM are now collected by January 1 of each year. If you have questions about dues and payment, contact: Academy of Dental Materials PO Box 432 Morgantown, WV 26507-0432. Our contact person is Ms. Kimberly kaphillips@simpsonosborne.com Phillips. 1-877-826-6372 Toll number: free Number: (304)292-7343 Telephone Fax Number: (304) 292-7099

Announcements

ADM web site has been revised to include current information on all web pages. A web page for annual meeting information containing registration and abstract submission forms has been added with a PDF brochure describing the meeting. The process for online payment of annual dues and meeting registration fees is underway. College of Dentistry is Baylor accepting applications to the graduate program in biomaterials science. Both MS and PhD programs are available. The next starting date is January 2004. Applicants should have a DDS, DMD, or BDS degree or have a BS degree in engineering/physical sciences. Address inquiries to Dr. Jason A. Griggs, Baylor College of Dentistry, Biomaterials Science, 3302 Gaston Avenue, Dallas, TX 75246, USA (JGriggs@tambcd.edu).

Future Meetings
The program for the 2004 meeting is currently in

The program for the 2004 meeting is currently in the finalization process. The site will be Geneva, Switzerland and last from Oct.21-23.