

ADM Newsletter

A Publication of the Academy of Dental Materials

2022, Issue 1

Message from the President By Ulrich Lohbauer

Dear ADM members, dear friends,

Join me in welcoming the spring as we all look very forward to positive recovery of the world and our scientific community. It is great to see how our members have rallied to survive and adapt to the challenges presented to us these last two years. This is for us nicely reflected by a nearly constant membership in 2020 and 2021, and we are honored to serve in such a lively society!

Looking back in 2021, I start reporting on our activities. We successfully organized two complete virtual scientific meetings. The first one in May 2021 – the ADM / SDMS-CSA joint meeting – was held in a hybrid style in Guangzhou, China. More than 300 participants were registered. The second, our annual meeting in October 2021, was held virtually, too. Seven invited keynote speakers, eleven invited research talks and three Marshall Award finalists made up the online scientific

program for the meeting. Additional 90 poster contributions reinforced the program and reflected the high scientific interest of the dental materials community. Here again, more than 300 participants were registered.

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Let me take the chance at this stage, to thank our reliable sponsors and partners in the dental industry. Without the continuous support we would not be able to run our activities and provide this exchange platform for our community. Lively participation and bilateral exchange with applied material competence is essential and key for our scientific orientation. Thank you!

Message from the President

Continued from page 1

On the executive Board level, we had rotational changes of officers. The four-years term of three Board Members-at-Large terminated in 2021. We thank Annalisa Mazzoni, Roberto Braga, and Will Palin for their continuous support and reinforcement of the Board business! All three vacancies were filled in with distinguished and committed ADM fellow members, and finally approved by our membership. We welcome Josette Camilleri, Marco Bottino, and Rafael Moraes and wish a successful and fruitful upcoming term!

Still in 2021, we extended our set of awards and thus grew in the effort of investing more of the Academy's capital back into research talents. We felt thereby the need to appoint a coordinating person that could assist the Board business. We welcome here Will Palin as new our "ADM Awards Chair" person. We particularly encourage all our young researchers and students to get familiar and exceptional apply for our award opportunities.

Details, key information and related finances, as well as a comprehensive summary of our 2021 activities is accessible through the member-only area on our website https://www.academydentalmaterials.org/.

Looking forward, we have several activities planned for 2022. In focus, of course, is our next annual meeting to be held between September 30th and October 2nd in Athens, Greece. The nice venue of the Grand Hyatt Athens is currently under renovation and a new recreational rooftop area will be ready by June 2022! This Hotel is located central to the historic city of Athens and allows for exciting afternoon excursions. Most likely we will organize some guided tours to major attractions. The scientific program is defined and we are honored to welcome such distinguished, world-class experts in the field of dental materials and beyond. Please find more details of our scientific program at www.admconference.com. The abstract submission site is opening soon - we encourage you to participate in this unique opportunity!

We all hope the best for the starting year and cross our fingers that a full return to normality might be around the corner. We are confident to plan and organize a full physical meeting supported with hybrid elements and finally to

Message from the President

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meet each other back in person for the annual ADM meeting in early October 2022. Check out the latest news on the ADM conference website (www.admconference.com) and see you all in Athens! Best in health and happiness as we move into great things in 2022 together! In the Spirit of Networking,

Uli Lohbauer

President

Call for Abstracts Athens - 2022

The abstract submission site will open **March 30**, **2022.** The Scientific Program Committee invites you to submit an abstract to be considered for Poster Presentation at the 2022 Conference Program.

IMPORTANT DEADLINES

Abstract submission deadline:

June 20, 2022

Preliminary abstract acceptance notifications:

July 20, 2022

Pre-Registration Deadline for Presenters:

July 30, 2022

Final Acceptance: August 10, 2022

Annual Meeting Report Held On-Line, Oct 6-8, 2021 By Rick Carvalho

The pandemics has once again prevented us from gathering for our annual meeting that was planned for Athens in 2021. As in the previous year, our ADM annual meeting was held online. The success of the event, however, was not compromised by the pandemics. We are very thankful to our seven invited speakers:

(https://www.admconference.com/2021invited-speakers/) who presented their latest findings and opinions in a variety of expertise.

findings and opinions in a variety of expertise. The program was completed with eleven invited research talks and three Marshall Award Winners presentations. The over 300 registrants could also enjoy the latest findings and progress in dental materials research by viewing over 90 posters that were presented by our members in the virtual platform. It was indeed a very rich program that addressed the always growing reach of materials sciences in dentistry. We are very thankful to our Board members who moderate the sessions and enriched discussion of topics. Please, check the 2021 meeting program to see what you

Annual Meeting Report Held On-Line, Oct 6-8, 2021

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have missed if you did not attend: (https://www.admconference.com/2021-invited-speakers/). We also thank our sponsors for the continued support to our meetings even though on a virtual platform and we look forward to meeting all together again in Athens 2022.

Satellite and Joint meetings By Alex Fok (on behalf of the Outreach Committee; Alex Fok, Roberto Braga, Will Palin)

It is said that a crisis brings opportunities. This is certainly the case for the ADM during the pandemic. The continued restrictions on international travels and gatherings meant that we had to do things differently if we were to keep our members engaged. It was against this backdrop that we launched two new initiatives last year to provide our members with added values.

When I was first asked to join the ADM as a member-at-large a few years ago, the idea was

that I could help reach out to our Chinese colleagues through my collaboration and

connection China. The in pandemic, unexpectedly, brought us together with our counterpart, the Society of Dental Materials Science of the Chinese Stomatological Association (SDMS-CSA), much sooner than we had thought. Supported unreservedly by Prof. Yan Wang, Associate Dean of Guanghua School of Stomatology, Sun Yat-Sen University and Prof. Jiao Sun of Shanghai Jiaotong University, and President of SDMS-CSA, a hybrid meeting, the first ever in the history of the ADM, took place in Guangzhou on May 9-10, 2021, and was made available online worldwide. Speakers of the meeting came from Europe America, China and other Asia Pacific countries, covering both traditional and contemporary topics in dental materials research. Virtual meeting rooms were also set up, allowing local students and junior faculty to meet 'face-to-face' with overseas experts in their fields to discuss their research topics. About 100 people attended the meeting in person, and over 1,000 tuned in online, making the meeting a resounding success!

Satellite and Joint meetings

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The first ADM/SDMS-CSA hybrid meeting, Guangzhou, China, May 9-10, 2021

To explore the idea of making future ADM meetings accessible to those who cannot travel to the foreign venue, the Minnesota Dental Research Center for Biomaterials and Biomechanics (MDRCBB), with generous support from the ADM and 3M OCSD, organized a local gathering to coincide with the 2021 ADM Virtual Meeting on October 7-9, 2021. The 'hybrid meeting' provided local members of the ADM the opportunity to come together to watch the presentations, participate in the live question-and-answer sessions, and continue with further discussion on the research presented. Fifteen local ADM members were able to attend the hybrid meeting in person.

The first day of the meeting took place at the University of Minnesota's newly built Health

Science Education Center (HSEC), which was equipped with state-of-the-art video/audio facilities. Five members presented their research outside the official ADM program. Several members from 3M also attended the local presentations and question-and-answer session remotely via Zoom.



A gathering in Minnesota, attended by local ADM members, that coincided with the ADM virtual meeting in Oct 2021.

For the social event, we traveled to Northeast Minneapolis to enjoy the Immersive Van Gogh Exhibit, where Van Gogh's partially animated artwork was projected onto the walls of the exhibit rooms, accompanied by ambient music. After the exhibit, we went to Chimborazo, a favorite Ecuadorian restaurant of Maria Pintado's, in Northeast Minneapolis for dinner. Maria was an instrumental faculty member and researcher at MDRCBB for many years. Unfortunately, she passed away in the summer of 2021. At the restaurant, a toast was given in memory of Maria.

Satellite and Joint meetings

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The second day of the hybrid meeting was held at the picturesque Minnesota Landscape Arboretum in Chaska, MN, where participants were able to explore its beautiful gardens of different themes after the ADM business meeting. There were no in-person activities on the third day and participants were encouraged to watch the remaining ADM presentations and participate in the question-and-answer sessions on their own.



Second day of the hybrid meeting in Minnesota, held at the Minnesota Landscape Arboretum

Overall, it was another successful event. We hope that this will encourage others, especially those from less developed

countries who may find it hard to travel overseas, to organize similar hybrid meetings

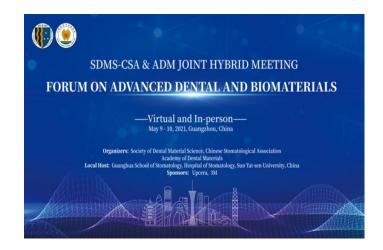
to coincide with the annual ADM meetings in the future.

Testimonial:

"Here at 3M, we truly enjoyed participating in this hybrid event and benefited from its outstanding content. In addition to the standard virtual content of ADM talks and posters, the hybrid/interactive poster session by MDRCBB provided excellent opportunity to connect with researchers and the field in real time. This can be a model for future meetings when physical presence is not an option. Many Thanks."

- Dr. Afshin Falsafi, 3M OCSD

Link to short video from the 2021 Forum on Advanced Dental and Biomaterials:



Treasurer's Report By Carmem Pfeifer

Summary of Finances and membership				
	2018	2019	2020	2021
Total members	386	237	320	362
Students	62	8	49	62
Total fellows	65	56	59	56
Registered for meeting	322 (total) 268 (paid)	165 (total) 137 (paid)	177 (free registra- tion)	315 (total) 183 (paid)
Total assets	\$652,738	\$670,222	\$742,735	\$848,984
Total income	\$260,050	\$281,400	\$93,825	\$132,209
Royalties	\$69,306	\$91,649	\$89,609	\$85,902
Total expenses	\$302,126	\$276,673	\$90,180	\$106,190
Net income (loss)	\$27,645	\$4,727	\$3,645	\$111,921
Annual meeting net income (loss)	\$101,721	(\$58,340)	\$8,481	

- 1. Financially, the Academy is still in good shape. The net assets have increased by \$106,597 to date (from \$742,387 in 2020 to \$848,984 in 2021). The total assets line reflects the values as of December 31 each year (calendar year totals).
- The current assets in each bank account are as follows (as of February 3, 2022):
 Wells Fargo Savings: \$838,760; Wells Fargo Checking: \$19,447; Total: \$858,207.
- 3. The final accounting for the 2021 annual meeting held virtually was: Income: \$85,985 (sponsorship: \$69,185; registration \$16,800; Expenses: \$30,063, resulting in a projected gain of \$55,922. The total number of registrations was 315 with 183 paid attendees.

- 4. Progress of the FAC activities: the process to invest \$350,000 into a fixed income brokerage account on Wells Fargo continues to be ON HOLD due to the continued uncertainty of the markets brought by the pandemic. This will be reevaluated in 6 months.
- 5. This year, the ADM piloted the Bowen early career investigator award, for a total of \$20,000 in sponsorship. We received 4 applications in total, reviewed by 2-3 reviewers each. The awardee was announced in the 2021 virtual meeting but was unable to accept the award due to conflict with another funding agency policy.

Invite your Colleagues to **Join the ADM!**

Join the Academy and connect to our membership system with access to the following valuable resources:

- Online Access to the journal <u>Dental</u> Materials
- Find an ADM Member
- ADM Documents
- Education Opportunities and Materials
- Affiliations and Industry Partners
- Discounted ADM Meeting Registration
- And so much more!

ADM Rafael L. Bowen Early Stage Investigator Collaborative Research Award

New Funding Opportunity

If you are an early-career investigator, check below what ADM has prepared for you!

The Academy of Dental Materials invites applications from members currently in an early-stage investigator status for a sponsored Fellowship in dental materials science. The Fellowship is in memory of Rafael L. Bowen. This award is being made to support those "early-stage" investigators conducting research directly related to dental materials, to educate and interconnect our field of science, with the main intention of promoting excellent science by sponsoring new collaborative research projects or expanding on existing projects in a meaningful way. Each Fellowship consists of a lump sum \$20,000 (USD) to cover expenses associated with the proposal. Upon completion of the award period, recipients are required to present their research at a

subsequent ADM meeting. More details on eligibility and how to apply is posted on the

<u>ADM website</u> and advertised broadly to the community with proposals due on **June 30**, **2022**.

From the Editorial Office By David Watts and Nick Silikas

There have been some recent changes in Elsevier staff who have responsibilities for *Dental Materials*. Our *Senior Publisher*, Jane Ryley, retired last December having served for about 10 years in this role. Our *Senior Publisher* is now Lindsay Allen, based in Philadelphia, USA.

Before that, our *Journal Manager*, Matthieu Renaud, handed over to Jake Hurley, based in Exeter UK. Production of each issue has proceeded smoothly, despite these changes. Submission rates remain at a high level and we continue to prioritize original research papers over review papers, the latter being very carefully selected from many proposals. In many areas within our field, real advances

From the Editorial Office

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in understanding can only be achieved by well-conceived and controlled experiments that address *very focussed original questions,* given the huge number of potential variables. Effective review papers normally require the authors to have extensive prior experience in experimental research publications *on the precise topic in question.* Our current Impact Factor is at an all-time high of **5.304**. We continue to be grateful for willing reviewers who make a significant difference to the final quality of published manuscripts.

The Transactions from the ADM 2021 virtual meeting (including all categories of Abstracts) are now typeset and will appear online in the Journal as issue 38S1. The dates for submission and approval of Abstracts for the ADM 2022 meeting have been decided. We did not receive any Speaker manuscripts from the 2021 virtual meeting.

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Dental Materials

The Official Publication of the Academy of Dental Materials

Fellowships and Awards

Emeritus

The Executive Board approved Emeritus status for Drs. Alan Boghosian, Robert Kelly, Jürgen Geis-Gerstorfer and Jukka Matinlinna. We wish all the best for their future!

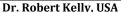


Dr. Alan Boghosian, USA



Dr. Jürgen Geis-Gerstorfer, Germany







Dr. Jukka Matinlinna, UK

Fellowships and Awards

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Fellowship

During the 2021 virtual Meeting, the Academy announced the Fellowships awarded to Drs. Howard Roberts and Márcia Borba The respective plaques will be presented during the annual meeting in Athens. Congratulations to our new Fellows!



Dr. Howard Roberts:
Associate Professor,
University of Kentucky,
College of Dentistry, USA



Dr. Márcia Borba: Associate Professor, Dental School, University of Passo Fundo, Brazil.



Paffenbarger Award

The ADM 2021 winners were: **1**st **Place: Aya Ali**

Title: Photocatalytic Activity and Antibacterial Behavior of Polyaniline-Doped Titanium Oxide Layers.

Authors: Aya Ali*1, A Janorkar1, M Marquart2, J Griggs1, J. Bumgardner3, M Roach1

¹Department of Biomedical Materials Science, University of Mississippi Medical Center;

²Department of Microbiology and Immunology, University of Mississippi Medical Center;

³Biomedical Engineering, University of Memphis

2nd Place: Maria Luísa Leite

Title: Calcium Silicate Loaded-Porous Chitosan Scaffold for Pulp-Dentin Complex Regeneration.

Authors: M.L. Leite* ¹, C. Anselmi ¹, I.P.M. Soares ¹, A. Manso ², J. Hebling ¹, R.M. Carvalho ², C.A. De Souza Costa, ¹São Paulo State University, Brazil, ²University of British Columbia, Canada

3rd Place: Jiahe (Dylan) He

Title: Durability of Cell Adhesion Peptides Coatings for Dental Implants.

Authors: J He, N Fisher, C Aparicio Minnesota Dental Research Center for Biomaterials and Biomechanics, University of Minnesota, Minneapolis, USA

Congratulations to all winners and their co-workers.

Marshalls Postdoctoral Award

The finalists were:

Dr Kartikeya Jodha, U of Miss, Jackson, MS, USA

"Fracture toughness and fractal dimension of two dental glass-ceramics."

Dr Ana Fugolin, OHSU, Portland, OR, USA

"Fatigue-Crack Propagation in
Thermosetting Polymers with Self-Healing
Capability."

Dr Patricia Comeau, UBC, BC, Canada

"Exploring the inclusion of photosensitive compounds on methacrylate-based resin properties."

Congratulations to ADM 2021 winner Dr. Ana Fugolin from OHSU.

Founders Award

Congratulations to Dr. George Eliades, Professor and Head, Department of Biomaterials, University of Athens, Greece.



Student Travel Award

No Student Travel Awards were presented in 2020 and 2021. Applications will resume for our 2022 Annual Meeting in Greece. Prepare your documents and make sure you check our website and News Flash from ADM for when applications open.

University Student Award

Chair: Milena Cadenaro

In 2021, 30 awards were presented to outstanding student researchers in the field of dental materials at various dental schools globally. ADM congratulates the students for their efforts to advance knowledge in our field.

For 2022, ADM will also offer the Perpetual Plaque as alternative to the individual plaques. Request forms for the 2022 Awards are available at <u>our website</u>. Please send the request forms to the ADM Administration, attention Lynn Reeves at ADM@res-inc.com



News from the Board

We would like to welcome our three new Board members who were approved by members to start their terms at the annual meeting 2021. Best wishes for a great engagement with the academy.

The Board has also recognized that there was a need to centralize and better coordinate the increased number of awards now handled by the academy. To accomplish that, the board appointed Dr. Will Palin as the new Chair of Awards. Will now coordinate the activities related to Paffenbarger Award, Marshall Award and Ray Bowen Early Career Award. Thanks to Will for accepting the task and we look forward for a growing number of ways the academy can support the talent of our members.

We would like to welcome our three new members of the Board:



Josette Camilleri (FADM, Univ. of Birmingham, UK)



Marco Bottino (FADM, Univ. of Michigan, USA)



Rafael Moraes (FADM, Univ. of Pelotas, Brazil)

Welcome aboard!!

ADM 2022 - Save the Date!



Please check <u>www.admconference.com</u> for all conference updates. Recently, the conference venue, the confirmed list of speakers and our meeting sponsors have been updated.

We are looking forward to meeting you all in person in beautiful Athens in 2022!

Uli Lohbauer, local meeting organizer.

Link to:

2022 ADM Meeting Program Schedule
2022 ADM Meeting Invited Speakers
2022 ADM Meeting Hotel Reservations
2022 ADM Meeting Sponsors

Sad News

The Academy of Dental Materials is sad to for the passing of Dr. Ralf Böhner (Sep 12 2021) and Dr. Kenneth Anusavice (Sep 30 2021). Dr. Böhner has served for many years as Manager of Research at Coltene and was responsible for the development of a wide range of products for dentistry. His research was focused in polymers, adhesives, cements and composites. Dr. Anusavice was Professor Emeritus of University of Florida, College of Dentistry and a long and loyal member of the academy. He was well known worldwide for his basic and applied research in dental materials, mainly in ceramics, and mostly for taking the lead to revise and continue the edition of "Phillip's Science of Dental Materials" textbook. A heartly homage to Ken was given by Jason Griggs at the business meeting 2021 with words kind remembrance of Ken and their interactions in research and mentorship.



Dr. Ralf Böhner († Sep 12 2021)



Dr. Ken Anusavice († Sep 30 2021)

More recently, on Dec 28th 2021, Prof. Nobuo Nakabayashi has left us. Prof. Nakabayashi is certainly known among all of us as the "creator" of the hybrid layer as the bonding mechanism to dental tissues. Many also know him for the fish tank in his laboratory where he had his beam specimens of PMMA bonded to ivory that were ageing there for years (no media change). He used to grab one of them from the tank and proudly show that you can make durable bonds to mineralized tissues. Ralf, Ken and Nobuo, they all leave an invaluable legacy for the knowledge and progress of dental materials. They will be missed.



Prof. Nobuo Nakabayshi († Dec 28 2021)

ADM Executive Board and Committees

ADM Board of Directors:

President (2020-2022):

Ulrich Lohbauer

Vice-President (2020-2022):

Milena Cadenaro

Immediate Past-President (2020-2022):

Jeffrey Stansbury

Treasurer (2020-2024):

Carmem Pfeifer

Secretary (2020-2022):

Ricardo Carvalho

Board Members-At-Large:

Alex Fok (2018 – 2022):

Marcelo Giannini (2020-2024):

Julian Leprince (2020-2024):

Rafael Moraes (2021-2025):

Marco Bottino (2021-2025):

Josette Camilieri (2021-2025):

Dental Materials Editor:

David C. Watts

Transaction Editor:

Nick Silikas

Membership Chair:

Arzu Tezvergil-Mutluay

ADM Current Committees:

Award Committees:

The Marshall Postdoctoral Award Chair

William Palin

Paffenbarger Award Chair

William Palin

Student Travel Award Chair

Alex Fok

University Student Award Chair

Ricardo Carvalho

Fellowship Committee Chair:

Ricardo Carvalho

Bowen Award Review Committee:

Jeffrey Stansbury

William Palin (Chair)

Carmem Pfeifer

By Laws Committee:

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Milena Cadenaro

Ricardo Carvalho

Ulrich Lohbauer (Chair)

Carmem Pfeifer

Financial Advisory Committee (FAC):

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ACADEMY OF DENTAL MATERIALS









ATHENS, GREECE

SAVE THE DATE: SEP 28-OCT 1, 2022

PROGRESS IN ADHESION, CERAMIC MATERIALS, AND DIGITAL ENGINEERING

REGISTRATION
and
CALL FOR ABSTRACTS
will open on
MARCH 30, 2022

Invited Speakers

JORGE BELINHA University of Porto, Porto, Portugal

SILKE CHRISTIANSEN
INAM Research Center for Nanotechnology
and Correlative Microscopy,
Forchheim, Germany

GEORGE ELIADES University of Athens, Athens, Greece AFSHIN FALSAFI 3M Oral Care Solutions, St. Paul, MN USA

RALF KOHAL University of Freiburg, Freiburg, Germany

TANJA LUBE Montanuniversität Leoben, Leoben, Austria

SPIRO MEGREMIS ADA Science & Research Institute, LLC, Chicago, II, USA ANDRÉ STUDART ETH Zurich, Zürich, Switzerland

KUMIKO YOSHIHARA National Institute of Advanced Industrial Science and Technology (AIST) Takamatsu, Japan

EDGAR ZANOTTO Federal University of Sao Carlos, São Paulo, Brazil

Please visit the ADM Conference Website to view the 2022 Invited Speakers and Scientific Program

www.admconference.com

ADM ADMINISTRATION adm@res-inc.com | 1.858.272.1018

A Sincere Thank You to the **ADM 2022 Meeting Sponsors**

September 8 - October 1 Annual Meeting in Athens, Greece Corporate Sponsorship and Exhibitors:

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