



ADM Newsletter

A Publication of the Academy of Dental Materials

2023, Issue 1

Message from the President

By Milena Cadenaro

Dear ADM Members,

Let me express my gratitude for the privilege of being the new President of the Academy of Dental Materials. It is truly a great honor to serve such an outstanding organization and its membership.

I would like to start by thanking Ulrich Lohbauer for his great job during the past two years as ADM President. His commitment to the Academy is certainly going to be an inspiration to me and an example to follow. He had to deal with all the issues caused by the pandemic, which strongly affected the organization of the ADM meeting in 2021. Despite this, he was able to organize a successful online meeting that kept the community spirit of ADM alive and in 2022, after two years of restrictions, he arranged a wonderful meeting in Athens, Greece, finally in presence. It was so refreshing to have the opportunity to meet each other face-to-face. Now the worst seems to be behind us and the meeting

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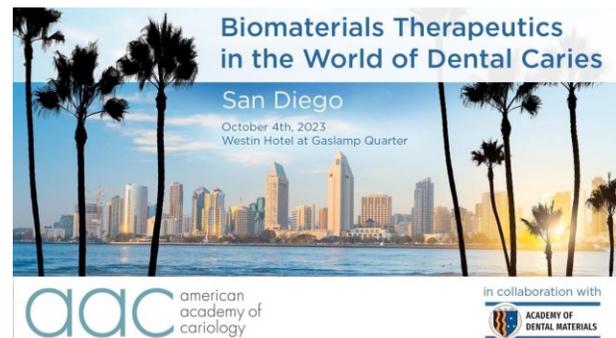
in Athens gave us the hope to be back to where we used to be before Covid.

It comes without saying that during my presidency I will keep on collaborating with the Board as a team, a group of scientists enthusiastically committed to the ADM I can not wait to work with. The new term 2022-2024 has started in October and I'm really glad to have Arzu Tezvergil-Mutluay as our new ADM Secretary! Arzu and I immediately started organizing the upcoming annual conference that will take place in beautiful San Diego, California, USA on October 4th-7th, 2023. After two online meetings and the last one in Greece, we decided to bring the meeting back to North America. The meeting venue is in the Gaslamp Quarter of San

Diego, which is home to many bars, cafes, restaurants and entertainment venues and close to so many attractions that it will be impossible not to find something fun to do. We are very excited about the scientific program we've prepared, with intriguing topics lectured by superb speakers. The overall theme of the **2023 Annual Meeting is Materials Testing and Performance: Laboratory and Clinical Challenges**. Adverse reactions to materials and dental cosmetics, Wear of the materials in the oral environment and Updates about CAD/CAM materials are the topics of interest. We are pleased to involve worldwide key opinion leaders like Lars Björkman, Paulo Francisco Cesar, Albert Feilzer, Garry Fleming, Ulrich Lohbauer, Thomas Rustemeyer, Nicola Scotti, Pekka Vallittu and Satoshi Yamaguchi. We will also have many interesting Lunch and Learn sessions that will be announced soon. The abstract submission site is also opening shortly (regular updates can be found at www.admconference.com) and I would like to encourage all our members not to miss the chance to participate!

I am also thrilled to announce that the day before our meeting, on October 4th, for the first time the ADM will also have a joint Meeting with the **American Academy of Cariology (AAC)** in the same venue. The theme of this joint Meeting is

Biomaterials Therapeutics in the World of Dental Caries with speakers from both the AAC and ADM focusing on the biological interactions of materials with the oral tissues and novel formulations to enhance the longevity of restorations (find out more at <https://aacariology.org/2023-aac-conference/>).



We really believe that the cooperation and exchange of expertise with another Academy can be enriching for our membership and an opportunity for the ADM to grow and we hope that you will be as enthusiastic as we are about this collaboration.

We also started to plan the 2024 Meeting. We will go back to Italy, to the charming city of Torino on October 2nd-5th, 2024. Updates will come up soon, check our website and in the meantime save the date!

2023 will be a busy year, we are currently working to expand the opportunities for our members, but please do not hesitate to contact me in case of any inquiry related to the upcoming Meeting and the future of the Academy or if you have suggestions and ideas.

I am looking forward to meeting you all in San Diego!

Sincerely,

Milena Cadenaro

President

ADM 2023 - Save the Date!



Call for Abstracts San Diego - 2023

The abstract submission site will open **March 30, 2023**. The Scientific Program Committee invites you to submit an abstract to be considered for Poster Presentation.

IMPORTANT DEADLINES

Abstract submission deadline:

June 2, 2023

Preliminary abstract acceptance
notifications: **July 23, 2023**

Pre-Registration Deadline for Presenters:
July 21, 2023

Final Acceptance: **August 10, 2023**

Past-President Message

Uli Lohbauer

Dear ADM members, dear friends,

The last two years were a great experience and pleasure for me serving the Academy as president! We had a good and productive time within the ADM Board and beyond with you as members – thank you all for the contributions, input, ideas and commitment to our community! It was certainly not easy to keep the society running through the recent years of pandemic crisis, all the while conforming to public health measures. We hope to have come to a place in which restrictions and limitations are lifted and we can count on valuable interactions face-to-face. However, this was not too bad as there is always something good in it. We managed to meet on the Board level much more frequently, which allowed us to intensively discuss pending matters. We thus managed to “professionalize” our awards, and put in place measures to assure the good-standing of the ADM. We initiated an “Outreach” Chair (Alex Fok), who is now spotting new collaborations and connections with different societies and regions of the world. We discovered the necessity to promote the activities of the ADM more intensively through social media channels. Rafael Moraes is now our “Social Media” Chair that will take care of up-to-

date information and provide you with news and announcements.

After 2021, after two virtual meetings on two separate occasions (SDMS-CSA / ADM in May 2021 and ADM annual conference in October 2021), we now returned to the regular schedule in 2022. The annual meeting in Athens was a great success and a warm welcome back to in-person contact with our international friends. The major regions of the world were represented and able to attend the meeting in-person (specific numbers are reported elsewhere). We had great speakers and many poster-presenters, resulting in a lively discussion of all topics in our agenda. The impressive historic scenery, the good food, the fun, the sunny weather and you have made of the ADM 2022 an overall all-inclusive package. I would also like to take the chance to thank RES as our admin service, particularly Lynn Reeves, Nicole Bengtsson and Kirsten Friedli for their continuing support of our business and meeting organization. Everything went extremely well through the recent years!

Lastly, I should say that it's also a relief to step back from presidency and to hand over the hammer to Milena Cadenaro. She will certainly move forward with passion with all our business and we are looking forward to the upcoming year with our meeting in San Diego. Good Luck – Milena!

Uli Lohbauer
Past-President

Annual Meeting 2022

By Arzu Tezvergil-Mutluay



After two years of virtual meetings during the pandemic time, ADM held the first in-person annual meeting from September 28 through October 1 in 2022 in Athens/Greece. The event featured nine world-class speakers focused on “Progress in Dental Materials and Digital Engineering “. World wide interest in the ADM continues to expand, and we welcomed two hundred seventy-eight participants representing 36 different countries in beautiful Athens.

The first day of the meeting focused on adhesive technologies starting with the presentation of Dr Afshin Falsafi, followed by the Dr Kumiko Yoshihara who provided a great overview on the role of functional monomers in adhesion. After the poster session, the program continued with

short presentations of three Marshall Postdoctoral award finalists. First day closed with Dr Silke Christianssen's presentation on the use of advanced imaging technologies and machine learning approaches with the focus on ceramic materials.



The second day of the meeting started with the meet-the-industry session. During this session Prof Jungi Tagami enlightened the audience on the bioactive technologies and innovation of Giomer/S-PRG fillers and its impact on minimal invasive dentistry. Following this session, morning session of the second day focused on ceramics. Prof Edgar Zanotto provided an excellent overview on the past, present and future of glass ceramics, and shared his experience on the use of artificial intelligence in ceramic designs. His presentation was followed Dr Tanja Lube's inspiring presentation on 3D printed ceramics and effect of testing environments on the reported properties. Prof Ralf Kohal concluded the second day with his excellent

presentation on oral implants made from zirconia materials with the focus on their potentials and limitations.

The last day of the meeting focused on the engineering of the new materials. Dr. Carmen Pfeifer focused on the current trends in polymeric materials utilizing host and bacterial enzyme-mediated approaches, Dr. Conrado Apraicio provided a comprehensive overview of the peptides and bioinstructive polymers for prevention of oral infections and the session concluded with Dr. Spiro Megremis presentation on the various aspects of product development and regulatory processes. Altogether, this exciting program was completed with nine invited research talks, one meet-the-industry talk and three Marshall Award finalists' presentations. The participants could also enjoy the latest findings and progress in dental materials research by viewing over 170 posters that were presented by our members during the poster sessions. Once again it was a very rich and inspiring program that addressed the latest development of materials in dentistry.

The social dinner with a beautiful view of the Acropolis was fully subscribed and provided an excellent opportunity to continue networking while enjoying delicious Greek cuisine.



Our thanks are due to our president for an outstanding meeting and to our Board members who moderate the sessions and enriched discussion of topics. We also thank our sponsors for the continued support to our meetings and we look forward to meeting all together again in San Diego 2023.

Treasurer's Report

By Carmem Pfeifer

Summary of Finances and membership

1. Financially, the Academy is still in good shape. The net assets have increased by \$64,535 to date (from \$848,984 to \$913,518 in 2022). The total assets line reflects the values as of December 31 each year (calendar year totals) all expenses have been matched against the assets, which only happens after the annual meeting.
2. The current assets in each bank account are as follows (as of February 8, 2023): Wells

	2020	2021	2022
<i>Total members</i>	320	362	350
<i>Students</i>	49	62	57
<i>Total fellows</i>	59	56	58
<i>Registered for meeting</i>	177 (free registration)	315 (total) 183 (paid)	278(total) 233 (paid)
<i>Total assets</i>	\$742,735	\$848,984	\$913,518
<i>Total income</i>	\$93,825	\$132,209	\$232,782
<i>Royalties</i>	\$89,609	\$85,902	\$92,127
<i>Total expenses</i>	\$90,180	\$106,190	\$269,490
<i>Net income (loss)</i>	\$3,645	\$111,921	\$64,618
<i>Annual meeting net income (loss)</i>	\$8,481	\$55,922	\$47,356

Fargo Savings: \$401,793; Wells Fargo Checking: \$41,799; Brokerage: \$460,131; Total: \$903,723.

3. The final accounting for the 2022 annual meeting held in Greece was: Income: \$158,424 (sponsorship: \$67,500; registration \$89,869; Expenses: \$129,816, resulting in a surplus of \$28,608. The total number of registrations was 278, with 233 paid attendees.
4. Progress of the FAC activities: the process to invest \$450,000 into a fixed income brokerage account on Wells Fargo has been completed on 5/11/2022, and the account has grown to \$460,131 as of February 8, 2023.

5. This was the second year of the Bowen early career investigator award, for a total of \$20,000 in sponsorship. Applications were reviewed by 2-3 reviewers each. Since the 2021 awardee was unable to accept the award due to conflict with another funding agency policy, and since we have had surplus from the 2021 budget, we have awarded two grants in 2022.

From the Editorial Office **By David Watts and Nick Silikas**

There have been some further changes in Elsevier staff who have responsibilities for *Dental Materials*. Our *Senior Publisher* since February is now Ms. **Lindsay Allen**, who is based in Philadelphia. She was not in attendance in Athens but will attend the 2023 ADM meeting. We were able to send a memento gift to her predecessor, Jane Ryley, which was much appreciated. Jake Hurley is now well-established as our *Journal Manager*, based in Exeter UK. Thanks to his good offices, issues of the journal were published each month in 2022. However, currently only 94 print copies are mailed per issue. This makes advertising *in print issues* quite costly in terms of impact.

Manuscript submission rates remain at a high level (about 14/week) and we continue to prioritize original (experimental) research papers over review papers, the latter being very carefully

selected from numerous proposals. In many areas within our field, real advances in understanding can only be achieved by well-conceived and controlled experiments that address *very focused 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*.

There has been a further increase in *Impact Factor* from 5.304 to **5.687**, ranking it 7 out of 92 in *Dentistry, Oral Surgery and Medicine*. The *CiteScore* is now **9.2** (3/109 for Dentistry). The journal is indexed in 32 international databases. Most papers are published on a *Subscription basis* – without publication charge and are freely available to subscribers (particularly ADM Members) as well as developing countries and patient groups through Elsevier access programs. However, despite the high costs (now risen by 10%), there was a small but significant increase (to 22 out of 193) in *Gold Open Access (GOA)* papers in 2021. Some have been facilitated through universities arranging specific finite-time ‘deals’ with Elsevier where the universities pay the GOA costs for their staff. GOA articles feature notably amongst the *most downloaded* articles and are also prominent amongst *most cited* articles.

The Transactions from the ADM 2021 virtual meeting (including all categories of Abstracts) appeared online in the Journal as issue **38S**. But we did not receive any speaker manuscripts from the 2021 virtual meeting. For the ADM 2022 meeting, we had 216 Abstracts submitted. 160 have been accepted as general posters, 6 for the Marshall Awards and 7 for the Paffenbarger Awards.

There is now a new system operated by Elsevier who will make tailored ‘transfer’ offers for MSS rejected by *Dental Materials* for other than (eg) ethical reasons. This is being operated by a *Scientific Managing Editor* (SME) internal to Elsevier. Their average turnaround time for an offer is 24 – 48 h.

We have, for the time being, declined a further offer from Elsevier to facilitate ‘Special Issues’ (SIs). The decision was based on: (i) the finite pool of outstanding articles submitted each year; (ii) uncertainties about additional costs* to the Academy; (iii) the risk of diluting our IF performance; (iv) the fact that the field of Dental Materials – though multidisciplinary – is relatively coherent. *The cost for sponsoring a standard **Text Article Supplement** would be \$1200/page (print and online *or* online-only) with a 32-page billable minimum of \$38,400 (plus applicable tax).

Fellowships and Awards

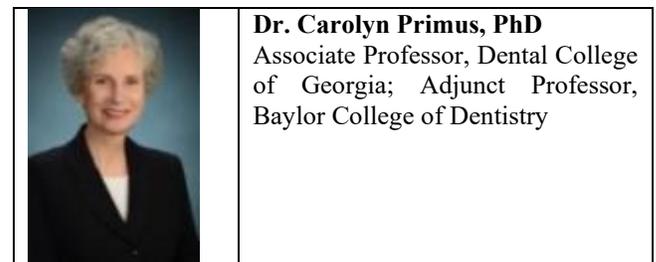
Fellowship

During the 2022 Athens Meeting, the Academy announced the Fellowships awarded to Drs Marcela R.O Carrilho, Vesna Miletic and Dr Adriano Lima and Hae Hyong Lee. Congratulations to our new Fellows!



Emeritus Status

The Executive Board approved Emeritus status for Dr Carolyn Primus. We wish Dr. Primus all the best for future!



Paffenbarger Award

This competition recognizes students who present the most excellent research at our annual conference. The winners of ADM 2022 Paffenbarger award are:

1st Place: Matheus Kury

Title: Development of In-Office Bleaching Gels Containing Co-Doped Titanium Dioxide Nanoparticles

2nd Place: Eva Maier
Title: Mimicking Clinical Wear of RBCs in the “Rub&Roll” Wear Machine

3rd Place: Zach Gouveia

Title: Biostable Ester-Free Monomers for Dental Applications

Congratulations to all winners and their co-workers.

Marshalls Postdoctoral Award

This competition recognizes outstanding research performed by individuals in the transitional post-doctoral stage of their careers.

The finalists of 2022 Marshalls Award were:

Dr Jeong-Hyun Ryu, Yonsei University, South Korea

Title “Osteogenic effect of hydroxyapatite scaffold covered with 45S5BG/PLGA microfiber for alveolar bone regeneration

Dr Chia Fei Liu, National Yang Ming Chiao Tung University, Taiwan

“Extracellular Matrix-mimic Surface Enhancing Angiogenesis/Osteogenesis of Titanium Dental Implant

Dr Cameron Stewart, University of Toronto, Canada

“From Benchtop to Product: Developments in the Design and Testing of Novel Antimicrobial/Antidegradative Dental Materials”

Congratulations to ADM 2022 winner

Dr Chia Fei Liu, National Yang Ming Chiao Tung University, Taiwan.



The winner of the Marshall Postdoctoral Award received a certificate of recognition, a financial award of US \$2,000 and a complimentary meeting registration for the ADM meeting of the subsequent year. Congratulations!

ADM Rafael L. Bowen Early Stage Investigator Collaborative Research Award

This award aims to support early career investigators (post-docs and junior faculty). The main intent of the award is to foster a new collaboration with a mentor outside the main applicant's institution.

Congratulations to

Luisa Leite, PDRF (UBC, Canada).
“Development of novel methacrylate-based dental resins for applications in the antimicrobial photodynamic therapy against cariogenic biofilms”

Host Mentor/Institution: Dr. Adriana Manso. University of British Columbia, Vancouver, BC, Canada.

Home Mentor/Institution: Dr. Carlos de Souza Costa. São Paulo State University, Araraquara, SP, Brazil

Josic Uros, PDRF (Univ of Bologna, Italy);
“Monomer elution, cytotoxic and physico-mechanical properties of universal self-adhesive composite cements”

Host Mentor/Institution: Dr Bart van Meerbeek. KU Leuven BIOMAT, Belgium

Home Mentor/Institution: Dr Lorenzo Breschi. University of Bologna, Italy

Student Travel Award

This award aims to encourage and recognize outstanding dental materials research and facilitate presentation by students at the annual

ADM meeting. For 2022, STA committee decided to give out two awards per region to make up for lost time because of pandemic.

The winners of the 2022 ADM travel awards are:

Yanning Chen, The University of Hong Kong, China

Rosalind Sin Man Chan The University of Hong Kong, China

Ji-Won Choi Yonsei University College of Dentistry, South Korea

Karina Felix Santos, School of Dentistry, University of Sao Paulo, Brazil

Marina Damasceno e Souza de Carvalho Chiari University of São Paulo, Brazil

Mengxuan Chen, The University of British Columbia, Canada

Andrea Baldi, University of Turin, Dental school, Italy

Ahmed Fouda, University Hospital Bonn, Germany

University Student Award

In 2022, 32 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.

We would like to remind the application is open for ADM Perpetual Plaque

Founders Award

Congratulations to **Dr. George Eliades**, Professor and Head, Department of Biomaterials, University of Athens, Greece. Nick Silikas presented the award during the awards ceremony.



News from the Board

Ulrich Lohbauer has completed his term as the president of the ADM and passed the president gavel to Milena Cadenaro at the business meeting. We would like to express our gratitude to Uli for his excellent leadership and dedication during challenging pandemic period and we welcome Milena as the new president of the Academy! Good luck Milena!

The Board has recognized that there was a need to increase collaborations and connections with different societies. Therefore decided to combine membership with the outreach and created a “Membership and Outreach” Chair (Alex Fok), who is actively promoting new collaborations and connections with different societies and regions of the world. The Board also acknowledged the necessity to promote the activities of the ADM more intensively through social media channels. Rafael Moraes is now our “Social Media” Chair that will take care of up-to-date information and provide you with news and announcements.

We would like to welcome our new Board member Dr. James Kit Hon Tsoi who was

approved by members to start his term at the annual meeting 2022. Best wishes for a great engagement with the academy.

Thanks to Alex and Rafael for accepting and we look forward for a growing number of ways the Academy can support the talent of our members.



Dr James Kit Hon Tsoi (BSc, PhD (HK); MRSC; MBCS; FHEA)
The University of HongKong

Welcome aboard!!

Outreach activities

By : Alex Fok

The Minnesota Dental Research Center for Biomaterials and Biomechanics celebrated its 30th anniversary in early Dec, 2022 with a 2-day global symposium that included seven synchronous hybrid meetings in different cities across the globe. (<https://www.mdrcbb30th.com/>). The cities involved were Minneapolis (USA), Guangzhou (China), Cairo (Egypt), Kuala Lumpur (Malaysia), Ribeirão Preto (Brazil), Manchester (UK) and Tainan (Taiwan). Several ADM members hosted and participated in the events which featured eminent speakers from the different regions. The opportunity was taken to

promote the ADM and the upcoming annual meeting in San Diego: a video of ADM President, Milena Cadenaro introducing the ADM was played during coffee breaks and postcards for the upcoming annual meeting were distributed to participants in the different regions.

Sad News



Dr. Elizabeth Dianne Rekow
(† August 11, 2022)

Our ADM fellow, emeritus member, Elizabeth Dianne Rekow (1944-2022) died Aug. 11. She was an exceptional person and leader in dental research and contributed to our meetings both by her active presence and also with the keynote presentations, latest one at the Jackson Hole meeting in 2019

She was a professor emeritus and fellow at King's College London, where she served as executive dean of Dental Institute and professor of orthodontics from 2012-16. She previously worked at New York University, where she was

a professor of orthodontics, senior vice provost of engineering technology and provost of the Polytechnic Institute.

Her early career as an engineer and her interest in the potential of CAD/CAM technologies for biomedical applications guided her to pursue a degree in dentistry and later a PhD and also an MS and certificate in orthodontics. Throughout her career she succeeded as a leader, significantly contributed to the development of digital dentistry, and over the years, became a leading voice for the future of dentistry. Her professional contributions included patents, many publications, numerous book contributions as well as over 100 national and international presentations.

Throughout her career, she was a strong role model and a mentor for women in science and actively supported women in their careers over the years.

She will be truly missed.

ADM Executive Board and Committees

ADM Board of Directors:

President (2022-2024):
Milena Cadenaro

Vice-President (2022-2024):
Ricardo Carvalho

Immediate Past-President (2022-2024):
Ulrich Lohbauer

Treasurer (2020-2024):
Carmem Pfeifer

Secretary (2022-2024):
Arzu Tezvergil-Mutluay

Board Members-At-Large:

Marcelo Giannini (2020-2024)

Julian Leprince (2020-2024)

Rafael Moraes (2021-2025)

Marco Bottino (2021-2025)

Josette Camilieri (2021-2025)

James Kit Hon Tsoi (2022-2026)

Dental Materials Editor:
David C. Watts

Transaction Editor:
Nick Silikas

Membership and Outreach Chair:
Alex Fok

Awards Chair: Will Palin

Social Media Chair: Rafael Moraes

University Student Award Chair
Arzu Tezvergil-Mutluay

Fellowship Committee Chair:
Arzu Tezvergil-Mutluay

Bowen Award Review Committee:

William Palin (Chair)
 Jeffrey Stansbury
 Carmem Pfeifer

By Laws Committee:

Milena Cadenaro (Chair)
 Ricardo Carvalho
 Ulrich Lohbauer
 Carmem Pfeifer
 Arzu Tezvergil-Mutluay

Financial Advisory Committee (FAC):

Carmem Pfeifer (Chair)
 Steven Armstrong
 Ulrich Lohbauer
 Jeffrey Stansbury

Executive Manager:

Lynn Reeves, RES Inc.
admin@academydentalmaterials.org

**INVITED SPEAKERS**

Lars Björkman

University of Bergen, Norway

Paulo Francisco Cesar

University of São Paulo, Brazil

Albert Feilzer

ACTA, Amsterdam, The Netherlands

Garry Fleming

Trinity College, Dublin, Ireland

Ulrich Lohbauer

Friedrich-Alexander University
 Erlangen-Nürnberg, Germany

Thomas Rustemeyer

Amsterdam University Medical Centers
 Amsterdam, The Netherlands

Nicola Scotti

University of Turin, Italy

Pekka Vallittu

University of Turku, Finland

Satoshi Yamaguchi

Osaka University, Japan



ADM
 2023



ACADEMY OF DENTAL MATERIALS

Wednesday, October 4 - Saturday, October 7, 2023

Material Testing and Performance: Laboratory and Clinical Challenges

San Diego, CA USA

ADM Corporate Sponsors:

