ACS OMEGA

http://pubs.acs.org/journal/acsodf

Editorial

ACS Omega's Progress Report: Growing with Trust and Diversity

Cite This: *ACS Omega* 2023, 8, 21352−21357

Read Online

ACCESS | Metrics & More | Article Recommendations | Supporting Information

As we draw near to the eighth anniversary of *ACS Omega* in July, we reflect on our journal's remarkable growth and the diversity of its community. We are proud to have come this far powered by the collective strength of our global community in providing you with a broad, multidisciplinary scope open access journal with rigorous peer review and fast processing times. In this Editorial, we are pleased to share some key journal statistics and activities from 2022 (Figure 1), highlighting some notable publications while sharing a glimpse of what's in store for the rest of 2023. We thank our global community of authors, reviewers, readers, editors, and staff for their invaluable contributions to *ACS Omega*, which has propelled the journal forward year after year. With your continued support and engagement, we are committed to serving you and striving for excellence.

2022: A YEAR OF GROWTH AND IMPACT

We had our first in-person Editorial Board meeting since the pandemic broke, which included a virtual component, on August 22, 2022, in Chicago, United States. The meeting provided a forum to evaluate the journal's performance, highlight the strong engagement from authors, reviewers, and our readers, and discuss the future direction and initiatives for the journal (Figure 2).

We were pleased with how 2022 ended, with *ACS Omega* publishing 4,464 articles from researchers in 94 countries across all different regions (Figure 3). Our author base expanded significantly worldwide, including in the Middle East, Latin America, and Africa, while remaining especially strong in China, India, Europe, the United States, Japan, and South Korea. We were also delighted to receive a Journal Impact Factor of 4.132, a CiteScore of 5.2, and a 5-Year Impact Factor of 4.197. In addition, *ACS Omega* articles were cited 41,528 times in 2021.[1]

ACS Omega's readership remains global and continues snowballing (Figure 4), a testament to the journal's influence on the scientific enterprise. Downloads of published articles at *ACS Omega* increased to a record high of almost 9.2 million

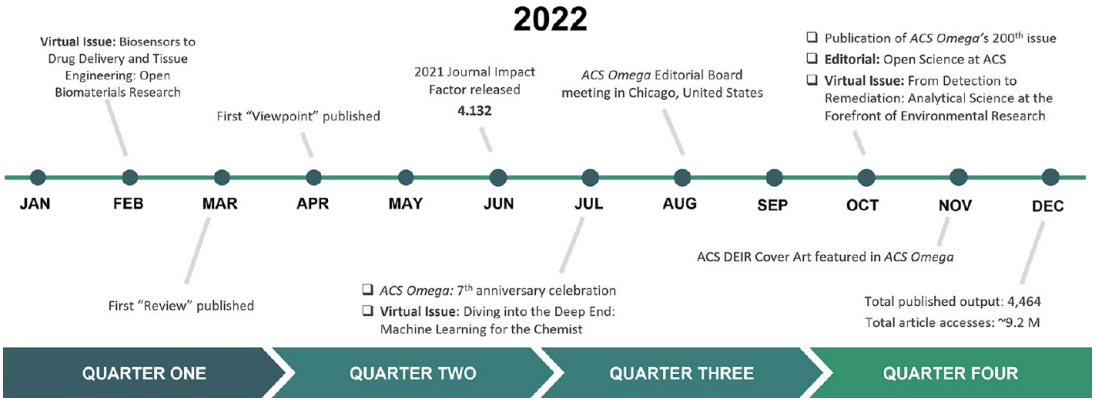
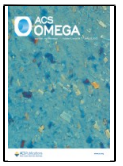


Figure 1. *ACS Omega*: A summary timeline for 2022.

Figure 2. *ACS Omega*'s Editorial Board meeting was held in August 2022 in Chicago.

(approximately 17 downloads per minute!), representing a more than 27% increase over the equivalent time frame in 2021. In 2022, seven articles were selected for ACS Editors' Choice (Table 1). Apart from original research articles, the journal published 72 mini-reviews, 108 reviews, 10 perspectives, and 2 viewpoints in 2022, covering a variety of topics. A selection of

Published: June 5, 2023



https://doi.org/10.1021/acsomega.3c03633
ACS Omega 2023, 8, 21352−21357

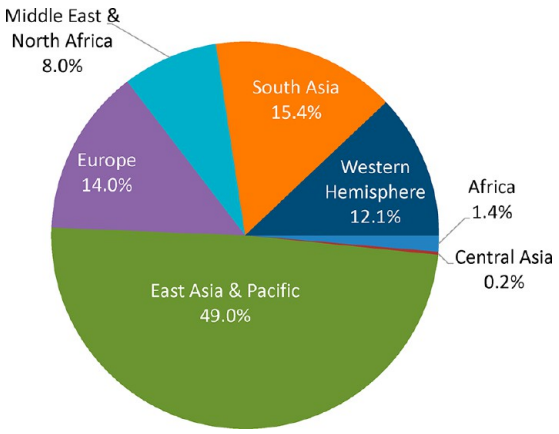


Figure 3. *ACS Omega*'s global authorship by region in 2022.

highly read articles and mini-reviews/reviews published in 2022 are presented in Table 2 and Table 3, respectively, while Table 4 highlights press releases on published content in *ACS Omega* from the American Chemical Society.

Robust peer review ensures the quality and high standards of *ACS Omega*'s published content. A special thank you to our reviewers for their constructive feedback, attention to detail, and insightful comments, which have helped authors improve their work. Specifically, a total of 10,549 unique reviewers from 100 countries returned reviews in 2022. The Editors at *ACS Omega* acknowledge our reviewers' time and effort in sharing their knowledge to help us make informed and fair decisions (Supporting Information Table S1).

EDITORIAL BOARD EXPANSION

With the growth of submissions and to cover a wider range of topics while striving to provide an excellent author experience, we strengthened our editorial board in 2022 and 2023. Profs. Jesús Jiménez-Barbero (CIC bioGUNE, Spain) and Luisa Torsi (University of Bari, Italy) were promoted to Senior Editors, and we welcomed six eminent scientists as Associate Editors, which include Profs. Davita L. Watkins (Ohio State University, United States), Carolina Horta Andrade (Universidade Federal de Goiás, Brazil), Christian Lorenz (King's College London, United Kingdom), Julie Korak (University of Colorado at Boulder, United States), Ulrich Hintermair (University of Bath, United Kingdom), and Hye Ryung Byon (Korea Advanced Institute of Science and Technology, Republic of Korea), each with subject expertise complementary to each other and to the existing editorial team (Figure 5). In addition to our roles as Co-Editors-in-Chief, our Editorial Board now contains 17 eminent Associate, Senior, and Topic Editors who lead research groups in 12 countries across four continents.

We also welcomed Profs./Drs. Sean Ekins (Collaborations Pharmaceuticals Inc., United States), Célia Fonseca Guerra (Vrije Universiteit, Netherlands), Annia Galano (Universidad Autónoma Metropolitana Iztapalapa, Mexico), Elżbieta Guziewicz (Polish Academy of Sciences, Poland), Hafiz M.N. Iqbal (Tecnologico de Monterrey, Mexico), Anwesha Sarkar (University of Leeds, United Kingdom), and Sohrab Zendehboudi (Memorial University, Canada) to the Editorial Advisory Board (EAB) with a focus on increasing topical diversity of the journal while ensuring geographical diversity and gender balance among the overall 97 EAB members. We also reflect with sadness the passing of Prof. María C. Moreno-Bondi and acknowledge her contributions to *ACS Omega* as a valued member of our EAB.

VIRTUAL ISSUES IN 2022

We continued to engage with the subject- and region-specific scientific community by leading four Virtual Issue collections in 2022 and early 2023 (Figure 6). In February 2022, we launched

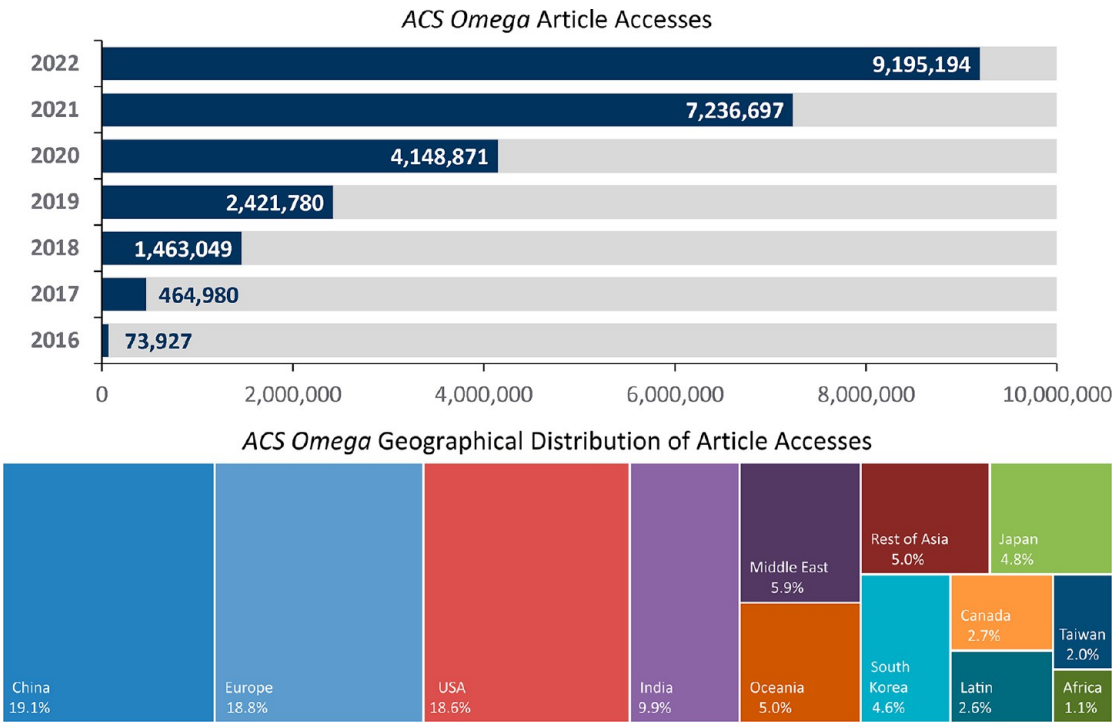


Figure 4. Bar graph in the top panel shows the year-over-year annual usage growth of published content in *ACS Omega*. The treemap at the bottom represents the geographical distribution of *ACS Omega*'s readership in 2022.

https://doi.org/10.1021/acsomega.3c03633
ACS Omega 2023, 8, 21352−21357

Table 1. *ACS Omega* Articles in 2022 Selected as ACS Editors' Choice[a]

TITLE	AUTHOR LIST (*corresponding author)	CITATION
Synthetic Approaches toward the Synthesis of Brivaracetam, An Antiepileptic Drug	Manoj Gayke, Hanuman Narode, Gyanchander Eppa, Rajesh S. Bhosale, and Jhillu Singh Yadav*	*ACS Omega* **2022**, 7, 3, 2486−2503. DOI: 10.1021/acsomega.1c05378
Nucleic Acid Architectonics for pH-responsive DNA Systems and Devices	Mohamed Nabeel Mattath, Debasis Ghosh, Sumon Pratihar, Shuo Shi, and Thimmaiah Govindaraju*	*ACS Omega* **2022**, 7, 4, 3167−3176. DOI: 10.1021/acsomega.1c06464
Non-native Amino Acid Click Chemistry-Based Technology for Site-Specific Polysaccharide Conjugation to a Bacterial Protein Serving as Both Carrier and Vaccine Antigen	Neeraj Kapoor*, Satoshi Uchiyama, Lucy Pill, Leslie Bautista, Angie Sedra, Lu Yin, Maritoni Regan, Ellen Chu, Taylor Rabara, Melissa Wong, Peter Davey, Jeff Fairman, and Victor Nizet*	*ACS Omega* **2022**, 7, 28, 24111−24120. DOI: 10.1021/acsomega.1c07360
"We Are Here!" Oxygen Functional Groups in Carbons for Electrochemical Applications	Mária Jerigová, Mateusz Odziomek*, and Nieves López-Salas*	*ACS Omega* **2022**, 7, 14, 11544−11554. DOI: 10.1021/acsomega.2c00639
Trends in Tissue Bioprinting, Cell-Laden Bioink Formulation and Cell Tracking	Paula Vázquez-Aristizabal, Govindaraj Perumal, Clara García-Astrain, Luis M. Liz-Marzán*, and Ander Izeta*	*ACS Omega* **2022**, 7, 19, 16236−16243. DOI: 10.1021/acsomega.2c01398
Exact Analytical Form of Diatomic Molecular Orbitals	Yunzhi Li and Chen Li*	*ACS Omega* **2022**, 7, 26, 22594−22600. DOI: 10.1021/acsomega.2c01905
Endo-Functionalized Cyclic Oligophenylenes: Synthesis and Complexation with a Chiral Phosphoric Acid	Kosuke Ono*, Yusei Tanaka, Kana Sugimoto, Shigemi Kinubari, and Hidetoshi Kawai	*ACS Omega* **2022**, 7, 49, 45347−45352. DOI: 10.1021/acsomega.2c05926

[a]ACS Editors' Choice link.

Table 2. Selection of Highly Accessed *ACS Omega* Articles Published in 2022

TITLE	AUTHOR LIST (*corresponding author)	CITATION
Variability in Metallurgical Coke Reactivity Index (CRI) and Coke Strength after Reaction (CSR): An Experimental Study	Deepak Kumar*, Vinod Kumar Saxena, Hari Prakash Tiwari, Barun Kumar Nandi, Abhilash Verma, and Vijay Kumar Tiwary	*ACS Omega* **2022**, 7, 2, 1703−1711. DOI: 10.1021/acsomega.1c04270
Power Generation by a Double-Sided Tape	Moon-Hyung Jang, Jacob D. Lee, Yu Lei, Simon Chung, and Gang Wang*	*ACS Omega* **2022**, 7, 46, 42359−42369. DOI: 10.1021/acsomega.2c05457
Understanding OxymaPure as a Peptide Coupling Additive: A Guide to New Oxyma Derivatives	Srinivasa Rao Manne, Anamika Sharma, Andrius Sazonovas, Ayman El-Faham, Beatriz G. de la Torre, and Fernando Albericio*	*ACS Omega* **2022**, 7, 7, 6007−6023. DOI: 10.1021/acsomega.1c06342
Laser-Induced Graphene (LIG) as a Smart and Sustainable Material to Restrain Pandemics and Endemics: A Perspective	Nandini Dixit and Swatantra P. Singh*	*ACS Omega* **2022**, 7, 6, 5112−5130. DOI: 10.1021/acsomega.1c06093
Distilled Waste Plastic Oil as Fuel for a Diesel Engine: Fuel Production, Combustion Characteristics, and Exhaust Gas Emissions	Weerachai Arjharn, Pansa Liplap*, Somkiat Maithomklang, Kontorn Thammakul, Sathaporn Chuepeng, and Ekarong Sukjit	*ACS Omega* **2022**, 7, 11, 9720−9729. DOI: 10.1021/acsomega.1c07257

Table 3. Selection of Highly Accessed *ACS Omega* Reviews and Mini-Reviews Published in 2022

TITLE	AUTHOR LIST (*corresponding author)	CITATION
Should IQOS Emissions Be Considered as Smoke and Harmful to Health? A Review of the Chemical Evidence	Clement N. Uguna* and Colin E. Snape	*ACS Omega* **2022**, 7, 26, 22111−22124. DOI: 10.1021/acsomega.2c01527
Iron Absorption: Factors, Limitations, and Improvement Methods	Elif Piskin, Danila Cianciosi, Sukru Gulec*, Merve Tomas*, and Esra Capanoglu*	*ACS Omega* **2022**, 7, 24, 20441−20456. DOI: 10.1021/acsomega.2c01833
Understanding the Design of Cathode Materials for Na-Ion Batteries	Priyanka Gupta, Sujatha Pushpakanth, M. Ali Haider, and Suddhasatwa Basu*	*ACS Omega* **2022**, 7, 7, 5605−5614. DOI: 10.1021/acsomega.1c05794
How Do Herbal Cigarettes Compare To Tobacco? A Comprehensive Review of Their Sensory Characters, Phytochemicals, and Functional Properties	Rania T. Abdel Rahman, Nurkhalida Kamal, Ahmed Mediani, and Mohamed A. Farag*	*ACS Omega* **2022**, 7, 50, 45797−45809. DOI: 10.1021/acsomega.2c04708
Synthesis of Chalcones Derivatives and Their Biological Activities: A Review	Nadia A. A. Elkanzi*, Hajer Hrichi, Ruba A. Alolayan, Wassila Derafa, Fatin M. Zahou, and Rania B. Bakr	*ACS Omega* **2022**, 7, 32, 27769−27786. DOI: 10.1021/acsomega.2c01779

a joint Virtual Issue, "From Biosensors to Drug Delivery and Tissue Engineering: Open Biomaterials Research", showcasing 40 cross-disciplinary free-to-read articles published in seven ACS journals including *ACS Omega*, *ACS Applied Bio Materials*, *ACS Applied Polymer Materials*, *ACS Biomaterials Science & Engineering*, *ACS Macro Letters*, *Biomacromolecules*, and *Macromolecules* under the umbrella of biomaterials research. The Virtual Issue was prefaced by an Editorial (DOI: 10.1021/acsomega.2c00787) highlighting the biomaterials portfolio within ACS Publications in the context of the global open access publishing landscape.

In July 2022, we released the Virtual Issue, "Diving into the Deep End: Machine Learning for the Chemist" that provided a glimpse of published content in *ACS Omega* with an Artificial Intelligence, Machine Learning, Deep Learning, or Neural Networks theme prefaced with an Editorial (DOI: 10.1021/acsomega.2c04373) by Dr. Silvia Imberti, Publishing Editor for *ACS Omega*.

Thereafter, we partnered with two other journals, *Analytical Chemistry* and *Environmental Science & Technology* to launch the Virtual Issue titled "From Detection to Remediation: Analytical Science at the Forefront of Environmental Research" in October 2022. This collection was introduced by an Editorial cowritten by a team of Editors from the above-mentioned journals (DOI: 10.1021/acsomega.2c06631) and featured 60 publications to showcase the wide-ranging technical innovation in analytical science in the context of environmental chemistry and health.

In the last five years, *ACS Omega* has been the top journal in the entire ACS portfolio for publishing content from the Latin America region. In March 2023, we released "A Vista on

https://doi.org/10.1021/acsomega.3c03633
ACS Omega 2023, 8, 21352−21357

Table 4. Press Releases Associated with Published Content in *ACS Omega* (2022–March 2023)

PRESS RELEASE HEADLINE	TITLE	CITATION
This starchy bioplastic could make soggy paper straws a thing of the past	Ultrastrong, Hydrostable, and Degradable Straws Derived from Microplastic-Free Thermoset Films for Sustainable Development	*ACS Omega* **2023**, *8*, 8, 7968–7977. DOI: 10.1021/acsomega.2c07797
Crab shells could help power the next generation of rechargeable batteries	Crab Shell-Derived SnS2/C and FeS2/C Carbon Composites as Anodes for High-Performance Sodium-Ion Batteries	*ACS Omega* **2023**, *8*, 10, 9145–9153. DOI: 10.1021/acsomega.2c06429
Keeping drivers safe with a road that can melt snow, ice on its own	Preparation of a Green Sustained-Release Microcapsule-Type Anti-Icing Agent for Asphalt Pavement and Its Application Demonstration Project	*ACS Omega* **2023**, *8*, 5, 4906–4920. DOI: 10.1021/acsomega.2c07212
"Green" way to extract hair compounds that could be used for bandages, sunscreens	One-Pot Extraction of Bioresources from Human Hair via a Zero-Waste Green Route	*ACS Omega* **2023**, *8*, 17, 15759–15768. DOI: 10.1021/acsomega.3c01428
Generating electricity from tacky tape	Power Generation by a Double-Sided Tape	*ACS Omega* **2022**, *7*, 46, 42359–42369. DOI: 10.1021/acsomega.2c05457
Celebrating with green, eye-catching sparklers	Customizing the Appearance of Sparks with Binary Metal Alloys	*ACS Omega* **2022**, *7*, 32, 28408–28420. DOI: 10.1021/acsomega.2c03081
What makes the "Appalachian truffle" taste and smell delicious	Characterization of the Volatilome of Tuber canaliculatum Harvested in Quebec, Canada	*ACS Omega* **2022**, *7*, 33, 29038–29045. DOI: 10.1021/acsomega.2c02877
COVID-19 alters levels of fertility-related proteins in men, study suggests	Semen Proteomics of COVID-19 Convalescent Men Reveals Disruption of Key Biological Pathways Relevant to Male Reproductive Function	*ACS Omega* **2022**, *7*, 10, 8601–8612. DOI: 10.1021/acsomega.1c06551
"E-nose" could someday diagnose Parkinson's disease by "smelling" skin	Artificial Intelligent Olfactory System for the Diagnosis of Parkinson's Disease	*ACS Omega* **2022**, *7*, 5, 4001–4010. DOI: 10.1021/acsomega.1c05060

Figure 5. Welcoming six new *ACS Omega* Associate Editors. Top Panel: Profs. Davita L. Watkins (Left), Carolina Horta Andrade (Middle), and Christian Lorenz (Right). Lower Panel: Profs. Julie Korak (Left), Ulrich Hintermair (Middle), and Hye Ryung Byon (Right).

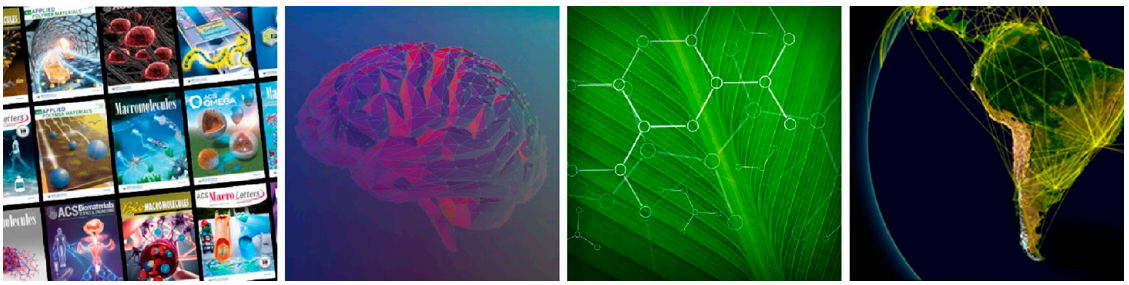


Figure 6. Artwork for the four Virtual Issues spearheaded by *ACS Omega* in 2022 and early 2023. Left to right: From Biosensors to Drug Delivery and Tissue Engineering: Open Biomaterials Research, Diving into the Deep End: Machine Learning for the Chemist, From Detection to Remediation: Analytical Science at the Forefront of Environmental Research, and A Vista on Research Excellence from Latin America.

https://doi.org/10.1021/acsomega.3c03633
ACS Omega 2023, 8, 21352–21357

Figure 7. Gallery of select front cover artwork published across Volume 7 in *ACS Omega* in 2022 (https://pubs.acs.org/loi/acsodf/group/d2020.y2022).

Research Excellence from Latin America" Virtual Issue to celebrate this successful partnership between researchers who are representative of these countries and *ACS Omega*. This collection featured 35 reviews and original articles along with an Editorial (DOI: 10.1021/acsomega.3c01437) by *ACS Omega* Publishing Editor Dr. Jhoan Toro-Mendoza. The Editorial

https://doi.org/10.1021/acsomega.3c03633
ACS Omega 2023, 8, 21352−21357

reflected on the 100-year-old partnership between Latin America and the American Chemical Society and took us on a walk down memory lane.

In addition to these Virtual Issues, *ACS Omega* also participated in multiple joint Virtual Issues with many of our sister ACS journals over 2022 and 2023 to place a spotlight on research undertaken on various diseases, their diagnosis, prevention, or treatment (1. Prevention and Treatment of Malaria (2023); 2. World Cancer Day; 3. Neglected Tropical Diseases 2023; 4. Diagnostic and Therapeutic Radiopharmaceuticals; 5. Prevention and Treatment of Malaria (2022); 6. Tuberculosis Drug Discovery and Diagnosis; 7. Neglected Tropical Diseases (2022)) or to celebrate landmarks or milestones (1. Chemists Celebrate Earth Week: The Curious Chemistry of Amazing Algae; 2. 50 Years of the Fluid Mosaic Model; 3. Bioorthogonal and Click Chemistry: Curated by Prof. Carolyn R. Bertozzi, 2022 winner of the Nobel Prize in Chemistry; 4. 40 Years of GenBank).

Over 2023, we invite you to keep an eye out for our "Call for Papers" in our "Announcements" homepage section for Virtual Special Issues, which will aim to feature work in theme-based collections edited by our expert Editorial Board members. We welcome your submissions to our current Calls for Papers in Phytochemistry and CO_2 Geostorage!

FEATURED FRONT COVER ARTWORK

On October 18, 2022, *ACS Omega* celebrated the publication of its 200th issue with a bespoke front cover (Figure 7, fifth row, first from left) accompanied by an editorial presenting the many opportunities for researchers in Open Science at *ACS Omega* and more generally at ACS Publications (DOI: 10.1021/acsomega.2c06305). Another exciting front cover featured artwork created by Abdullahi Tunde Aborode, a Ph.D. student from the Department of Chemistry, Mississippi State University (https://pubs.acs.org/toc/acsodf/7/47), as part of the ACS-portfolio wide Diversity & Inclusion Cover Art Series (https://axial.acs.org/publishing/acs-diversity-inclusion-cover-art-series-2023). The front cover depicted the genuine need to embrace inclusiveness for chemists with disabilities to help them thrive mentally and socially. A selection of our 2022 front covers is shown in Figure 7. We encourage more cover art submissions to our journal as they offer an excellent opportunity to promote your work creatively and attract readership.

OUTREACH AND ENGAGEMENT

ACS Omega supported and sponsored up to 65 conferences, symposia, and meetings in 2022, including several oral and poster prizes to students and early career researchers. We have maintained our social media presence on Twitter (https://twitter.com/ACS_Omega) by highlighting current research and noteworthy events for *ACS Omega*'s wide audience with close to 4,178 unique Twitter accounts engaging with the content published in the journal. We released a Whitepaper titled 5 Reasons for Researchers in India to Publish in *ACS Omega*, highlighting the continued engagement from India with the journal at various levels.

We hope you found this Editorial informative and learned about *ACS Omega*'s progress, initiatives, and endeavors over the past year and a half. Our success is because of the support of our authors, reviewers, editors, and ACS staff that work together to create *ACS Omega* − so thank you all!

Deqing Zhang, Co-Editor orcid.org/0000-0002-5709-6088

Krishna N. Ganesh, Co-Editor orcid.org/0000-0003-2292-643X

ASSOCIATED CONTENT

Supporting Information

The Supporting Information is available free of charge at https://pubs.acs.org/doi/10.1021/acsomega.3c03633.

Table S1: Full reviewers list. Alphabetical list of *ACS Omega* peer reviewers who returned a referee report between January 1, 2022 and December 31, 2022 (PDF)

AUTHOR INFORMATION

Complete contact information is available at: https://pubs.acs.org/10.1021/acsomega.3c03633

Notes

Views expressed in this editorial are those of the authors and not necessarily the views of the ACS.

ACKNOWLEDGMENTS

We thank Drs. Aditi Jain, Dinesh Soares, Silvia Imberti, Jhoan Toro-Mendoza, and Brice Darroch for their assistance in preparing this Editorial.

REFERENCES

(1) Soares, D. C.; Zhang, D.; Ganesh, K. N. Open Science at ACS: Present and Future Opportunities for *ACS Omega* as We Celebrate 200 Issues. *ACS Omega* **2022**, *7* (41), 36050−36051.