

2020 CATALOG



**ENERGIZING INNOVATION THROUGH
ENGINEERING KNOWLEDGE**

Journals • Conference Proceedings • eBooks

asmedigitalcollection.asme.org

2020 CATALOG



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ENERGIZING INNOVATION THROUGH ENGINEERING KNOWLEDGE

Dear Colleague,

We are pleased to present the **2020 American Society of Mechanical Engineers (ASME) Digital Collection catalog**. The ASME Digital Collection (asmedigitalcollection.asme.org) provides online access to one of the world's foremost technical publishing portfolios. Our published content is closely aligned with ASME's core mission: to serve as an **essential resource for professionals seeking engineering solutions to global challenges through innovation**.

Our valued authors, editors, and peer reviewers, originating from our membership as well as the broader global engineering community, contribute to some of the profession's most prestigious publications, including our **journals, conference proceedings, and eBooks**. These publications support our readers throughout the **research lifecycle** and promote **multidisciplinary collaboration – energizing innovation**.

SERVING the Engineering Community

ASME has strong ties to the engineering community because we are PART of that community. This close connection has enabled us to identify **five strategic technologies** that guide our content and product development strategy across the entire ASME organization. These are **Bioengineering; Clean Energy; Manufacturing; Pressure Technology; and Robotics**.

ASME currently publishes more than 30 peer-reviewed international journals, with important new titles launched since 2015. **ASME's decision to launch a new journal is always the result of a selective and rigorous process to identify specific needs and existing gaps in research coverage.** Launched in 2018, the *Journal of Nondestructive Evaluation, Diagnostics and Prognostics of Engineering Systems* and the *Journal of Engineering and Science in Medical Diagnostics and Therapy* are thriving with strong paper submissions and readership. After extensive research that identified a gap in the engineering literature, we will begin publication of the **ASME Journal of Engineering for Sustainable Buildings and Cities** in 2020. Looking retrospectively, we now have a collection of journal archives dating back to 1959 (with the exception of the *Journal of Applied Mechanics*) and in 2020 will begin publishing conference proceedings legacy content.

Striving for excellence and the widest dissemination of content are guiding principles of our journal publishing philosophy. ASME's increasing Journal Impact Factors (JIFs)* are one measure of our success. For a second year, the ASME Journal Program has experienced significant increases in both the total number of citations and its impact factor rankings. *Applied Mechanics Reviews* is the top-ranked ASME journal with an **impressive score of 7.848***. Several other journals experienced a **greater than 30 percent improvement** in their JIFs from 2016 to 2017.

SUPPORTING Our Author Community – Open for OPEN ACCESS!

The debate around Open Access is intensifying, and ASME is not only following developments, but is also actively contributing to the discussion. Our aim is to ensure that our global engineering community has appropriate and timely access to critical engineering knowledge. ASME's current hybrid publishing program spanning all journals enables authors to choose to pay an Article Processing Charge (APC) so that their **peer-reviewed and accepted articles can be published Open Access**.

LISTENING to Our Library Community

ASME is a service-oriented organization and a not-for-profit publisher. We pride ourselves on being an information provider serving the needs of our community and mindful of library budget constraints.

ASME Publishing's Library Advisory Board (LAB) was formally established to mutually benefit the library community and ASME. In September 2018, we hosted the inaugural meeting of the LAB. This successful gathering of academic, corporate, and government librarians fostered dialog on current and anticipated issues potentially impacting ASME's publishing program.

ENERGIZING Engineering Innovation

At ASME, we are proud of our partnership with the engineering research community. Together we deliver the validated, high quality information that mechanical and other engineers need every day to energize and drive innovation that benefits all people.



Kind regards,

Philip DiVietro

Managing Director, Publishing

The American Society of Mechanical Engineers (ASME)

* 2017 Journal Citation Reports® (Clarivate Analytics, 2018)

MORE THAN MECHANICAL ENGINEERING...

Founded in 1880 as The American Society of Mechanical Engineers, ASME is a not-for-profit professional organization that enables collaboration, knowledge sharing, and skills development across all engineering disciplines, while promoting the vital role of the engineer in society.

ASME publishes some of the **most prestigious engineering content in the world** as one way to fulfill its ongoing mission of being an essential resource for professionals seeking engineering solutions to global challenges.

The ASME Digital Collection provides unparalleled depth, breadth, and quality of peer-reviewed content:

- **ASME's Journals** from 1959 – present
- **ASME's Conference Proceedings** from 2000 – present, plus select proceedings back to 1955
- **ASME's eBooks** from 1993 – present, plus select titles back to 1944

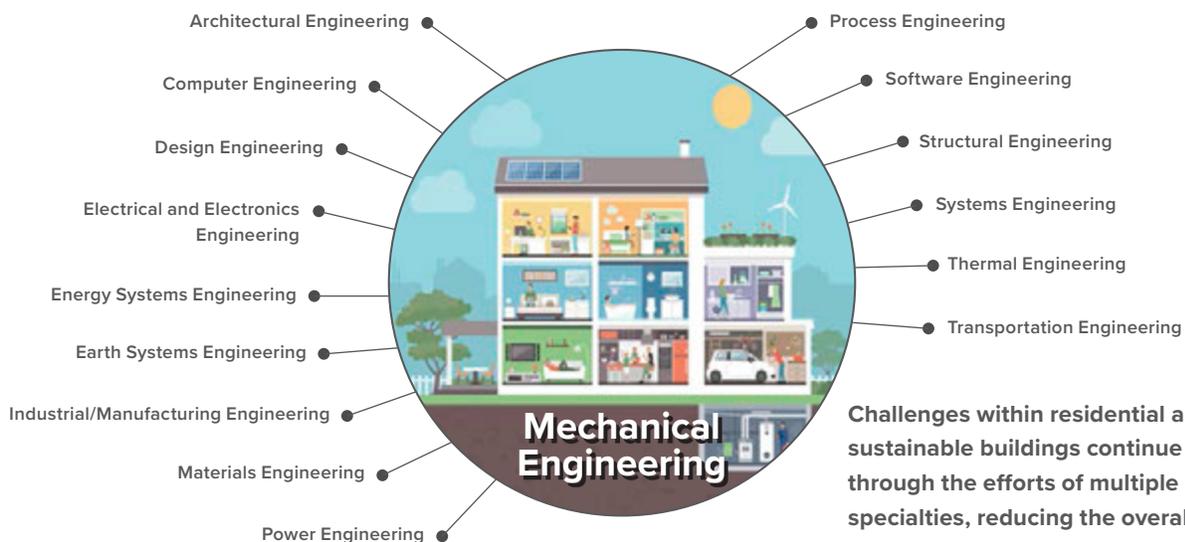
Fostering Interdisciplinary Engineering Collaboration

Beyond mechanical engineering, ASME's expanding publishing program embraces a wide range of engineering disciplines. By supplying high quality, validated content, it energizes innovation by supplying cutting-edge engineering knowledge that promotes interdisciplinary problem solving and collaboration. Sustainable building, or green construction, is a prime example of the successful convergence of engineering principles, where design and processes meet to create environmentally responsible, energy/resource efficient, and resilient structures.

Readers can find many of the engineering principles introduced in energy efficient housing within the pages of ASME publications.

Features of The ASME Digital Collection include:

- Powerful search tools that retrieve content simultaneously from journals, conference proceedings, and eBooks
- Advanced filtering tools to refine search results by keywords, topics, journal citation, and date range
- Topic Collections for specific subject areas
- Enhanced user experience (UX), providing simplified navigation and inline figures & tables
- Responsive web pages for better desktop and mobile experience
- Links to CrossRef, Google Scholar, and Web of Science to discover citing articles
- Tools for citation export
- Ability to share links by social media and email
- Email alerts for saved searches and newly published content
- COUNTER/SUSHI compliant
- Shibboleth institutional login
- Indexed in leading abstracting and indexing (A&I) services

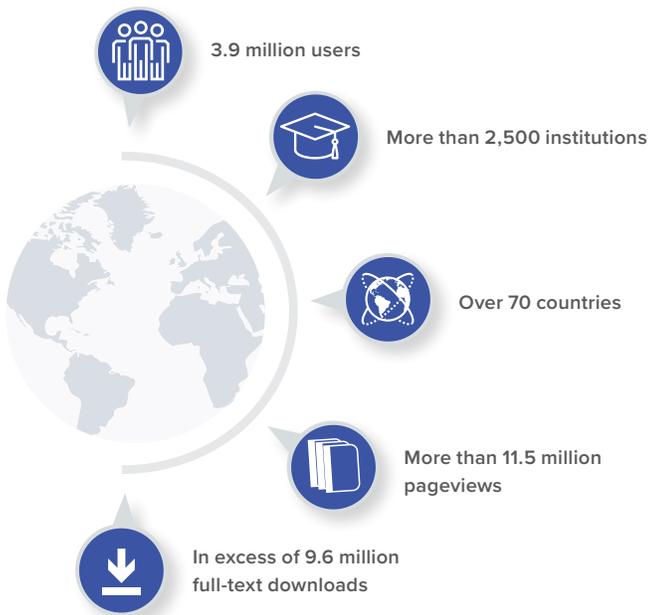


Challenges within residential and commercial sustainable buildings continue to be resolved through the efforts of multiple engineering specialties, reducing the overall impact of the built environment on human health and the natural environment while making our buildings resilient to natural disasters.

ENERGIZING INNOVATION THROUGH ENGINEERING KNOWLEDGE

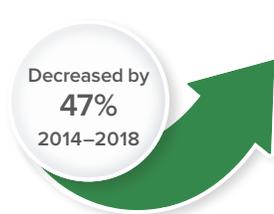
Global Access

In 2018, **3.9 million users** at more than **2,500 institutions** in over **70 countries** accounted for more than **11.5 million pageviews** and accessed in excess of **9.6 million full-text** journal articles, conference proceedings papers, and eBook chapters.



Speed to Publication

ASME is continuously striving to **improve the time to publication across the entire ASME Journal Program** while maintaining the integrity, thoroughness, and quality of the peer reviews that define the program.

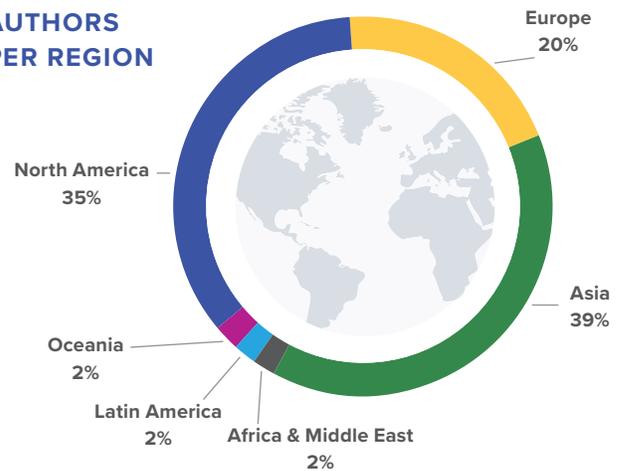


As an example, the time in review for the *Journal of Applied Mechanics* decreased by **47% (2014–2018)**, which means that authors received review results in an average of **58 days in 2018!**

International Authorship

In 2018, more than **3,000 articles** were published through the **ASME Journal Program** with a global footprint of authors that contributes to and supports the ASME Journal Program.

AUTHORS PER REGION

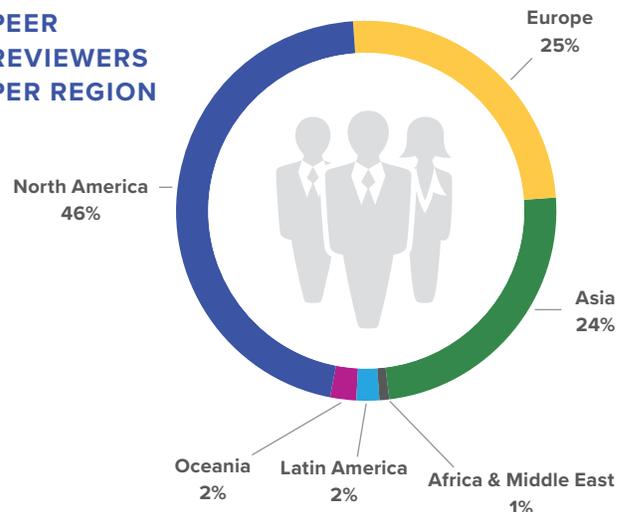


Expert and Fair Peer Review

At the heart of the program, over **8,750 individuals** served as peer reviewers for the **ASME Journal Program in 2018**.

Reviewers are invited to participate in the ASME Journal Program because of their expertise in their fields and their ability to offer thorough and accurate criticism of current research in order to move the knowledge of the world forward to benefit all people.

PEER REVIEWERS PER REGION



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All Current Conference Proceedings (2008-2020)

Online only – Available via subscription

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Plus select proceedings back to 1955

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ASME JOURNALS ONLINE AVAILABILITY

● Journal Archives (1959-1999) ● Journal Frontfiles (2000-2020)

JOURNAL	YEAR	59	60	61	62	63	64	65	66	67	68	69	70	71	72	73	74
Applied Mechanics Reviews																	
ASCE-ASME Journal of Risk and Uncertainty In Engineering Systems, Part B: Mechanical Engineering																	
ASME Journal of Engineering for Sustainable Buildings and Cities - NEW IN 2020																	
Journal of Applied Mechanics			●	●	●	●	●	●	●	●	●	●	●	●	●	●	●
Journal of Biomechanical Engineering																	
Journal of Computational and Nonlinear Dynamics																	
Journal of Computing and Information Science in Engineering																	
Journal of Dynamic Systems, Measurement, and Control															●	●	●
Journal of Electrochemical Energy Conversion and Storage (formerly JrnI of Fuel Cell Science and Tech)																	
Journal of Electronic Packaging																	
Journal of Energy Resources Technology																	
Journal of Engineering and Science in Medical Diagnostics and Therapy																	
Journal of Engineering for Gas Turbines and Power			●	●	●	●	●	●	●	●	●	●	●	●	●	●	●
Journal of Engineering Materials and Technology																●	●
Journal of Fluids Engineering			●	●	●	●	●	●	●	●	●	●	●	●	●	●	●
Journal of Heat Transfer			●	●	●	●	●	●	●	●	●	●	●	●	●	●	●
Journal of Manufacturing Science and Engineering			●	●	●	●	●	●	●	●	●	●	●	●	●	●	●
Journal of Mechanical Design																	
Journal of Mechanisms and Robotics																	
Journal of Medical Devices																	
Journal of Micro and Nano-Manufacturing																	
Journal of Nanotechnology in Engineering and Medicine - SUSPENDED PUBLICATION																	
Journal of Nondestructive Evaluation, Diagnostics and Prognostics of Engineering Systems																	
Journal of Nuclear Engineering and Radiation Science																	
Journal of Offshore Mechanics and Arctic Engineering																	
Journal of Pressure Vessel Technology																	●
Journal of Solar Energy Engineering																	
Journal of Thermal Science and Engineering Applications																	
Journal of Tribology															●	●	●
Journal of Turbomachinery																	
Journal of Verification, Validation and Uncertainty Quantification																	
Journal of Vibration and Acoustics																	

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ASME CODES & STANDARDS FOR ACADEMIA

DELIVER **THE STANDARD** TO YOUR ENGINEERING COMMUNITY

*Did you know that almost 50 percent of early career engineers lack standards knowledge?**

The ASME Standards Collection is now available to all academic libraries through a new flexible subscription option. This enables access to the most up-to-date collection of Codes and Standards produced by ASME, one of the oldest and most highly regarded international standards developing organizations. Codes and Standards are associated with the art, science, and practice of mechanical engineering, starting in 1914 with the first edition of its legendary Boiler and Pressure Vessel Code.

ASME Standards Collection



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available in the
Collection



100 countries
currently use the Standards



Topics span
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plants, elevators/escalators,
construction, engineering
design, standardization, and
engineering drawing

Give your engineering community, particularly students, the tools needed to succeed in today's increasingly competitive employment environment. Equip your users with an understanding of the use of Codes and Standards in different contexts, which will give them a greater and more authentic sense of the world of practice.

"The greatest weaknesses noted by employers of current mechanical engineering graduates, as well as by the early career engineers themselves, were a lack of practical experience in how devices are made or work, **lack of familiarity with Codes and Standards**, and a lack of a systems perspective."*

*ASME Vision 2030 Survey Feedback

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3. Complete ASME Standards Collection

BPVC Boiler and Pressure Vessel Code Complete Set and other Codes and Standards.

"Online access to Codes and Standards dramatically increases their use by students, faculty members, and other researchers. It ensures they have convenient and timely access to the Standards they need, without mediation, at the precise moment they need them."

-Assistant Professor of Library Science and Engineering Information Specialist at a top-ranking US university (current subscriber)

For more information, visit asme.org/about-asme/standards
Contact your regional sales representative regarding pricing and availability.