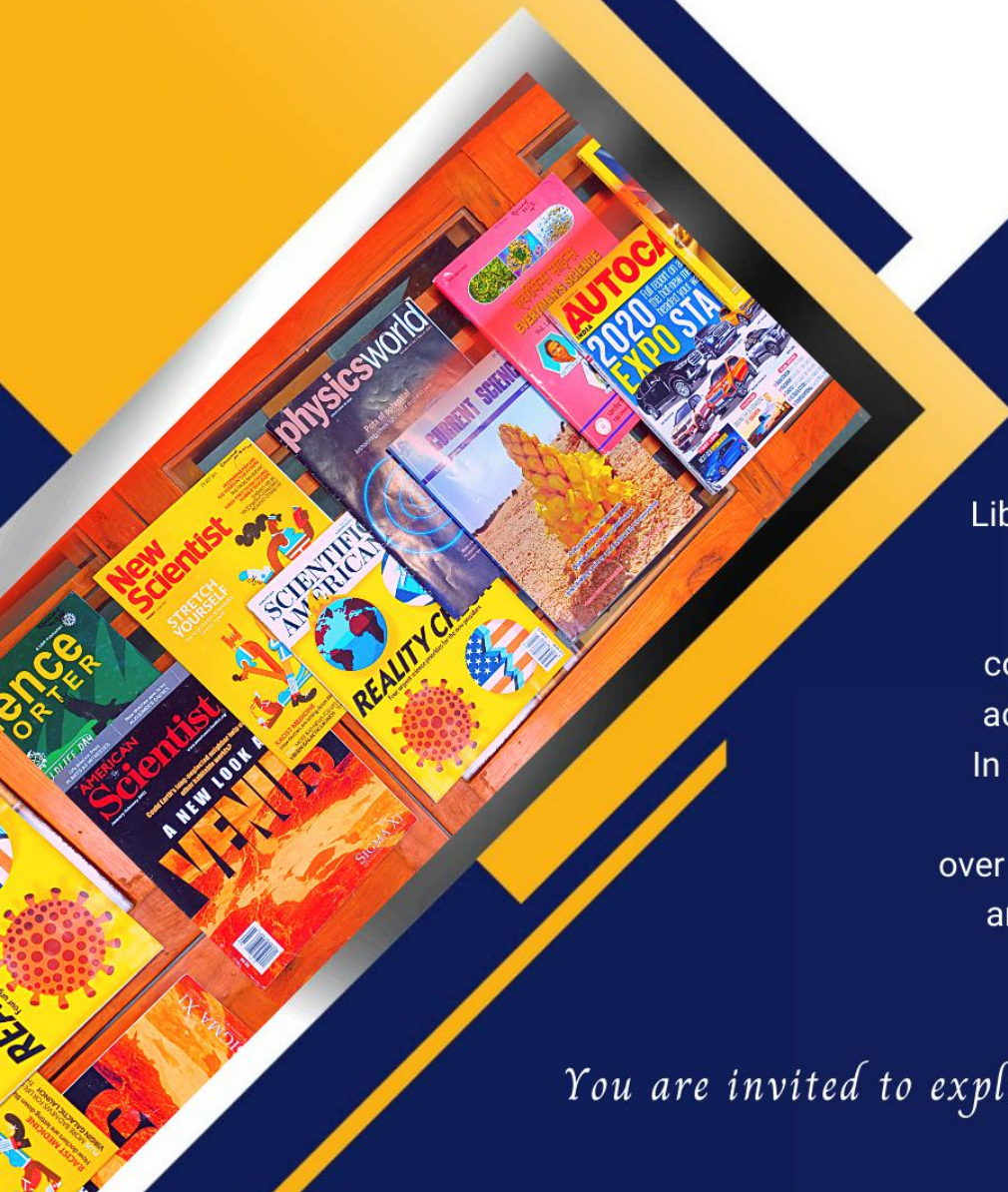


POPULAR MAGAZINE COLLECTION



Library Collection @ IITGN has an impressive number of 63 popular magazines covering all subjects catering to academics and general reading. In addition, another 54 magazines published by IEEE and over 40 magazines of general interest are also a part of this collection.

You are invited to explore this rich collection!



A Brief Introduction to Popular Magazine Collection

The IITGN Library provides access to an excellent collection scholarly information resource both in print and online. The library website, online catalogue, the resource guides, pathfinders and several other user-friendly media through which library tries to provide an access to these information resources. In addition, the library team continues with its efforts to bring out innovative information products and services to promote the use of these resources which will be helpful to the student group, the faculty, staff and the residents for their academic endeavors, research work, updating themselves and for leisure reading.

One such new initiative is compilation of 'Popular Magazine Collection'. Magazines in any subject unlike the journals, contain variety of information items which are valuable yet presented in a lucid manner. Magazines are great sources for weekend reading, easy for reading while travelling, igniting new ideas, creating interest in new topics in unique ways and many a times trigger the curiosity in us for beginning research. They can be used as classroom teaching aids, for initiating discussions, can be excellent conversation content apart from enriching you in many subject areas.

Its interesting to note that IITGN Library has a sizable collection of magazines both in print and digital form in various disciplines as well as catering to the various courses offered at the institute. The magazines are displayed explicitly in the magazine section with an equally enticing environment including seating arrangement, and availability of staff to assist you.

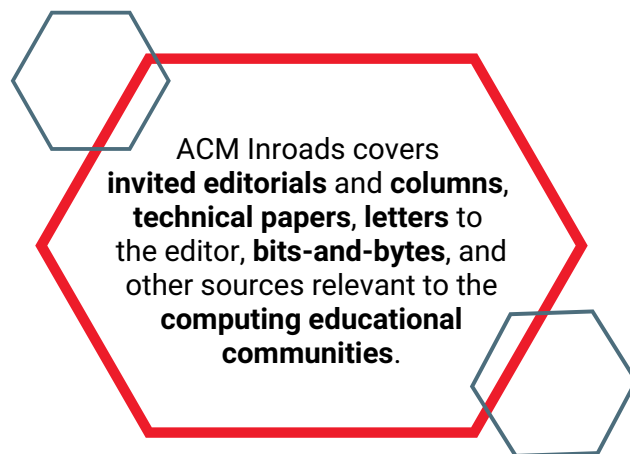
Your leisure time can be well utilized and your quest for stimulating ideas will be totally fulfilled by this amazing collection of 63 popular magazines from various subjects along with 54 magazines published by IEEE collection and over 40 magazines of general interest. We invite you to explore this treasure trove and make the best utilization of time and resources available exclusively for IITGN community!

We sincerely appreciate the effort of Mr. Pratyush Bhatt (BTech Student) and Library Team contributed immensely in putting together this handy compilation.

Happy Magazine Exploration!

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- [IEEE Potentials](#)
- [IEEE Spectrum](#)
- [Interactions](#)
- [JSTOR Daily](#)
- [Knowable Magazine](#)
- [MAA Focus](#)
- [Machine Design](#)
- [Math Horizons](#)
- [Mathematical Intelligencer \(The\)](#)
- [Mathematics Magazine](#)
- [Mechanical Engineering \(ASME\)](#)
- [Microcosm](#)
- [MIT Technology Review](#)
- [MRS Bulletin](#)
- [National Geographic](#)
- [Nature](#)
- [New Scientist](#)
- [Notices of American Mathematical Society](#)
- [Optics & Photonics News](#)
- [Physics \(APS\)](#)
- [Physics Today](#)
- [Physics World](#)
- [Popular Mechanics](#)
- [Popular Science](#)
- [PRIMUS](#)
- [Queue \(ACM\)](#)
- [Resonance: Journal of Science Education](#)
- [Science](#)
- [Science and Culture](#)
- [Science Reporter](#)
- [Scientific American](#)
- [Scientist \(The\)](#)
- [SIAM News](#)
- [Standardization News \(ASTM\)](#)
- [Ubiquity](#)
- [Wired](#)
- [XRDS: Crossroads](#)



ACM Inroads covers **invited editorials and columns, technical papers, letters** to the editor, **bits-and-bytes**, and other sources relevant to the **computing educational communities**.

Pub. details:

Publisher: Association for Computing Machinery (ACM)

Country: USA

Freq.: Quarterly (4 Issues/ year)

Pub. since: 2010

Visit [here](#)



ACM Inroads

Available in its online and offline versions, ACM Inroads is a magazine published by the Association for Computing Machinery (ACM) catering to an audience of wide-ranged professionals across the globe interested in **advancing computing education**. Its authors represent an international community of scholars who reflect and contribute to the domain of computing.

Apart from invited editorials and columns, this magazine also has pieces from technical papers, letters to the editor, bits-and-bytes, and other sources relevant to the computing educational communities. The focus of the publication is to generate new **"inroads"** in theory and practice affecting a **worldwide community of computing educators** that fosters cooperation, dialogue, and collaboration.

The American Mathematical Monthly (MAA) core value is to **strengthen the community through collaborative activities for mathematics professionals, students, and enthusiasts** at all levels. It fosters the open exchange of ideas about the **teaching and learning of mathematics**.

Pub. details:

Publisher: Taylor and Francis group for the Mathematical Association of America

Country: USA

Freq.: Monthly (12 Issues/ year)

Pub. since: 1894

Visit [here](#)



American Mathematical Monthly (The)

Published monthly by the Taylor and Francis group for the Mathematical Association of America. The American Mathematical Monthly is an international, peer-reviewed journal that publishes **research on mathematics, mathematical ideas, mathematical problems, and solutions**. Its readers represent a wide range of mathematical interests, including professional mathematicians and students, especially at the graduate level. This journal fulfills a different role from that of a typical mathematical research journal. According to JSTOR, it is the most widely read mathematics journal in the world.

The abstracts of these journal articles are indexed in MathSciNet, Web of Science, PubMed, zbMath, and ProQuest. By reading this journal, we further **develop the understanding of our world through mathematics** because mathematics drives society and shapes our lives. Its core value is to **strengthen the community through collaborative activities for mathematics professionals, students, and enthusiasts** at all levels. It fosters the **open exchange of ideas about the teaching and learning of mathematics**.



American Scientist features articles written by prominent engineers and scientists reviewing crucial advancements in fields ranging from **quantum physics**, **molecular biology**, and **statistical mechanics** to **computer engineering**, and much more.

Pub. details:

Publisher: Sigma Xi, The Scientific Research Honor Society

Country: USA

Freq.: Bi-monthly (6 Issues/ year)

Pub. since: 1913

Visit [here](#)

➤ American Scientist

Published by Sigma Xi, The Scientific Research Honor Society, this is an illustrated bi-monthly for science, engineering, and technology enthusiasts which offers its content in online and offline forms. The learning it offers is widely generic and interesting, as it seems from the diversified questions we began with. Each issue of this magazine features articles written by prominent engineers and scientists reviewing crucial advancements in fields ranging from quantum physics, molecular biology, and statistical mechanics to computer engineering, electronics and communication, astronomy, music theory, and much more.

A special mention within the American Scientist is the **Scientists' Nightstand** that reviews a variety of science-related books. There is also a dedicated column to shed light on the **interaction between science and culture**. And all of this is **open for everyone**, irrespective of their age and academic background with the only prerequisite being a deep curiosity to know about science and technology.

Autocar India covers all types of **automobile news, updates, and reviews.** The audience it caters to spans across the fan-base of automobiles.



Pub. details:

Publisher: Haymarket Motoring Publication

Country: India

Freq.: Monthly (12 Issues/ year)

Pub. since: 1999

Visit [here](#)

Autocar India 

Autocar India (online and print) is published by 'Autocar', a British automobile publication by Haymarket Motoring Publications Ltd. as a monthly magazine and currently enjoys one of the highest readerships among automobile magazines in India. Its companion, 'The Autocar Show,' also airs weekly on Times Now and ET Now which enjoys one of the highest viewership among Indian automobile programmes on the television.

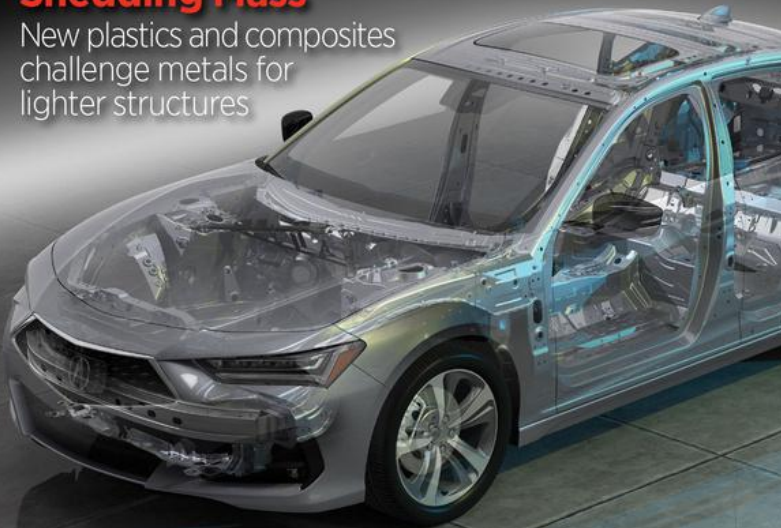
Autocar India has a strong digital presence with the website providing a daily feed of automobile news, updates, and reviews. The number of alternatives we have in the **Indian automobile industry** ranges from sedans to SUVs, luxury cars and beyond. Every category has a **plethora of variety** to offer. And this is where the Autocar can help. Needless to mention, the audience it caters to spans across the **fan-base of automobiles**. Any prerequisite knowledge to make the most of this publication? None!

SAE
INTERNATIONAL

AUTOMOTIVE ENGINEERING

Seeking Strength, Shedding Mass

New plastics and composites challenge metals for lighter structures



Schaeffler's Dan Sayre talks e-motors

Laurie Harbour Q&A

Altair Lightweighting awards

September 2021

autoengineering.sae.org

Automotive Engineering has dedicated articles to very specific details. It is available in its print and e-versions. It can be of immense help to all the **automobile** and **EV enthusiasts**.

Pub. details:

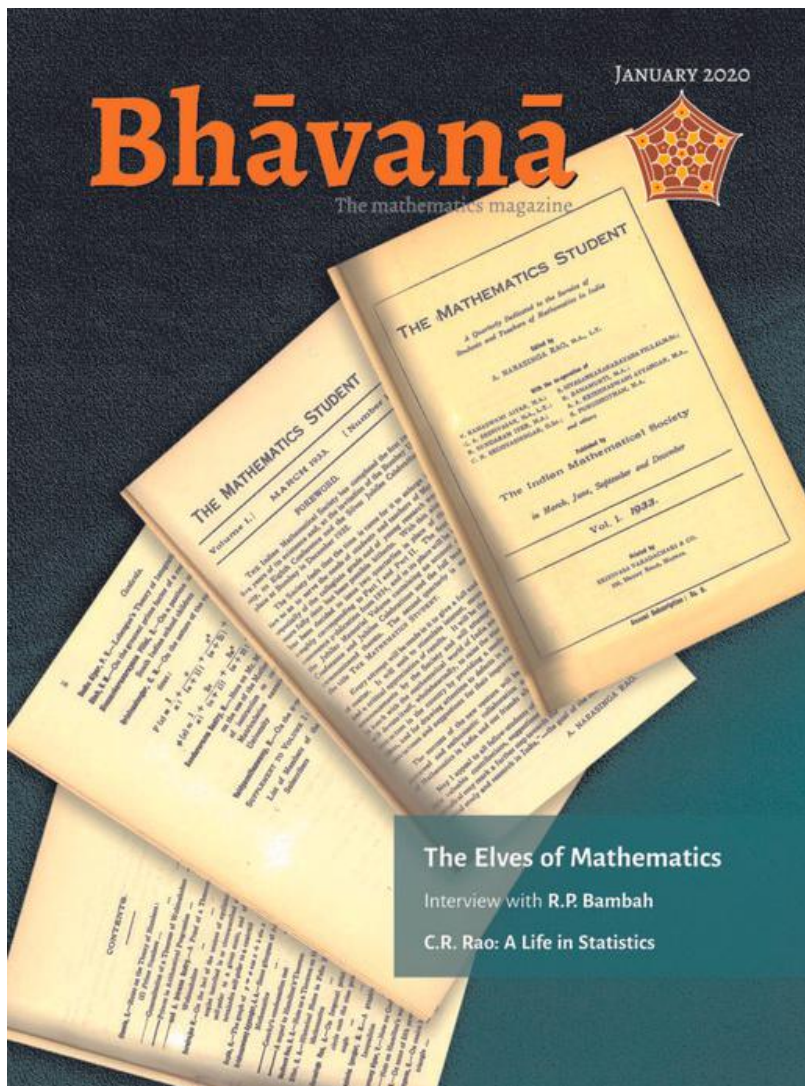
Publisher: SAE International
Country: USA
Freq.: Monthly (12 Issues/ year)
Pub. since: 1972
Visit [here](https://www.autoengineering.sae.org)

➤➤ Automotive Engineering

Transportation industry has inevitably found its place among the most booming ones across the globe. With the ever-rising population and demand of resources as a consequence, rapid mobility of people, goods, as well as services has become a necessity. And for the same, the only roadway resort we look forward to is state-of-the-art automobile technologies. With the large-scale depletion of natural resources, we are also observing an increase in adoption of electric vehicles (EVs). In addition, hardcore exploration of hydrogen fuel cells, ethanol-run motor vehicles, and reuse of all the emissions and waste heat from automobiles are among the trending research domains. Nevertheless, this only highlights a minute fraction within the domain of automotive engineering. Then what offers a holistic perspective? Automotive Engineering itself!

Yes, you read it right. Published by the SAE International, this magazine walks you through the updates across this entire field. Moreover, it has dedicated articles to very specific details like in-depth analysis of an **EV battery** and the scope of **internal combustion engines** for the usage of alternative fuels. Available in its print and e-versions, this monthly can be of immense help to all the automobile and EV enthusiasts as well as those interested in working along the lines of **renewable energy** for vehicles, **thermoelectric materials**, and optimization of car engines.





Bhavana aims to offer deep insights on the subject mainly through **interviews with world-class mathematicians**. With articles on **intriguing topics**, this magazine also **reviews** a book or a research article in each of its versions.

Pub. details:

Publisher: Bhavana Trust
Country: India
Freq.: Quarterly (4 Issues/ year)
Pub. since: 2017
 Visit [here](#)



It is just to claim that Mathematics is the queen of all sciences as, without it, trials in making a sense of the real world would have taken a highly abstract form. If that should have been the case, the hidden patterns within fractals and snowflakes wouldn't have been explored yet. Ranging from **music theory** to the current booming phase of **Silicon Valley**, everything would have existed solely as imagination. It is with this intent to translate scientific wonders into reality that the reverence must be due for mathematics. Hence, to dive deeper into the worth-diving wonders of this subject, Bhavana: The Mathematics Magazine can be of immense help.

This independent tri-monthly, available in its print and electronic versions, aims to offer deep insights on the subject mainly through **interviews with world-class mathematicians**. With articles on intriguing topics like the lost works of Ramanujan and emerging research areas, this magazine also reviews a book or a research article in each of its versions. Irrespective of one's academic credentials, this publication is of substantial **value for everyone** appealed by the subject of **Mathematics**.

Bulletin of the American Meteorological Society publishes articles of interest and significance for the **weather, water, and climate** community as well as news, editorials, and reviews for the AMS members.

Pub. details:

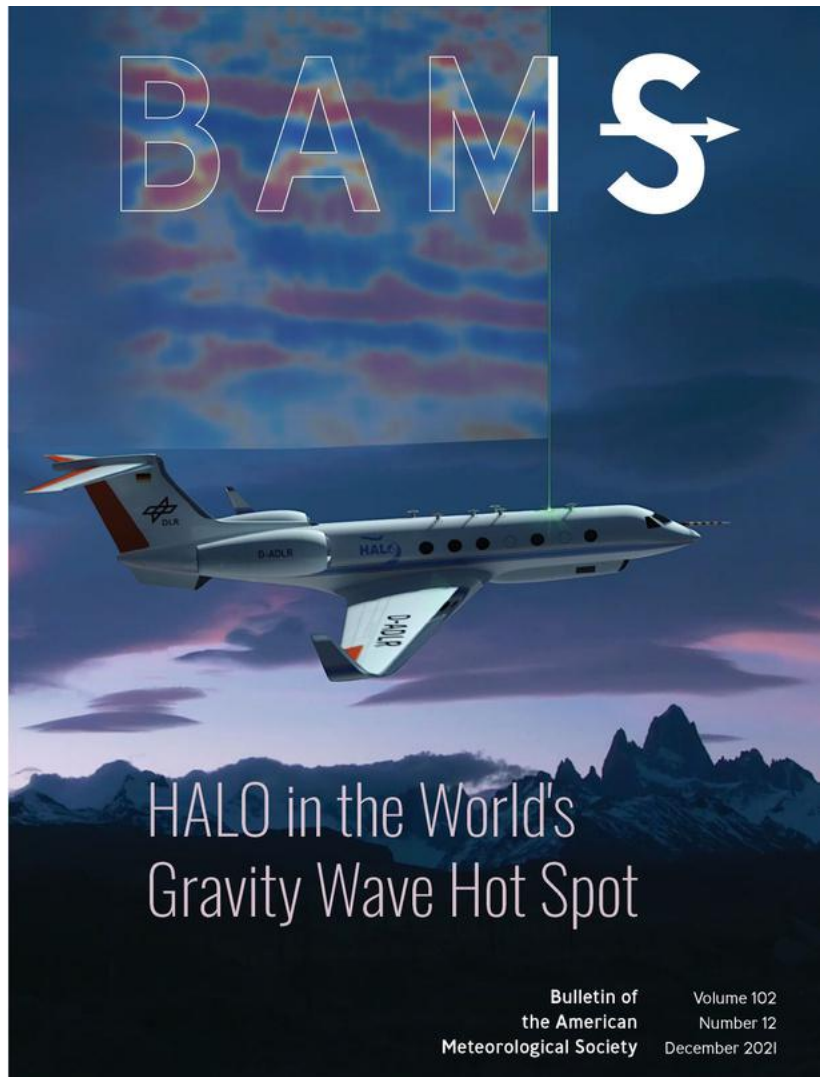
Publisher: American Meteorological Society

Country: USA

Freq.: Monthly (12 Issues/ year)

Pub. since: 1920

Visit [here](#)



BAMS

The Bulletin of the American Meteorological Society (BAMS) is one of its kind exclusively focusing on the **meteorological factors**, and not only from the perspectives of academicians, but from that of a general audience too. It is the flagship magazine of American Meteorological Society (AMS) and publishes articles of interest and significance for the weather, water, and climate community as well as news, editorials, and reviews for the AMS members. Spanning across advanced algorithms for **air quality prediction**, addressal of hazardous **weather communication, ice extent over the poles**, and many other intriguing topics, the monthly serves a generic as well as detail-oriented audience interested in exploring the domain of **environmental sciences**.

The publication is available in its digital and print versions and has a plethora of content to offer to the undergraduate-level aspiring students interested in working on the fronts of **climate change, environmental sustainability, water quality**, and much more. Like many others, it is the interdisciplinary approach of this magazine to address the alarming environmental concerns that renders it the due credit as well as credibility it deserves.



C&EN covers select areas like **Education, energy, environment, food, materials, pharmaceuticals, synthesis, biological, and analytical chemistry.**

Pub. details:

Publisher: ACS Publications

Country: USA

Freq.: Weekly

Pub. since: 1923

Visit [here](#)

➤➤ C & EN: Chemical & Engineering News

Chemistry is one of those basic sciences that stands at the interface of physics, biology, earth sciences, environmental science, and medicine. This is what makes this a wide-spanning academic subject adorable to many basic science enthusiasts, looking forward to an interdisciplinary career in research and development or academia. And Chemical & Engineering News (C&EN) is aimed at catering to this very audience.

The weekly is committed to keeping its readership updated with the changes in the domain of **chemistry**. Its content tracks business and policy trends, research advances, **chemical safety practices**, and even offers **career guidance**. However, the magazine delves into engineering aspects of this science as well, as the title suggests. Education, energy, environment, food, materials, pharmaceuticals, synthesis, biological, and analytical chemistry, are select areas the publication has under its radar. There are also **job prospects** shared in all its issues. **Whitepapers, webinars, quizzes, new scripts, and periodic graphics** are some of its special features. C&EN also presents chemistry in pictures and offers much of its content in the form of videos. All it demands is an audience interested in exploring the wonders of chemistry, irrespective of what academic background one belongs to or their saturation point of reading the content in the form of words.

Chance magazine is more dedicated to a **general audience** fond of **numbers substantiating the facts** and does not demand any prerequisite knowledge.

Pub. details:

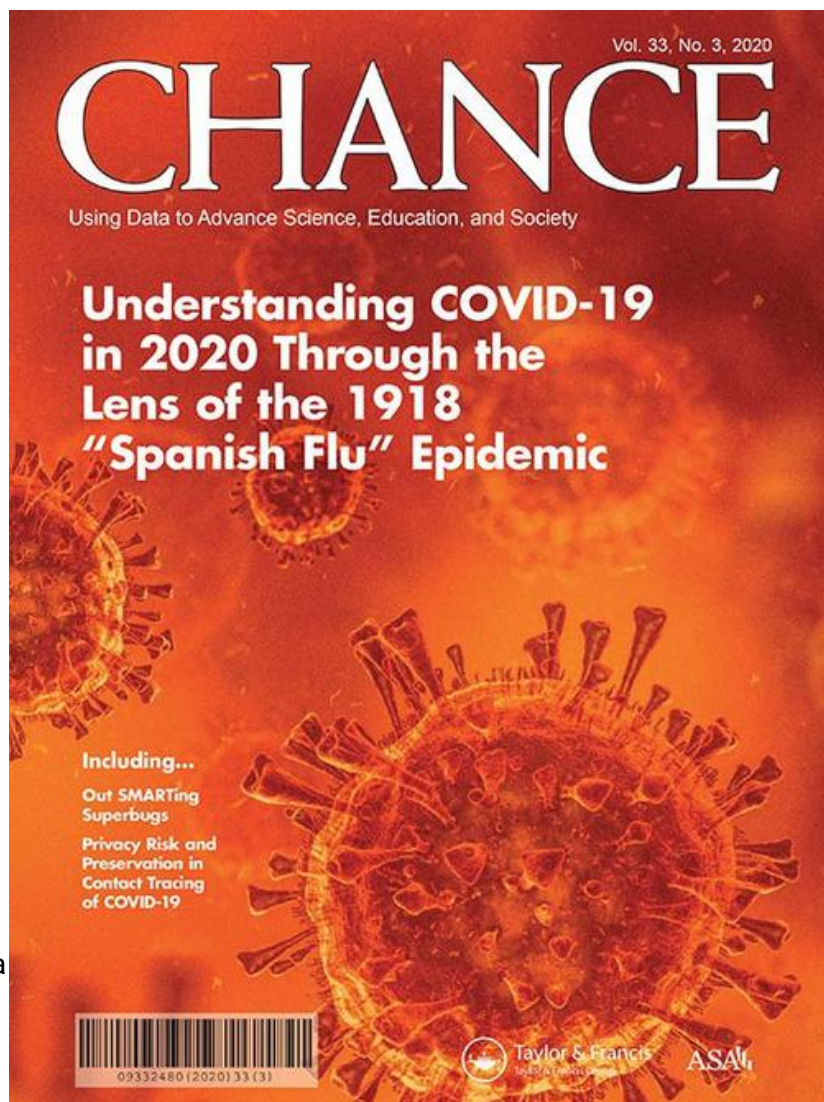
Publisher: Taylor & Francis on behalf of the Mathematical Association of America

Country: USA

Freq.: Quarterly (4 Issues/ year)

Pub. since: 1989

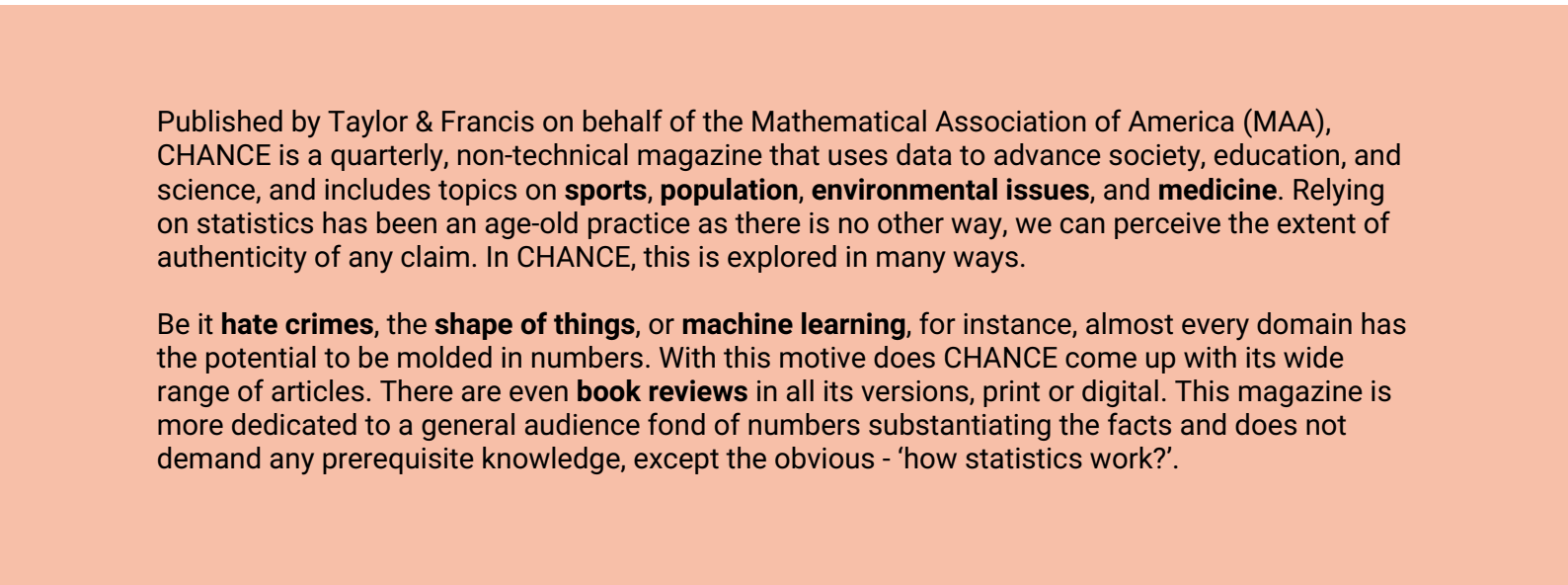
Visit [here](#)

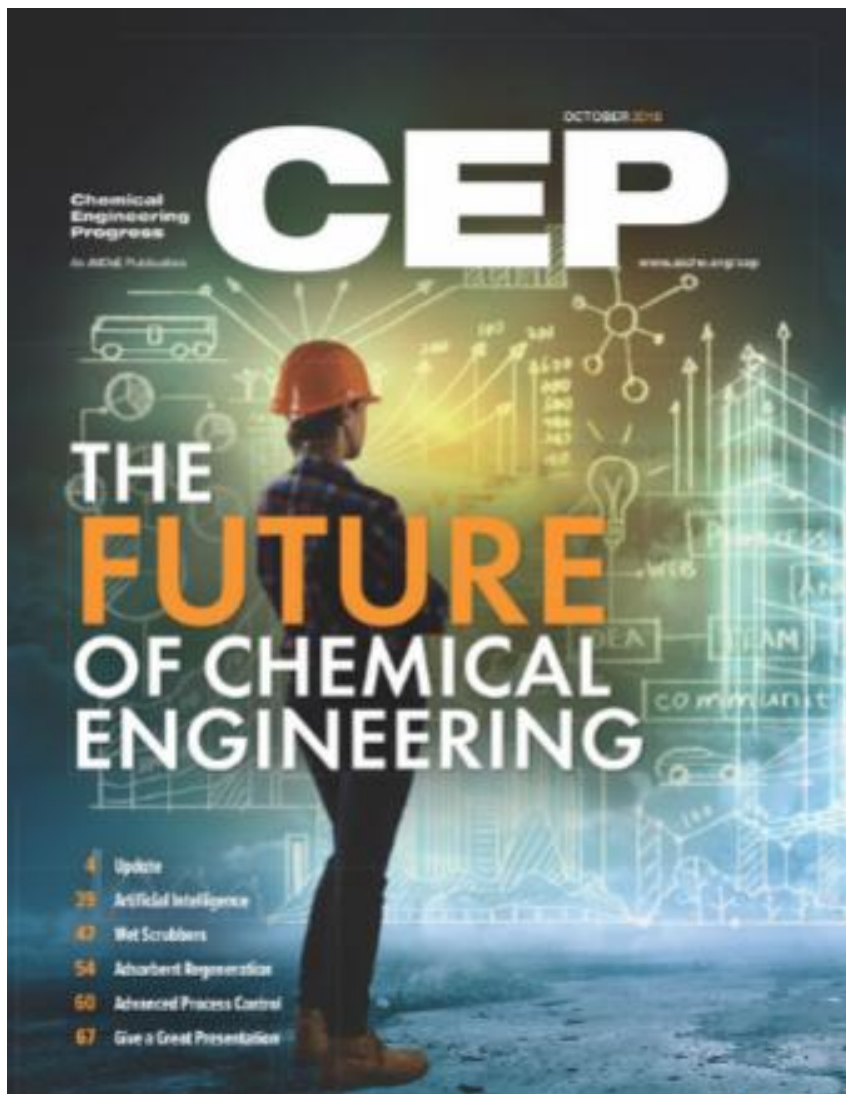


Chance (AICHe) 

Published by Taylor & Francis on behalf of the Mathematical Association of America (MAA), CHANCE is a quarterly, non-technical magazine that uses data to advance society, education, and science, and includes topics on **sports, population, environmental issues, and medicine**. Relying on statistics has been an age-old practice as there is no other way, we can perceive the extent of authenticity of any claim. In CHANCE, this is explored in many ways.

Be it **hate crimes, the shape of things, or machine learning**, for instance, almost every domain has the potential to be molded in numbers. With this motive does CHANCE come up with its wide range of articles. There are even **book reviews** in all its versions, print or digital. This magazine is more dedicated to a general audience fond of numbers substantiating the facts and does not demand any prerequisite knowledge, except the obvious - 'how statistics work?'.





With a multitude of insights from **scientists, engineers,** and industry experts, the CEP is an ocean of knowledge for budding **ChE students** aiming to thrive within the job market or academic institutions.

Pub. details:

Publisher: American Institute of Chemical Engineers (AIChE)

Country: USA

Freq.: Monthly (12 issues/ year)

Pub. since: 2001

Visit [here](#)

➤➤ Chemical Engineering Progress

Available in the online as well as print forms, the Chemical Engineering Progress magazine spans across the minutiae within a plethora of chemical engineering favorites. This includes **process safety, control systems, process economics, fire engineering, sustainability, fuel cells,** and even **space science!**

Published by the American Institute of Chemical Engineers (AIChE), which also has a **student chapter** here at **IIT Gandhinagar**, this publication ensures to share the latest trends through in-depth analysis. With a multitude of insights from scientists, engineers, and industry experts, the Chemical Engineering Progress is an ocean of knowledge for budding ChE students aiming to thrive within the job market or academic institutions. This magazine also offers outstanding resources for **grad-school applications** and **workable solutions** to career choice dilemmas often faced by undergraduate students. Needless to mention, the up-to-date content it offers is of considerable value for the aspiring industrial and educational leaders.

Chemistry World packed with a mix of articles on all aspects of the **chemical sciences, regular company and individual profiles, commercial technology reports.**

Pub. details:

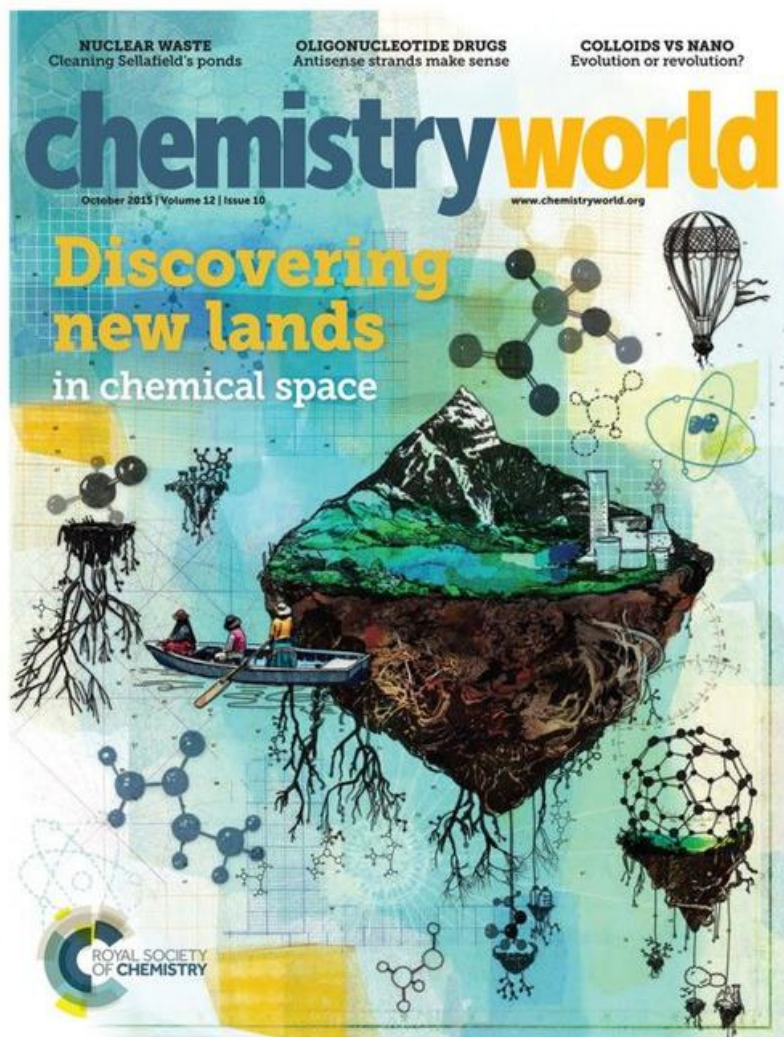
Publisher: Royal Society of Chemistry

Country: UK

Freq.: Monthly (12 Issues/ year)

Pub. since: 2004

Visit [here](#)



Chemistry World 

Chemistry World published monthly by the Royal Society of Chemistry, this is a chemistry news magazine for the global chemical science community. It is packed with a mix of articles on all aspects of the chemical sciences, regular company and individual profiles, commercial technology reports.

This magazine brings the news of cutting-edge **research, international business news, opinion pieces, new product applications, and analysis of government policy affecting the chemical sciences.** Over 45,000 readers turn first to Chemistry World for its opinions, features, and its jobs. It reaches millions of chemical scientists worldwide with stories published daily online and through a monthly print magazine. Chemistry World has a list of columns where you can find the News, Research (Matter, Energy, Earth, and Life), Opinion, Culture, Career, Webinars, and featured notch collection of chemical sciences. **Chemical Stories, Interviews, news, and opinions** can be heard through Podcasts. This magazine offers **Reading room** facilities where you can read chapters and forthcoming titles, browse their reviews, join their **book club**, and get the **expert's reports.**



MCU VENDORS REV UP NEW SECURITY SOLUTIONS



▶ Datasheet: Tiny Embedded Boards ▶ Test and Measurement Tools |
▶ Sports Wearable Uses ANT+ Protocol | Robotic Arm with Linear Actuators |
Build an Autonomous Mapping Rover | Nora Flight Controller: A Review |
▶ FreeRTOS (Part 7): FreeRTOS, TCP and Internet | Playing with I-V Curves |
Refrigerator Repair Project ▶ The Future of Full Lifecycle Security

Every issue of Circuit Cellar showcases 'cool' projects by **university students**.

There are dedicated sections like 'Quick Bits' and 'EE Tips' which summarize relevant concepts and basics of **modern electronic devices**.

Pub. details:

Publisher: Circuit Cellar

Country: USA

Freq.: Monthly (12 Issues/ year)

Pub. since: 1988

Visit [here](#)

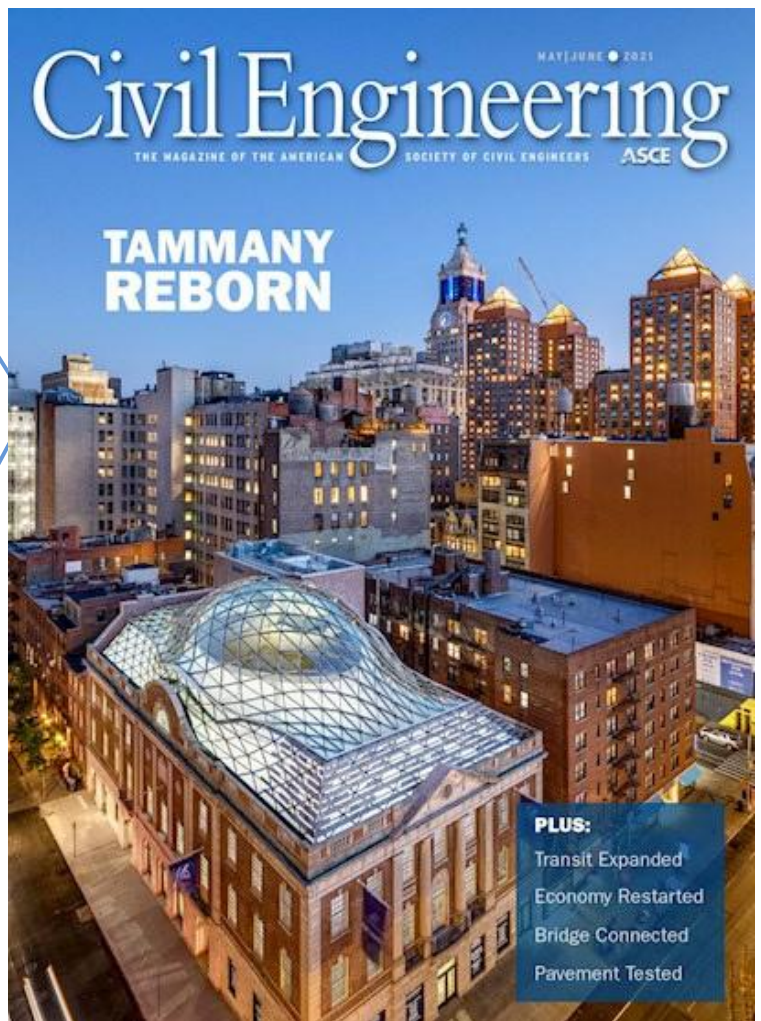


This magazine is yet another instance among the set of those of which the title is slightly misleading. Circuit Cellar might seem fully focused on the intricacies of **electrical or electronic circuits** like those in VLSI designs, power systems, etc. However, the areas it spans across are much more diverse. To name a few, you can easily find interesting articles like **ethics of artificial intelligence** and **robotics, processing lost signals** in the universe, playing with the **images of distant galaxies**, and much more.

Published independently in its online and offline versions, the primary audience of this magazine is university students interested in exploring the domain of **electronics engineering**, which is why the content is offered accordingly. Every issue showcases 'cool' projects by university students whereas a part of their courses, they design stringless bass guitar, smart wrist band specifically for COVID patients, and smart weather cube which changes the aura of its surroundings by assuming calm colors accordingly. There are dedicated sections like 'Quick Bits' and 'EE Tips' which summarize relevant concepts and basics of modern electronic devices. The monthly also hosts circuit design contests and has crossword puzzles exclusively for its readers to let them stay actively engaged with the futuristic area of electronics.

The key feature of Civil Engineering magazine is that it is not merely about **facts, figures, and stories**. It has to offer the **expert advice** in its every issue.

Those interested in **engineering entrepreneurship** also get benefit from this.



Pub. details:

Publisher: American Society of Civil Engineers

Country: USA

Freq.: Bi-monthly (6 Issues/ year)

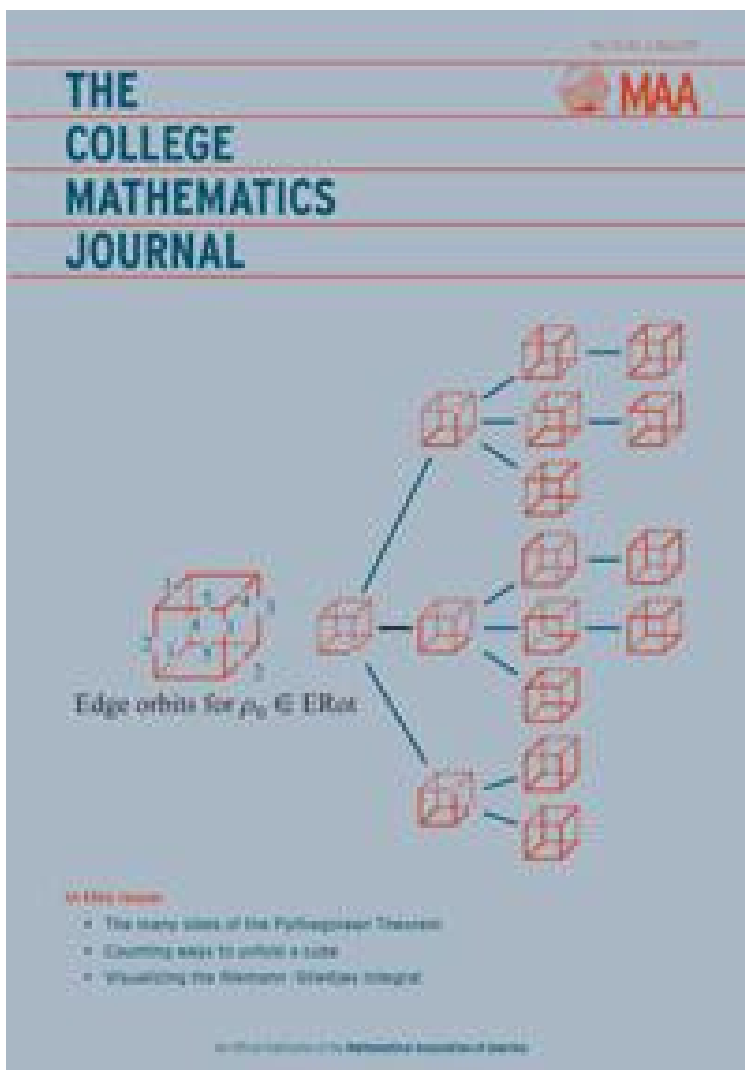
Pub. since: 2005

Visit [here](#)

Civil Engineering

The most commonly perceived notion after the term Civil Engineering knocks our ears is **buildings and bridges**. Some might think of the architectural grandeurs like the Seven Wonders and some on the lines of gigantic dams. Nonetheless, all this only resembles a droplet in the ocean.

One of the most crucial infrastructures from the 19th century happens to be the one that led to a tedious traffic jam due to the Ever Given - we are talking of the Suez Canal. There is a net-positive building in a Netherlands-based technical university, which means that it **generates more energy than it consumes!** And there is much more to add to the list, which is readily made available to us on a bimonthly basis. Available in its offline and online formats, this publication by the American Society of Civil Engineers spans across the wonders of Civil Engineering like skinny scrappers to the **renowned Energy Star building**. Starting from the **undergraduate audience**, everyone interested in making a career in this discipline would feel highly entertained. A key feature of this magazine is that it is not merely about facts, figures, and stories. Even those interested in **engineering entrepreneurship** like setting up a venture to come up with **state-of-the-art technologies** or building their own consulting firms won't feel excluded, given the **expert advice** it has to offer in its every issue.



The College Mathematics Journal (CMJ) is an expository journal that discusses various topics of **undergraduate mathematics**, in a unique style to enhance the **classroom learning** and **stimulate thinking**.

Pub. details:

Publisher: Taylor & Francis on behalf of the Mathematical Association of America
Country: USA
Freq.: 5 Issues/ Year
Pub. since: 1970
Visit [here](#)

➤➤ College Mathematics Journal (The)

College Mathematics Journal (CMJ) is an expository journal that discusses various topics of **undergraduate mathematics**, in a unique style to **enhance the classroom learning** and **stimulate thinking**. First published in 1970, the magazine publishes much more than just articles. Short articles called **Classroom Capsules**, visual understanding of mathematical results called **Proofs Without Words**, Problems and Solutions discussing a proposed problem with a solution, and short reviews called **Media Highlights** set this magazine apart.

It is currently being published by Taylor & Francis on behalf of the Mathematical Association of America, for 5 times a year. All topics covered in this magazine aim at the **mathematics curriculum** of the first two years in undergraduate programs. Both new **mathematical perspectives** as well as **historical standpoint, pedagogical notes** make their ways into CMJ, which believes in keeping the narration short and crisp. It was formerly known as the Two-Year College Mathematics Journal (1970 - 1984). The George Pólya Awards, presented annually by the Mathematical Association of America (MAA) is awarded for articles of expository excellence that have been published in The College Mathematics Journal.

Communications ACM covers **latest research, innovations and discoveries**. It brings readers exhaustive stories of emerging areas of **computer science**, new trends in **IT**, and **practical research applications**.

Pub. details:

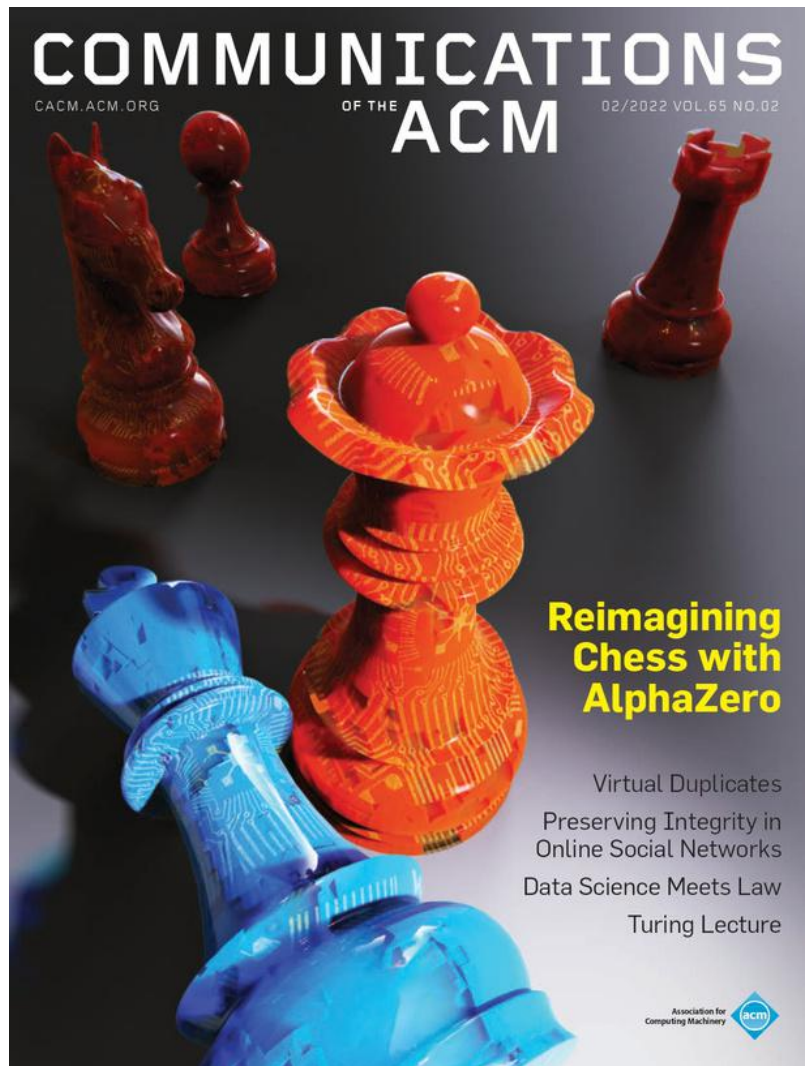
Publisher: Association for Computing Machinery (ACM) Digital Library

Country: USA

Freq.: Monthly (12 Issues/ year)

Pub. since: 1958

Visit [here](#)



Communications of the ACM

Dating back to 1958, Communications of the ACM is published monthly by the ACM digital library and provides full text of all ACM publications. It is a premier chronicler of **computing technologies**, which covers **latest research, innovations and discoveries**. Communications brings readers exhaustive stories of emerging areas of **computer science, new trends in IT, and practical research applications**. It is read by over 85,000 computing researchers and practitioners all over the world.

Communications provides information ranging from **computing ethos to historical people**. It lets you know the subject area which is covered in the particular issue in a very interesting way. It also publishes **bibliometrics** like publication counts, citation counts, downloads in a year, average citation per hour, etc. They give you information like most **popular articles, latest news, most frequent affiliations, most cited authors** and also promote open access.



Concrete International (CI) is a magazine, one of its kind, exclusively dedicated to **concrete technology** and **practice enthusiasts**.

Pub. details:

Publisher: American Concrete Institute (ACI)
Country: USA
Freq.: Monthly (12 Issues/ year)
Pub. since: 1979
Visit [here](#)

Concrete International

Concrete International (CI) is a magazine, one of its kind, exclusively dedicated to **concrete technology** and practice enthusiasts. Published by the American Concrete Institute (ACI), CI's circulation is mainly concentrated among professionals in the concrete field - the **contractors, engineers, manufacturers, researchers, and technicians**. These professionals collaborate in preparing **ACI Standards, Codes, and Guides** that define the essential requirements for all kinds of concrete structures. Nevertheless, the lucid way of explanations within makes it fairly understandable to students at undergraduate level having a basic understanding of the field of concrete technology.

Concrete pavement designs, structural plans, corrosion of concrete, and many more are the relevant topics usually explored in this monthly. Occasionally, one can also find topics along the lines of sustainability like forms of concrete leading to reduced CO2 emissions or less inherent energy requirements. Hence, even those interested in exploring the fronts of sustainable construction might get intrigued by its relatively unique content.

Current Science publishes special sections on **diverse and topical themes of interest**. It has served as a platform for the **scientific fraternity** to get their work **highlighted and acknowledged**.

Pub. details:

Publisher: Current science association in collaboration with Indian Academy of Sciences

Country: India

Freq.: Fortnightly (24 Issues/ year)

Pub. since: 1932

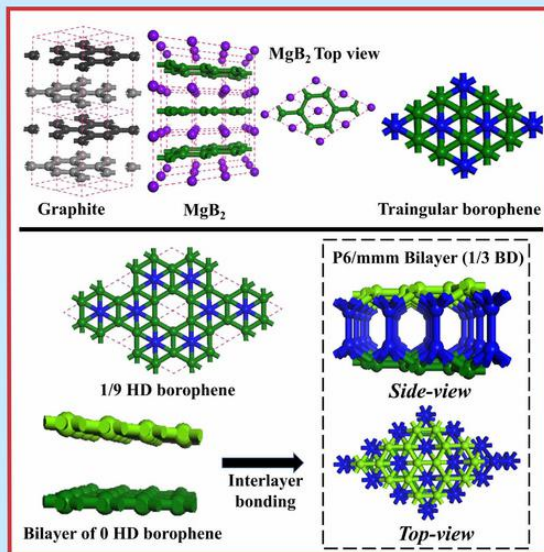
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CURRENT SCIENCE

₹ 50

Volume 122 Number 2

25 January 2022



Career challenges for young independent researchers

Simulator for a deepwater manned submersible

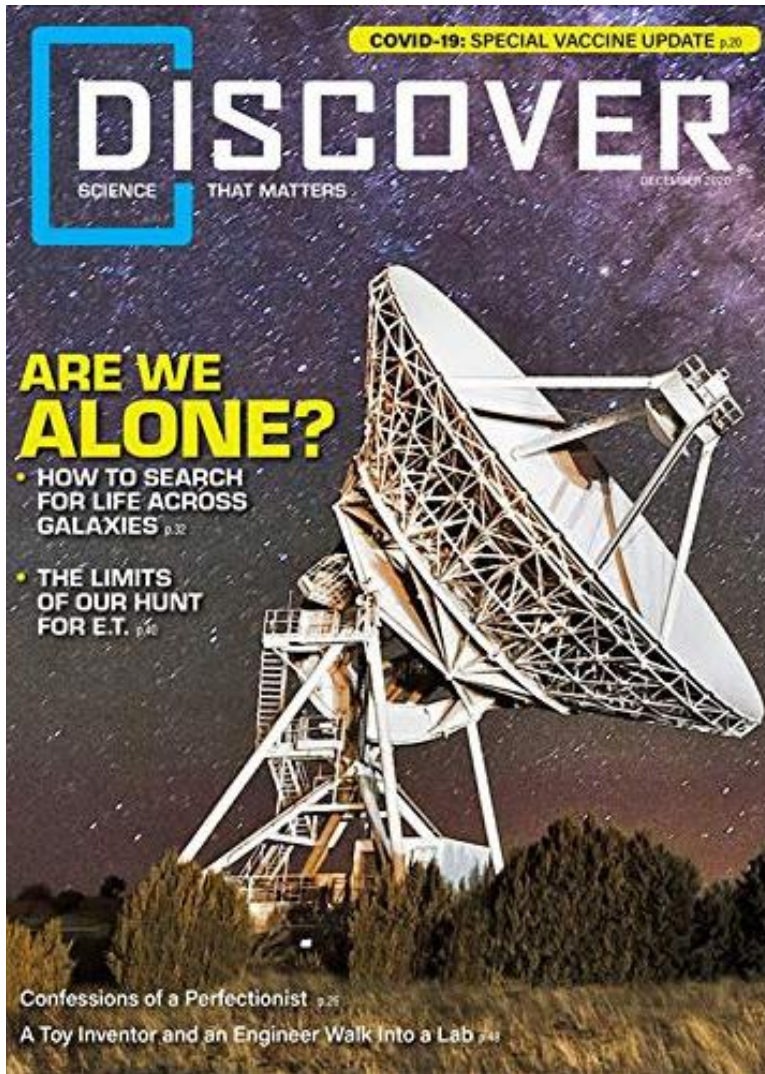
Dynamic three-dimensional cell-culture systems

Current Science Association ■ Indian Academy of Sciences

Current Science

Current Science is published by the current science association in collaboration with the Indian Academy of Sciences. It is a leading interdisciplinary science journal from India. It is a **medium for communication and discussion** of important issues that concern **science and scientific activities**. One can read it twice a month. It covers **32 categories** in total which vary from **general articles to Living Legends in Indian Science, research account to Technical Note**. They have arranged the content on the website title wise, categories wise, author wise and volume wise. One can easily browse through the alphabetically arranged content.

Current Science publishes special sections on diverse and topical themes of interest. It has served as a platform for the **scientific fraternity** to get their **work highlighted and acknowledged**. Current Science is indexed by Web of Science, Current Contents, Geobase, Chemical Abstracts and Scopus.



Some of the exclusive categories Discover focuses on include the **environment, health,** and the **mysterious mind.** It also offers select content that remains uncategorized but is equally intriguing.

Pub. details:

Publisher: Kalmbach Media Company
Country: USA
Freq.: 10 Issues/ year
Pub. since: 1980
Visit [here](#)



Discover is yet another general-purpose magazine for **science & tech** enthusiasts all across the globe. Nevertheless, it definitely has a unique selling point. Some of the exclusive categories it focuses on include the **environment, health,** and the **mysterious mind.** It also offers select content that remains uncategorized but is equally intriguing. All the articles offer briefs on the concerned topic.

Published by the Kalmbach Media Company, Discover remains available to its readership in the digital and print versions that appear with completely **novel content** in the form of 10 issues round the year. With its wide-ranging area of focus, the publication has always ensured to satisfy its curious audience with **in-depth, high-quality information.**

Ranging from **cyclones to quantum computers** and the reach of **giant tech companies**, Down To Earth publication covers much under the sun from a **political perspective**.

Pub. details:

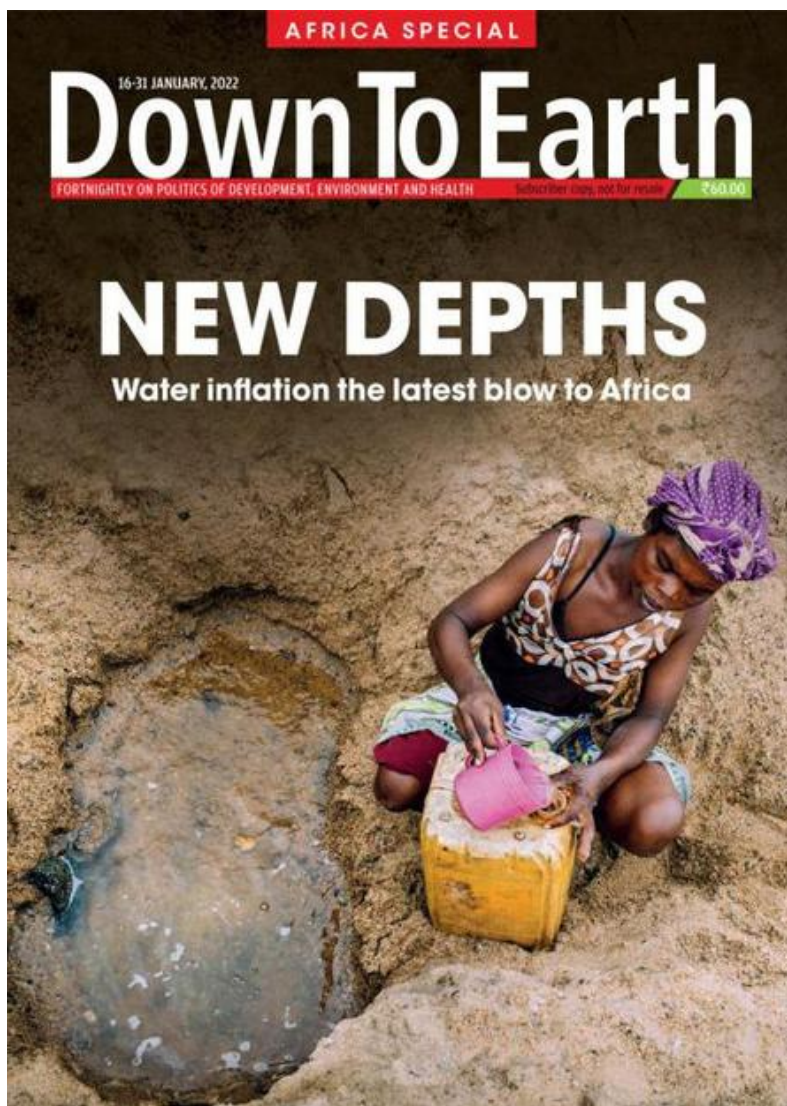
Publisher: Society for Environmental Communications assists by Centre for Science and Environment

Country: India

Freq.: 24 Issues/ Year (English);
12 Issues/ year (Hindi)

Pub. since: 1992

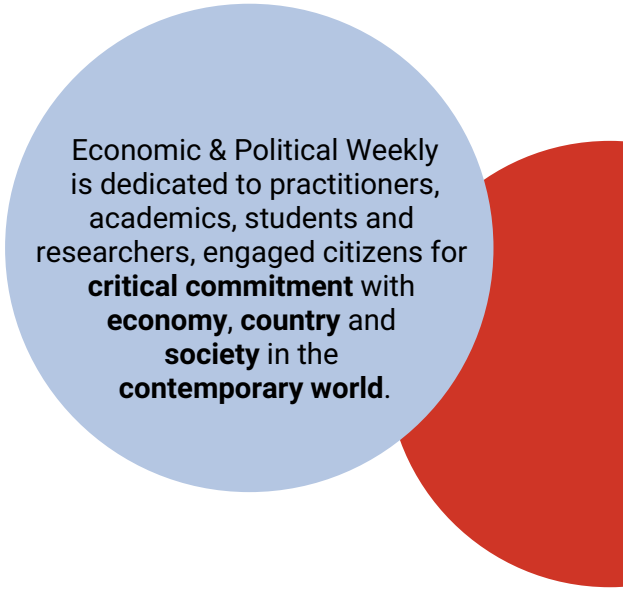
Visit [here](#)



Down to Earth 

Down to Earth is a fortnightly focused on politics of many of the fields stated above, published in New Delhi, India. The Centre for Science and Environment assists in the production of the magazine. Ranging from **cyclones to quantum computers** and the reach of **giant tech companies**, the publication covers much under the sun from a **political perspective**. Apart from articles in its online and print versions, it has some special features including **cartoons, book reviews, and interviews**.

While this might sound difficult to grasp, many domains like **energy, natural disasters, agriculture, wildlife** and **biodiversity** are substantially affected when looked upon from a political lens. And this is where Down To Earth comes to help. The language used is lucid enough to be understandable by a general audience, not demanding any prerequisite knowledge of the subject of politics. All one needs is an interest and deep curiosity to explore the same from a much wider angle.



Economic & Political Weekly is dedicated to practitioners, academics, students and researchers, engaged citizens for **critical commitment** with **economy, country and society** in the contemporary world.

Pub. details:

Publisher: Sameeksha Trust
Country: India
Freq.: Weekly
Pub. since: 1949
Visit [here](#)

 **Economic & Political Weekly**

Economic and Political Weekly, also known as EPW, is published weekly by the Sameeksha trust. A **multidisciplinary journal** which is dedicated to practitioners, academics, students and researchers, engaged citizens for **critical commitment** with **economy, country and society** in the **contemporary world**. The journal is abstracted and indexed in Commonwealth Agricultural Bureaux (CAB) and Scopus.

EPW is the only publication in the world that **publishes both research in social sciences and informed comment on social affairs**. It publishes 70,000 to 80,000 words on a variety of issues. EPW is at the same time widely read in policy circles and is seen as providing **in-depth analysis of major economic and social issues** which go far beyond that published by mainstream media.

The Economist covers news from a very broad range of topics. In addition it covers, essays and **cultural commentary** for the literary enthusiasts, **role of markets and technology** on democratic freedom for **sociology buffs**, **technological insights** for the science & tech enthusiasts, and much more.

Pub. details:

Publisher: The Economist
Country: London
Freq.: Weekly
Pub. since: 1843
Visit [here](#)



Economist (The) <<

The Economist is focused on **news and current affairs**, accompanied with **analysis of alarming concerns** like racial discrimination in the US, the global climate change scenario, or the shaping up of future biological wars. In addition, **essays and cultural commentary** for the literary enthusiasts, **role of markets and technology** on democratic freedom for sociology buffs, **technological insights** for the science & tech enthusiasts, and much more makes this resource more inclusive and holistic.

The Economist covers news from a very broad range of topics and also offers content from various other walks. All of this is presented in the format of weekly news magazines in print as well as in digital version. Some of its special features include **5-minute reads** for catching up with the global ups and downs of the day and dedicated sections to the **challenges demanding world-wide attention**, as stated earlier. This magazine too is meant for a general audience and is available also in the form of podcasts as well as videos. Another unique feature of The Economist is the **executive-level course** it has opened up for a holistic knowledge of international alliances, developments in trade, and the pervasive power of technology. Not everyone might get intrigued by it, but the curious minds, yes...highly likely!



Explore this Collection!





E-Learn focused on **emerging technologies, e-learning innovations,** their applications, and **updated policies** along with ideas for potential advent in the field of **computer science and engineering education.**

Pub. details:

Publisher: Association for Computing Machinery (ACM)

Country: USA

Freq.: Monthly (12 Issues/ year)

Pub. since: 2001

Visit [here](#)

➤➤ **E-Learn**

Academic research and its **industrial application** are mutually implied. Hence, it becomes inevitable for aspiring quality researchers and industrial practitioners to stay updated with the latest trends in either area so as to optimize the knowledge in favor of their professional ambitions. And this doesn't remain as difficult anymore with the help of eLearn.

Published by the Association for Computing Machinery (ACM), this magazine provides a space for substantiated conversations with real-world utility for **K-12, higher education, government, corporate, and not-for-profit contexts. Emerging technologies, e-learning innovations,** their applications, and updated **policies** along with ideas for potential advent are the key areas of focus to facilitate global engagement in the field of **computer science and engineering education.** Being **ACM's first online magazine,** eLearn has been at the prime among others of its kind within the online education industry for the past 20 years.

Electrochemical Society Interface remains one of the most readable magazines in the field of **electrochemical science & technology** and **solid-state** and is a full-color magazine.

Pub. details:

Publisher: The Electrochemical Society (ECS)

Country: USA

Freq: Quarterly (4 Issues/ year)

Pub. since: 1992

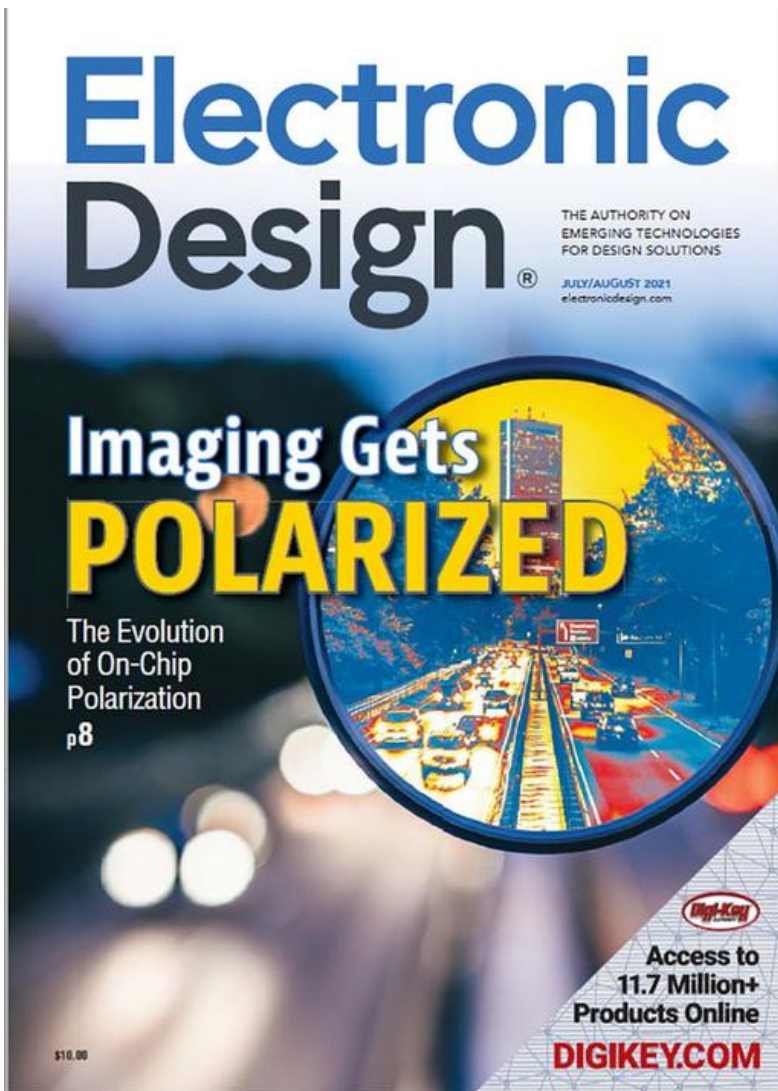
Visit [here](#)



Electrochemical Society Interface

Published quarterly by The Electrochemical Society (ECS), this magazine covers the technology in the area related to **Electrochemistry**. It remains one of the most readable magazines in the field of **electrochemical science & technology** and **solid-state**. Electrochemical Society Interface is a full-color magazine published quarterly and contained **technical articles** about **advanced technology and its impact on Society**. This magazine brings the **latest ECS society news** and also provides the focus area that "What new in the next issue of this magazine."

This magazine has a list of columns where you can find the **Most read, Most cited, and latest articles**. It also gives the list of **trending articles on Altmetric** (discussed and used around the world). You can access the complete digital version of the 2022 magazine from here.



Electronic Design focusses on **electrical and electronics engineering** enthusiasts. It contains areas like **internal circuits of gadgets, cryptography, sensors and wireless technologies, Industrial Internet of Things (IIoT), embedded systems, electric vehicles, power systems, and much more.**

Pub. details:

Publisher: Endeavour Business Media, LLC
Country: USA
Freq.: Bi-monthly (6 Issues/ year)
Pub. since: 1952
Visit [here](#)

➤➤ Electronic Design

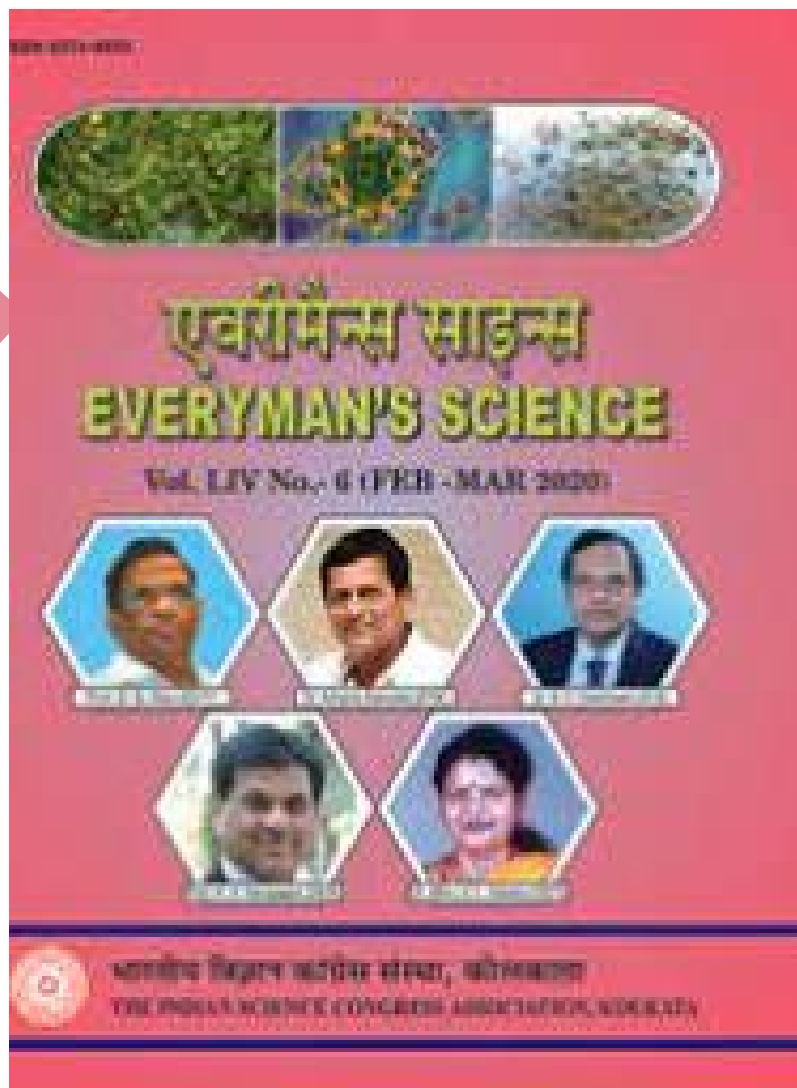
Have you ever wondered what is the fundamental composition behind the tempting devices, like mobile, tablet, TV etc.? If the underlying electronics interests you, Electronic Design might be equally interesting.

Published by the Endeavour Business Media, LLC, this magazine focusses on **electrical and electronics engineering** enthusiasts from the undergraduate level and beyond. Apart from the **internal circuits of gadgets**, the content also touches upon areas like **cryptography, sensors and wireless technologies, Industrial Internet of Things (IIoT), embedded systems, electric vehicles, power systems**, and much more. A special feature in the form of comics is there to further intrigue its readers at the end of each issue. Available in its online and offline versions, the publication also occasionally includes **expert advice** for students looking forward to a career in electronics and also a plethora of content on bridging the gap between industrial expectations and the academic curriculum for the relevant young audience.

Everyman's Science offers information vary from **Veterinary and Fishery Sciences, to Molecular Biology and Biotechnology.** It gives information regarding what is happening in **science and technology** around the world and about upcoming **conferences, symposium, meetings and seminars.**

Pub. details:

Publisher: Indian Science Congress Association
Country: India
Freq.: Bi-monthly (6 Issues/ year)
Pub. since: 1965
Visit [here](#)



Everyman's Science 

The Indian Science Congress Association owes its origin to the foresight and initiative of two British Chemists, Professor J. L. Simonsen and Professor P. S. MacMahon. They formed a congress in 1914 to promote the cause of science in India. That vision comes alive with Everyman's Science. Everyman's Science is published once every 2 months. It has a strong fraternity of more than 60 thousand members till date.

It offers information in 14 sections which vary from **Veterinary and Fishery Sciences, to Molecular Biology and Biotechnology.** It gives you information regarding what is happening in **science and technology** around the world. Also, it gives you brief information about the **conferences, symposium and meetings and seminars** going to be held in the near future.



Harvard Business Publishing includes **experts' insights, case studies,** and articles ranging across the domains of **strategic planning, finance, operations, entrepreneurship, business leadership,** and many more.

Pub. details:

Publisher: Harvard Business Publishing
Country: USA
Freq.: Bi-monthly (6 Issues/ year)
Pub. since: 1922
Visit [here](#)

▶▶ **Harvard Business Review**

The Covid-19 pandemic can undoubtedly be termed as the biggest lesson of the century for businesses worldwide. However, there were certain firms that thrived throughout the testing times even when the entire industry they belong to was facing massive income dips. How did this happen? What was it that made their business seamless and cost-effective?

Many such questions are worth pondering upon for the wannabe business managers and entrepreneurs to thrive within their field. Years ago, it took solid research to address such concerns. But now, it is just a matter of minutes because of the Harvard Business Review. Available in its print and digital form, this magazine published under the Harvard Business Publishing includes **experts' insights, case studies, and articles ranging across the domains of strategic planning, finance, operations, entrepreneurship, business leadership,** and many more. Not to mention, it is worth it for everyone interested in having a bird's eye view of the managerial industry, and especially those looking forward to an MBA in near future.

IEEE Potentials spans across the areas of **virtual reality, biosensors, paradigm shifts in higher education, cloud computing, blockchains, smart cities, creative problem solving**, and much more.

Pub. details:

Publisher: The Institute of Electrical and Electronics Engineers (IEEE)

Country: USA

Freq.: Bi-monthly (6 Issues/ year)

Pub. since: 1982

Visit [here](#)



IEEE Potentials 

Being at the interface of magazines and academic journals, IEEE Potentials explores **career strategies, latest developments in research**, and core technical advancements in the domain of **electronics and electrical engineering**. Its articles also relate the suggested theories to real-world applications, highlight worldwide impact of technology, and generate international forums fostering the sharing of a multitude of diverse insights about relevant professions.

Published by the Institute of Electrical and Electronics Engineers (IEEE), IEEE Potentials is a magazine exclusively meant for **undergraduate and graduate students and young professionals**. It spans across the areas of **virtual reality, biosensors, paradigm shifts in higher education, cloud computing, blockchains, smart cities, creative problem solving**, and much more. This monthly available in its print and e-media formats is highly recommended to all the students inclined towards electrical and electronics engineering, whether their interest lies in academia or contributing to the industry.



IEEE Spectrum provides international coverage of all **technical issues and advances in computers, communications, and electronics**. Moreover, it is written in clear, concise language for the non-specialist.

Pub. details:

Publisher: Institute of Electrical and Electronics Engineers (IEEE)

Country: USA

Freq.: Monthly (12 Issues/ year)

Pub. since: 1964

Visit [here](#)

▶▶ IEEE Spectrum

IEEE Spectrum is the world's leading **engineering and scientific magazine**. Read by over 300,000 engineers worldwide, it provides international coverage of all **technical issues and advances in computers, communications, and electronics**. Written in clear, concise language for the non-specialist, Spectrum's **high editorial standards and worldwide resources ensure technical accuracy and state-of-the-art relevance**. Needless to mention, computer and electrical engineering enthusiasts as well as undergraduate students aiming for a career in these fields are the biggest probable beneficiaries of this publication.

This monthly by the Institute of Electrical and Electronics Engineers (IEEE) Association focuses on cutting edge technological advancements, ranging from machine learning to groceries for your home, supercharged micro-sized mega-scale applicable semiconductors to artificial placentas and multitasking compact satellites. To summarize, it anticipates trends in engineering, science, and technology, and provides a forum for understanding, discussion and leadership in these areas.

Interactions is catering to professionals interested in the **connections between people, technology, and experiences**. It includes timely **articles, stories, and content on research publications** related to all these interactions.

Pub. details:

Publisher: Association for Computing Machinery (ACM)

Country: USA

Freq.: Bi-monthly (6 Issues/ year)

Pub. since: 1994

Visit [here](#)

INTERACTIONS MARCH-APRIL 2020 VOLUME XXVII.2



Inclusive and Engaged HCI

SPECIAL TOPIC: Inbodied Interaction
Computer Multitasking in the Classroom
Toward Growable Computer Games
Interaction and Architecture Is Dead.
Long Live Architectural Interactivity!

Interactions

Interactions is yet another publication by the Association for Computing Machinery (ACM) focussed on the branches of **computer science and engineering** dealing with **human computer interaction, collaborative and social computing, social networks, interaction devices, multimedia information systems**, and much more.

Offered in its online and offline versions, Interactions is a magazine catering to professionals interested in the **connections between people, technology, and experiences**. The human-built world can afford a sense of resonance, beauty, and sublimity, and through our advancements in technology can come advances in society. At the center of these advances are interactions – conversations, connections, collaborations, and relationships – within and across multiple disciplines, with and without technology. This magazine includes **timely articles, stories, and content on research publications** related to all these interactions. Apart from professionals, this publication can also be of considerable benefit to students interested in diving deeper into the fields mentioned earlier.

JSTOR DAILY where news meets its scholarly match Newsletters

ROUNDUP

Celebrating Black History Month

JSTOR Daily editors pick their favorite stories for Black History Month.



JSTOR DAILY
Celebrates Black History Month

Staff Sgt. Timoteus O'Neil and Sgt. Samuel C. Lewis, 8888th Central Postal Directory, look at a letter received in the Battle of Iwo Jima.

By **The Editors** | January 31, 2022 | 5 minutes

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February marks Black History Month, a month-long observance in the United States and Canada that recognizes the significant contributions of African-Americans to American history, as well as the historical legacies of the African diaspora. We hope you'll find the stories below, and the scholarship they include in full, a valuable resource for classroom or leisure reading.

Radical Black Voices

 **Roundup**

JSTOR Daily is an online publication **based in fact** and grounded by **careful research** and to provide free access to that research for all of our readers. **Scientific, historical, literary, political,** and many other areas covering various topics come under its domain.

Pub. details:

Publisher: JSTOR
Country: USA
Freq.: Daily
Pub. since: 2014
Visit [here](#)



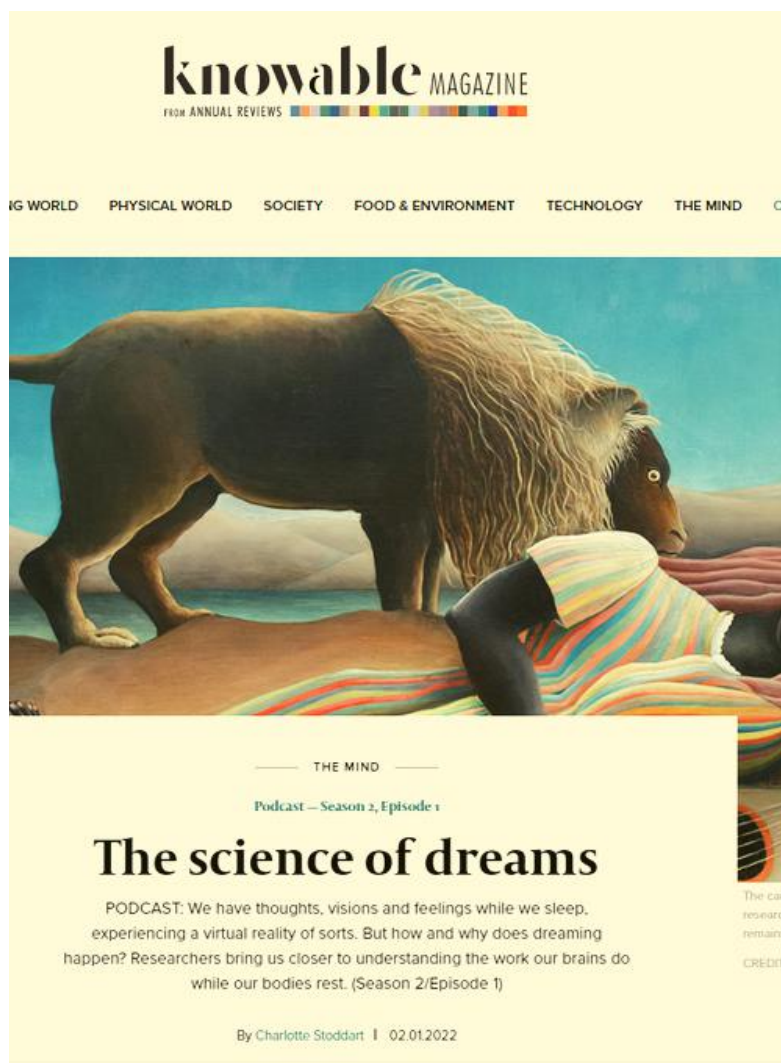
Quality scholarship is of immense help in this time of growth in dubious sources and spread of misinformation. Renowned academic works are backed with hardcore and up-to-the-mark research, but a major challenge with them is that they aren't understandable by the masses. But fortunately, we do have a solution to this - JSTOR Daily.

JSTOR Daily is an online publication from the well-known digital library JSTOR which contextualizes **current events with scholarship**. An essence from over **2000 credible academic journals** is sourced for this magazine. **Scientific, historical, literary, political,** and many other areas covering various topics come under its domain. The nature of all its stories is thought-provoking, unique, reader-friendly, and backed by the credibility of academic integrity and peer review. With all of these aspects in a concise form does JSTOR Daily emerge as a magazine for a general audience aiming for accurate information.

Knowable Magazine explores the **real-world significance of scholarly work** through a journalistic lens. Its content ranging from **biochemistry to agriculture; high-energy physics to water security;** and the **origin of the universe to human psychology.**

Pub. details:

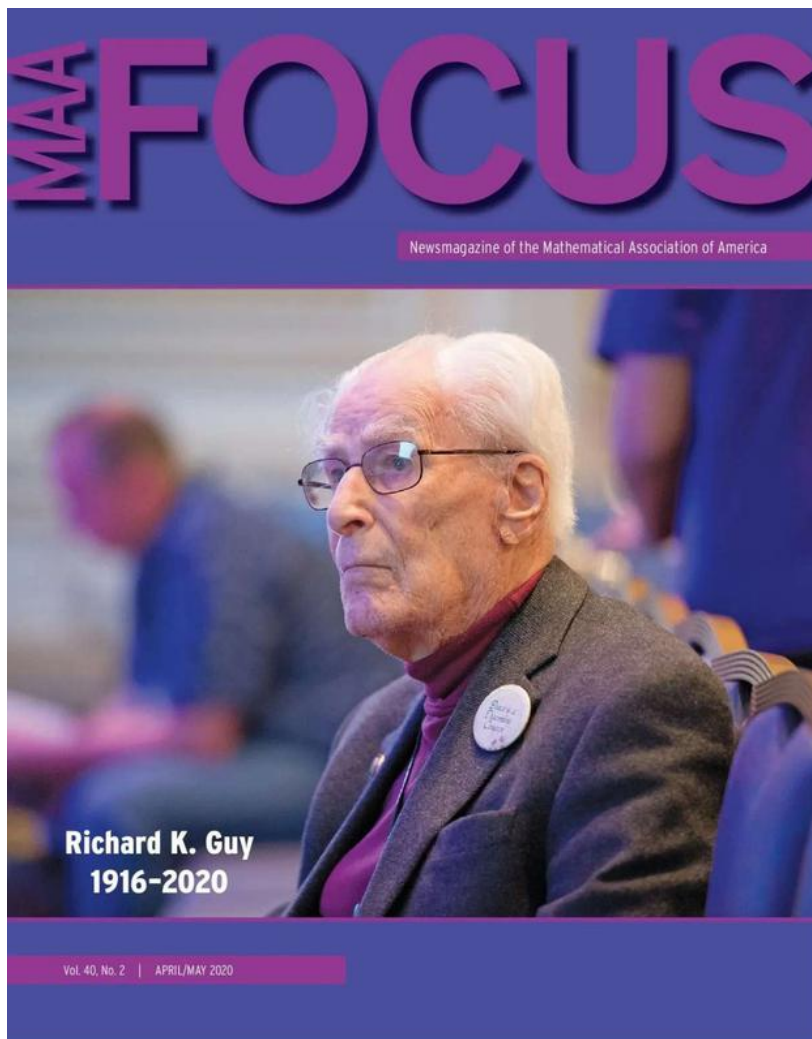
Publisher: Annual Reviews
Country: USA
Freq.: Daily
Pub. since: 2017
Visit [here](#)



Knowable Magazine 

From **biochemistry to agriculture; high-energy physics to water security;** and the **origin of the universe to human psychology,** there is a lot which is unknown and, what is already known is also in a colossally large amount, segments of which Knowable aims to share. A digital publication from the Annual Reviews, Knowable strives to make knowledge accessible to all. It explores the **real-world significance of scholarly work through a journalistic lens.**

A majority of its content is derived from **review articles** written by leading scholars from the 50+ Annual Reviews. **Health & Disease, Society, Food & Environment, Technology, and Mind** are few of the areas under its radar. Knowable also features **comics, articles, explainers, essays, slideshows, infographics, podcasts, and interviews.** Its content is thoroughly fact-checked, well-researched, reported, edited, and copy-edited. Depending on the scale of the audience a story might serve, it also publishes occasional special reports.



MAA Focus covers various activities of the **Mathematical Association of America**, the news of the **mathematical community worldwide**, and interesting articles about **new and fascinating topics in mathematics, mathematical education** and related areas.

Pub. details:

Publisher: Mathematical Association of America
Country: USA
Freq.: Bi-monthly (6 Issues/ year)
Pub. since: 1981
Visit [here](#)

»» MAA Focus

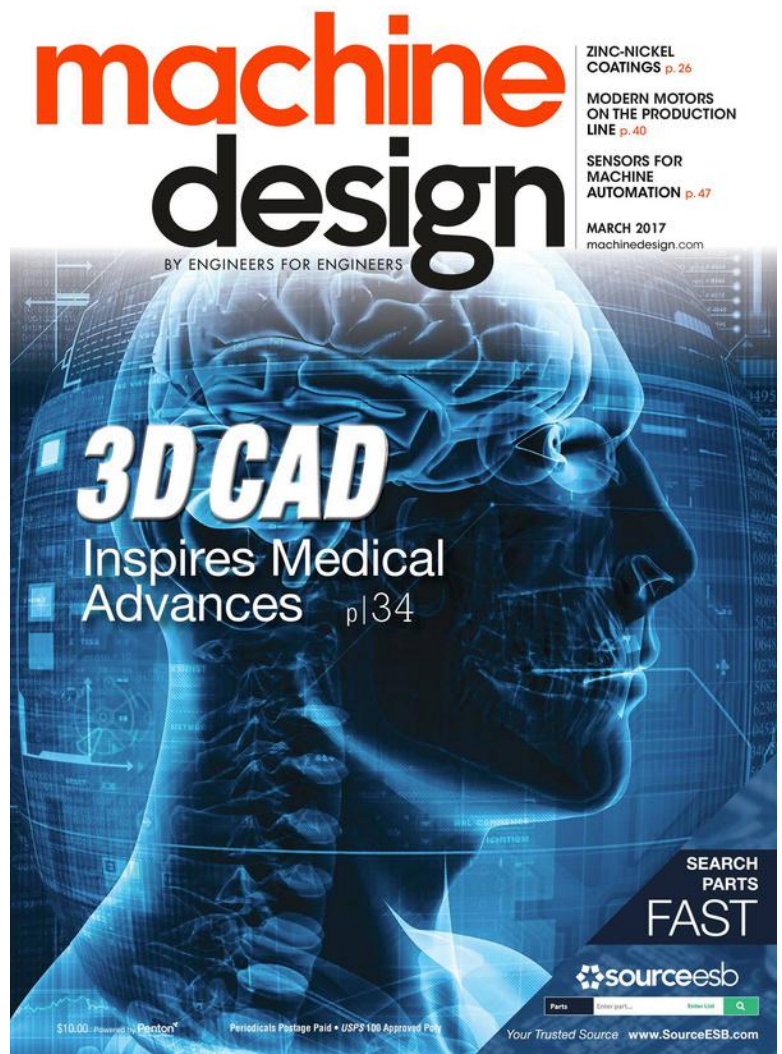
MAA FOCUS is the news magazine published by the Mathematical Association of America. It was first published in 1981 and currently produces six issues per year. The magazine usually covers various **activities of the Mathematical Association of America**, the **news of the mathematical community worldwide**, and **interesting articles about new and fascinating topics in mathematics, mathematical education** and related areas. It is available in both digital and print.

The articles are short, written in an informal language and contain several photos and illustrations to create a fun, gripping reading experience. All the issues ever published since the inception are available in digital format on the website. The magazine reader provides a comfortable view of the magazine pages as well as the articles, with features like “search” within the magazine issue/volume, add “notes” to relevant sections and toggle easily between page view and content view.

Machine Design is providing the technical essentials of advanced **design and manufacturing**. It provides in-depth, precise technical information on the full **spectrum of products, markets and technologies** important to the broad audience.

Pub. details:

Publisher: Endeavor Business Media, LLC
Country: USA
Freq.: 24 Issues/ year
Pub. since: 1929
Visit [here](#)



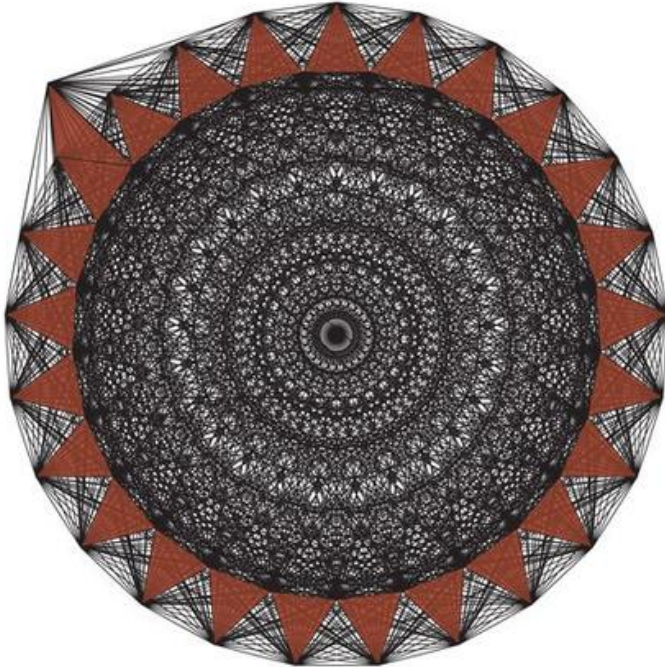
Machine Design 

Manufacturing and design are two of the booming areas in the domain of engineering as of now. Due credits to the emerging global entrepreneurship culture and spike among the concerns demanding their addressal from a technological perspective. Hence, it becomes crucial for **budding engineers** and the concerned college students to get fairly acquainted with the current trends in this field. And fortunately, to cater to our needs, we have Machine Design by the Endeavor Business Media, LLC.

Among many other counterparts, this magazine covers traditional as well as state-of-the-art topics that are of interest to **mechanical designers, ranging from bearings, motors, and engines, to IoT, robotics, 3D printing, medical design**, and much more. This publication, being a veteran serving its niche for over 80 years, is available in its online as well as offline versions. In addition, Machine Design also ensures to keep in touch with its readership via **webinars, whitepapers, conferences**, and various other modes.

math

HORIZONS



Published by the Mathematical Association of America
Volume XXVIII : : Issue 4 : : April 2021

Math Horizon magazine is vibrant with more than just articles and explicitly promotes the **culture of mathematics** covering the **associated people, institutions, humor, games, cartoons, and book reviews.**

Pub. details:

Publisher: Mathematical Association of America

Country: USA

Freq.: Quarterly (4 Issues/ year)

Pub. since: 1993

Visit [here](#)

➤➤ Math Horizons

Another wonderful magazine for the young math lovers by the Mathematical Association of America, Math Horizons targets undergraduates, enthusiastic about the beautiful world of mathematics. The magazine is vibrant with more than just articles and explicitly **promotes the culture of mathematics covering the associated people, institutions, humor, games, cartoons, and book reviews.** It is published four times a year (September, November, February, and April), in print and electronic form and is available via Taylor and Francis.

Published since 1993, the magazine endorses the emerging fields in **mathematics**, however in a simple, layman, self-contained manner. Aftermath, an interesting essay on mathematics culture, is published in each issue and is also collected on a blog site by the same name. The Trevor Evans Awards, established by the Board of Governors in 1992 and first awarded in 1996, are presented by the Mathematical Association of America to authors of exceptional articles that are accessible to undergraduates and published in Math Horizons.

In addition to **articles of a strictly mathematical nature, notes, poetry, short fiction,** and the **occasional interview,** the Mathematical Intelligencer journal currently features regular columns on the **history of mathematics, humor, and mathematically themed stamps.**

Pub. details:

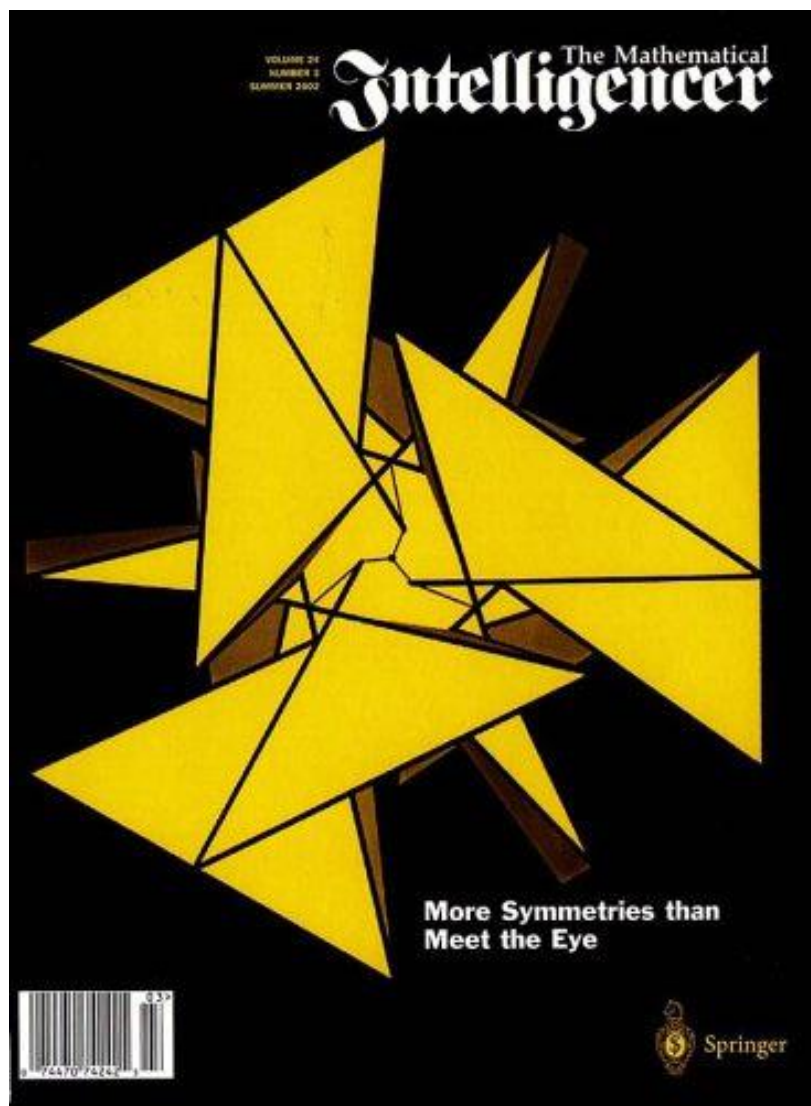
Publisher: Springer

Country: USA

Freq.: Quarterly (4 Issues/ year)

Pub. since: 1971

Visit [here](#)



Mathematical Intelligencer (The)

The Mathematical Intelligencer is a mathematics journal that focuses on frontline research on mathematics and uses informal tone in the articles to inform and entertain a broad audience of mathematicians and the wider intellectual community. First published in 1971, the journal is currently published by Springer on a quarterly basis. The journal aims to bring forth the diversity of mathematical thoughts and communities.

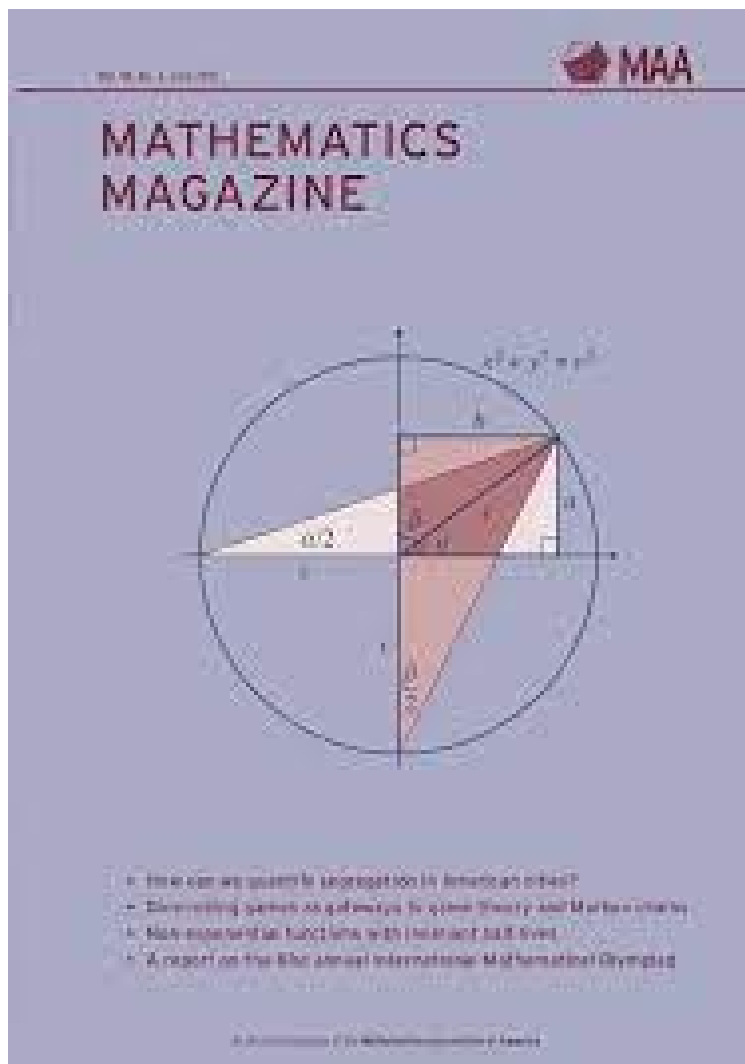
In addition to **articles of a strictly mathematical nature, notes, poetry, short fiction,** and the **occasional interview,** the journal currently features regular columns on the **history of mathematics** (Years Ago), **humor** (Mathematically Bent), and **mathematically themed stamps** (Stamp Corner).



Math Horizon magazine is vibrant with more than just articles and explicitly promotes the **culture of mathematics covering the associated people, institutions, humor, games, cartoons, and book reviews.**

Pub. details:

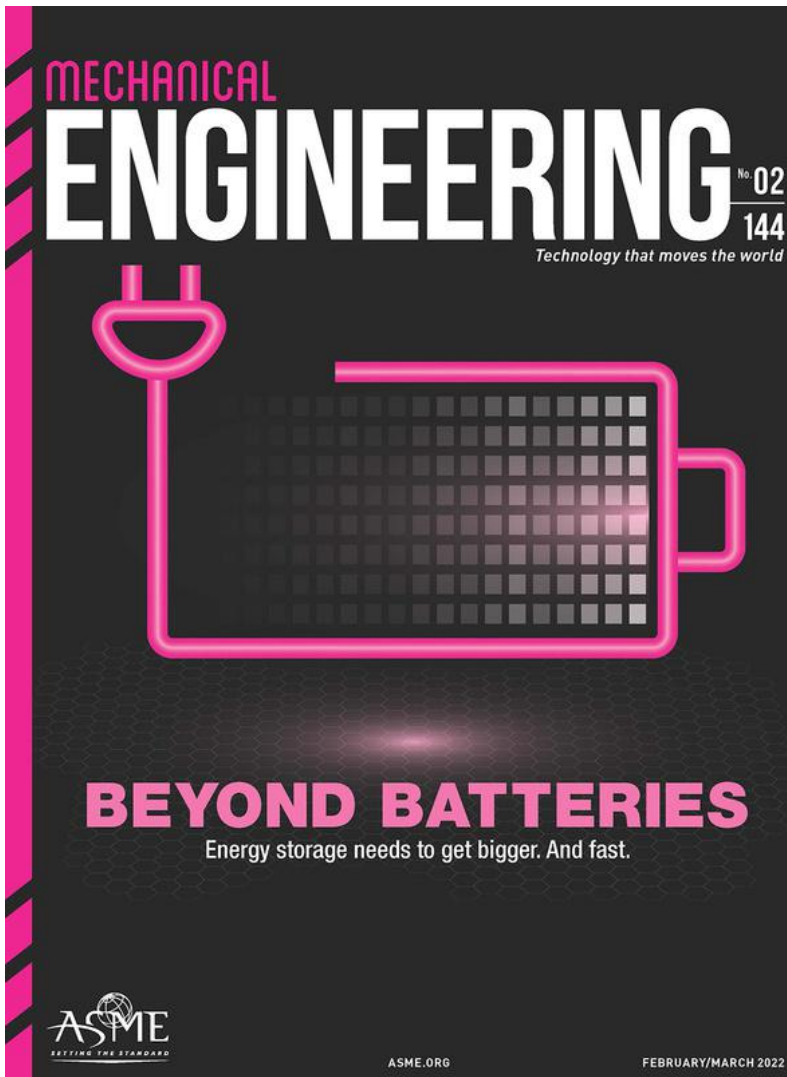
Publisher: Mathematical Association of America
Country: USA
Freq.: 5 Issues/ Year
Pub. since: 1947
Visit [here](#)



Mathematics Magazine

Mathematical Association of America and Taylor & Francis ensures the precision of the information published in Mathematics Magazine, which is published bimonthly.

It caters to the needs of collegiate mathematics, especially at the junior/senior level, and their students. Provides **research on mathematics, historical events and connections between mathematics and other disciplines.** Also give insight information on total views on the article give metrics, citations data from Scopus, web of science, and Crossref Information is segregated in the **heading of puzzles, articles, problems solution, letters** etc. The desired content can be obtained by using the filter option done in the form of page number, section A-Z, most read and most cited articles. It also provides **Citation on the particular article till date and also Altmetrics.**



Mechanical Engineering delivering an interdisciplinary view of **engineering trends and breakthroughs**, giving readers a roadmap to understand **today's technology and tomorrow's innovations**.

Pub. details:

Publisher: American Society of Mechanical Engineers

Country: USA

Freq.: Bi-monthly (6 Issues/ year)

Pub. since: 1959

Visit [here](#)

➤➤ Mechanical Engineering Magazine

Mechanical Engineering Magazine is the award-winning monthly flagship publication of the American Society of Mechanical Engineers. As the ASME was founded in 1880, a not-for-profit membership organization, this flagship magazine reaches more than 160,000 engineers in 150 countries. This magazine application can be downloaded here, delivering an interdisciplinary view of engineering trends and breakthroughs, giving readers a roadmap to understand **today's technology and tomorrow's innovations**.

This magazine **identifies emerging technologies and trends and explores their impact** as they transform industries and the workforce. Some of the Interesting facts about Mechanical Engineering Magazine readers 82% prefer reading **Mechanical Engineering vs. competitive publications**. 86% took action after reading/seeing an **advertisement in Mechanical Engineering** and 46% visit a company's website after reading about them in the magazine.

Microbe Magazine is open to every enthusiast in the area of **microbiology**. Apart from regular articles, the publication also runs a series of **blogs, research articles, and podcasts**.

Pub. details:

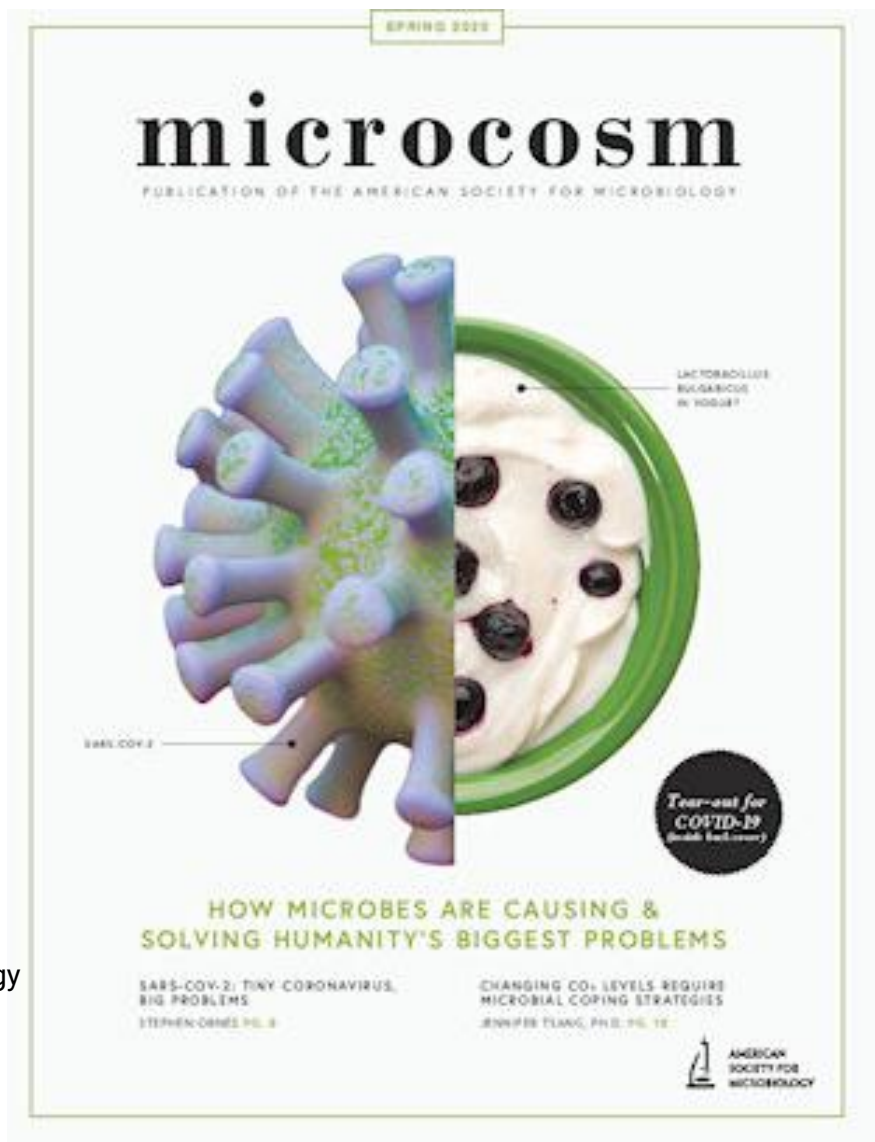
Publisher: American Society for Microbiology

Country: USA

Freq.: Half-yearly (2 Issues/ year)

Pub. since: 1996

Visit [here](#)



Microcosm 

There are artists like Michele Banks who explore science and medicine via paintings and images of microbes. Virologists too are no different than many travel-buffs. It is just that they move to different spots in order to satisfy their biological hunger. Astonishingly, Life Sciences turned out to be the most attractive employment sector in the year 2020, even over the demanding Computer Science.

It is due to many such facts that knowledge of the usually invisible microbes holds considerable importance among the wannabe virologists, bio-scientists, or academicians in this field. Published by the American Society for Microbiology, the Microbe Magazine is open to every enthusiast in the area of **microbiology**. Apart from regular articles, the publication also **runs a series of blogs, research articles, and podcasts**. All it does right now is waiting for a curious audience to imbibe everything it has to offer.



MIT Technology Review is an **executive-oriented tech magazine**. The content is insightful and forward-thinking. It educates its readers through **features, topics, newsletters, podcasts, news analyses, business reports, photo essays, reviews**, and interactive digital experiences.

Pub. details:

Publisher: Massachusetts Institute of Technology

Country: USA

Freq.: Bi-monthly (6 Issues/ year)

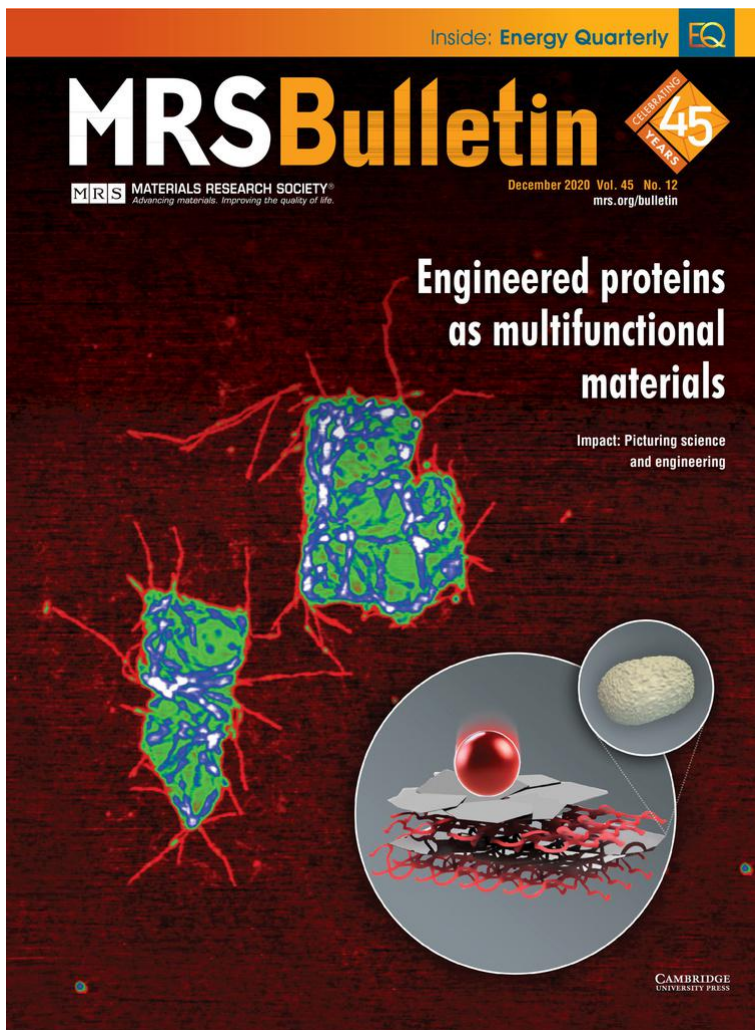
Pub. since: 1899

Visit [here](#)

➤➤ MIT Technology Review

MIT Technology Review, a world-renowned, independent media company that was founded in 1899 at the Massachusetts Institute of Technology. Its insight, analysis, reviews, interviews, and live events explain the newest technologies and their commercial, social, and political implications. This magazine always tries to make technology a greater force for good by bringing about better-informed, more conscious technology decisions through authoritative, influential, and trustworthy journalism.

Generally, the other magazines are business-oriented with tech insights; MIT Technology Review is essentially the opposite. It is an **executive-oriented tech magazine**. The content is insightful and forward-thinking. It educates its readers through **features, topics, newsletters, podcasts, news analyses, business reports, photo essays, reviews, and interactive digital experiences**. If you want to read about the latest developments around the world, there is no better place online than the MIT Technology Review as this digitally oriented magazine offers a lot of information, which explains **how new technologies are transforming companies, disrupting markets, or creating entire industries**.



MRS Bulletin has features like **Energy quarterly, Materials News, Society News, Science Policy, Material Matters** and many more, which provides up-to-date information of special groups in **materials science and engineering**.

Pub. details:

Publisher: Cambridge University Press
Country: UK
Freq.: Monthly (12 Issues/ year)
Pub. since: 1974
Visit [here](#)

➤➤ **MRS Bulletin**

It is one of the most recognized and prestigious publications that promotes communication for the advancement of interdisciplinary materials research and technology to improve the quality of life. Published monthly by the Cambridge University Press, this magazine provides a comprehensive overview of a specific materials theme along with the industry and its policy developments. This magazine has some special features like **Energy quarterly, Materials News, Society News, Science Policy, Material Matters, MRS Movers & Shakers, and Career Central written by leading experts**, which provides up-to-date information of special groups in materials science and engineering-related fields.

In the beginning, from January 2021, MRS Bulletin starts publishing its volume (From Vol. 46) in partnership with Springer Nature and also launches MRS Bulletin Impact, a premier outlet for high-profile original materials research. In addition, this Bulletin presents **MRS OnDemand webinars** each month which complement the MRS Bulletin's monthly theme topic.

National Geographic is the hub of knowledge spans across **Animals, Environment, Science, Travel, and History & Culture**. It is available in several platforms and are full of facts and stories from elite speakers.

Pub. details:

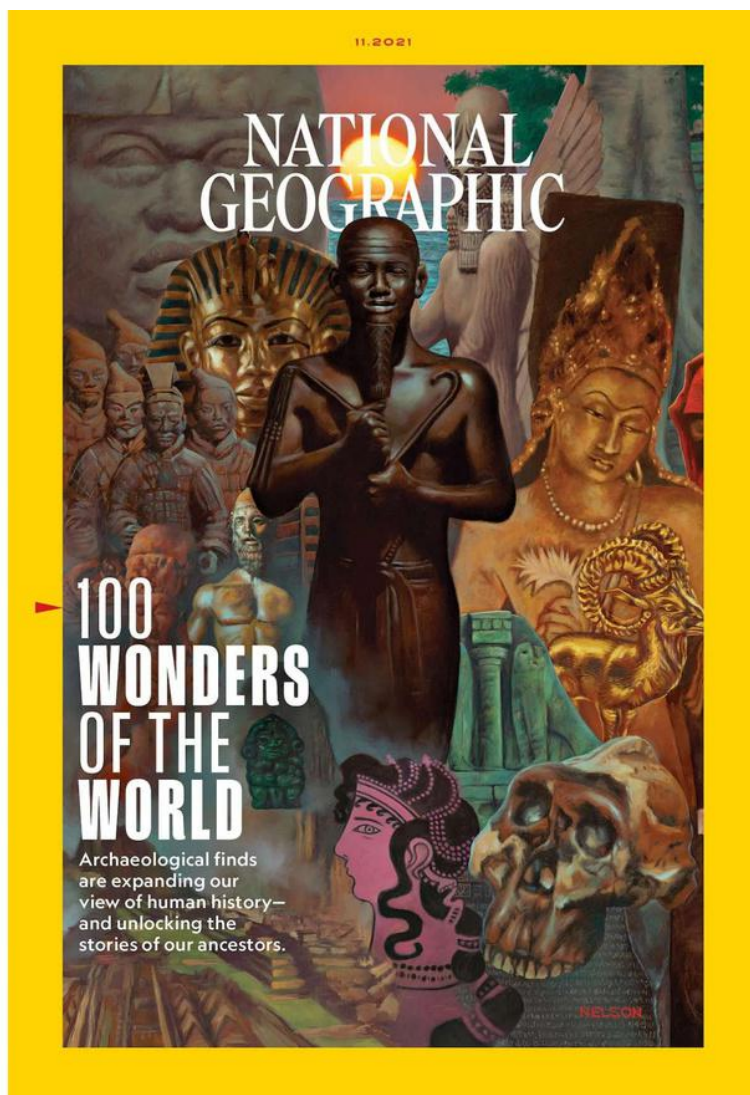
Publisher: National Geographic Society

Country: USA

Freq.: Monthly (12 Issues/ year)

Pub. since: 1888

Visit [here](#)



National Geographic 

The title of this unique publication is that the impression we get from its name constitutes only a subset of what it actually has to offer. **Geography and other areas of Earth Sciences** are definitely the areas on which National Geographic sheds some light, but that is not all. From the gods ancient Egyptians worshipped to what made the legendary Aretha Franklin the Queen of Soul, this magazine has a lot more diversity to share.

Published by the National Geographic Society, this hub of knowledge spans across **Animals, Environment, Science, Travel, and History & Culture**. You can consume the content through its offline and **online versions**, watching **live TV**, or listening to **podcasts**. In addition, it also offers the privilege to book expeditions and attend its live events virtually and physically. These platforms are **full of facts and stories from elite speakers talking on a plethora of topics** covering resilience during the times of global crisis to looking forward to a sustainable future from an environmentalist's perspective. Irrespective of whatsoever academic background one possesses, the genericity of National Geographic makes it amiable to all.



Nature is one of the most authentic sources of **scientific knowledge** all across the globe and also offers a **critical analysis, opinions, and news on the current trends** that have the potential to positively impact the future of humanity.

Pub. details:

Publisher: Springer Nature Community
Country: UK
Freq.: Weekly
Pub. since: 1869
Visit [here](#)



Apart from being one of the most authentic sources of scientific knowledge all across the globe, Nature also offers a **critical analysis, opinions, and news on the current trends that have the potential to positively impact the future of humanity**. Spanning across much wider domains including Physics and Genetics, it also leaves no stone unturned whether it is about the usage of mathematics in devising rapid Covid-19 test strategies using mathematics or figuring out the kind of soft robots that can traverse through the deepest of the oceans on this planet.

Mainly motivated by the **scientific ideas that can make Earth a better place to live**, this magazine is so trustworthy among scholars as well as curious laymen that its impact factor turned out to be a whopping 42.778 in the year 2019. Published by the Springer Nature Community, the areas under its radar include **energy, electronics, chemistry, sustainability, communication sciences, cell biology, vaccines, urology**, and much more. Needless to say, its print and online versions are a few clicks and keys away for the future of science and tech enthusiasts here at IITGN.

New Scientist covers
**Physics to Electronics, Earth
Sciences to Sustainability,
Microbiology to Geography,
and even science and history.**
Readers can make
anamorphic illusions on paper,
solving crosswords, logic
puzzles, and quizzes.

Pub. details:

Publisher: New Scientist
Country: London
Freq.: Weekly
Pub. since: 1956
Visit [here](#)



New Scientist 

In terms of engagement, New Scientist is good for those having a rich taste in science, and even better for those who prefer thinking wild!

For starters, we aren't talking about something scary. It is all about the amusement this publication has to offer to a generic audience. Hibernation of ancient humans, life on venus, surprising health benefits for humans surrounded by invertebrates, and reasons behind cats not evolving with wheels and sapiens without wings are only to name a few. From **Physics to Electronics, Earth Sciences to Sustainability, Microbiology to Geography, and even science and history**, this magazine can help anyone satisfy their curiosity. Yes, you read it right - 'anyone.' Even kids and others willing to declutter their head can have a good time making anamorphic illusions on paper, solving crosswords, logic puzzles, and quizzes.

Available in its online and offline versions, this independent publication also offers its content through **videos and podcasts**. Needless to mention, the only prerequisite for its fruitful accessibility is a desire for wide-spanned knowledge.



Each issue of AMS Notices magazine contains very informative articles written by STEM professionals in industry and academia. It includes the compilations of **feature collection** (feature articles), **reviewed collection, AMS surveys and reports on industry trends.**

Pub. details:

Publisher: American Mathematical Society
Country: USA
Freq.: Monthly (combine issue for Jun & Jul)
Pub. since: 1953
 Visit [here](#)

➤➤ Notices of American Mathematical Society

Notices of the American Mathematical Society is the world's most widely read and recognized magazine for professional mathematicians. Published monthly with a combined June/July issue by the American Mathematical Society, this magazine highlights the activities of Society and update the mathematician and students of mathematics what's new going in their field. Each issue of this magazine contains very informative articles written by STEM professionals in industry and academia. The publication society is committed to promoting and facilitating equity, diversity, and inclusion throughout the mathematical sciences.

AMS Notices include the **compilations of feature collection (feature articles) and reviewed collection** which is dedicated to presenting the readers with **summaries of current books, plays, movies, and other artistic and cultural works involving mathematics.** This magazine regularly features **AMS surveys and reports on industry trends, academia, community updates from AMS, Mathematical people news, review of books & New Books, and upcoming national and international meetings and conferences.**

Optics & Photonics News brings you the latest articles, special issues, reviews, and other features in the field of **optics and photonics, optical industry** and instructive pieces on several themes such as **science and society, education, technology, and business.**

Pub. details:

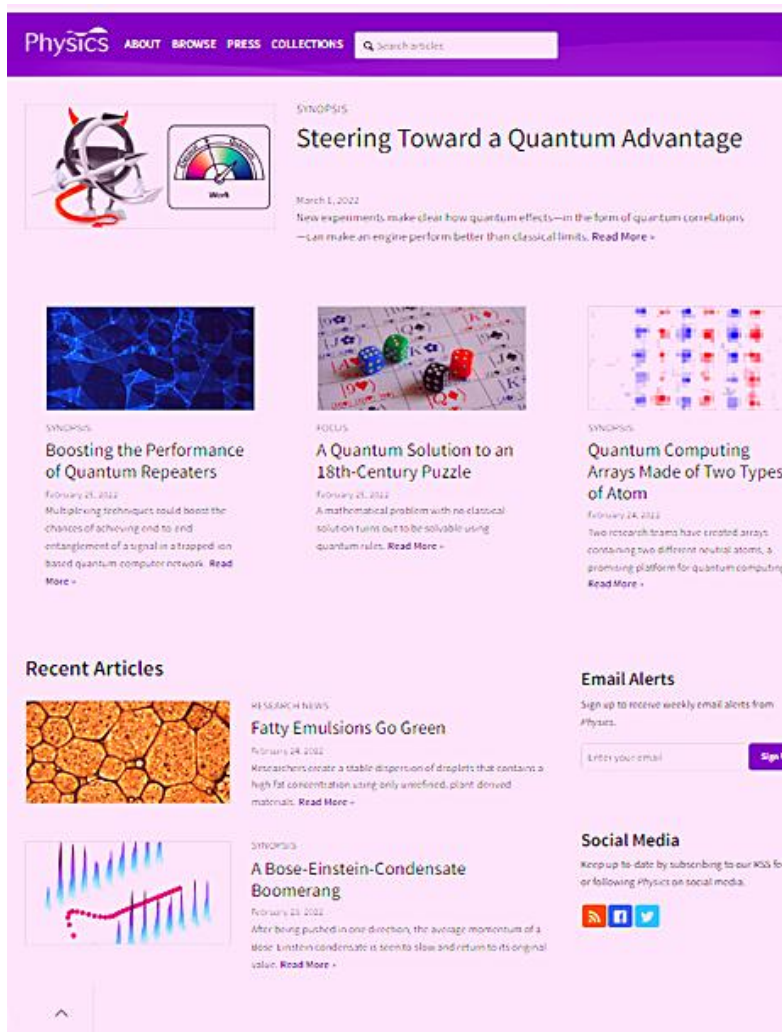
Publisher: Optical Society
Country: USA
Freq.: Monthly (12 Issues/ year)
Pub. since: 1975
Visit [here](#)



Optics & Photonics News

The Optical Society's monthly news publication is Optics & Photonics News (OPN). It brings you the latest articles, special issues, reviews, and other features in the field of optics and photonics - an exciting and ever-changing area of research. Generally, it offers busy professionals the tools they need to thrive in the **optical industry and instructive pieces on several themes such as science and society, education, technology, and business** and provides in-depth coverage of recent advancements in the field of **optics and photonics**.

Researchers, engineers, entrepreneurs, and students can all benefit from OPN's efforts to make the different aspects of this complex area more accessible. Scientists and journalists who specialize in optics are among the contributors. Year In Optics is a regular feature in this magazine, in which Optics and Photonics News highlight the fascinating optics research in the preceding 12 months. It features **Image of the Week**, where anyone can submit exciting, high-resolution photos of optics phenomena. This magazine has a list of columns where you can find the **News, Career, Books, and Multimedia in the field of Optics and Photonics**.



Physics reflects the people, debates, and activities behind the scenes of the published research. Physics features **interviews with physicists, news pieces on a variety of themes, and articles regarding the impact of physics on the arts daily.**

Pub. details:

Publisher: American Physical Society (APS)
Country: USA
Freq.: Daily
Pub. since: 2008
Visit [here](#)

»» Physics (APS)

Physics is yet another magazine published by the American Physical Society which is working to advance and diffuse the knowledge of physics for the benefit of humanity, promote physics and serve the broader physics community. This magazine focuses on results that will affect research trajectory, stimulates a new way of thinking, or spark curiosity, primarily reports on papers from the Physical Review Journals. It is also focused on advance scientific discovery and research dissemination.

The Physical Review Journals is full of fantastic stories. However, Physics is much more than papers; this magazine **reflects the people, debates, and activities behind the scenes of the published research.** Physics **features interviews with physicists, news pieces on a variety of themes, and articles regarding the impact of physics on the arts daily.** It has a selected physics article on a particular subject or theme that often marks an anniversary or a major news event. Generally, these magazines **advocate for physics and physicists** and amplify the voice for science.





Physics Today presents content spanning across the domains of **nuclear physics, particle physics, quantum mechanics, sound waves, fluid dynamics, optics, material physics**, and much more, and that too in an extremely lucid language.

Pub. details:

Publisher: American Institute of Physics (AIP)
Country: USA
Freq.: Monthly (12 Issues/ year)
Pub. since: 1948
Visit [here](#)

»» **Physics Today**

Black holes, asymmetry of the proton sea, the twin paradox, and happenings beyond the speed of light sound like some of the most fascinating topics to talk about. But do we actually know to its fullest what exactly are all these phenomena or occurrences governed by? Perhaps not always. This is why we need legends like Sir Richard Feynman to help us understand a subject as interesting and mind-boggling as physics - the study of nature. Unfortunately, Dr. Feynman isn't with us anymore to help us make the most from his art of simplifying extremely complex physical theories. But among the many other alternatives lies Physics Today.

Published by the American Institute of Physics (AIP), this magazine presents content spanning across the domains of **nuclear physics, particle physics, quantum mechanics, sound waves, fluid dynamics, optics, material physics**, and much more, and that too in an extremely lucid language. Well, but this is what many other resources based on physics do. Then how is Physics Today unique? You'd be astonished to know that it sheds light on topics like **people and history, careers and education, politics and policy, research and technology, and other fields from the viewpoint of a physicist**. Available in its print and electronic versions, Physics Today should be a matter of interest to undergraduates and graduate students in physics and also to those who have a keen interest in the subject.

Physics World brings the content from renowned physicists, **covering all areas of physics pure and applied, thorough news and analysis, sound career advice, insightful opinions, reviews of the books and multimedia.**

Pub. details:

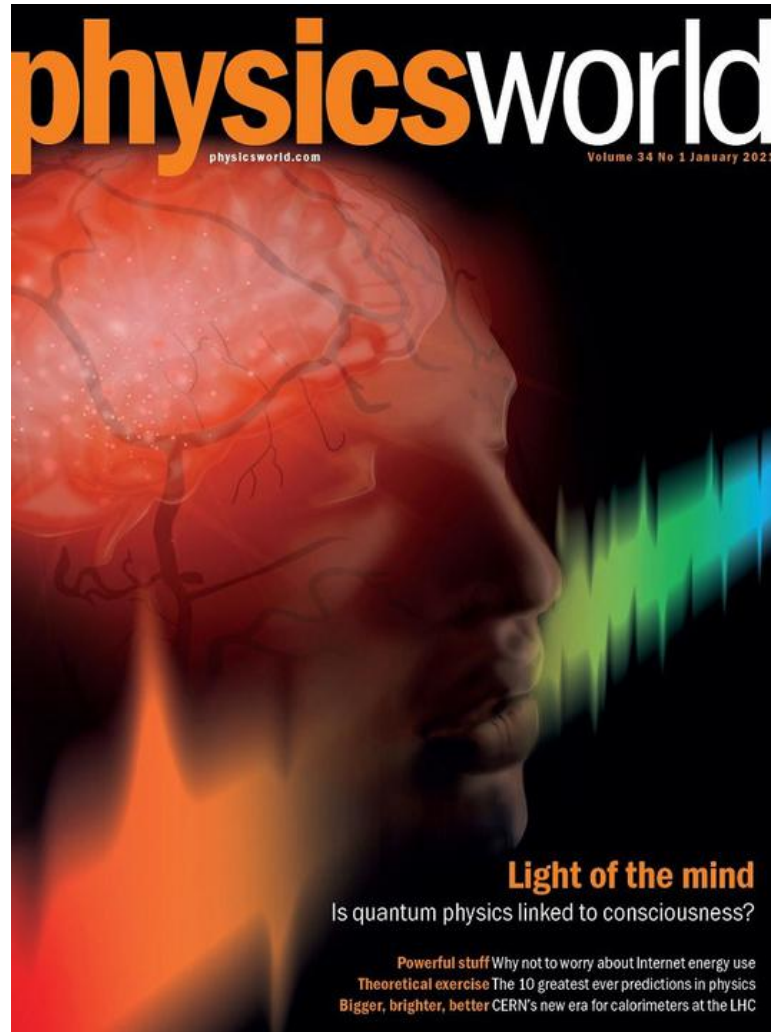
Publisher: American Institute of Physics (AIP)

Country: UK

Freq.: Monthly (12 Issues/ year)

Pub. since: 1988

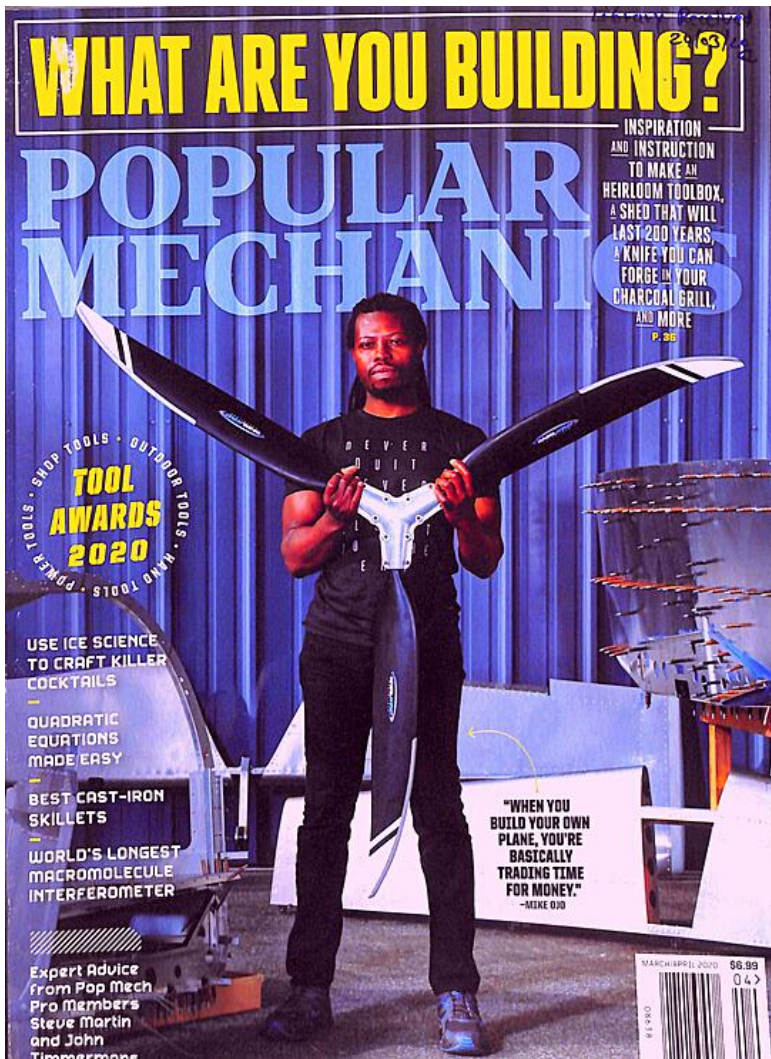
Visit [here](#)



Physics World 

Physics world is a monthly magazine of the Institute of Physics, first published in 1988, one of the largest physical communities of the world. It brings the content from renowned physicists, covering **all areas of physics pure and applied, thorough news and analysis, sound career advice, insightful opinions, reviews of the books and multimedia.**

They have published around 11,000 articles till date which is easily searchable. It also gives you information regarding most cited and most read articles.



Popular Mechanics is about wonder, about being curious about the world around you, and it's about getting your hands dirty, top. Popular Mechanics explains the **world** in an **easy-to-understand** way and covers **innovations and inventions**.

Pub. details:

Publisher: Hearst Communications
Country: USA
Freq.: Bi-monthly (6 Issues/ year)
Pub. since: 1902
 Visit [here](#)

➤➤ Popular Mechanics

Published once in 2 months by Hearst Communications, Popular Mechanics caters to the needs of readers by providing information on **innovations and inventions across automotive, DIY, science, technology, and outdoor spaces**. They also serve their readers with the knowledge they need to get the most out of life. Popular Mechanics is about wonder, about being curious about the world around you, and it's about getting your hands dirty, top. Popular Mechanics explains the world in an easy-to-understand, jargon-free way while also offering readers the depth of information they need to succeed.

No wonder why "How your world works" is the tagline of the magazine!

Popular Science ensures to entertain a much wider reader base, irrespective of their status as college students, researchers, or even those having a serious appetite for **scientific exploration**. It covers mostly **science & tech, space, life, animal and health**.

Pub. details:

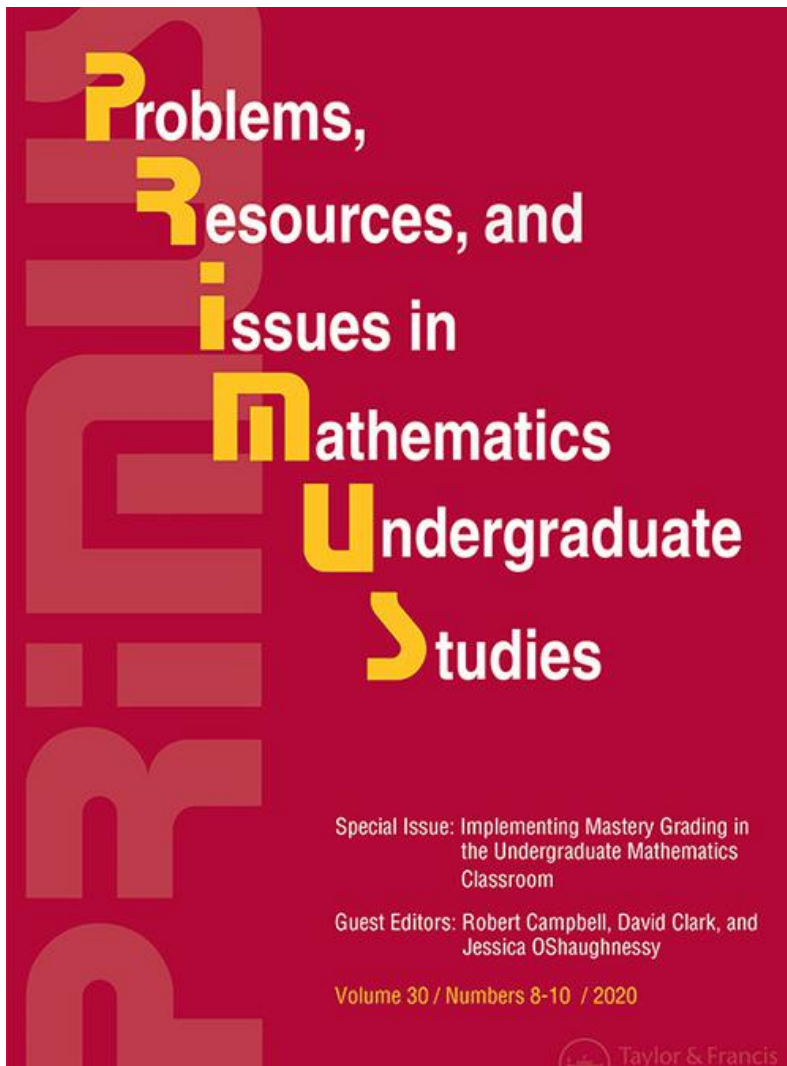
Publisher: Bonnier Corporation
Country: USA
Freq.: Bi-monthly (6 Issues/ year)
Pub. since: 1872
Visit [here](#)



Popular Science 

'When should the world see the first war fought entirely without a human crew but using robots?,' 'What are some of the spooky stories to be celebrated on the dreadful Friday the 13th?,' 'What desk arrangements make the most ergonomic ones ever that are much needed in the current trend of virtual visits a.k.a. an ear of rising levels of backaches?,' 'How about some **technological life hacks** like colouring your old black and white pics, or getting to know the age of a web page just by having a look at its UI?.'

Such a set of questions offers immense food for thought for the **science and technology** enthusiasts around. The topical diversity spanning across the magazine Popular Science ensures to entertain a much wider reader base, irrespective of their status as college students, researchers, or even those having a serious appetite for **scientific exploration**. Published by the renowned media company Bonnier Corporation, this publication is available in its online as well as offline formats. In addition to readable versions, the content is also fully available in the form of podcast episodes.



PRIMUS is published to **address the lack of platforms for educators of mathematics** to showcase their pedagogical initiatives. It focuses on the **promotion of mathematics education** by highlighting the various approaches taken by educators worldwide

Pub. details:

Publisher: Taylor & Francis Group
Country: UK
Freq.: 10 Issues/ Year
Pub. since: 1991
Visit [here](#)



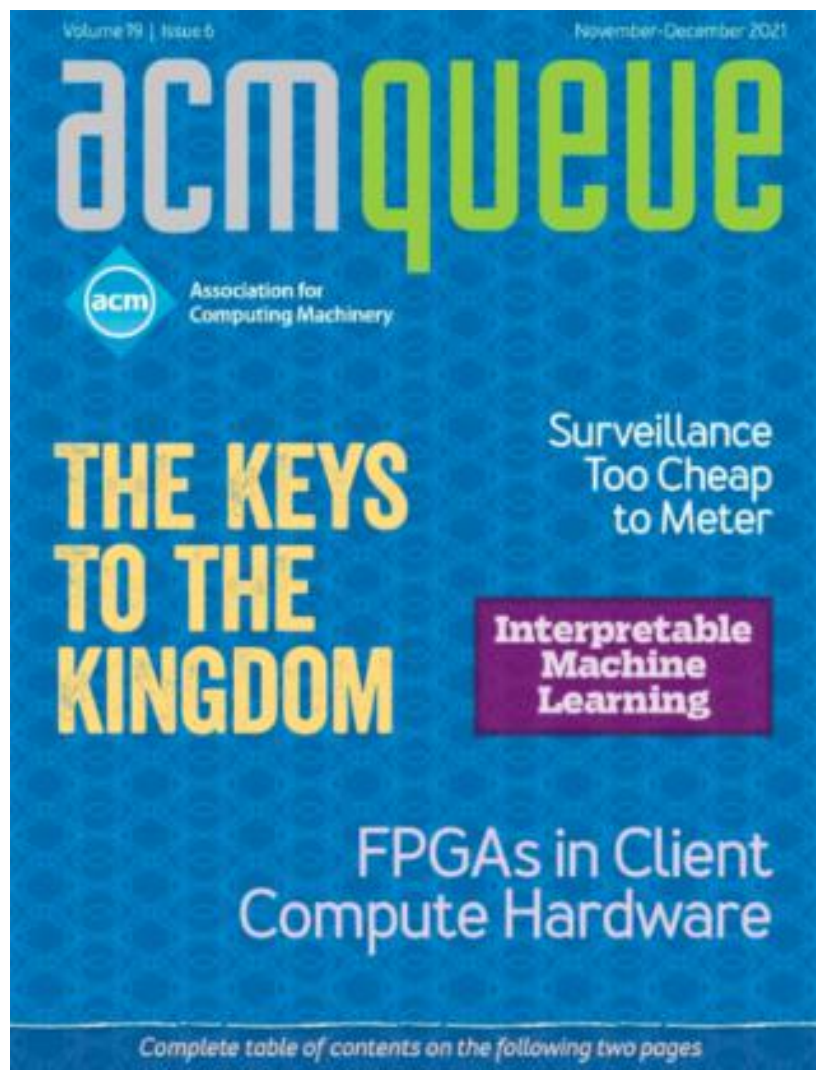
PRIMUS: Problems, Resources, and Issues in Mathematics Undergraduate Studies is a peer-reviewed journal that was first published in 1991 to **address the lack of platforms for educators of mathematics to showcase their pedagogical initiatives**. The journal focuses on **enabling exchange of teaching ideas from educators teaching collegiate mathematics**. PRIMUS gets published 10 times a year with frequent special issues based on themed topics.

All articles submitted are double-peer reviewed, thus, maintaining a very high standard of exposition. The focal point of the journal is **promotion of mathematics education in colleges, by highlighting the various approaches taken by educators worldwide** that might prove effective for individual students, course, curriculum or entire programs. Several survey results of new ideas for teaching mathematics have also been published over the course of time. However, the unwavering goal of PRIMUS has always been to share information in order to improve undergraduate teaching.

ACM Queue publishes **bibliometrics like publication counts, citation counts, downloads in a year, average citation per hour**, etc. which provides information like most popular articles, latest news, most cited authors, and most frequent affiliations.

Pub. details:

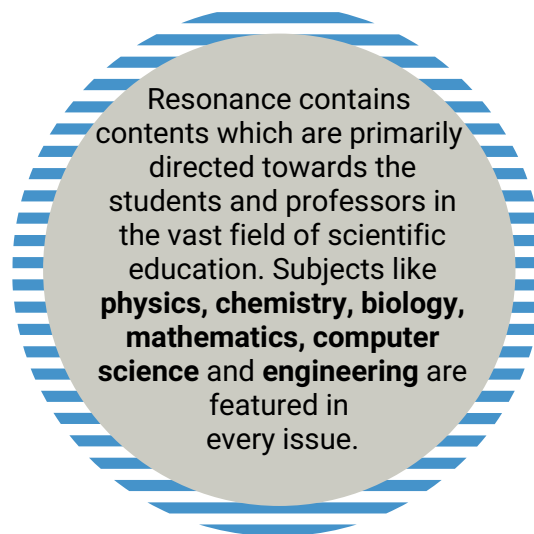
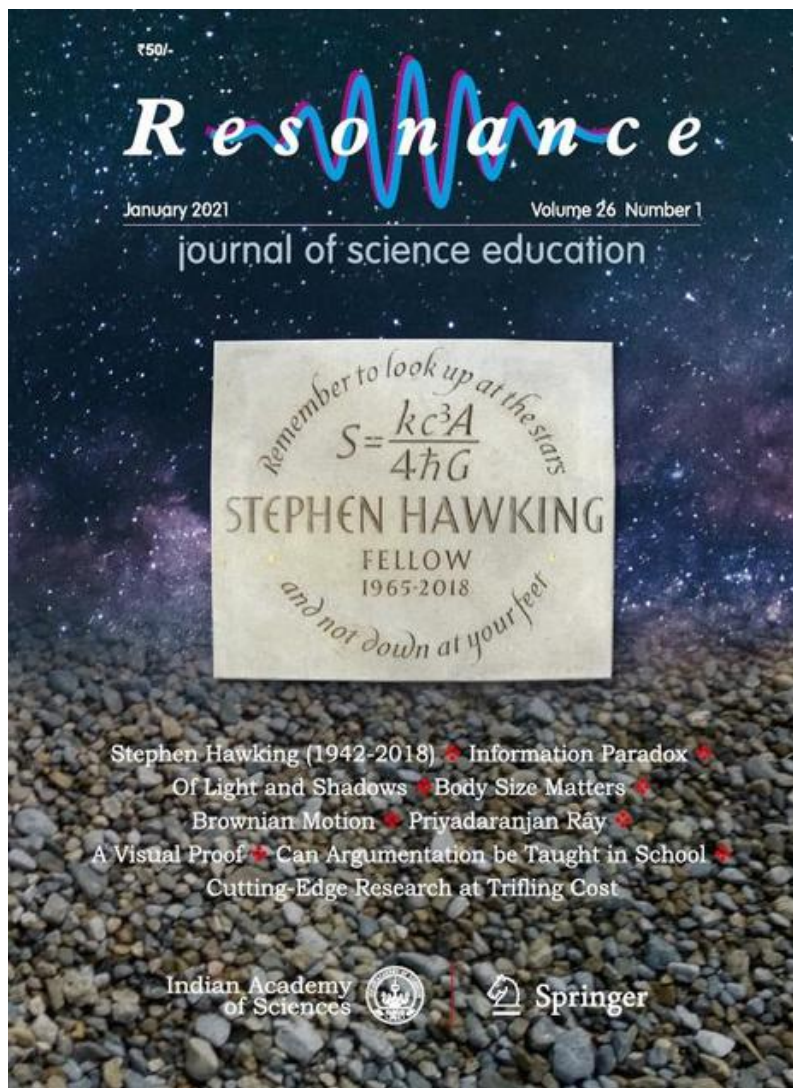
Publisher: ACM digital Library
Country: USA
Freq.: Bi-monthly (6 Issues/ year)
Pub. since: 2003
Visit [here](#)



Queue (ACM) 

Another magazine by ACM digital Library, came into existence in 2003. It lets you know the subject area which is covered in the particular issue in the form of word clouds. It also publishes **bibliometrics like publication counts, citation counts, downloads in a year, average citation per hour**, etc. They give you information like **most popular articles, latest news, most cited authors**, and most frequent affiliations.

Queue is a magazine by and more software professionals, published once in two months. Queue articles inspect the **technologies which make unavoidable disruptive differences** and underlying problems which emerge and pose questions that software engineers should be thinking about. It also helps readers to enhance their own thoughts and chase the creative solutions.



Pub. details:

Publisher: Springer Science and Business Media
on behalf of the
Indian Academy of Sciences

Country: India
Freq.: Monthly (12 issues/ year)
Pub. since: 1996
Visit [here](#)

➤➤ Resonance: Journal of Science Education

Resonance is a monthly peer-reviewed academic journal of science education. Incepted in 1996, the journal is currently being published by Springer Science+Business Media on behalf of the Indian Academy of Sciences. The contents of Resonance are primarily directed towards the students and professors in the vast field of scientific education. Subjects like **physics, chemistry, biology, mathematics, computer science and engineering** are featured in every issue.

All the articles are presented in an attractive way and lucid style, with ample photographs, illustrations, margin notes etc. In fact, the criteria for being published in this journal relies on the article being at least one-third of the article should be comprehensible to the general audience. Various categories of articles are featured to keep the journals diverse and of interest to the broader scientific community. General articles, series made up of several parts, concise article-in-boxes, **classroom pieces, nature-watch pieces, research news, book reviews, and information and announcements** useful to students and teachers



Science Magazine focused in **original scientific research works and research reviews**, that serve the general interest of the scientific community as a whole. It covers the **full range of scientific disciplines**.

Pub. details:

Publisher: American Association for the Advancement of Science (AAAS)

Country: USA

Freq.: Weekly

Pub. since: 1880

Visit [here](#)



Science 

Now this one needs no introduction! Science, also widely known as Science Magazine, is one of the world's top academic peer-reviewed journals, with high impact factor and highly cited journal articles. First published in 1880, the association of legendary names with Science magazine has been there all throughout, most notably Thomas Edison and Alexander Graham Bell. Currently, the journal is being published weekly by the American Association for the Advancement of Science (AAAS). Our institute has access to the digital journal via JSTOR of issues till 2015, as of date. While the latest issues remain accessible only through subscription of AAAS, research articles published after 1997 are available for free (with online registration) one year after they are published.

The major focus of the journal is **original scientific research works and research reviews**, although it also includes news, opinions and such other related topics that serve the general interest of the scientific community as a whole. Unlike other scientific journals, Science does not focus on only one subject but covers the **full range of scientific disciplines**. The authorship of Science is global too, as they accept articles from all over the world, irrespective of membership of AAAS. The journal is credited for publication of some breakthrough research works like the human genome, studies tying AIDS to human immunodeficiency virus etc. The journal also grants a plethora of awards for the research works in advancement of science.



Science & Culture offers novel insights on **scientific research and development, national concerns, society and culture, current events, and much more via reviews, notes, and original articles.**

Pub. details:

Publisher: Indian Science News Association
Country: India
Freq.: Bi-monthly (6 Issues/ year)
Pub. since: 1935
 Visit [here](#)

➤➤ **Science and Culture**

Steve Jobs was among the many who took a strong stand on the blend of liberation and scientific education leading the future of humanity. He rightly quoted - "It's technology married with liberal arts, married with the humanities, that yields us the results that make our heart sing."

Tangential to this belief is the fundamental objective behind the publication Science and Culture by the Indian Science News Association. Being a multidisciplinary journal, it offers **novel insights on scientific research and development, national concerns, society and culture, current events, and much more via reviews, notes, and original articles.** The sole motive behind such a holistic approach is to ensure that the thoughts of elite scientists and thinkers are easily understood by laymen based on their subjective perceptions of science and culture altogether. This magazine should be of interest to every college student irrespective of their academic background, the only prerequisite being the willingness to observe science and technology from a wider point of view. In addition to its online and offline versions, the parent association entertains its audience through **endowment lectures by renowned professors, awards for students conducting basic science research, and training programs for science communication and media practice.**

Science Reporter covers information on **latest developments on the science and technology** in the world, **interviews of renowned scientists and researchers, profiles of scientific institutions, reviews of science books, movies and many more.**

Pub. details:

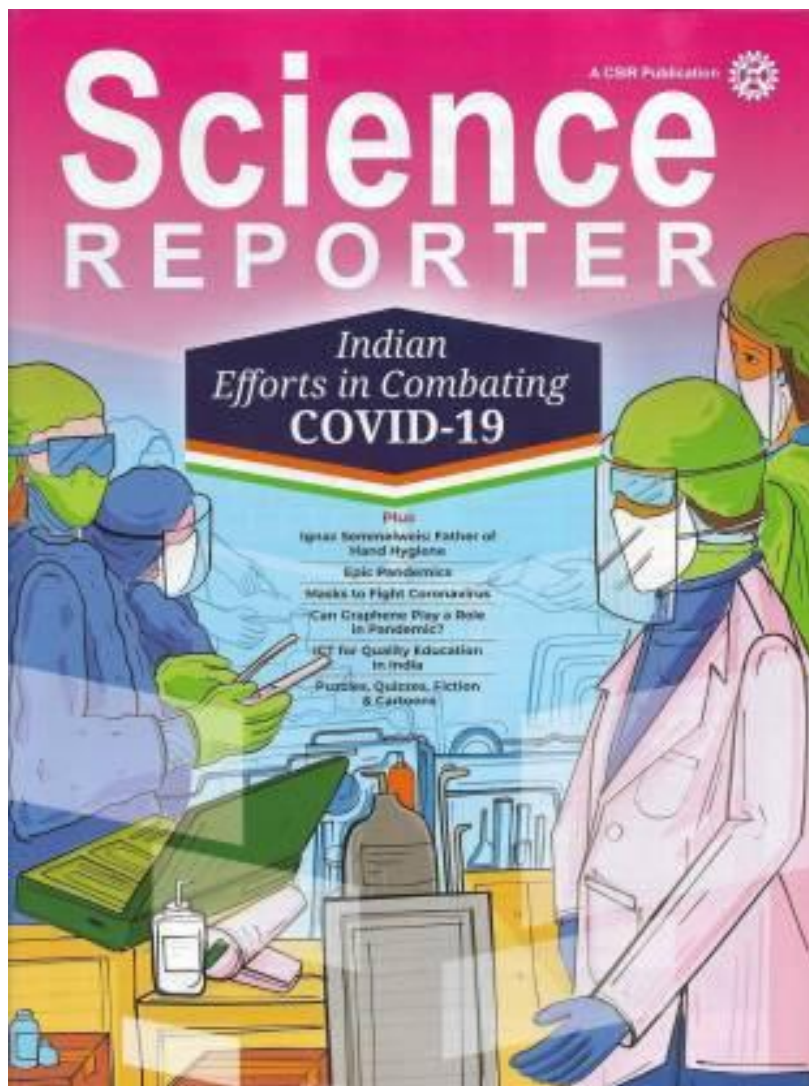
Publisher: CSIR- NISCAIR

Country: India

Freq.: Monthly (12 Issues/ year)

Pub. since: 1964

Visit [here](#)



Science Reporter 

Monthly published by CSIR- NISCAIR. It covers information on **latest developments on the science and technology** in the world, **interviews of renowned scientists and researchers, profiles of scientific institutions, reviews of science books, movies, Expert views on controversial, ethical and complex scientific concepts, puzzles, quizzes, science cartoons and science fiction Columns with interesting facts & trivia on environment, plants & animals, technology, innovation and much more.** They have segregated the information department wise like curiosity corner, what's new, innovative minds, nature's marvels, editorial etc.

They also have a blog 'Scienspark' so for you to share any interesting observation, comment, viewpoint about science.



Scientific American covers subjects ranging from **astronomy, medicine, neuroplasticity, physics, social media, or even the most hi-tech gadget**. It covers even **science from an economic and political lens**.

Pub. details:

Publisher: Springer Nature
Country: India
Freq.: Monthly (12 Issues/ year)
Pub. since: 1845
Visit [here](#)

»» **Scientific American**

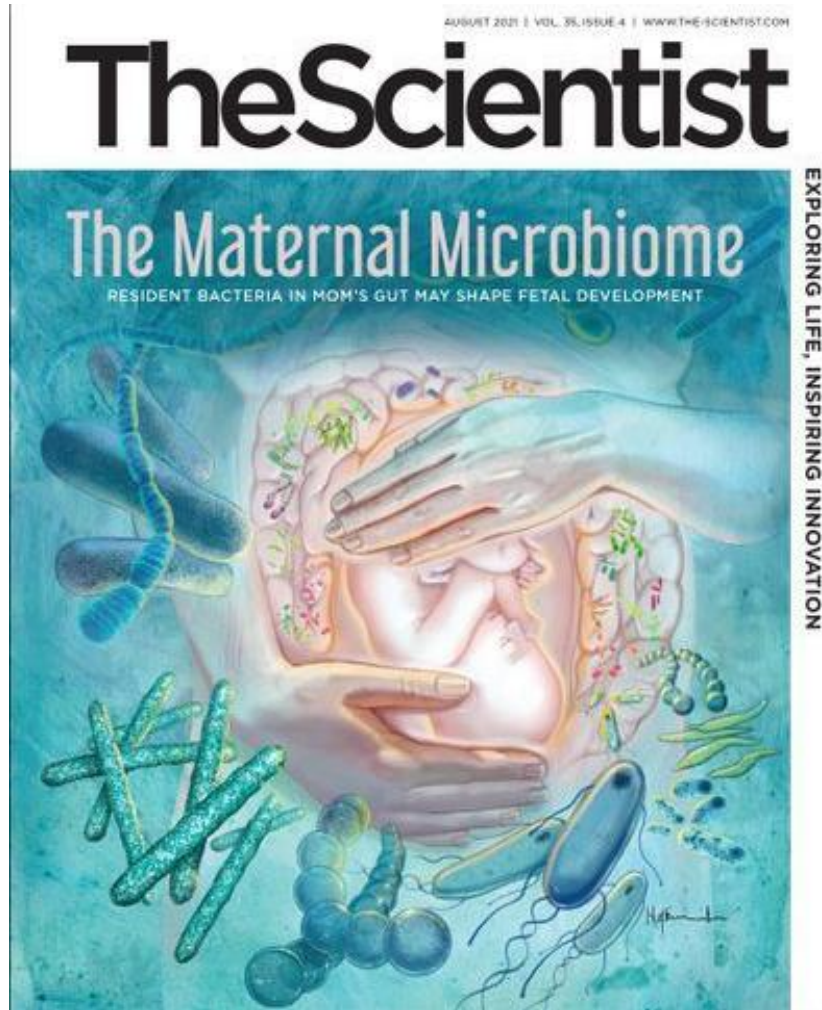
Having a look around, almost everything we observe is derived from some form of science. Be it the device on which you are reading this, the apparel you put on, the food you eat, or the mask you use to protect yourself from the deadly Covid, all of it has reached you in its final form through the application of select underlying principles of science. If this subject wouldn't have existed, it seems next to impossible to imagine the progress we humans would have collectively made as a race. Ranging from **astronomy, medicine, neuroplasticity, physics, to our not-so-distant friend social media, or even the most hi-tech gadget** we own, everything has contributed to our advancement. And to stay updated with the associated trends becomes a moral duty of everyone willing to lead from a scientist's or an engineer's front. Hence, we have, among many others, the Scientific American.

This monthly is published by the renowned publisher Springer Nature known for its credibility within the academia as well as the many of the communities of science enthusiasts. Its history of inception can be dated back to 1845, since when an ample amount of highly respected scientists and engineers, including Albert Einstein, have contributed. Available in its online and offline versions, this publication covers **emerging viruses, health issues, state-of-the-art technologies, and even science from an economic and political lens**. Some of its special features include forum discussions on alarming threats to our survival and science agenda, which is entirely authored by the editors aimed at trending concerns within the global scientific community.

The Scientist magazine coverage **research papers, current research, techniques, career news, profiles of established and up and coming scientists, publishing, research integrity and best practices relating to life science.**

Pub. details:

Publisher: LabX Media Group
Country: USA
Freq.: Monthly (12 Issues/ year)
Pub. since: 1986
Visit [here](#)



Scientist (The) 

A magazine for life science professionals, The Scientist is a publication dedicated to a wide range of topics in **life sciences**, like the **study of cell and molecular biology, genetics**, to name a few. It was first published in 1986 by Eugene Garfield and is currently published monthly in both print and digital media, both of which are made available to the IITGN community.

The magazine coverage includes articles on recently published research papers, current research, techniques, career news, profiles of established and up and coming scientists, publishing, research integrity and best practices. Beside these, **infographics, crossword puzzles** and **'Image of the Day'** also make this magazine for a wider audience. The articles are concise, accurate and entertaining and makes a great read for science enthusiasts.

The Loopy Fluid Dynamics of Bird Lungs

By Anand U. Ozo, Christina Frederick, and Leif Ristroph

If asked why birds are such efficient aerodynamic machines, one may initially point to their streamlined bodies and finely contoured wings that seem tailored to manipulate the wind. But the aerodynamics behind birds' mastery of flight is as much about the intricate structures and airflows inside as well as outside. Investigations into the nonlinear dynamics of flow networks with unusual topologies are breathing fresh air into a century-old mystery about bird lungs [1].

Biologists have long appreciated birds' ability to breathe highly efficiently—a trait that is presumably connected with the extreme energetic demands of flight [5]. A classic experiment illustrates this point by stark comparison: in an enclosed chamber where oxygen has been depleted to such a level that a mouse is comatose and moribund, a similarly-sized sparrow playfully flutters about [10]. These remarkable respiratory abilities allow birds to migrate across oceans and continents and fly in thin air at elevations as high as Mount Everest [9]. It is thus with good reason that anatomists have carefully mapped out the structure of avian lungs and physiologists have charted the airflow patterns and currents [2].

The airflow in the lungs of most animals (including humans) oscillates with inhalation and exhalation. However, one-way or directed flows persist throughout the bird respiration cycle due to a unique topology that—unlike our own branched bronchial network—contains looped airways (see Figure 1a). The one-way flows arise as circulation around these loops, meaning that the time average of the fluid flux over a breathing cycle has a nonzero value. Bird lungs therefore exhibit a form of alternating current (AC) to direct current (DC) rectification, wherein the oscillatory AC airflow that is associated with inhalation and exhalation is converted to a directed DC flow around the loops. While researchers

are still parsing through the details [6], it seems that this one-way flow of air allows for efficient gas exchange with the blood, which itself flows directionally within the circulatory system because of the one-way action of heart valves.

Lung valves, however, seem to be nothing but science fiction. In the 100 years since scientists first documented the phenomenon of one-way airflow, exhaustive searches for valvular structures by anatomists have come up empty [4]. Consequently, researchers have proposed many hypotheses that appeal to various structural features in the lung that may appropriately guide the flows, even without the opening and closing movements of conventional valves [1]. However,

because anatomical details differ across species yet one-way flows are pervasive, we felt that a more general mechanism lurks in the fluid dynamics of loopy networks.

Rather than use a detailed model of a bird lung that captures all anatomical complexities, our recent study considers a "spherical bird" approximation that isolates a single loop in the network (see Figure 1b). We then transformed the system into the closed circuit in Figure 1c—an experimental and computational convenience for the study of internal flows. The network contains a fluid that is driven through the action of an oscillating piston, which plays the role of inhalation and exhalation in bird lungs. This system allows

See *Bird Lungs* on page 4

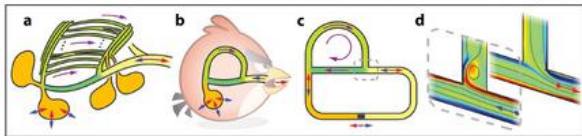


Figure 1. Oscillatory airflows during breathing transform into one-way flows around loops in the bird lung. **1a.** Unlike the branched network of mammalian lungs, avian lungs have loops and reconstrictions. **1b.** A "spherical bird" approximation to the lung network that involves one loop (green) and oscillatory forcing from a single air sac (orange). **1c.** A closed-circuit system that is driven by a reciprocating piston. **1d.** Simulations show that nonlinear effects at network junctions provide the valving action that directs flows around the loop. Figure courtesy of the authors.

SIAM News covers topics related to **science policy, professional development, mathematics education and trends in applied mathematics**. The target audience of this news journal are mainly educators and policy makers.

Digital Twins: Where Data, Mathematics, Models, and Decisions Collide

By Michael G. Kapteyn and Karen E. Willcox

Regardless of whether one is entering the interdisciplinary field of computational science and engineering with a background in mathematics, statistics, computer science, engineering, or the sciences—or maybe a little bit of each—it is such an exciting time to be a computational scientist. The field is in the midst of a tremendous convergence of technologies that generate unprecedented system data and enable automation, algorithms that let users process massive amounts of data and run predictive simulations that drive key decisions, and the compute power that makes these algorithms feasible at scale for complex systems and in real-time or in situ settings.

The convergence of these three elements is a revolution that touches almost every area of science, engineering, and society. It affects all aspects of a complex system's lifecycle by advancing simulation and modeling capabilities in each phase of design: impacting the way we plan, monitor, and optimize manufacturing processes; and changing the way we operate systems.

Digital Twins Integrate Data, Models, and Decisions

A digital twin is defined as "a set of virtual information constructs that mimics the structure, context, and behavior of an individual/unique physical asset, is dynamically updated with data from its physical twin throughout its lifecycle, and informs decisions that realize value" [1]. People often wonder how a digital twin differs from the modeling and simulation that researchers have been conducting for decades. The quoted definition highlights three key points of differentiation. First, a digital twin is personalized because it targets an individual or unique asset instead of being a generic computational model. This means that it must reflect asset-to-asset differences and variability. Second, a digital twin is a living model—not a static computational model—that evolves as the physical twin evolves. And third, a digital twin encapsulates an integrated end-to-end view of data, models, and decisions.

The community is beginning to see digital twins deployed for myriad engineering applications, including aircraft, spacecraft, buildings, bridges, engines, automobiles,

wind turbines, and floating production storage and offloading units. As Figure 1 illustrates, there is also gathering momentum to develop digital twins in medicine and the geosciences. However, state-of-the-art digital twins are largely the result of custom implementations that require considerable deployment resources and a high level of expertise. Moving from the one-off digital twin to accessible robust digital twin implementations at scale requires rigorous and scalable mathematical foundations [4].

A Mathematical Foundation for Digital Twins

One example of a mathematical foundation for digital twins is a probabilistic graphical model [3]. Probabilistic graphical models provide a powerful mathematical abstraction for modeling complex systems in an insightful and intuitive way while also serving as a foundation for generalizable and scalable computational methods. For example, graphical models have seen wide application as a unified framework for modeling and inference in the field of robotics, where they enable tasks like perception, state estimation, and motion planning for a variety of robotic systems [2]. In

Pub. details:

Publisher: Society for Industrial and Applied Mathematics (SIAM)

Country: Philadelphia

Freq.: 10 Issues/Year

Pub. since: 1952

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SIAM News is the news journal of the Society for Industrial and Applied Mathematics (SIAM). The primary focus of SIAM is to promote the use of mathematics in practical fields, such as industry. SIAM News, thus, consists of all the **activity of SIAM and growth of applied mathematics in general**. Published 10 times a year, SIAM News is available in both print and digital media and both are accessible to the institute community.

While some articles are broader in nature and appeal to the general public with an interest in mathematics, the SIAM News also covers topics related to **science policy, professional development, mathematics education and trends in applied mathematics**. The target audience of this news journal are mainly educators and policy makers.

Standardization News (ASTM) magazine brings the **latest international standardization news** to the following Industry sectors i.e., **Aerospace, Cannabis, Chemicals, Construction, Consumer Products, Energy, Environment, Manufacturing, Medical, Metals & Materials** and many more.

Pub. details:

Publisher: ASTM International standard organization

Country: USA

Freq.: Bi-monthly (6 Issues/ year)

Pub. since: 2012

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Standardization News (ASTM) <<

Published bimonthly by the ASTM International standard organization which is a constantly evolving organization, this magazine **provides news of ASTM's latest work in international standardization, a column about how standards are developed, interviews with industry experts,** and features that show how ASTM International standards benefit governments, industries, consumers, and global trade. This magazine regularly features a **news article report on the research, testing, and new activities of ASTM standard**-writings committees, as well as those of the domestic and global standards community. It also featured biographies of organizations, persons, and businesses active in the standards arena, as well as legal, regulatory, and international events affecting the standard creation process.

This magazine brings the latest international standardization news to the following Industry sectors i.e., **Aerospace, Cannabis, Chemicals, Construction, Consumer Products, Energy, Environment, Manufacturing, Medical, Metals & Materials, Quality, Safety, and Transportation.** ASTM International publishes eNews-letters to supplement the bimonthly publications of Standardization News which provides the links to timely new stories about ASTM International and its technical committees; a list of upcoming meetings, workshops, and symposia; global notes, and new publications information.

Ubiquity magazine by ACM tries to stay focus ambitiously on **“The Future-Already-Happening.”** This is the future coming to life right before our eyes, in an information-rich world where **computing** is embedded everywhere

Pub. details:

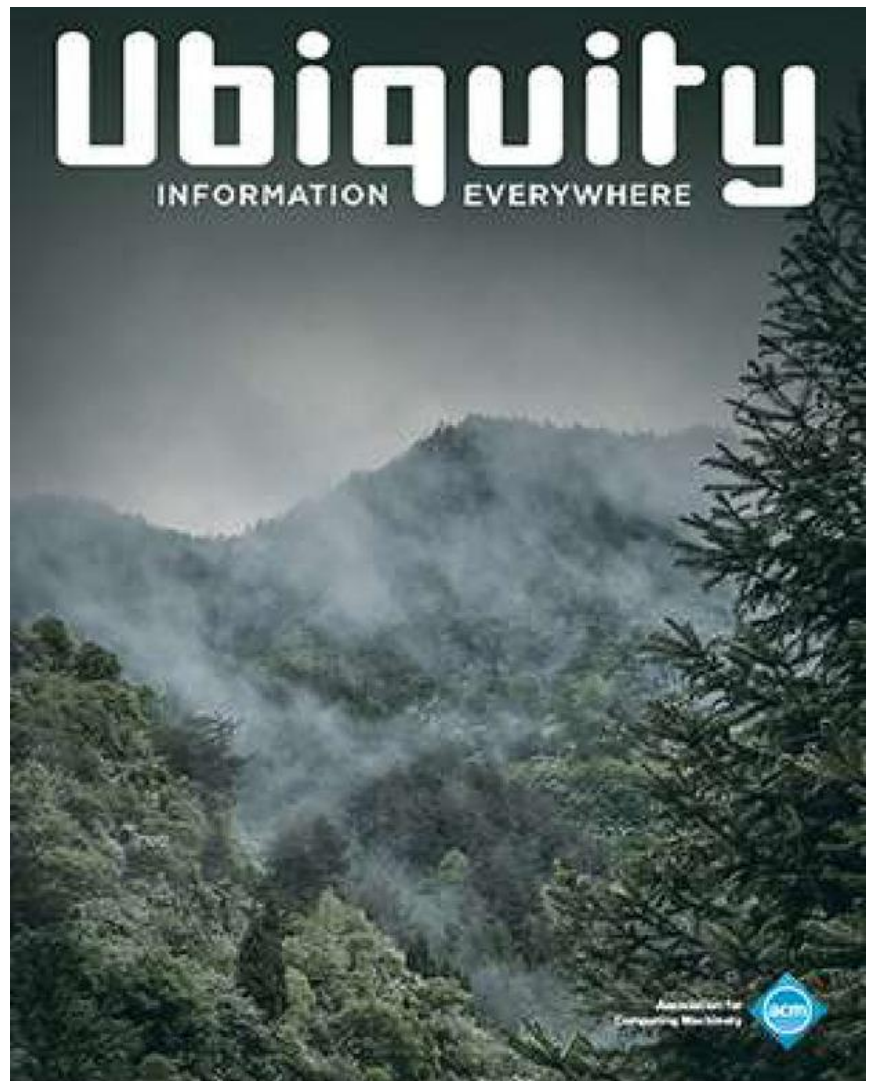
Publisher: Association for Computing Machinery (ACM)

Country: USA

Freq.: Weekly

Pub, since: 2000

Visit [here](#)



Ubiquity 

Ubiquity is yet another magazine published weekly by the Association for Computing Machinery. It is a web-based magazine devoted to the future of computing and the people who are creating it. This magazine promotes critical thinking and in-depth study of topics pertaining to the **computing profession’s nature, constitution, structure, science, engineering, cognition, technology, practices, and paradigms.** Ubiquity helps us see what we do not see. This magazine seeks novel perspectives on what is going on in the core of our field. It also looks to the edges of our field and beyond, seeking the perspectives of those in other fields who are impacted by computing.

“Ubiquity” comes from the Latin word for “everywhere” so this magazine tries to stay focus ambitiously on **“The Future-Already-Happening.”** This is the future coming to life right before our eyes, in an information-rich world where computing is embedded everywhere. This magazine is highly visible within ACM. Some of the major subject coverage areas of this magazine are **Computing Education, Electronic Commerce, Computer Crime, Human-Computer Interaction (HCI), Artificial Intelligence, and Computer Science Education.**



The published essays in Wired mainly revolve around the **impact of emerging trends in the world of technology** and their impact on **politics, culture**, and the overall **economy**.

Pub. details:

Publisher: Wired
Country: USA
Freq.: Monthly (12 Issues/ year)
Pub. since: 1998
Visit [here](#)



Being social animals, no one among us can sustain being fully immersed into none but one field of interest. Throughout the day, we consciously or unconsciously involve ourselves into multiple activities. For instance, we might talk about the upcoming project deadline, followed by a few assignment submissions, the sports tournament in the coming week, and even the much-awaited cultural event in the following month within just a span of a few minutes. Well, we missed out on the time spent on socializing and scrolling through social media handles in the meanwhile.

Coming to the underlying point here, we humans are fond of changes. And especially for the technology-buffs, WIRED as an independent print and online platform, being one-of-its-kind, adequately caters to our needs to overcome monotony. The published essays mainly revolve around the **impact of emerging trends in the world of technology** and their **impact on politics, culture**, and the **overall economy**. Irrespective of the background one belongs to, the only prerequisite to make the most out of this qualitative research is a keen interest in technological exploration. Ranging from **business analytics, cryptocurrency, and artificial intelligence** to even **renowned PC games** like Assassin's Creed and the future of using the **computing power of the human brain**, this magazine holds the potential to satisfy a diverse range of curious minds.

Every issue of XRDS is thematic and revolving around **“Wearable Computing”** or **“Health Informatics.”** It also brings **interviews**, latest research trends, columns, and even **career advice articles** on the lines of the theme that is of use to **computer science enthusiasts**.

Pub. details:

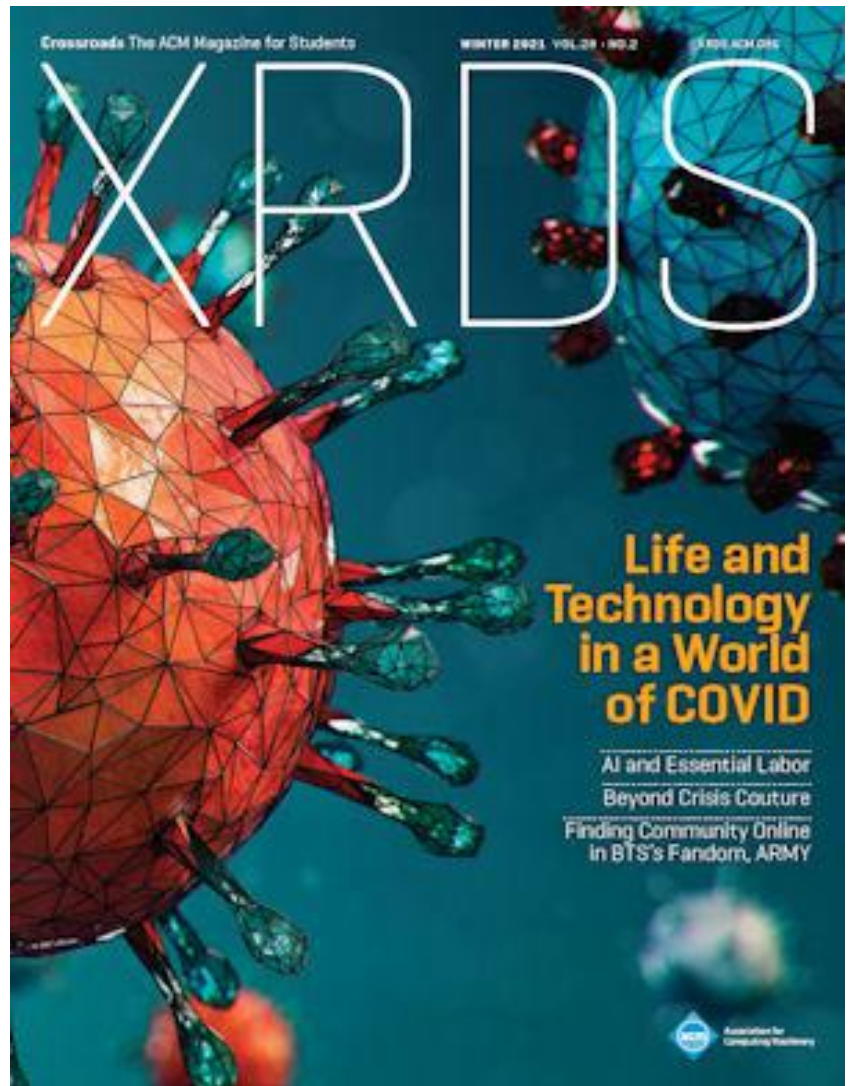
Publisher: Association for Computing Machinery (ACM)

Country: USA

Freq.: Quarterly (4 Issues/ year)

Pub. since: 1994

Visit [here](#)



XRDS: Crossroads

“Computing is not about computers anymore. It is about living,” goes a quote by Nicholas Negroponte, the founder and chairman Emeritus of Massachusetts Institute of Technology's Media Lab. And in a way, this quote very much relates to the content in XRDS: Crossroads.

Available in its print and e-versions, this quarterly is published by the Association for Computing Machinery (ACM) **exclusively for its student members**. Every issue is thematic with the mentions revolving around **“Wearable Computing”** or **“Health Informatics.”** The magazine also brings **interviews, latest research trends, columns, and even career advice articles** on the lines of the theme that is of use to computer science enthusiasts. **Major conferences, grants and fellowships, calls for papers**, and other useful details are also included to facilitate the students to look forward to remarkable educational careers.

Subject wise List

Biological Engineering

- Microbe Magazine
- Scientist (The)

Chemical Engineering

- C & EN: Chemical & Engineering News
- Chemical Engineering Progress

Chemistry

- Chemistry World
- Electrochemical Society Interface

Civil Engineering

- Bulletin of the American Meteorological Society
- CI Magazine: Concrete International Magazine
- Civil Engineering Magazine

Computer Science and Engineering

- ACM Inroads
- ACM Queue
- Communications of the ACM
- eLearn
- IEEE Spectrum
- Interactions
- Queue (ACM)
- Ubiquity
- XRDS: Crossroads

Electrical & Electronic Engineering

- Circuit Cellular
- Electronic Design
- IEEE Potentials
- IEEE Spectrum
- Optics & Photonics News

General

- JSTOR Daily
- Knowable Magazine
- National Geographic
- Wired

Humanities and Social Science

- Economic and Political weekly
- Economist (The)
- Harvard Business Review

Material Science

- MRS Bulletin

Mathematics

- American Mathematical Monthly (The)
- Bhāvanā
- College Mathematics Journal (MAA)
- MAA FOCUS
- Math Horizons
- Mathematical Intelligencer (The)
- Mathematics Magazine
- Notices of the American Mathematical Society
- PRIMUS
- SIAM News

Mechanical Engineering

- Autocar
- Automotive Engineering
- Mechanical Engineering Magazine
- Machine Design
- Popular Mechanics

Multidisciplinary

- American Scientist
- MIT Technology Review
- Nature
- Popular Science
- Resonance: Journal of Science Education
- Science
- Scientific American
- Standardization News (ASTM)

Physics

- Physics (APS)
- Physics Today
- Physics World

Science & Technology

- Current Science
- Discover Magazine
- Down to Earth
- Everyman's Science
- New Scientist
- Science and Culture
- Science Reporter
- Standardization News (ASTM)

Magazines Published by IEEE (54)

- IEEE Aerospace and Electronic Systems Magazine
- IEEE Annals of the History of Computing
- IEEE Antennas and Propagation Magazine
- IEEE BITS the Information Theory Magazine
- IEEE Circuits and Devices Magazine
- IEEE Circuits and Systems Magazine
- IEEE Cloud Computing
- IEEE Communications Magazine
- IEEE Communications Standards Magazine
- China Communications
- IEEE Computational Intelligence Magazine
- Computer
- IEEE Computer Applications in Power
- IEEE Computer Graphics and Applications
- Computing in Science & Engineering
- IEEE Concurrency
- IEEE Consumer Electronics Magazine
- IEEE Control Systems
- IEEE Design & Test
- IEEE Distributed Systems Online
- IEEE Electrical Insulation Magazine
- IEEE Electrification Magazine
- IEEE Electromagnetic Compatibility Magazine
- Engineering & Technology
- IEEE Geoscience and Remote Sensing Magazine
- IEEE Industrial Electronics Magazine
- IEEE Industry Applications Magazine
- IEEE Instrumentation & Measurement Magazine
- IEEE Intelligent Systems
- IEEE Intelligent Transportation Systems Magazine
- IEEE Internet Computing
- IEEE Internet of Things Magazine
- IT Professional
- IEEE Micro
- IEEE Microwave and Wireless Components Letters
- IEEE Microwave Magazine
- IEEE MultiMedia
- IEEE Nanotechnology Magazine
- IEEE Network
- IEEE Pervasive Computing
- IEEE Power and Energy Magazine
- IEEE Power Electronics Magazine
- IEEE Power Engineering Review
- IEEE Pulse
- IEEE Robotics & Automation Magazine
- IEEE Security & Privacy
- IEEE Signal Processing Magazine
- IEEE Software
- IEEE Solid-State Circuits Magazine
- IEEE Systems, Man, and Cybernetics Magazine
- IEEE Technology and Society Magazine
- IEEE Vehicular Technology Magazine
- IEEE Wireless Communications
- IEEE Women in Engineering Magazine

Some other Magazines

- AI Magazine
- AMS Bulletin
- Archeology: A publication of the Archeological Institute of America
- ART India
- Better Photography
- Bharatiya Vaigyanik Evam Audhyogik
- Biblio: A Review of Books
- Book Review (The)
- Business India
- Business Today
- Caravan (The)
- Chemical Product Finder
- Communication Arts
- Dataquest
- Design Issues
- Domus India
- Expedition Magazine
- Express Computer
- Eye Magazine
- Forbes India
- Form
- Fortune India
- Frontline
- Hydrolink
- India Today
- Industrial Product Finder
- Inside Outside
- Kurukshetra
- Open Source for You
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