IEEE Executive Director & COO Address

Region 10 Meeting
26 February 2022
Stephen Welby, IEEE Executive Director & COO
Inspiring a Global Community of Innovation
Where forward-thinking technology professionals collaborate

- Discover what’s next in technological innovation
- Create international standards
- Build technical communities
- Shape and share research

Our Mission
The core purpose of IEEE is to foster technological and excellence for the benefit of humanity

Our Vision
IEEE will be essential to the global technical community and to technical professionals everywhere, and be universally recognized for the contributions of technology and of technical professionals in improving global conditions
IEEE Membership

- Total Membership: 421,427 members
  - Change from January 2021: 3.5% increase
- Higher Grade Membership (without GS): 285,966 members
  - Change from January 2021: 1.6% decrease
- Undergraduate Student Membership: 83,836 members
  - Change from January 2021: 23.4% increase
- Graduate Student Memberships: 51,635 members
  - Change from January 2021: 6.1% increase

All figures are end of January 2022 and reflect the same time period YoY for 2021 unless otherwise noted.
IEEE Membership

Total Society Membership excluding affiliates: 336,632
  ▶ Change from January 2021: 4.9% increase
    - 23 societies increased by more than 1%
    - 9 societies decreased by more than 1%
    - 7 societies saw increases or decreases of +/- 1%

IEEE- Standards Association Membership: 8,577
  ▶ Change from January 2021: 10.8% increase

All figures are end of January 2022 and reflect the same time period YoY for 2021 unless otherwise noted.
2021 IEEE Annual Statistics to be Released

- The Annual Statistics of the IEEE is a 2021 year-end statistical snapshot of IEEE
- Section A: IEEE membership statistics
  - Membership by Region and Grade
  - Life Members, Women Members
  - Members by Grade, 1963-2020
  - Region 1-10 Membership by Section, by Grade
- Section B: Student Branch Statistics
- Section C: Society membership and Chapter statistics
- Section D: Society affiliates and other statistics
- Section E: Member technical interest and IEEE meeting/conference activity
- Section F: Organization statistics

https://mga.ieee.org/resources/annual-statistics
Phishing Email Attacks are a Threat to IEEE

Attackers impersonate executives to make urgent requests for wire transfers or invoice payment

- Attackers research their victims and send targeted emails using titles and familiar names that are readily available online
- They use spoofed emails, look-like email addresses and domain names, or at time through compromised business email (BEC)
- First email could be just to establish a connection but then all of them have an urgent request for a payment, money transfer or gift cards
- These requests will appear as if coming from a member of the organization or from a vendor or partner

How to protect yourself and IEEE

- Be very suspicious of any urgent request for information of for money, and always verify
- Use a secondary channel to validate any request (e.g., calling the impersonated individual) and never use any information from the email
- Exercise caution when the request is not following the normal IEEE process or if the request appears unconventional such as requests to buy gift cards.
- Look for red flags such as spoofed email (hover your mouse over the contact's name), slightly modified domain name or new banking information. Don’t click on links from suspicious emails
- Forward all suspicious emails to security@ieee.org
IEEE Conferences Remained Strong in 2021

Opportunities for global participants to convene, share, and innovate

570K+ Participants in 2021

- Global reach of more than 570K participants
  - 21% conferences with in-person component
  - 98% conferences with virtual component
Publications in 2021

*Integrity, sustainability, and efficiency*

- Launched the **Author Portal** – a cornerstone of our strategy focused on the author and researcher.
- Continued success of **Gold Open Access** program:
  - 21 of 23 titles on track for a Journal Impact Factor in mid-2023
  - 2021 revenues from Gold OA titles (accelerated & non-accelerated) grew by 20% over 2020
- Launch of **redesigned IEEE Spectrum** print and online editions:
  - Visitors, engaged minutes, and registrations all up significantly (100%+)
  - Commercial advertising revenue up 10% over prior year
- Cleared backlog of ethics cases, created new Director of Publishing Ethics & Conduct staff position, and expanded the Periodical Conduct Committee to ensure the highest standards in *research integrity*.
- **Automated processes** for Periodical Review & Assessment Committee (PRAC) and launched the Editor-in-Chief dashboard for continuous monitoring of journal health
- **Decreased production costs** for periodicals by 5% over 2020.
Education Week™

A week-long celebration of education from IEEE

- Live and virtual events
- Educational resources, courses, websites, and scholarships
- Special offers on education for IEEE members
- Earn points and an Education Week badge for participating all week
- All IEEE groups are invited to share their educational content on the website
  - 60+ already participating
- Interested in participating or learning more? Contact Jennifer Fong: j.fong@ieee.org

educationweek.ieee.org

4-8 April 2022
Initiated by 2020 IEEE President Toshio Fukuda during the 2020 IEEE Board of Directors Strategic Retreat

Developed by the 2020 & 2021 IEEE Ad Hoc Committees on Lifelong Learning and Continuing Education

IEEE Academy on IoT offers two learning paths with technical focus on:
- Communication Standards [available now on ILN](#)
- Computing Platforms [available now on ILN](#)

IEEE Academy on Smart Grid (Distribution Automation & Microgrid) and IEEE Academy on Artificial Intelligence are also being developed

[www.ieee.org/education/academy-index.html](http://www.ieee.org/education/academy-index.html)
IEEE Humanitarian Activities Committee Update

▸ **IEEE HAC/SIGHT Success Story Portfolio**: Featuring the stars of funded humanitarian technology and sustainable development projects and initial impact of the IEEE HAC/SIGHT COVID-19 response within local team’s community

▸ **IEEE HAC Impact Survey**: demonstrates that HAC benefits and offerings deliver real value to IEEE and the communities impacted by HAC/SIGHT volunteers:
  - 95% are likely to renew their IEEE Membership; 70% say participation in HAC/SIGHT activities has a strong influence on their likelihood to renew their Membership
  - 87% agreed this position introduced them to new social or professional connections.
  - Over 83% agreed they developed new area(s) of expertise and improved skills such as leadership, communication with others, collaboration with others, project management, and identifying the right metrics to assess a project
  - 87% say that members of their HAC/SIGHT team have become IEEE Members as a result of participating

▸ **IEEE SIGHT Membership**: Concluded 2021 with **23,390** members, **68%** of which are Student or Graduate Student Members, **10,726** new members added last year
IEEE History Center Oral History Program

Peer-to-peer interviewing program

- The IEEE History Center is continuing its effort to expand the peer-to-peer oral history interviewing program, with a focus on IEEE Life Fellows
- As a part of the project, India Office conducted interviews of two prominent IEEE life fellows Professor LM Patnaik and Professor Aatre
- Volunteers and their Organizational Units are encouraged to contact the History Center to participate

Learn more here
IEEE Women in Engineering (WIE) Celebrates 25 Years!

Various activities planned for the yearlong celebration

- 25 Years of Women in Engineering panel discussion with current and past chairs on the future of IEEE WIE
- Extraordinary Women, Extraordinary Science Seminar Series
- “Women-to-Women Tech Ideas Dedicated to Women” Competition
- 12-hour live event with WIE Affinity Group Chairs around the globe

Watch on IEEE.tv

https://wie.ieee.org/wie-25th-anniversary
2022 IEEE President & CEO Social Media Platforms

- @IEEEPresident profile on Facebook, Instagram, LinkedIn, Twitter, and the President’s Corner on IEEE App
- Follow Ray Liu, 2022 IEEE President and CEO, and get updates and information from across IEEE, your professional home
  - [https://www.facebook.com/ieeepresident](https://www.facebook.com/ieeepresident)
  - [https://www.instagram.com/ieeepresident/](https://www.instagram.com/ieeepresident/)
  - [https://www.linkedin.com/showcase/ieeepresident](https://www.linkedin.com/showcase/ieeepresident)
  - [https://twitter.com/ieeepresident](https://twitter.com/ieeepresident)
2022 Risks to the IEEE Conference Business

Continued uncertainty in external environment

- Higher risk without insurance for COVID variants
- Limited Force Majeure protection must be specifically negotiated regarding COVID
- International travel remains suppressed, governments as well as travel partners experiencing staffing shortages and increased inconvenience
- Expect robust conference proceedings from virtual conferences, but lower margin on events themselves
- Highest risks are for biggest events (e.g., T&D) events where income could be affected primarily by exhibitors
- Cost basis for hybrid higher than either virtual or face-to-face; but can be managed and mitigated by working together. Flexibility and support are key.
- Other factors - inflation & evolving governmental guidelines on closings/gatherings, staffing

On the other side...

- Expect continued improvement in outlook
- Strong desire to return to face-to-face
- Conference team focused on helping organizers limit obligations (e.g., “right-size”), make anticipatory agreements with exhibitors and adjust pricing to work towards restoring the net
- Good volunteer staff coordination as we work together in fast changing environment.
IEEE Conferences Achieve Record-Breaking Publications in 2021

208K+
Conference papers published in IEEE Xplore® in 2021