

# AAAS Engineering Section



**Virtual Business Meeting**  
**February 10, 2022**

# Agenda

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- ❑ Leadership and leadership changes for our section
- ❑ Short summary of latest AAAS activities
- ❑ Ideas for our section's programming for 2023 Annual Meeting
- ❑ New AAAS Fellows
- ❑ Review of Fellow nomination process
- ❑ Other business

# Current Engineering Section Leadership

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- Chair: Jennifer Curtis, UC Davis\*
- Past Chair: Nicholas Abbott, Cornell University
- Secretary: Marwan Simaan, U of Central Florida
- Members-at-Large:
  - Ilona Kretzschmar, City College of New York, CUNY\*
  - Anne Robinson, Carnegie Mellon University
  - Pramod Khargonekar, UC Irvine
- Council Delegate
  - Jacqueline Chen, Sandia National Laboratories

\* **term ends Feb 20, 2022**

# Steering Group Changes

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- Due to the modernization process at AAAS, beginning with 2023 the new cycle of election for Steering Group members will be from January 1 to December 31 instead of the period between two consecutive annual meetings
- Chair: Nicholas Abbott, Cornell University
  - Previous service as Chair of Engineering Section
- Member-at-Large: Sankar Basu, NSF
  - Previous service as Council Delegate representing our section
- Will serve from February 21–December 31, 2022

# Summary of Update from AAAS CEO & Leadership

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- Model for governance of AAAS has not changed in over 70 years
- Governance Modernization Project launched in April 2020
- Strategic Planning – process recently launched
- Program Evaluation
  - Mission alignment and impact
  - Financial sustainability

# Financial

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- ▣ Deficits for 2014-2019 (up to \$10M annually)
- ▣ Surplus in 2020
- ▣ Surplus in 2021
- ▣ Significant growth in reserves (now \$90M)

# Governance Modernization

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- Nearing conclusion of process

## Goals

- Improve flexibility and adaptability
- Streamline governance structure
- Make structure more transparent and intuitive
- Enable timely decision making

# Governance Modernization

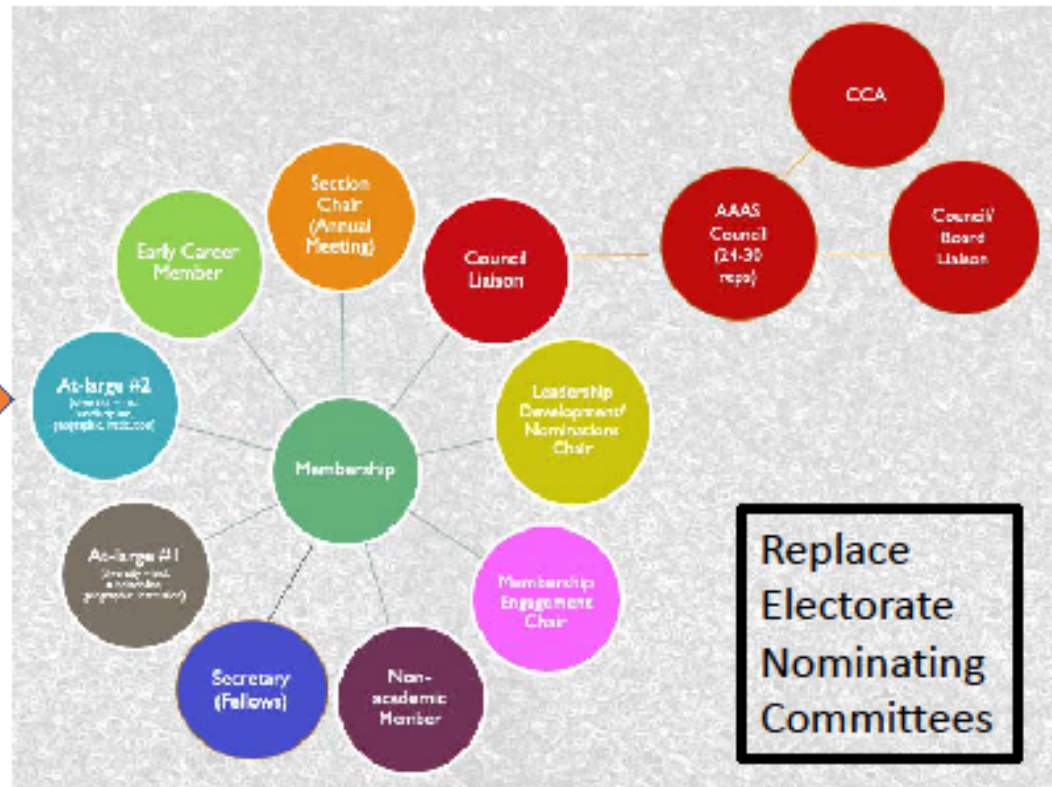
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- Enhance how AAAS engages volunteers
  - Allow leaders and volunteers to focus on important work and less on administrative duties
- Expand voices at the table
  - More diverse and integrated governing bodies
- Establishment of nimble, multidisciplinary committees to consider and advise on pressing science and policy issues
  - Enable AAAS to speak with a stronger voice
- Work in progress
- Marwan serves on Governance Modernization Committee



## Section Steering Group – What is changing?

- **Chair-line** is 3-year term (Chair-elect, Chair, Retiring Chair); new Chair-elect elected annually by Section membership
- **Member-at-Large** is 4-year term (1 elected annually by Section membership)
- **Secretary** is appointed for 4-year term by the Steering Group (renewable indefinitely)



## COUNCIL – What is changing?

- Chaired by AAAS President
- Council is comprised of representatives from across AAAS governance structure
- Size fluctuates (Section membership dictates number of elected Council Delegates)
  - Usually ~80 members total
  - Each Section has minimum of 2 Council representatives: at least 1 Council Delegate, plus Steering Group Retiring Chair



- Chair elected by Council
  - Chair of Council serves on AAAS Board
- Council would consist of one councilor per Section, four at-large seats to ensure diversity of participation, a representative of the presidential line, and the CEO (ex officio)
- ~30 members total
- Establishment of ad hoc committees to take on policy issues and statements for approval by the board

# Updates

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## □ Journals

- Science
- Science Advances
- Science Robotics
- Science Translational Medicine
- Science Immunology
- Science Signaling

Significant increase in submissions

Increasing impact

# Government Relations-Related Activities

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- Science and Technology Policy Fellowships
  - Integrate science into decision-making by building trust with federal government
  - 284 fellows in 2021
  
- Center on Scientific Evidence in Public Issues (EPI Center) - Newer program
  - Provides significant support and scientific evidence to legislatures as they write policy relating to science
  - Wide range of decision makers, local, state, regional and national decision makers
  
- Federal Science Budget Analysis
  - Appropriations not finalized
  - Large budget increases (except DOD) requested

# Programs – Serving Society

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- AAAS Mission “Advance science and serve society”
- Dialogue on Science, Ethics, and Religion
  - Engagement with religious leaders and seminaries
  - Integration of science in courses (over 200 small grants awarded in 2021)
- Center for Public Engagement
  - Train scientists to effectively communicate with wide range of stakeholders – workshop and seminars for scientists (over 1100 individuals participated in 2021)
- SciLine Program
  - Engagement with media
  - Helps increase science and scientists in news stories
  - Science requests from reporters (over 900 requests in 2021)

# DEI Activities

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- ❑ 2020 DEI Report and Plan “Nurturing Diversity, Equity and Inclusion” in the Scientific Enterprise

## Preface

- ❑ Scientific enterprise should reflect the society
- ❑ Diverse teams are critical to achieve scientific excellence
- ❑ AAAS has a role to play to drive progress
- ❑ AAAS should expand collaboration to solve global challenges

# DEI Activities

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- Hired DEI Manager
  - Recruitment, compensation
- Engaged a learning and education company, Winters Group
  - training, improving climate, cultural competencies
- Employee-led Groups
- Data Gathering
  - those engaged with AAAS functions - missing data....but based on available data, diversity improving
  - science journals – women are underrepresented as both authors and reviewers

# DEI Activities

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- DEI in Strategic Plan
- Embed DEI into existing programs, if DEI is not at the heart of the program
- ISEED Program (Inclusive STEMM Ecosystem for Equity and Diversity) – includes many projects that support representation of all people
  - SEA Change Program – guides universities through self-assessment process and institutional transformation (18 universities so far)



# 2022 Section Programming

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- For 2022 Annual Meeting, over 20 sessions led by engineers
  
- Submission of proposal
  - Short Synopsis
  - Newsworthiness
  - Relevance to Meeting Theme
  - Relevance to other Sessions
  - Possible Speakers
  
- Evaluation
- If 'tentatively' chosen, some edits required

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# **Ideas for Programming for 2023**

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**CONGRATULATIONS TO  
OUR NEW AAAS FELLOWS!**

# 40 New Fellows (Engineering Section)

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- **Arvind Agarwal** *Florida International University*
- **Norma Alcantar** *University of South Florida*
- **Ruzena Bajcsy** *UC Berkeley*
- **Morton A. Barlaz** *North Carolina State University*
- **Georges Belfort** *Rensselaer Polytechnic Institute*
- **Pratim Biswas** *University of Miami*
- **John E. Bowers** *UC Santa Barbara*
- **Gary J. Cheng** *Purdue University*
- **Giovanni De Micheli** *Swiss Federal Institute of Technology (EPFL) (Switzerland)*
- **Delcie Rena Durham** *University of South Florida*
- **Rachel S. Goldman** *University of Michigan*

# 40 New Fellows (Engineering Section)

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- **Olivia A. Graeve** *University of California, San Diego*
- **Dorota A. Grejner-Brzezinska** *The Ohio State University*
- **Susan Hagness** *University of Wisconsin-Madison*
- **Ayman Hawari** *North Carolina State University*
- **Xiaoping Hu** *University of California, Riverside*
- **Joseph Irudayaraj** *University of Illinois Urbana-Champaign*
- **Bjorn Ingemar Johansson** *Chalmers University of Technology (Sweden)*
- **Erick C. Jones Sr.** *University of Texas at Arlington*
- **Kourosch Kalantar-Zadeh** *University of New South Wales (Australia)*

# 40 New Fellows (Engineering Section)

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- **Ranu Jung** *Florida International University (Emeritus )/University of Arkansas*
- **Leo Charles Kempel** *Michigan State University*
- **Michael R. King** *Vanderbilt University*
- **Nikhil Ashok Koratkar** *Rensselaer Polytechnic Institute*
- **Xiuling Li** *The University of Texas at Austin*
- **Karl G. Linden** *University of Colorado Boulder*
- **Elizabeth G. Loba** *Southern Methodist University*
- **Judith L. MacManus-Driscoll** *University of Cambridge (United Kingdom)*

# 40 New Fellows (Engineering Section)

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- **Lance Manuel** *The University of Texas at Austin*
- **Ying Shirley Meng** *UC San Diego*
- **Karen Ann Panetta** *Tufts University*
- **Jose C. Principe** *University of Florida*
- **Chris B. Schaffer** *Cornell University*
- **David Alan Shifler** *U.S. Office of Naval Research*
- **John W. Sutherland** *Purdue University*
- **Madhava Syamlal** *U.S. Department of Energy, National Energy Technology Laboratory*
- **Evelyn Ning-Yi Wang** *MIT*
- **Sharon Weiss** *Vanderbilt University*
- **Huili Grace Xing** *Cornell University*
- **Yannis Yortsos** *University of Southern California*

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# **FELLOW NOMINATION PROCESS**



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# **OTHER BUSINESS**