# Sensors Council

The Sensors Council returns value to its 26 IEEE member societies by serving the community in the multi-disciplinary technical area of Sensors. This coverage includes publications, conferences, Distinguished Lecturers, and more services that complement the member society's offerings.

## IEEE SENSORS COUNCIL SCOPE

The fields of interest of the Council and its activities shall be the theory, design, fabrication, manufacturing and application of devices for sensing and transducing physical, chemical, and biological phenomena, with emphasis on the electronics, physics and reliability aspects of sensors and integrated sensor-actuators.

The purpose of the Sensors Council is to foster joint activities among societies engaged in sensors-related research and/or use of sensors in specific applications.

## **COUNCIL HISTORY**

When the Council was formed in 1999, each of the 26 joining member societies paid a one-time fee of \$2,000. Thereafter, the annual financial obligation of our member societies is the annual cost to send society-appointed, one member representative to the two semi-annual AdCom meeting. The Fall meeting is hosted annually in conjunction with the IEEE SENSORS conference. In 2016, a second meeting was added to allow for early engagement of new volunteers, improve consistency of programs and projects, enhanced training and mentoring of volunteers, and a greater involvement of AdCom members in Council activities and programs.

The only on-going financial obligation of our member societies is the annual costs to send one volunteer (societyappointed member representative) to the AdCom meetings. Previously, one meeting was held each year at the IEEE SENSORS Conference location. Starting in 2016, a 2nd meeting was added for the following reasons: 1) early engagement of new volunteers (waiting until November was not efficient); 2) consistency of programs/projects; 3) better training and mentoring of volunteers; and 4) a deeper involvement of AdCom members in Council programs.

# FINANCIAL

The Council was able to leverage its \$52,000 startup funding from member societies and is self-sustaining. The Council reserves have stayed above 50% of annual expenses since formation. Member societies are not liable for financial risks of the Council.

## SENSOR COUNCIL CONFERENCES (100% SPONSOR)

- IEEE SENSORS Started in 2002, SENSORS is the annual, flagship conference with a 3-year international, geographic rotation – Americas, Europe/Middle-East/Africa, and Asia/Pacific. ieee-sensorsconference.org
- IEEE Inertial Sensors & Systems (INERTIAL) started in 2013 ieee-inertial.org
- IEEE Conference on Flexible and Printable Sensors and Systems (FLEPS) started in 2019 ieee-fleps.org

#### SHARED CONFERENCES

• Symposium on Olfaction and Electronic Nose (ISOEN) - isoen.org

# SENSORS COUNCIL PUBLICATIONS (100% SPONSOR)

- **Sensors Journal** Started in 2001, a fully-digital publication with 1000+ papers annually and a median time to e-publication of 8 weeks.
- Sensors Letters Started in 2017, a rapid-disclosure, length-limited, online publication addresses sensor technologies and applications across all member society disciplines

## SHARED PUBLICATIONS

- IEEE Transactions on Big Data (7.5%)
- IEEE Transactions on Games (ToG) (5%)
- IEEE Journal of Electromagnetics, RF and Microwaves in Medicine and Biology (J-ERM) (10%)
- IEEE Journal on Miniaturization for Air and Space Systems (J-MASS) (25%)
- IEEE Internet of Things Journal (34%)

## SENSORS STANDARDS

The Council's Standards Committee and Member Society Relations Committee work together to organize standards-related workshops at Member Societies' conferences. In 2015, the Industry Liaison Committee was formed to coordinate the Council's industry initiatives including the search for new sensor standard topics, to create sponsorships and links between industry and Council conferences.

## DISTINGUISHED LECTURERS

Distinguished Lecturers promote the field of Sensors to the broad engineering and scientific community, and to the public at large by lecturing at local IEEE chapters, universities and companies, high schools, and science fairs. ieeesensors.org/dlp

# **IEEE SENSORS COUNCIL CHAPTERS**

Currently, IEEE Sensors Council (SEN 39) has 28 chapters at Section level and 21 Student Branch chapters, which are organized by local groups with interested in promotion Sensors. Visit the website for contact information and how to start a chapter.

ieee-sensors.org/chapters

- Bangalore
- Boston
- Central Texas
- Chicago
- China
- Cleveland
- Dallas
- France
- Galveston Bay
- Gujarat
- Harbin
- Italy
- Kitchener-Waterloo
- Malaysia
- Mexico

## Montreal

- Nanjin
- New South Wales
- NoVA/Washington, DC
- Richland
- Santa Clara Valley/San Francisco/Oakland-East Bay
- Singapore
- Spain
- Tainan
- Taipei
- Tunisia
- UK and Ireland
- Vancouver



Technical Councils are established for the purpose of providing a continuing mechanism for two or more IEEE societies called Member Societies to work together in a multi-disciplinary technical area of mutual interest. Councils are defined by IEEE policies and may be created by TAB. Every member society of a Council appoints its own representative to the Council.

## **COUNCIL MEMBERSHIP BENEFITS FOR SOCIETIES**

#### Member Societies control the Council

• A society-appointed representative holds a voting seat on the Administrative Committee (AdCom) and provide direct input to Council direction. These representatives are encouraged to participate in Council committees, similarly, influencing future activities.

The Council is not in competition for society members

 Council participants don't pay dues, only Member Societies. Therefore, there is no competition in membership between Member Societies and the Sensors Council.

## The Council offers visibility to its Member Societies

- Each Member Society's home page is linked on the Council website
- Opportunity to advertise on the Council's website, newsletter, and on social media channels
- At the SENSORS Conference, Member Society informational slides are highlighted between sessions. Also, at SENSORS a shared booth space is available at no cost to societies. Sensors Council AdCom members are available at our exhibit booth to assist IEEE member attendees in obtaining IEEE Senior Member elevation. Option for Member Society sponsored conferences or publications advertising material can be added to SENSORS attendee bags.

## The Council offers services to Member Society members

The Sensors Council Distinguished Lecturer Program (DLP) promotes the field of sensors to the broad engineering and scientific community and to the public at large. DL's are available to present at conferences and chapter meetings. ieee-sensors.org/distinguished-lecturer-program

- Technical conferences, presentations, standards and publication deliver value to your society members who are technology-focused IEEE members whose careers involve sensors technology research, development, and applications.
- · Joint ventures and partnerships with the Council
- Member Society member can hold a range of editorial positions for the Sensors Council publications

## IEEE SENSORS COUNCIL MEMBER SOCIETIES

Aerospace and Electronic Systems Antennas and Propagation **Broadcast Technology Circuits and Systems** Communications Computer Consumer Technology Dielectrics and Electrical Insulation Electromagnetic Compatibility Electron Devices **Electronics Packaging** Engineering in Medicine and Biology Industrial Electronics **Industry Applications** Instrumentation and Measurement Magnetics Microwave Theory and Techniques Oceanic Engineering Photonics Power and Energy Reliability **Robotics and Automation** Signal Processing Solid State Circuits Ultrasonics, Ferroelectrics, and Frequency Control Vehicular Technology

ieee-sensors.org/member-societies

## **IEEE SENSORS COUNCIL CONTACTS**

# President (2020-2021)

ANDREI SHKEL ashkel@uci.edu

## **President Elect**

RAVINDER DAHYIA ravinder.dahiya@glasgow.ac.uk

#### Past President

FABRICE LABEAU fabrice.labeau@mcgill.ca

## Publicity Chair

CHRIS SCHOBER cmschober@icloud.com