# IEEE Solid-State Circuits Society Administrative Committee Virtual Meeting Minutes

Tuesday and Wednesday, March 15th and 16th, 2022

### **ATTENDEES:**

### **VOTING MEMBERS PRESENT:**

Amara Amara Frank O'Mahony
Emre Ayranci Yusuke Oike
Bill Bowhill Rikky Muller
Andreia Cathelin Kazuko Nishimura
Vivek De Makoto Nagata
Terri Fiez Kenneth O
Daniel Friedman Shanthi Pavan

Ichiro Fujimoro Esther Rodriguez-Villegas

Danielle Griffith Woogeun Rhee
Makoto Ikeda Farhana Sheikh
Chulwoo Kim Ali Sheikholeslami
Alvin Loke Hoi-Jun Yoo

John R. Long

# **VOTING MEMBERS ABSENT:**

**Bram Nauta** 

#### **NON-VOTING MEMBERS PRESENT:**

**Eugenio Cantatore** John Corcoran Antonio Liscidini Romane Dumont Alvin Loke Pavan Kumar Hanumolu Zeynep Lulec **Boris Murmann** Peter Harpe Azad Naeemi **Bruce Hecht** Waleed Khalil Willy Sansen Jan Van der Spiegel Rabia Yazicigil Kirby **Trudy Stetzler** Rakesh Kumar

Kathy Wilcox

Filip Tavernier

# **NON-VOTING MEMBERS ABSENT:**

Leo Belostotski Bill Bidermann Tony Chan Carusone Dave Hodges Dick Jaeger Stephen Kosonocky Tom Lee
Domine Leenaerts
Michael Steyaert
Lew Terman
Hua Wang
Bruce Wooley

# **GUESTS:**

N/A

# **STAFF:**

Adam Greenberg Abira Altvater Danielle Marinese Lauren Caruso

#### **SUMMARY OF MOTIONS**

**MOTION 1:** To approve the Meeting Agenda. The motion was made by John Long with a second by Terri Fiez. **The motion passed.** 

**MOTION 2**: To approve the meeting minutes of the previous AdCom Meeting held in September 2021. The motion was made by John Long with a second by Hoi-Jun Yoo. **The motion passed.** 

**MOTION 3:** To advance \$600K to support ISSCC 2023. The motion was made by the Conferences Committee. **The motion passed.** 

**MOTION 4:** To request \$25K for organizing educational activities at ISSCC 2023. The motion was made by the Conferences Committee. **The motion passed.** 

**MOTION 5:** To advance \$60K to support CICC 2023. The motion was made by the Conferences Committee. **The motion passed.** 

**MOTION 6:** To renew RFIC conference co-sponsorship. The motion was made by the Conferences Committee. **The motion passed.** 

**MOTION 7:** To re-initiate Hot Chips conference co-sponsorship. The motion was made by the Conferences Committee. **The motion passed.** 

**MOTION 8:** To initiate Hot Interconnects conference co-sponsorship. The motion was made by the Conferences Committee. **The motion passed.** 

**MOTION 9:** To approve all Publications page counts for 2023. This motion was made by Shanthi Pavan with a second by Alvin Loke. **The motion passed.** 

**MOTION 10:** To create the technical committee – "Open-Source Ecosystem (OSE)". The motion was made by the Solid-State Circuits Directions Committee. **The motion passed.** 

**MOTION 11:** To adjourn the meeting until 9:00 AM ET on Tuesday, March 16<sup>th</sup>. The motion was made by John Long with a second by Emre Ayranci. **The motion passed.** 

**MOTION 12:** To participate in the IEEE Multi-Society Discount Program in the 2023 and 2024 Membership years. The motion was made by the Membership Committee. **The motion passed.** 

**MOTION 13:** To operationalize \$22K/year Chronus software costs within the base budget starting in 2023. The motion was made by the Membership Committee. **The motion passed.** 

**MOTION 14:** To allow up to \$200,000 to be donated outright to the SSCS James D. Meindl Memorial Educational Fund, instead of as a matching grant, The motion was made by John Corcoran, second by Dan Freidman. **The motion passed.** 

**MOTION 15:** To adjourn the meeting. The motion was made by Kenneth O with a second by Alvin Loke. **The motion passed.** 

# **SUMMARY OF ACTION ITEMS**

**ACTION ITEM 1: (Owner: Abira Altvater)** 

**ACTION ITEM 2:** Work with MCE and research if it is acceptable to give a reviewer free registration to an IEEE SSCS sponsored conference. **(Owner: Danielle Marinese)** 

**ACTION ITEM 3:** Work with IEEE Educational Activities (EA) to see how SSCS and EA can collaborate on Circuit Insights 2022 **(Owner: Abira Altvater)** 

**ACTION ITEM 4:** Send free and/or discounted membership codes to Circuit Insights attendees (**Owner: Adam Greenberg and Abira Altvater**)

#### **MEETING NOTES**

# Tuesday, 15<sup>th</sup> March 2022:

# 09:05 Introduction and Housekeeping – Emre Ayranci

- Emre and Adam explained the online AdCom format.
- Voting and motions will be done via unanimous consent.
- For further details beyond the meeting notes, all presentations can be found at the link:
- The meeting will be recorded.

### 09:09 Roll Call – Adam Greenberg

• A quorum was present.

# 09:12 Presidents Welcome – John Long

- John welcomed the new and returning members to the AdCom.
- Society finances are robust despite the Covid-19 pandemic, success stories include: SSCD and PICO, Circuit Insights, Chapter revitalization, OJ-SSCS, Meindl Fund established, increase in membership, etc.
- Challenges include: recruiting volunteers, new project execution, increasing diversity, impact factor for new journals, migration from virtual back to in-person events, etc.
- John recognized outgoing AdCom volunteers.

**MOTION 1:** To approve the Meeting Agenda. The motion was made by John Long with a second by Terri Fiez. **The motion passed.** 

**MOTION 2**: To approve the meeting minutes of the previous AdCom Meeting held in September 2021. The motion was made by John Long with a second by Hoi-Jun Yoo. **The motion passed.** 

#### 09:23 Treasurer's Report – Terri Fiez

- Financial situation is strong it's a combination of no travel and a strong ISSCC surplus
- Revenue higher than planned due to (ISSCC), expense is lower than planned due largely to less travel.
- A number of projects have been approved in 2022 (\$~800K Avaliable) Full list of projects can be found on Slides 5 & 6 of the presentation.

#### 09:30 Conferences Committee – Alessandro Piovaccari

- Accomplishments of the Conferences Committee include: A new VP and Associate VP, formation
  of a new conferences committee, and establishing four new initiatives.
- New Conferences Committee has been formed (includes President and Treasurer, VP and Associate VP of Conferences, one representative from each financially sponsored conference,

- and two members-at-large).
- New Initiatives: Define process for conference organizing committee; Hybrid format guidelines
  for conferences; Build a conference quick reference guide (information on SSCS meetings,
  motions, and MOUs, etc); Expand on education and democratization of Silicon initiatives within
  conferences.
- A common registration platform within SSCS-sponsored conferences would be ideal, however, there are some challenges with a common registration platform, especially with technically cosponsored conferences. We would need to come to an understanding with other societies.

**MOTION 3:** To advance \$600K to support ISSCC 2023. The motion was made by the Conferences Committee. **The motion passed.** 

**MOTION 4:** To request \$25K for organizing educational activities at ISSCC 2023. The motion was made by the Conferences Committee. **The motion passed.** 

**MOTION 5:** To advance \$60K to support CICC 2023. The motion was made by the Conferences Committee. **The motion passed.** 

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**MOTION 8:** To initiate Hot Interconnects conference co-sponsorship. The motion was made by the Conferences Committee. **The motion passed.** 

## 09:53 Education Committee/DL Program – Ali Sheikholeslami

- Frank O'Mahony was appointed as Associate VP of Education (and Distinguished Lecturer Chair).
- Distinguished Lecturer (DL) Program: 14 people are on the roster through 12/2022 and 15 people are on the roster through 12/2023. In 2021, there were 73 total visits (8 In-Person, 4 Hybrid, and 61 Virtual).
- Webinar Program: We've been consistently holding webinars once a month. There were 3900 live attendees for 2021 webinars (325/month on average), with many more views via Resource Center and YouTube. We should have recognition for webinar speakers.
- SSCS YouTube Channel: We currently have (as of March 2022), 6,820 subscribers on the SSCS YouTube Channel.
- CONFedu: Organization of the material on the SSCS YouTube Channel is underway (total of 20 playlists to be organized by topic and event). New CONFedu invitations will be sent out soon, no need to tie it to conferences. We will provide an honorarium for contributions.
- Video Primers: Videos of topics related to SSCS presented by experts to secondary and undergraduate students (3-4 mins in length). Initial goal is to start with five videos.
- Resource Center: 16,090 users (as of March 2022) with most users from USA, India, and China.
- Circuit Design Contest: We've initiated a new contest format this year with a puzzle type question, this should expand the number of applicants. The deadline for the contest is June 30<sup>th</sup>.

- Circuit Insights 2022: Held in conjunction with ISSCC 2022; 5,133 people attended from six continents and 65 countries. The Circuit Insights videos have now been posted to the SSCS YouTube Channel.
- Education To-Do List: Create public excel sheet of education content, provide in-depth reviews of five ISSCC papers, Minecraft video contest, etc. More information can be found on Slide 23 of the presentation.

**ACTION ITEM 3:** Work with IEEE Educational Activities (EA) to see how SSCS and EA can collaborate on Circuit Insights 2022 (Owner: Abira Altvater)

**ACTION ITEM 4:** Send free and/or discounted membership codes to Circuit Insights attendees (**Owner: Adam Greenberg and Abira Altvater**)

### 10:18 Publications Committee - Shanthi Pavan

- Accomplishments of the Publications Committee include: OJ-SSCS is on a good trajectory, SSC-L
  has been submitted for an Impact Factor, and a new EiC for JSSC has been identified (Dennis
  Sylvester).
- We need to work on lowering the cost for SSC Magazine, we've successfully defaulted to
  electronic option when memberships have been renewed. We need to work on other ways to
  lower costs, such as moving to electronic format only and no longer offering a print option.
- We should recognize JSSC reviewers who have completed a certain number of reviews (ideas
  include rewarding the reviewer with SSCS merch for every five papers reviewed, holding a dinner
  at ISSCC for reviewers, complimentary registration to SSCS conferences, etc).

**MOTION 9:** To approve all Publications page counts for 2023. This motion was made by Shanthi Pavan with a second by Alvin Loke. **The motion passed.** 

**ACTION ITEM 2:** Work with MCE and research if it is acceptable to give a reviewer free registration to an IEEE SSCS sponsored conference. **(Owner: Danielle Marinese)** 

### 10:34 Solid-State Circuits Directions – Boris Murmann

- 2021 SSCD accomplishments included: running two workshops, organizing the SSCS PICO design contest, including a student and young professional on the SSCD committee, and building connections with IEEE Brain and the Computer Society Technical Council on VLSI.
- There is a massive opportunity for SSCS in democratizing IC design; coupling with student contests, educational events, etc.
- SSCD representative will serve on the SSCS Magazine Advisory Board
- SSCD is planning on holding joint events and workshops with IEEE Brain and the Computer Society.
- The chips from the chipathon will be ready in the next few weeks. Once the chips are in hand, there will be regular meetings to measure, leading to a magazine article/report out. Few of the designs can be submitted to conferences, however, the majority of the designs are more educational in nature.

**MOTION 10:** To create the technical committee – "Open-Source Ecosystem (OSE)". The motion was made by the Solid-State Circuits Directions Committee. **The motion passed.** 

#### 10:56 Nominations Committee – Kenneth O

- The Nominations Committee has good diversity and includes people from EU, FE, and NA, and has gender balance.
- The Nominations Committee is currently working on the 2023-2025 Member-at-Large slate. The slate will be announced in May, following a petition process, and voting by SSCS membership in September. The results will be ready in early November.

# 11:04 Open Discussion – ALL

- Brian Floyd will start his tenure as SSCS Secretary at the end of March.
- Boris Murmann will be the Chair of Open-Source Ecosystem (OSE).
- Dennis Sylvester will start his tenure as EiC of JSSC in July.
- Editorial Changes to the Bylaws were made in 2021: Add Associate VP's to each standing committee (Membership, Education, Conferences, and Publications).

### 11:15 Procedural (Recess) - John Long

**MOTION 11:** To adjourn the meeting until 9:00 AM ET on Tuesday, March 16<sup>th</sup>. The motion was made by John Long with a second by Emre Ayranci. **The motion passed.** 

# Wednesday, 17th March:

### 09:08 Housekeeping – Emre Ayranci

- Emre and Adam explained the online AdCom format.
- Voting will be done via unanimous consent.
- For further details beyond the meeting notes, all presentations can be found at the link:
- The meeting will be recorded.

#### 09:00 Roll Call – Adam Greenberg

• A quorum was present

#### 09:11 Membership Committee – Dan Friedman

- Accomplishments of the Membership Committee include- Chapters- creating a Chapter Steering Committee, defining new Chapters awards, and improving the subsidies disbursement process.
   YP – expanding YP programming, maintaining mentoring sessions even with the virtual format.
   WiC – continued vitality of WiC initiatives.
- Plans for 2022: Create a reference library of educational content for distribution to faculty, creation of a catalog of suggested chapter events, help wanted page, membership survey, and a plan for awards revitalization (especially our newer awards).
- January 2022: We have 10,632 members (4.2% increase since 2021)
- A deeper dive of demographic and regional membership breakdowns can be found in slide 6 of the presentation

- Key membership initiatives and their statuses can be found on slides 7, 8, and 9.
- The membership committee needs volunteers for: Curation of SSCS content, Membership Survey, WYE, Tutoring Initiative, Chronus Mentoring Platform, and Awards revitalization.

**MOTION 12:** To participate in the IEEE Multi-Society Discount Program in the 2023 and 2024 Membership years. The motion was made by the Membership Committee. **The motion passed.** 

**MOTION 13:** To operationalize \$22K/year Chronus software costs within the base budget starting in 2023. The motion was made by the Membership Committee. **The motion passed.** 

# 09:36 Chapters Committee Report – Alvin Loke

- We have 121 chapters as of February 2022 (52-SSCS, 42-Joint, 27-Student Branch).
- New Chapters Steering Committee was created in August 2021.
- We've been communicating extensively and trying to establish connections with Chapter Leads.
- Chapter best practices material created, chapter e-newsletter is under construction (first issue to be sent in the next few weeks).
- vTools monitoring making sure chapters are entering their events into the vTools system.
- Chapter Events YouTube Channel launched in April 2021.
- There have been improvements with the Chapter Subsidy Processes.
- Two Outstanding Chapter Awards (South Brazil and Wuhan) were given at ISSCC 2022. The awards portfolio has been expanded to six awards. The Chapter Honor Roll has also been created.
- New Initiatives: University Tutoring SSCS in every circuits class, pilot locations (UT Dallas, South Brazil).
- Pre-College Engagement: Initiated discussion with local San Diego high school electronics teacher, we need to explore synergies between local high schools and SSCS chapters to encourage students to enroll in EE programs.

## 09:56 Women in Circuits - Kathy Wilcox and Farhana Sheikh

- Female representation is falling in some categories, female representation in SSCS is below global representation across the semiconductor industry.
- There is an all time high % of females in the ISSCC TPC as Chair/Co-Chair/Moderators.
- Strong impact on increasing membership and representation since inception of Women in Circuits events in 2018.
- New WiC projects include: virtual luncheons with technical seminars and discussions, NextGen Circuit Designer Workshop to encourage careers in circuits/semiconductors, professional development workshops (Negotiation, Member Elevation).
- Focus for 2022 will include improving representation and recognition through member elevation, childcare and mothering facilities at conferences, professional development, and updated statistics to guide new programs.
- Volunteers are requested for 2022.

#### 10:17 Diversity Ad Hoc – Kathy Wilcox

- The Diversity Committee was formed, and has representation of various IEEE regions and gender.
- Two meetings were held in 2021/2022.

- Spending Ideas: More WiE events, mentorship initiatives for minority and female students at
  engineering schools worldwide, sponsor registration for conferences with a set student diversity
  criteria, create an ambassador program, provide travel grants for diversity students, childcare
  funding.
- 2022 Goals: Collaborate with SSCS chapters, Relook at travel grants from diversity perspective, leverage relationships with other organizations for outreach, continue to gather membership data, develop SSCS diversity website pages, celebrate 25<sup>th</sup> anniversary of SSCS & WiE.

#### 10:22 Awards – John Corcoran

- Five SSCS members were elevated to Fellow in 2022.
- Meindl Award Donor contributions to fund this award are underway, five nominations were entered in 2021, the winner was Azad Naeemi (GA Tech).
- PreDoc Awards 48 applicants, 28 awards (10 female applications in 2021, 6 female applicants were granted).
- Should we poll AdCom for nominations for awards? Award Committee needs to come up with nominations as well. There should be nominations target for each award.

**Motion 14:** To allow up to \$200,000 to be donated outright to the SSCS James D. Meindl Memorial Educational Fund, instead of as a matching grant, The motion was made by John Corcoran, second by Dan Freidman. **The motion passed.** 

## 10:35 Young Professionals – Zeynep Lulec

- Accomplishments: online and virtual events to increase our reach (online mentoring events, Chronus, Webinars for Young Excellence, and Collaborations with WiC, Webinars Committee, and EDS); committee empowerment to support increasing palette of activities; YP leadership grants and new coordinators.
- A senior member is needed to support the Chronus Program and the Webinars for Young Excellence Program.
- In 2021, we had 3250 YP Members in SSCS (YP's are within 15 years of their first graduation).
- New: SSCS YP Leadership Grant to support one YP to attend a mentoring session per conference.
- 2022 Plans: Continue the hold online-in-person mentoring sessions at SSCS conferences, continue
  empowerment of the YP committee, continue Chronus and Webinars for Young Excellence, better
  structure projects and new initiatives.

## 10:48 Councils, Committees, and Initiatives – Bill Bowhill

- 2022 Goals: Continue to work with councils, communities, and initiatives to shape and develop multiple disciplinary activities including conferences and publications; collaborate; socialize best practices; help avoid unintentional conflicts.
- Our Councils, Communities, Initiatives include: EDA, Sensors, Council on RFID, Biometrics/Life Sciences Portal, Nanotechnology, IoT, Future Networks, Sustainable Info and Comm. Tech, Brain, Rebooting Computing, and CAS.
- Slide # 4 includes SSCS participation and revenue information.
- 2022 Plans: finalize participation in Future Networks Organization; publicize developments and results
  of initiatives (regular updates in SSC Magazine/e-News); encourage SSCS member participation and
  collaboration; develop greater collaboration with other societies and institutions; expand SSCS new

### 11:03 Financial Implications of this Meeting -Adam Greenberg for Terri Fiez

- There were no budget changes for 2022.
- 2023 budget changes, 41K total increase over 2022 budget.
  - o \$15.1K increase in expense of JSSC.
  - o \$8.7K increase in expense of Magazine.
  - o \$4.55K decrease in expense of SSC-L.
  - o \$0.6K decrease in expense of JxCDC.
  - o \$0.35K increase in expense of OJ-SSCS.
  - o \$22K increase in Membership exp. to operationalize Chronus.
- \$470K in Year-3 Projects.
  - o \$80K PICO (Year 3).
  - \$40K Diversity & inclusion (Year 3).
  - o \$20K Mentorship & career development (Year 3).
  - o \$30K SSCD growth (Year 3).
  - o \$30K ESSCIRC/A-SSCC Author Exchange (Year 3).
  - o \$200K Meindl Fund Matching Grant (Year 3).
  - o \$50K Donation to Education and Future Talent Find (Year 3).
  - \$20K Video primers targeting secondary and undergraduate students (aka Student Engagement Videos -- Year 3).
- \$635K preliminary project grand total for 2023.
  - o \$20K Capture IEEE members as SSCS members during conference reg (Year 2).
  - o \$15K Grants for Tutors (Year 2).
  - o \$20K Capture IEEE members as SSCS members during conference reg (Year 2).
  - \$25K Media plan (Year 2).
  - o \$35K Online presence (Year 2).
  - \$30K Promote Society pubs in other, non-traditional pubs (Yr. 2).
  - \$20K Dissecting Select Papers from ISSCC (Year 2).

#### 11:10 OPEN DISCUSSION -ALL

• Roman Dumont, SSCS' new Student AdCom Member, was introduced.

# 11:15 Presidents Closing - John Long

- John thanked everyone for attending.
- The next SSCS AdCom Meeting will be held in conjunction with ESSCIRC-ESSDERC in Milan in September. Date and Times, TBD.
- Call for new project proposals: keep an eye out for emails asking for new project proposals.

### 11:17 Adjourn - John Long

**MOTION 17:** To adjourn the meeting. The motion was made by Kenneth O with a second by Alvin Loke. **The motion passed.** 

# **Meeting Agenda**

Time	Туре	Presenter	Agenda I tem
09:00	Info	Emre Ayranci	Introduction and Housekeeping
09:05	Info	John Long	President's Welcome/Recognition
09:15	Motion	John Long	Approve Agenda
09:20	Motion	John Long	Approve Summer 2021 AdCom Meeting Minutes
09:25	Report	Terri Fiez	Treasurer's Report
09:35	Report	Alessandro Piovaccari	Conferences Committee
09:55	Report	Shanthi Pavan	Publications Committee
10:15	Report	Ali Sheikholeslami	Education/DL Program
10:35	Report	Boris Murmann	Solid-State Circuits Directions (SSCD)
10:55	Report	Kenneth O	Nominations Committee
11:10	Discussion	AII	New Business/Open Discussion
11:30	Procedural	John Long	Recess until 9 a.m. EDT on 16 March 2022
09:00	Info	Emre Ayranci	Introduction and Housekeeping
09:05	Report	Daniel Friedman	Membership Committee
09:25	Report	Alvin Loke	Chapters
09:40	Report	Kathy Wilcox	Women in Circuits
09:50	Report	Kathy Wilcox	Diversity Ad Hoc
10:00	Report	John Corcoran	Awards
10:15	Report	Zeynep Lulec	Young Professionals
10:30	Report	Bill Bowhill	Councils, Committees, and Initiatives
10:45	Report	Terri Fiez	Financial Implications of this Meeting
11:00	Discussion	AII	New Business/Open Discussion
11:20	Report	John Long	President's Closing
11:30	Motion	John Long	Adjourn