



Semiconductor  
Research  
Corporation

Because the future can't wait, we bring the best minds together to achieve the unimaginable

# Supply Chain AI Realized Future (SCARF) Research Program Annual Review



October 4, 2022

Tempe, AZ @ Arizona State University

John Oakley, Science Director

Tameka Bell, Research Program Coordinator

<https://www.src.org/calendar/e007522/>

<https://www.src.org/program/srp/scarf/>

SRC Select Disclosure

# Thank you!

On Behalf of the SRC,

## **Thank You!**

- To all the industry members for their sponsorship and mentorship
- To all the Principal Investigators & their Students for the great research effort
- To Tameka Bell at SRC for the logistical support
- To all of you for being in-person with us!



# Review Reminders



Everyone will be participating in-person

Presenters should remember to speak clearly and keep within the allotted time.



Timing: 60 min (45 min talk + 15 min Q/A)

Presentations and Q&A will be live. Please be mindful, so watch the time!!!



Informal Presentations

Please indicate if you want the audience to interrupt with questions. Q/A will occur at the end



Industry people: Evaluation form (electronic) to be collected

Submit review spreadsheet to SRC

# Reminder: Invoicing and Deliverables



## Regular invoicing

Invoice on regular basis: monthly is preferred

Excess money (calendar year) is considered profit and taxable!

Spending must occur within contract period

**Invoicing expected to be at or above 95% invoiced at end of each contract period**

Final invoice within 60 days after project ends



## Submit deliverables on time: even 1 day is too late!

System will flag delinquencies

**Late deliverables will stop invoices being paid and can jeopardize future funding**

Contact SRC if there are issues with getting deliverables on time



## Pre-publication drafts must be deposited at SRC > 60 days before published

Best practice: deposit draft to SRC website when submitting to journal/conference (also thesis)

Update the draft on the SRC website with final paper after acceptance (select submit a new version)

**Acknowledgement of SRC funding must be added to all publications**



# Resources that Help Academics Evaluate, Adopt, and Amplify Emerging Member Solutions

<https://www.src.org/program/grc/guide/researcher/guidelines/>

## Member Resources

- SRC has collected information members provide for the academic community, including education, design, and prototyping
- SRC researchers and students are encouraged to take advantage of these resources in their research and education activities

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#### Intel

- Intel Open Data Center Diagnostic Project
- Intel Academic Compute Resource Environment (ACE)
- Intel Academic Program for oneAPI

#### Analog Devices

- Active Learning Program
- ADALM-SR1 Hardware
- ADALM-SR1 Switching Regulator Active Learning Module

#### ARM

ARM Academic Access  
ARM Education

- ARM University Program Education Kits
- ARM Education Online Courses
- ARM Education Textbooks and Reference Books

#### Texas Instruments

Specific tutorial and curriculum for universities include:

- Texas Instruments University Program
- TI Robotics System Learning Kit
- TI Power Management Lab Kit
- TI Experimental Power Electronics Reference and Curriculum
- TI Precision Labs

#### IBM

- IBM tutorial and curriculum for universities
- IBM Skills Academy
- IBM + Coursera
- IBM PhD Fellowship Program
- IBM Quantum Computing - student opportunities
- IBM AI Hardware

#### NXP

- Rapid IoT Prototyping Kit

#### Siemens

- EDA Academic Products

#### Qualcomm

- University Relations Program

A Siemens Business

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INFORMATION  
About SRC  
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Contracts & IP  
Management Charts  
Corporate Annual Reports

FOR MEMBERS  
Joining Company @ SRC  
Liaisons

SRC VALUE  
Awards Programs  
Patents  
Recruiter Guide  
SRC Timeline

ACADEMIA  
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Career Opportunities  
Participating Universities  
Education Alliance

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Voice: (919) 941-9400 Fax: (919) 941-9450



# New “Failure to Success” Workshops

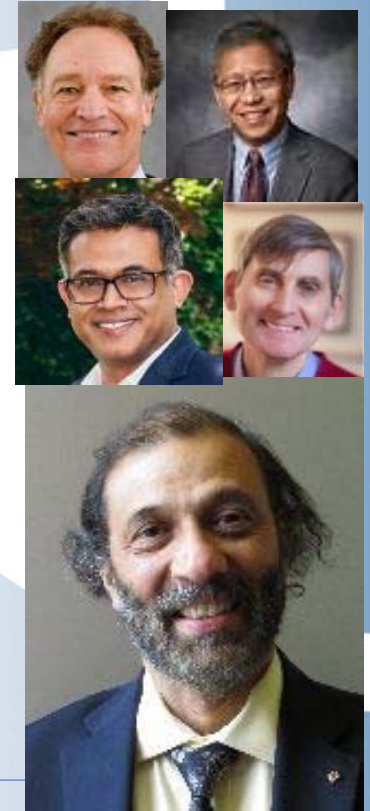
<https://www.src.org/calendar/failure-to-success/>

New Workshop Series:  
From Failure to Success  
September 23rd



- New workshop series to highlight challenges faced by our researchers and how they overcame them or set a new direction
  - Not all research will be successful, but we should continuously learn
  - Open to all SRC: industry, other academia, and SRC Research Scholars
- Most recent Failure to Success (5/18): “Lemons are for Lemonade?” by Professor Subu Iyer, UCLA (<https://www.src.org/calendar/e007658/>), over 160 people attended.

I like very much the concept you have laid out, and I think I have a very nice example to share with the SRC community.



- More workshops are coming. Please stay tuned!



# Reminder: Send News Items to SRC

<https://www.src.org/newsroom/newsletter/>

- Send noteworthy events and announcements that you and your team are involved in to SRC
- Send this information on a monthly basis. We use what we can in our SRC newsletter and monthly emails to the Advisory Board and liaisons
  - Best Paper Awards (who, award, title of piece, where, when and photos of students/faculty)
  - Papers, posters presentations, and/or conference talks
  - Professional Recognition Awards: IEEE, teaching awards, etc.
  - Professional activities such as workshops, tutorials, and invited talks
- All submissions must have a web link (URL) to the award, paper, etc.
  - If you have your own website that contains information pertaining to your research, share the link with SRC as well



More Than  
17,000  
subscribers!!



# New SRC Student Platform on LinkedIn (Beta)

<https://www.src.org/student-center/handbook/linkedin/>

- SRC Student Programs is rebranding to “**SRC Research Scholars**” Program
- What is the **SRC Research Scholars Program**?
  - SRC provides undergrads, graduate students, and postdoctoral researchers with a unique education consisting of traditional course work, cutting-edge research, and direct interaction with the semiconductor industry
  - These Research Scholars work on industry-relevant research with SRC-funded faculty who are recognized experts in their fields
  - Through our extensive community of academics and industry personnel, we nurture the evaluation of the talent pipeline for our industry and beyond
  - Our alumni have become industry leaders and renowned faculty researchers, creating a virtuous cycle where mojo begets mojo



SRC encourages all undergrads, graduate students, and postdoctoral researchers to join this Beta program!!!

Join  
the  
Beta  
Now!

## Get LinkedIn with SRC

SRC uses a special LinkedIn Affiliate page for the SRC Research Scholars Program. Undergrad, graduate students, and postdoctoral researchers participating on SRC research add their SRC Research Scholars experience to their LinkedIn profile. This allows Scholars a way to professionally showcase their talent and experience. It also simplifies how recruiters, engineers, and even other Scholars can find SRC Research Scholars, using either the LinkedIn Search\* or LinkedIn Recruiter\*.

SRC Research Scholars  
Program\*



By being part of our community, Research Scholars will have a unique opportunity to get to know professionals with careers in the semiconductor industry or government, top researchers in their fields, and other students with similar interests.

SRC Select Disclosure



# Reminder: Student Hiring/Internship information back to SRC

- Relevantly trained students are one of the most valuable outcomes of the funded research
  - Hiring information is an important data point to highlight the value of SRC funded research to our member companies
- Include any SRC students (whether directly funded or participated in some way on the research) that graduated, were hired, or had an internship
  - **If you have a student that is working on the project but funded through other sources have them create a student account with SRC;** this allows SRC to promote them to our industry members
  - And let SRC know how they are being funded; as leveraged funding is a benefit for the members.
- Many students graduate and start the next chapter of their life but leave without updating their student record on the SRC website
  - As your students do internships or accept hiring offers, **PIs are expected to have their students update their accounts at SRC**



# Intellectual Property Statement

<https://www.src.org/about/contracts-ip/#ip>

- The information provided by researchers during this annual review
  - Is the property of the university and of the researchers presenting this information
  - May include research results sponsored by and provided to the funding members
  - May include intellectual property rights belonging to the university and SRC, to which sponsors may have license rights
- By attending or viewing this review, you are agreeing
  - Not to use this information for purposes unrelated to the review unless and until approved by SRC
  - To keep this information in confidence until the university and SRC have evaluated and secured any applicable intellectual property rights
- After any intellectual property rights have been secured, the SRC encourages the University and researchers to publish and freely disseminate this information and results of the sponsored research program.
  - Worldwide patent rights are waived if publication or public dissemination occurs prior to filing a corresponding U.S. provisional or utility patent application



# General Data Protection Regulation

<https://www.src.org/app/account/guide/privacy-policy/>

- Applies to SRC
- Personal data regulations
- Involves privacy notices, consent, and security
- SRC Privacy Policy



# SCARF Annual Review & Logistics

<https://www.src.org/calendar/e007522/>

- **In-person annual review at ASU**

- At McCord Hall (Tempe Campus), 450 E Lemon St, Tempe, AZ 85281

## Tuesday, October 4

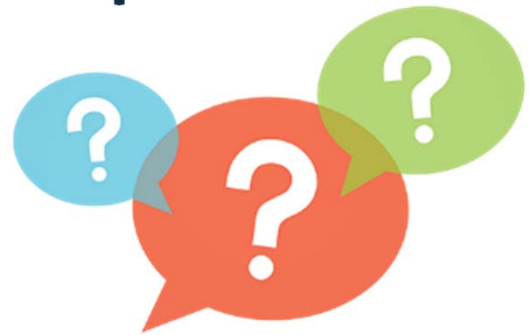
Time	Speaker & Title	Presenter
8:00 - 8:30 am	Registration	
8:30 - 8:45 am	ASU Introduction	Dale Rogers / ASU
8:45 - 9:00 am	Introduction	John Oakley / SRC
9:00 - 10:00 am	<a href="#">3110.001</a> : A Robust Framework for Supply Chain Ecosystem Intelligence	Jitamitra Desai / IIM/Bangalore & Dale Rogers / ASU
10:00 - 11:00 am	<a href="#">3109.001</a> : Data and Information Fusion for Spatially Optimized, Responsive Maintenance and Spare Parts Logistic Operations in Semiconductor Manufacturing	Dragan Djurdjanovic / UT/Austin
11:00 - 12:00 pm	<a href="#">3108.001</a> : Autonomous/Smart Planning & Logistics	George Runger / ASU
12:00 - 1:00 pm	<a href="#">3111.001</a> : Africa Ecosystem Intelligence	Dale Rogers / ASU & Nathaniel Boso / KNUST



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**Opens?**



# SRC Liaison Program

## Maximizing the Value of Participation

Move Yourself, Your Company and the Next Generation Forward

### Develop the Workforce

- Provide relevant guidance for industry challenges
- Prepare students to enter industry or pursue future academics

### Contribute to Research

- Encourage technology exchange between university and industry
- Bridge the conventional gap between academia and industry

### Academia Contributes to Industry

- Provide an out of the box approach to current problems which enhance industry research and development enables a differentiated product for the market place
- Provide an outside perspective adding diversity to the thought process of how best to attack a challenge

### Access New Technology

- Gain valuable insights into problems and solutions that will ultimately impact industry competitiveness
- Provide an effective way to deliver actionable research results directly into their companies

### Identify the Best

- Identify the most compelling research from current and recent research



# Effective collaboration begins with communication

## SRC Program Manager

- Runs Advisory Board and aligns research
- Educates PI about requirements and responsibilities
- Encourages Liaison participation
- Finds opportunities for further engagement

## Principal Investigator

- Pursues ambitious, ground-breaking research
- Schedules regular calls, every 4-8 weeks
- Arranges meet-ups at conferences
- Presents research at annual reviews

## Student

- Leads meetings
- Presents findings
- Aims to present at TECHCON
- Is knowledgeable about SRC members

## Liaison

- Provides industry perspective to PI
- Transfers technology into company
- Advocates for SRC research
- Coordinates with Advisory Board

**Academics solving  
meaningful problems**

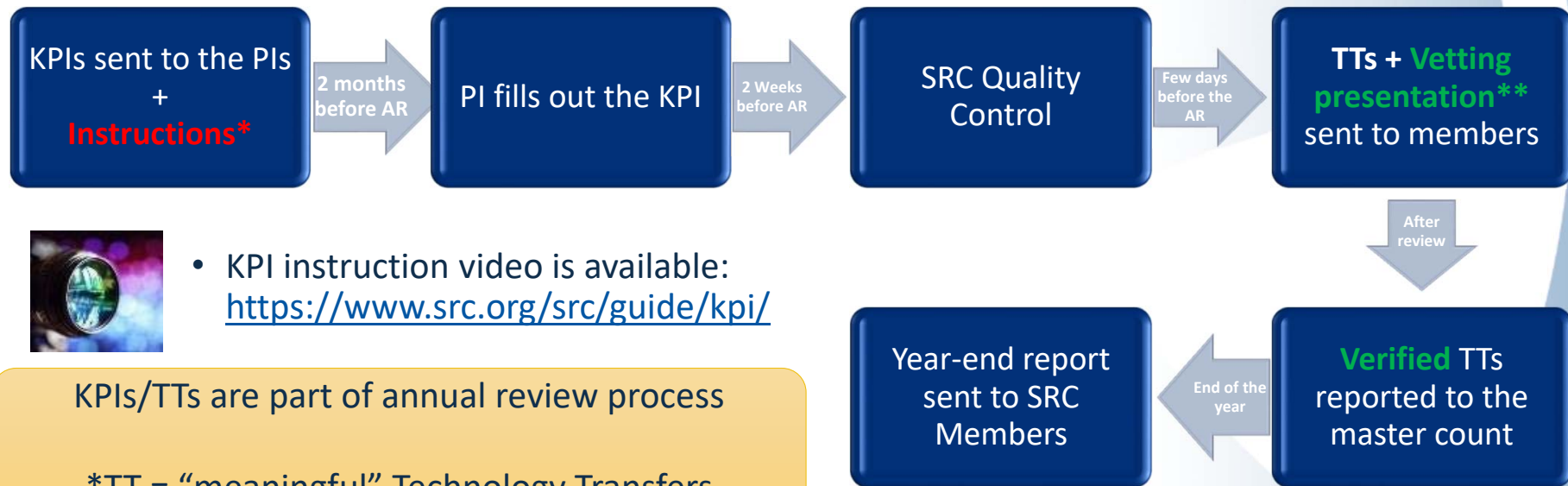
**Increase of tech  
transfer**

**Clear investment ROI**



# Key Performance Indicators (KPI) Process Flow

<https://www.src.org/src/guide/kpi/>



- KPI instruction video is available: <https://www.src.org/src/guide/kpi/>

KPIs/TTs are part of annual review process

\*TT = “meaningful” Technology Transfers

Because of well-defined KPI process flow, SRC members can maximize their research experiences with meaningful Technology Transfers.

