



September 14-17, 2020 / Anaheim, CA



Call for Technical Abstract Submission Guide

Submission Module Opens: December 13, 2019

Deadline for Technical Abstract Submissions: February 7, 2020 at 11:59 pm ET

Submission Notifications and Invitations: Early April 2020

On behalf of the Solar Energy Industries Association (SEIA) and the Smart Electric Power Alliance (SEPA), we are pleased to announce that we are currently accepting abstracts for oral and/or poster presentation at next year's Technical Symposium program at Solar Power International, Energy Storage International, and North America Smart Energy Week, taking place September 14-17, 2020 in Anaheim, CA, USA. SPI, ESI, and NASEW are North America's Premier education and business-to-business event for professionals in solar, energy storage, and related fields. No other event provides the opportunities for collaboration, access to experts, and innovative information needed for success.

Technical Abstracts are essential to the delivery of compelling content at SPI, ESI, and NASEW and only the very best submissions will be considered for a presentation at this year's meeting, so please review this guide carefully to improve your chance for selection. All abstracts presented for oral and/or poster presentation will be published in the *Proceedings of The Technical Symposium at SPI, ESI, and NASEW 2020* and receive an appropriate citation and CrossRef DOI number. Abstracts should represent technical, academic or scientific research, and development in the following categories: Solar Energy (Photovoltaics), Energy Storage, Wind Energy, Electric Vehicles, and/or Smart Energy Technologies. Additional information on submission categories can be found on page 3 of this guide.



All educational content is developed through an online peer reviewed process to guarantee the delivery of timely, relevant, and compelling content for professionals in the solar, storage, and smart energy industries. Each submission will be reviewed by subject matter experts.

Notifications will be sent via email, whether or not a submission was accepted by early April 2020. Please do not contact the organizers before this date.

Presentation Submission Policies

- The presenting author must accept full responsibility for the submission and presentation of the abstract and retain full copyright of his/her presentation, and/or full paper. By submitting an abstract, the presenting author gives consent and authorizes SPI, ESI, and NASEW to publish the abstract in any conference publications, including *The Proceedings of The Technical Symposium at SPI, ESI, and NASEW 2020*.
- Once your abstract has been submitted, you may continue to revise it through the submission deadline, **Friday, February 7, 2020 at 11:59 pm PST**.

- SPI, ESI, and NASEW reserves the right to reject any abstracts for failure to comply with submission policies. Due to the large number of abstracts received for this conference, SPI, ESI, and NASEW are unable to provide feedback on each submission that has presentations not been accepted for an oral and/or poster presentation.

Step-by-Step Submission Guide

STEP 1: Log in or Create an Account

If you have submitted an abstract for SPI, ESI, and NASEW in the past three years, please use your previous credentials. If you've forgotten, the system will send you a reminder via the forgot your password tool. If you are new, please create an account and then follow the instructions to set up a login and change your password.

STEP 2: Start a New Abstract

To start a new abstract submission, you will need the following items:

- a. **Submission Title** (150 character maximum)
- b. **Submission Category (pick one):** Solar, Energy Storage, Wind Energy, Microgrids, Hydrogen + Fuel Cells, Electric Vehicles and Infrastructure, Biomass/Biofuels, Geothermal, and Water Nexus/Hydropower

STEP 3: Presenter Profile

For a technical abstract submission, please enter the presenter's contact information and professional designation. It is imperative that the email address you enter is correct, as all correspondence regarding submissions will be done via email through the online submission module.

The following items and questions will appear:

- Are you a current SEIA or SEPA member?
- Upload Presenter's Bio (250 Word Limit)
- Have you presented at a professional meeting/event in the past? If yes, where?

STEP 4: Submission Details

You will need to answer the following questions to best categorize the content of your submission for the review and selection process.

- **Education Category (Select One):** See chart on page 3 below for options.
- **Sub-Education Category (Select One):** See chart on page 3 below for options.
- **Keywords:** List no more than four keywords that describe your research.
- **Target Audience/Industry Segments (Pick All That Apply):** Architect, Business Development, Communications/Public Relations, Engineer, Executive, Finance/Accounting, Government Relations, Healthy/Safety, Human Resources, Information Technology, Installer, Legal Counsel, Marketing, Operations/Maintenance, Policy Adviser/Analyst, Program/Project Management, Research & Development, Sales, Supply Chain/Logistics, Sustainability/Corporate Social Responsibility, Other
- **Abstract Content (450 Word Maximum)**
 - Abstracts **MUST** follow the following format:
→ Aim/Objective: text → Methods: text → Results: text → Conclusion: text
 - Avoid reference to institution names, locations, or funding sources in the abstract.
 - All abstracts must be submitted in English only.
 - Please carefully check all text for errors before submission as the quality of your abstract in this regard may significantly affect the outcome of the reviewers' evaluation and scoring of your abstract.
- **Previous Submission:** Identify if this abstract has been submitted for presentation/publication at another conference. If yes, please add specific details.

[Abstract Submission Categories](#)

SOLAR ENERGY (Photovoltaics)

Photovoltaic Cells and Modules:

1. Nanotechnologies
2. Silver Nanowire Transparent Electrodes
3. Perovskite Solar Cells and Modules versus Silicon
4. Tandem Solar Cells and Modules

Silicon Photovoltaics:

5. Material Characterization and Treatment
6. Silicon Crystallization
7. Metallization
8. From Ingots to Wafers
9. Production Innovations
10. Solar-grade Silicon Properties and Specifications
11. Testing and Performance
12. Heterojunction Solar Cells
13. LID in PERC
14. Mono versus Multi Crystalline Silicon

Increasing Module Performance:

15. Improving Light Management
16. New Module Designs (half cells, double glass, bifacial)
17. Advanced Measurement Techniques
18. III-V Multijunction Solar Cells
19. Organic and Perovskite Photovoltaic Devices
20. Smart Inverters, IEE 1547

Manufacturing, Installation, Codes, and Standards in PV Systems:

21. Automatization
22. Balance of System Components
23. Simulation Tools and System Failure Analysis
24. Thin-film Photovoltaics
25. Micro-inverters
26. Module Recycling
27. Cleaning Solutions for Solar Plants – Anti-soiling Catalysts
28. Development and Integration of Quality Control Methods
29. Improvement of Inverter Lifetime
30. Mitigation of Degradation Mechanisms
31. Resilience
32. Installation

ENERGY STORAGE

Battery Chemistry:

33. New and Next-generation Battery Types
34. Lead-based Batteries
35. Liquid Metal Batteries
36. Li-ion Batteries

Improvement of Volumetric Energy Density of Electrochemical Capacitors:

37. Asymmetric Supercapacitors
38. Charge Storage Mechanisms
39. Cell Performance
40. Cycling Stability

New EC Capacitor Products:

41. Anode and Cathode-active Materials
42. Cell-balancing and Fuel Gauge Methods

Battery Design, Engineering, and Progressive Battery Manufacturing:

43. Measuring Capacity Fade and Capacity Loss Mechanisms
44. Environmentally Clean Production of Battery Materials
45. Recycling
46. Advances and Remaining Challenges in Electrolytes
47. Challenges of Cell Stacking
48. On-site Hydrogen Electrolysis
49. Off-grid and Grid-connected Microgrid Systems

Codes, Standards, and Battery Safety:

50. Stimulation and Reliability Prediction
51. Safety, Aging, and Abuse Tests – Standards and Validation Methods
52. Protective Functions and Shutdown Systems
53. Field Experiences

ELECTRIC VEHICLES

1. Hybrid and Electric Vehicle Technologies
2. E-Mobility, ICT, and Charging Infrastructure/Standards

SMART ENERGY TECHNOLOGIES

54. Smart Systems for Energy Security, Data Protection, and Security
55. Virtual Power Plants
56. Standardization of Energy (Consumption)
57. Data Delivery
58. Distributed Energy Resource Management Systems (DERMS)
59. Innovative Technical Solutions for the Energy Transition
60. Smart and Efficient Buildings and Cities
61. Home Energy Management Systems (HEMS: IEC, Zigbee, Zwave)
62. Smart Metering
63. Smart Electric Grids

- 64. Smart Software Solutions for Distributed Energy Storage
- 65. Transactive Energy

[Review Process](#)

All education content for SPI, ESI, and NASEW is developed through a blind peer review process to guarantee the delivery of timely, relevant, and compelling content for professionals in the renewable energy industries. During the review process, reviewers will assign accepted abstracts to either an oral presentation or a poster presenter. Following the review process, accepted education content for SPI, ESI, and NASEW is slotted and organized by the Technical Symposium Education Committee and staff of SEIA and SEPA.

Note: *While we are pleased when a speaker chooses to be a sponsor or exhibitor, a speaking slot is never guaranteed for exhibitors or sponsors. All accepted presentations are based on overall merit and/or slot availability.*

Frequently Asked Questions

What are the submitters responsibilities?

- ***It is imperative that the email address you enter is correct, as all correspondence regarding submissions will be done via email through the online submission module.***

Are there preferred topics for submission?

- Yes, you can find them on page 3 and 4 of this guide.

How long is each speaking slot?

- If you are selected for an oral presentation, you will have 15-20 minutes to present your material. There will be 3 to 4 other presentations within your overall session slot and there will be a 10-minute period after all of the presentations for the audience to ask each of you questions about your material.
- If you are selected for a poster presentation, then there is no formal speaking role associated with submitting a poster. However, the top rated posters will have an opportunity to present their poster on the poster spotlight stage. About 15 to 20 presenters will be selected for this opportunity. Additionally, there will be a Poster Reception during the conference and all poster presenters are required to attend that event to discuss their poster with attendees.

Does speaking at SPI, ESI, and NASEW have any cost for my company?

- There is no cost for your company. Accepted oral and poster presenters will receive a significantly discounted Full Conference pass and for poster presenters, we will print and hang your poster for you. All oral and poster presenters must be registered for the conference in order to be included in *The Technical Symposium Proceedings*.

May I submit an abstract that has been accepted and presented at another conference?

- If your abstract has been submitted for another conference and has been accepted for presentation, then it should not be submitted for presentation. If the abstract was rejected or has been amended with new information since a previous presentation, it may be submitted.

What advice do you have for creating a successful application?

- **Submit it on time.** Submit your abstract on time. Submit your poster file on time so that it can be reviewed. If feedback is provided by the reviewers, incorporate that feedback and submit your second version on time.
- **More is not better.** We want to give as many companies the opportunity to present a poster as possible, so we have a one speaker per company policy. We recommend no more than five posters per company.
- **Quality trumps.** We're looking for the best: the most current issues, the most innovative ideas, the leaders of your company, etc. Put your best foot forward and please do not send us the same abstract you've submitted previously. As a reminder, posters may not include blatant marketing.
- **Focus on the audience.** The Education Team selects posters that facilitate the dissemination of research and innovations, analysis of practical problem-solving efforts, and recommended best practices to the solar, storage, and smart energy community.
- **Keep it simple.** In order to have a great poster, you must focus on a few key ideas you want to convey. Do not try to solve all grid integration issues in your one poster.

Technical Abstract Selection Process Timeline

Please note the deadlines and important dates in the timeline below. If you have any questions or concerns about any of the information below, please send an email to education@sets.solar.

Technical Abstract Submission Deadline	February 7, 2020
Review Site Opens for Technical Abstract Submissions	February 11, 2020
Review Site Closes for Technical Abstract Submissions	March 16, 2020
Technical Symposium Education Committee Begins to Schedule Sessions	March 23, 2020
Technical Symposium Education Committee Finishes Scheduling Sessions	April 6, 2020
Technical Symposium Speaker and Poster Invitations Sent	April 10, 2020
Deadline for Technical Symposium Speakers and Poster Presenters to confirm their participation	April 17, 2020
Draft Poster Files due from Technical Poster Presenters <i>*If you were accepted as an oral presenter, you will not be required to turn a poster in.</i>	May 1, 2020
Technical Poster Files Reviewed	May 6, 2020 – May 20, 2020
Final Poster File Due from Presenters	June 10, 2020
Solar Power International (Anaheim, California, USA)	September 14 – 17, 2020