



**Science and Technology  
of Materials, Interfaces, and Processing**

**2019 SPRING MEETING of the  
AVS HUDSON MOHAWK CHAPTER**

Tuesday May 7, 2019

4pm – 8pm

General Electric Global Research Center  
1 Research Circle  
Niskayuna, NY 12309  
Conference Rooms 4 and 5

**This meeting will be comprised of a series of invited talks  
on the theme “Quantum Science”**

**Topical Areas**

Biomaterials  
Environmental S&T  
Magnetic Materials  
Manufacturing S&T  
Materials Characterization  
Materials Processing  
MEMS  
Microelectronic Materials  
Nanometer-Scale S&T  
Plasma S&T  
Surface Engineering  
Surface Science  
Thin Films  
Vacuum Technology

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Final agenda:

4 – 6 pm Talks on Quantum Science-Industry, Science & Applications

- Jim Bray - *Quantum Theory and National Quantum Initiatives*
- Annarita Giani & Austars Schnore - *Quantum Computing Applications*
- Stephen F Bush - *Quantum Key Distribution and Quantum Standards*
- Glen Koste - *Integrating Optical Hardware with Communications*
- S Papa Rao - *Fabrication Technology Development for Quantum Technologies*
- Rasit Topaloglu - *Compact Qubits for Quantum Computing*
- Ravishankar Sundararaman - *Non-equilibrium carrier dynamics in plasmonic materials from quantum-mechanical calculations*
- J. Scott Price - *AVS at the Quantum Science Frontier*

6 – 7:30 pm The talks will be followed by a poster session. Pizza and drinks will be provided during the poster session.

**Papers**

We are soliciting abstracts for poster presentations at the Spring Meeting of the AVS Hudson-Mohawk Chapter on Monday May 7, 2019. Any presentation related to activities associated with areas relevant to the AVS (surfaces, films, materials, interfaces, vacuum, electronic properties, photovoltaics, nanofabrication, storage, quantum science) will be considered. *Student participation is strongly encouraged.*

Awards will be given for the best poster presentation at the end of the meeting. The award winners will be publicized in the AVS Newsletter.

To submit an abstract for consideration, please email the abstract to J. Scott Price ([prices@ge.com](mailto:prices@ge.com)) by Wednesday May 1, 2019. Abstract details follow.

**Abstract format:**

- One page abstract 8.5" x 11", with 1" margins all around, MS Word (12pt Arial, and/or symbols), not pdf file.
- Center title, authors, and affiliation at the top.
- Leave one blank line between title and authors, and between authors and affiliations.
  - Print title bold, all uppercase (except chemical symbols).
  - Type the names of the authors using upper and lower case as needed. Underline presenting author's name. Type each author's affiliation.
  - Type e-mail address of the presenting author.
  - Leave another blank line.
- Type abstract text, single-spaced, with one blank line between paragraphs. Graphs and images can be included, if the entire abstract fits on one page.

Electronic posters will be accepted (e.g., scrolling PowerPoint files) – the presenter will need to provide the laptop; the screen saver will need to be disabled.

The winners will be decided by the chapter officers and members-at-large. Chapter officers, members-at-large, AVS Board members, and past award winners can present at the meeting but are not eligible for the awards.

**Meeting Registration:**

Registration for the meeting is free; *however you must pre-register* by contacting Scott Price ([prices@ge.com](mailto:prices@ge.com)) or Vincent Smentkowski ([smentkow@ge.com](mailto:smentkow@ge.com)) prior to or on Monday April 29, 2019. You will need to provide your full name, affiliation, and citizenship status. *If you do not pre-register, you may not be able to enter the facility!* You will need to provide a government issued ID upon arrival at GRC (non-US citizens must bring their passport). A map, and details regarding visitor check in and parking will be provided at a later date. Pizza, soda, and water will be provided after the talks. Please forward this announcement to your colleagues!

J. Scott Price  
Chair, AVS Hudson Mohawk Chapter  
[prices@ge.com](mailto:prices@ge.com)