

Thursday March 16, 2023 12:30 p.m.

The 2022 Harvey Rosten Award

Sponsored by Siemens Digital Industries Software

For Outstanding Work in the Field of Thermal Analysis of Electronic Equipment:

Analysis of the Thermal Behavior of Li-Ion Pouch Battery Cell – Part II: Circuit-based Modeling for Fast and Accurate Thermo-Electrochemical Simulation







Ciro Scognamillo



Francesco Piccirillo



Pierluigi Guerriero



Vincenzo D'Alessandro



Lorenzo Codecasa

Antonio Pio Catalano is an assistant professor with the University of Naples Federico II, Italy. His research interests include the modeling of thermal and electrothermal effects in electronic devices and circuits. His contributions also fall in the scenario of renewable energies.

Ciro Scognamillo is a post-doctoral researcher with University of Naples Federico II, Italy. His research is focused on state-of-the-art technologies for power modules, as well as on electrothermal simulations of semiconductor devices for radiofrequency applications.

Francesco Piccirillo received the M. Sc. degree Magna cum Laude in mechanical engineering with from the University of Naples Federico II, Italy. His M. Sc. thesis concerned numerical modeling of Li-ion batteries. He is currently working with FEV Italia as control systems engineer.

Pierluigi Guerriero is currently an associate professor with the University of Naples Federico II, Italy. His research concerns modeling and characterization devices and systems, design of converters for renewable energy applications, and development of embedded systems for monitoring and diagnostic in photovoltaic plants.

Vincenzo d'Alessandro is currently an associate professor with the University of Naples Federico II, Italy. His main research interests focus on the simulation, modeling, and experimental characterization of electrothermal effects in a large variety of semiconductor devices, circuits, and systems, as well as on the modeling and simulation of energy yield reduction in photovoltaic plants.

Lorenzo Codecasa is an associate professor with Politecnico di Milano, Italy. His main research contributions are in the theoretical analysis and in the computational investigation of electric circuits and electromagnetic fields. He is particularly active in the research of heat transfer and thermal management of electronic devices and systems.

The Harvey Rosten Award

The Award is for outstanding work, recently published or in the public domain, which advances the analysis or modeling of thermal or thermomechanical effects in electronic equipment or components, including experiments aimed specifically at the validation of numerical models. The award is in the form of a plaque and a \$1000 cash prize. The Award was established by the family and friends of Harvey Rosten, to commemorate his achievements in the field of thermal analysis of electronics equipment, and the thermal modeling of electronics parts and packages. The Award is made annually to encourage innovation and excellence in these and closely related fields.

The recipient is selected by the Selection Committee, made up of eminent practitioners in the electronics-thermal field. The criteria for selection are that the work: represents an advance in thermal analysis or thermal modeling of electronics equipment or components, including experiments aimed specifically at validating numerical models; demonstrates clear application to practical electronics design; demonstrates insight into the physical processes affecting the thermal behavior of electronics components, parts and systems; is innovative in embodying this understanding in either thermal analysis or thermal modeling; takes a pragmatic approach.