Advanced energy storage, power conversion devices, management strategies are developed in order to ensure better energy performance, reduced operating cost, and higher lifetime of future transportation systems including not only road vehicles, but also more electric trains, subways, ships and airplanes. Research on advanced electric powertrain technologies is much required, in order to push electrified vehicles to a large-scale commercialization.

In order to further promote excellence of research in Vehicle Power and Propulsion, in conjunction with the 14th and 15th IEEE Vehicle Power and Propulsion Conference (VPPC 2017 and VPPC 2018), a special section in the IEEE Transactions on Vehicular Technology is proposed to focus on the-state-of-the-art research and development as well as future trends in the More Electric Vehicles. Papers related to the components by themselves will not be considered in this special section.

Topics of interest include, but are not limited, to the following:

- Batteries, ultracapacitors, flywheels systems embedded in hybrid & electrical vehicles
- Power converters (electrical to electrical, electrical to mechanical, chemical to electrical, thermal to electrical, …) designed and embedded in more electrical vehicles
- Design, modeling and simulation of powertrains
- Durability issues and accelerated stress tests
- Energy management, vehicle control & fault-tolerant operations
- Hybrid Vehicles, Electrical Vehicles, Fuel Cell Vehicles, …
- Automotive, railway, subway, ships, aeronautic, aerospace, and robotic applications

Potential authors are invited to submit their original contributions for consideration to be published in this special section. A thorough peer review will be conducted to select top papers to be included in this special section. Only papers presented at the IEEE-VPPC 2017 and IEEE-VPPC 2018 will be considered. Please note that IEEE TVT requires that a journal submission offer substantive novel contributions beyond the previous work in a conference paper. The submitted papers require a mandatory extension at least of 50% of changes, and a new title. The conference paper must be uploaded when the journal paper is submitted. Moreover, the cover letter along with manuscript should mention specifically “VPPC Special Section” and a letter with a list of major differences must also be uploaded with the new paper as a supplementary file. Finally, the reviewing process will include just one round revision and the authors are expected to submit high caliber papers as soon as the first manuscript submission. It should be noticed that the submission deadline will not be postpone respecting the publication date. After this deadline, the papers can be submitted as regular papers and not in this special section.

- Deadlines -
  
  Manuscript Submission Deadline: January 18th, 2019
  First Decision: May 15th, 2019
  Revised Paper Due: June 30th, 2019
  Final Decision: August 15th, 2019
  Estimated publication date: Fourth Quarter 2019

Manuscript Preparation and Submission

All manuscripts must follow the guidelines under “Information for Authors” in IEEE Transactions on Vehicular Technology at http://www.it.is.tohoku.ac.jp/~tvt/. Please submit your manuscript in electronic form through Manuscript Central web site: https://mc.manuscriptcentral.com/tvt-ieee. On the submission page #1 in the popup menu for the manuscript type, select “Special Issue” and in the special issue topic write: “Advanced Vehicle Power Propulsion systems”

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