Bridging to the New Period
[Editor's Column]

Palensky, Peter

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by Peter Palensky

Bridging to the New Period

This year's spring issue is the first one during my administration, and it is a great honor for me to be appointed editor-in-chief (EiC) for the new period of our successful *IEEE Industrial Electronics Magazine*. My thanks go to past EiC Thilo Sauter for all of his guidance and help in the transition phase. I will work hard to keep up the quality and value of our magazine, and I am confident in succeeding with the help of our amazing team of associate and column editors.

The IEEE Industrial Electronics Society (IES) is a great group. Bridging science and industry, it is always at the forefront of development. Using advanced electronics, algorithms, systems, and components, we try to contribute to the IEEE's mission of "advancing technology for humanity." This magazine serves as an instrument to communicate knowledge, connect people, and inspire minds. I am thankful for all of the contributions, articles, and columns that we receive from our authors.

This issue contains several highlights, one being a great report on our Women in IES activities. Lucia Lo Bello describes the second IES Women in Engineering forum, held in Washington, D.C., at the 2018 Annual Conference of the IES (IECON). It was a massive event, very well attended, with a fantastic program and charismatic speakers. We are very proud that this initiative gained such momentum in so little time. Whatever perspective you have on that phenomenon, ranging from a dry "Finally, industry might get access to the other half of the world's workforce," to an excited "Finally, women make careers in engineering!" the following is evident: We will all benefit, and the IES is proud of its success in promoting our topics within the female science and industry community.

Another highlight of this issue is a report on our annual flagship event. The historic Omni Shoreham Hotel in Washington, D.C., hosted a productive, inspiring, and busy 2018 IECON, organized by Conference Chair Milos Manic. In addition to many top-notch keynote talks, article presentations, and discussions, it featured numerous innovative side events, such as a plugfest and a training session for volunteers in the IEEE.

FINALLY, THIS ISSUE IS THE ONE WHERE THE IES CONGRATULATES ITS NEWLY ELEVATED MEMBERS THAT JUST BECAME IEEE FELLOWS.

We also highlight a report on the Polish IES Chapter and its workshop on virtual hardware-in-the-loop simulation. Another great initiative is our Students and Young Professionals (SYP) movement, led by Marek Jasinski. His article provides insight into the energy that we could all feel at the last SYP meeting.

In the first feature article, "Using a Large Data Set to Improve Industrial Wireless Communications," Xiaolin Jiang, Zhibo Pang, Michele Luvisotto, Fei Pan, Richard Candell, and Carlo Fischione introduce us to wireless industrial automation in harsh environments. With wireless communication being a critical technology for the advancement of Industry 4.0, we need certainty on its performance and reliability in such instances. The authors use newly available measurement data to shed some light on this important topic.

In "Toward Industry 4.0 Components" by Xun Ye and Seung Ho Hong puts innovative Industry 4.0 concepts into practice. An asset administration shell represents real shop-floor assets in the virtual world and connects the cyberworld with the physical world.

Finally, "Supervisory Energy-Management Systems for Microgrids" by Gayathri Sugumar, Rajasekar Selvamuthukumaran, Mateja Novak, and Tomislav Dragičević, formal methods and networked timed automatons meet energy-management applications. The case of a microgrid is taken as an example to demonstrate the benefits of this approach.

Reviewed in the "Book News" column are *Reluctance Electric Machines: Design and Control* by Ion Boldea and Lucian Tutelea and *Electric Power: Distribution Emergency Operation* by Chee-Wooi Ten and Yachen Tang, both recently published by CRC Press and Taylor & Francis, respectively. Massimo Guarnieri's "Historical" column tells us about the historical root of all WhatsApp and Twitter trouble: "Messaging Before the Internet—Early Electrical Telegraphs" identifies early telegraphs even in ancient Greece! Finally, this issue is the one where the IES congratulates its newly elevated members that just became IEEE Fellows. Congratulations, and well deserved!

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