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We live in an era of computerization and internetization.

Imagine that one day your secretary informs you that the academic journals in which you publish your scientific findings are mostly class-B journals and that you are merely a class-C researcher as a result of her calculation of several numerical scores based on a handful of pre-set indexes about your academic performances. You are truly amazed and dismayed, of course, but then you start to ponder how a secretary who by no means understands your life's work is able to judge your academic standing and research quality.

Consequently you further wonder where you stand in relationship to your peers and why the established research quality assurance committees did not stand up to support you. She smiles and politely explains that peer reviews and academic committees are no longer needed; the institution has hired some new administrative assistants to take on the task of appraising researchers by equipping them with supercomputers connecting to accessible databases around the world. This has saved the institution a significant amount of money while making all academic assessments much simpler.

You thus find yourself far behind today's rapidly changing academic world.

This could become a real scenario if the current data-based numerical ranking systems continue to evolve and be employed to measure traditional research quality while effectively replacing most well-established academic standards and a healthy research culture.

Knowing the potential dangers of such computer-based rankings upon academia and education, tremendous efforts have been made in international scientific communities to resist the degradation and degeneration of current peer-review evaluation systems.

Douglas Arnold and Kristine Fowler, past President of the Society for Industrial and Applied Mathematics and Mathematics Librarian at the University of Minnesota respectively, refer to journal impact factors as "nefari-

ous numbers", which is the title of their communication published in the *Notices of the American Mathematical Society* in March 2011.

Douglas and Kristine began their commentary by pointing out that "The impact factor has been widely adopted as a proxy for journal quality. It is used by libraries to guide purchase and renewal decisions, by researchers deciding where to publish and what to read, by tenure and promotion committees laboring under the assumption that publication in a higher impact-factor journal represents better work, and by editors and publishers as a means to evaluate and promote their journals." And yet, they felt that "Goodhart's law warns us that 'when a measure becomes a target, it ceases to be a good measure.'" They further discussed several examples that journal impact factors can be (and indeed have been) manipulated in many different ways by authors and publishers, and especially by editors who make a game of it.

On May 30th of this year, the Australian Academy of Science released a memorandum to the media entitled "Science Academy welcomes decision to drop ERA journal rankings," declaring that "The Australian Academy of Science welcomed today's decision by the Government and the Australian Research Council to end the system of ranking academic journals as A*, A, B and C." They went on to say that "The ranking system was a highly controversial component of the Excellence in Research for Australia (ERA) assessment of university disciplines." The memo quotes Bob Williamson, Australian Academy of Science Secretary for Science Policy. Bob stated that "key areas such as interdisciplinary research and new research were seriously disadvantaged by journal ranking," and "This affected not only areas of science and technology, but also interactions between the sciences and the humanities." He further remarked that "It has been very distressing to see some universities using publications in highly ranked journals as the basis for funding, promotions, and even staff appointments."

In my view, current peer-review evaluation systems are working quite effectively, therefore they should be retained and sustained. They certainly are not perfect

and can be enhanced, but they should not be overridden or even replaced by today's available supercomputing power and access to extensive databases. At this point, it is appropriate to quote Sir Winston Churchill, who in 1947 stated that "Many forms of government have been tried and will be tried in this world of sin and woe. No one pretends that democracy is perfect or all-wise. Indeed, it has been said that democracy is the worst form of government except all those other forms that have been tried from time to time."

The *IEEE Circuits and Systems Magazine* is a peer-reviewed publication, thus its quality should be and will be judged by its readers, especially by Circuits and Systems Society members like you. According to Thomson Reuters, the 2010 impact factor of the Magazine is 1.568. Whether or not you consider this specific number

significant as a reflection or measure of the magazine's quality is not my main concern at this time. The fact is that I am very pleased with all the progress our society and magazine have made during the past four years of my tenure as Editor-in-Chief.

Now, it is with great pleasure that I extend a hearty welcome to Professor C.K. Michael Tse of The Hong Kong Polytechnic University as the new Editor-in-Chief of this magazine. I wish him great success in his new position and am confident the magazine will continue to improve under his leadership.

Tempus fugit sed amor semper manet. It has been both a pleasure and an honor to work with and for you.

