

of IEEE (MTT, AP, and EMC Societies); a life member of the Society of Electronic Engineers India (SEE); a life member of Vacuum Electronic Devices & Application Society (VEDAS); an associate member of the 'dB Society', USA; a member of Aeronautical Society of India; and a member of the Antenna Test & Measurement Society (ATMS) of India.

Dr. Pande is the author of more than 150 technical papers published in various journals and conferences and more than 50 technical reports. He wrote five chapters on EMI/EMC, NEMP and HPM for a book on 'EMC', published by IETE, India. Due to his scientific work he received:

- "Certificate of Achievements" from SUMMA Foundation in 1989,
- "Commendable Certificate" from Integrated Guided Missile Development Program (IGMDP) in 1990,
- "Megha Nath Saha Memorial Award" from The Institution of Electronics & Telecommunication Engineers (IETE) in 1994,
- "EMC Engineer of the Year 1998" from the Society of EMC Engineers (India),
- "Lab Scientist of the Year 2003" by DRDO,

- "National Science Day Award of 2004",
- "DRDO Scientist of the Year Award 2005" by Prime Minister in 2006,
- "DRDO Technology Group Award (2011): LRDE".

In addition to his scientific work, Dr. Pande is very actively engaged in conferences. He was also the Chairman of the 11th & 12th International Conference on Electromagnetic Interference & Compatibility (INCEMIC), Chairman of the International Symposium on Microwaves (ISM-2012), Chairman of the IEEE IAW 2013, Convener of the 9th and 10th INCEMIC as well as a member of the technical committees of various national and international conferences and seminars. He was a chairman of many workshops conducted by SEMCE(I).

Dr. Pande has always been enthusiastic in sharing his knowledge and experience with others. He has travelled across the country giving numerous lectures to the student community; to the armed services – Army, Airforce and Navy; and also to the public, private and government sectors.

On the personal side, Dr. Pande lives with his wife, son and daughter in Bangalore, India. His enjoys walking amidst the greens and reading. **EMC**



## Why Publish Your Research in EMC Journals?

*By Flavio Canavero, IEEE EMC Society Vice-President for Communications*

A large number of journals is available nowadays for the dissemination of the results of scientific research. These journals cover many different scientific disciplines and can be differentiated by subject/topic of interest, depth of the coverage of the matter, or reputation and popularity within the scientific community. IEEE publishes a constantly growing number of journals and covers a broad range of subjects, including all aspects of emerging technologies and interdisciplinary research. The competition with other commercial publishers is fierce, but IEEE enjoys top positions in many fields. Electromagnetic Compatibility (EMC) is only covered by IEEE (with the *Transactions* and the *Magazine*) at the level of archival scientific journals; the other existing periodical publications in *EMC* are technical bulletins essentially providing application notes, comments and advertisement for the practitioner.

From the perspective of a researcher in this area, the question about the bibliometric positioning of different IEEE journals and their influence on the scientific community may be relevant in view of submitting his/her results. Answering the previous questions is not easy. There are many ways to monitor, compare and study how scientific journals change over the years, such as considering their circulation, the reputation/prestige of the editorial board or the presence of articles submitted by eminent authors. However, these evaluations are

often subjective and not very reliable. A more objective tool for this purpose can be represented by bibliometric indicators, which are based on citation statistics. Although indicators can show some weak points, they are often thought to represent the most appropriate manner for evaluating, comparing and ranking a scientific journal. Today, the metric of the *ISI Impact Factor* is customarily employed by both authors and publishers to monitor the performance of journals.

ISI Impact Factor (IF) was created in the 1960s as a way to measure the value of scientific journals. For a particular journal and year, IF is computed by calculating the average number of citations to articles published in the journal during the preceding two years, from all articles published in that given year [1]. In this sense, IF is an indicator of "mean citedness". IF is calculated only for those journals indexed by WoS (Web of Science), briefly referred as ISI journals annually reported in the Journal Citation Reports (JCR) by Thomson Scientific. Regarding IEEE journals, almost all of them are ISI journals.

Unfortunately, IF is more often misused [2, 3]. The most insidious misuse is represented by the growing tendency to compare individual papers, people, programs, ascribing the properties of an individual journal to each article within that journal (and to each author). In fact, it should be pointed out that if the IF of journal A is greater than

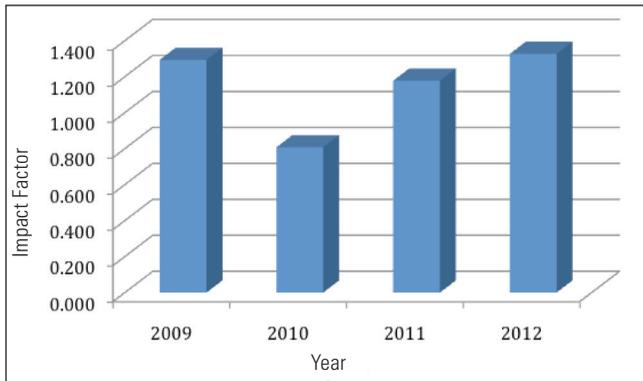


Fig. 1 - Recent trend of the Impact Factor of EMC Transactions.

that of journal B, then a paper in A is not necessarily superior to a paper in B, and the author of the paper in A is not necessarily superior to the author of the paper in B. The Publication Services and Products Board of IEEE has very recently approved a position statement on the appropriate use of bibliometric indicators for the assessment of journals, research proposals, and individuals.

Concerning the publications of the EMC Society, the IF value of the *Transactions* can be monitored through the IEEE Xplore webpage <http://ieeexplore.ieee.org/xpl/RecentIssue.jsp?punumber=15> that allows any visitor (IEEE membership is NOT required) to view the title and abstract of all papers published in the *Transactions* since the first issue in 1964 and also the forthcoming papers. For people belonging to Institutions subscribing to IEEE services or for those willing to pay a service charge, the full articles are available in pdf format and can be downloaded. The IF of the *EMC Transactions* is steadily growing and has reached its highest value in 2012 (per most recent data released by ISI). The trend of the *EMC Transactions* IF is reported in Fig. 1.

An additional recent success of the *EMC Transactions* is a significant reduction of the time between the first submission of a paper and its availability on line in the Early Access section of the IEEE Xplore webpage. Fig. 2 compares the average time to publication of the *EMC Transactions* over the last two years with the average over all IEEE publications and indicates that contributions submitted to our journal have now, if accepted, a much better chance to become publically available in a shorter time than papers sent to other journals.

It is my great pleasure to acknowledge that the above success must be ascribed to the scrupulous work of the past and present Editors-in-Chief of the journal, who have constantly monitored the paper review progress, and to the hard and constant work of the large number of reviewers, who have been able to comply with stringent deadlines without compromising the quality of their evaluations.

Presently, the IF value for this *Magazine* is not available, since – as the reader might remember – the *EMC Magazine* was born only last year from the hashes of the EMC Newsletter, which was not classified as an ISI publication. The *EMC Magazine* needs to build its own two-year record of citations before the IF can be released.

In conclusion, I would like to emphasize the great advantage for researchers to target our IEEE EMC journals for their publications: the *Transactions* and the *Magazine* offer a prestigious showcase in which

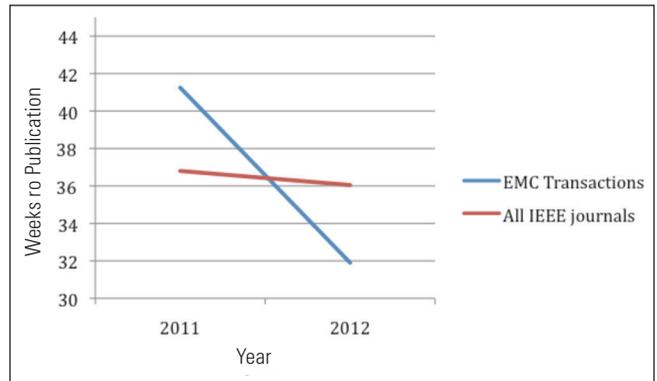


Fig. 2 - Average time to publication (in weeks) for contributions submitted to EMC Transactions and to all IEEE journals.



A screenshot of the Xplore page of the EMC Transactions, where the impact factor is displayed.

the efforts (papers) of their work become available to the scientific community in a shorter time than most other publications. **EMC**

## References:

- [1] Garfield E. 2006. The history and meaning of the journal impact factor. *JAMA*. 295(1): 90-93.
- [2] JCQAR – Joint Committee on Quantitative Assessment of Research. 2010. Citation Statistics. <http://www.mathunion.org/fileadmin/IMU/Report/CitationStatistics.pdf> [10 February 2010].
- [3] DORA - San Francisco Declaration on Research Assessment, 2012. Available at <http://am.ascb.org/dora/>

## Biography

**Flavio G. Canavero (SM '99, F '07)** received his electronic engineering degree from Politecnico di Torino (Technical University of Turin, Italy) and the Ph.D. degree from the Georgia Institute of Technology, Atlanta, USA, in 1986. Currently he is a Professor of Circuit Theory and Electromagnetic Compatibility with the Department of Electronics and Telecommunications, Politecnico di Torino, where he serves also as the Director of the Doctoral School. He is an IEEE Fellow, Associate Editor of the Letters Section of the IEEE Transactions on Electromagnetic Compatibility, and Vice-President for Communication Services of the EMC Society. He has been the Editor-in-Chief of IEEE Transactions on Electromagnetic Compatibility and Chair of URSI Commission E (Noise and Interference). His research interests include Signal Integrity and EMC design issues, interconnect modeling, black-box characterization of digital integrated circuits, EMI and Statistics in EMC.