Outgoing Editorial

DEAR TCAS-I READER:

As you read this editorial, my term as Editor-in-Chief of IEEE TRANSACTIONS ON CIRCUITS AND SYSTEMS—PART I: REGULAR PAPERS (TCAS-I) is almost over and, since this is my final opportunity to address you at large, I would like to give you a brief status update of the journal and thank the people that helped TCAS-I maintain its position as a top-class journal fostering its readers across disciplines to address humanity's grand challenges by conceiving and pioneering solutions to fundamental and applied problems in circuits and systems.

To begin with: TCAS-I is in good shape, healthy and stable. On an annual basis, TCAS-I receives about 900 fresh submissions, i.e., submissions that are new and not revisions of previously submitted manuscripts. Taking into account also resubmissions after minor and major revisions, TCAS-I receives a little over 1250 papers per year. This number is slowly increasing.

Of all fresh submissions received during my term as Editor-in-Chief, which spans 2010 and 2011, about 32% have been accepted (usually after major and/or minor revisions), 44% have been rejected (either directly after the first review round or after unsatisfactory major revision), and 24% have received the recommendation to be submitted elsewhere, after proper revision. All these percentages include also papers submitted to special issues of TCAS-I and exclude so-called administrative rejects, i.e., papers that are not correctly formatted according to IEEE's double-column format or are too long (i.e., longer than 14 pages, biographies and photographs included) or too short and thus should be submitted to our sister journal, IEEE TRANSACTIONS ON CIRCUITS AND SYSTEMS—PART II: EXPRESS BRIEFS (TCAS-II). Among the 24% manuscripts that received the recommendation to be submitted elsewhere, quite a few were encouraged to be revised and resubmitted to TCAS-II, often because the ideas presented were considered interesting and within the field of interest of both journals, but the amount of material and results did not warrant publication as a regular paper of more than six pages. Without taking into account manuscripts submitted for special issues, which are by invitation only, the acceptance rate of TCAS-I amounts to 26%.

Another important figure to you is probably how long it takes for the editorial board of TCAS-I to come to a first decision on a manuscript. On average this is 46 days. Less than 27% of all papers submitted require more than 60 days to come to a first decision; only less than 5% need more than 90 days. As a reference, the "good practice" recommended by the IEEE Publication Services and Products Board (PSPB) is that more than 50% of the fresh papers submitted should have a first decision within 90 days. TCAS-I, which is perfectly in line with this recommendation, sets an even better target.

The average delay for a manuscript from its first submission and the moment it is accepted for publication and all files are prepared for handing over to the IEEE Publications Department is 24 weeks. And on average all manuscripts are on IEEE Xplore 35 weeks after you offered it for review for the first time. This is 6 weeks faster than the average "Sub-to-Epub" time of all IEEE journals.

Over the last two years we have published six special issues or sections: two editions of the annual Special Issue on the International Symposium on Circuits and Systems (ISCAS), the international flagship conference of the IEEE Circuts and Systems Society; two special sections on the annual Custom Integrated Circuits Conference (CICC); one issue on the 2009 Systems on a Chip Conference (SOCC 2009); and one issue on Blind Signal Processing. TCAS-I will likely continue to publish special issues on ISCAS and CICC. Other special issues or sections, especially those on selected and emerging topics in the field of circuits and systems, are foreseen to be published in the new journal of the IEEE Circuits and Systems Society (CASS), the IEEE JOURNAL ON EMERGING AND SELECTED TOPICS IN CIRCUITS AND SYSTEMS (JETCAS).

Apart from the above-mentioned special issues/section, TCAS-I also published a number of invited papers and tutorials. In the January 2010 issue we published an invited tutorial, authored by Krishnendu Chakrabarty, entitled "Design Automation and Test Solutions for Digital Microfluidic Biochips." This tutorial was invited after a very successful, both in terms of quality and attendance, tutorial given by the author at the IEEE International Symposium on Circuits and Systems in Taipei, Taiwan in May 2009. In June 2010, we published an invited paper by Ali Hajimiri, entitled "Generalized Time- and Transfer-Constant Circuit Analysis." In January 2011, we published an invited tutorial by José de la Rosa, entitled "Sigma-Delta Modulators: Tutorial Overview, Design Guide, and State-of-the-Art Survey." Also this tutorial was derived from a very successful tutorial at ISCAS, this time in Paris, in May 2010. The same issue also comprised an invited paper by Heng Zhang and Edgar Sánchez-Sinencio, entitled "Linearization Techniques for CMOS Low Noise Amplifiers: A Tutorial." Needless to say that all the above invited papers/tutorials were well received by the TCAS-I readership, i.e., you, as evidenced from the large number of IEEE Xplore downloads. As a heads up: the upcoming January issue of TCAS-I will publish an invited tutorial by Massimo Alioto, entitled "Ultra-Low Power VLSI Circuit Design Demystified and Explained: A Tutorial." Also this tutorial was derived from a very successful tutorial at ISCAS 2010.

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Handling the large number of submitted manuscripts, providing good-quality reviews, and having a fast turn-around time would not have been possible without the great sense of professionalism, prompt action, and help of my editorial board. So a big thank you to Gabriele Manganaro, Aleksandar Tasic, Ali Sheikholeslami, Anas Hamoui, Andrea Neviani, Andreas Demosthenous, Antonio Strollo, Bertram Shi, Chien-Cheng Tseng, Chip Hong Chang, Chua-Chin Wang, Deming Chen, Eduard Alarcon, Felix Lustenberger, Gaetano Palumbo, Hanspeter Schmid, Howard Luong, Huijun Gao, Igor Filanovsky, Jerry Sobelman, Jinhu Lu, Jipeng Li, Joseph Chang, Manuel Delgado Restituto, Marina Mondin, Massimiliano Laddomada, Maurits Ortmanns, Mauro di Marco, Ming-Der Shieh, Mohab Anis, Mrityun Chakraborty, Norikazu Takahashi, Pui-In (Elvis) Mak, Reza Lotfi, Sameer Sonkusale, SeongHwan Cho, Shahriar Mirabbasi, Shanthi Pavan, Sorin Cotofana, Tsorng-Juu (Peter) Liang, Vincent Gaudet, Xiang Li, Xinghuo Yu, Xinmiao Zhang, Yehia Massoud, and Yichuang Sun.

Handling papers for special issues and special sections and guaranteeing at least three good quality reviews per manuscript in a timely manner requires a peak quality time injection from the guest editors handling them. So a big thank you to the Guest Editors who worked with me on the ISCAS 2009, CICC 2009, SOCC 2009, ISCAS 2010, CICC 2010, ISCAS 2011 special issues: Chua-Chin Wang, Felix Lustenberger, Yehia Massoud, Shahriar Mirabbasi, Gennady Gildenblat, Andrew Marshall, Sakir Sezer, Gabriele Manganaro, Maged Ghoneima, Yong Lian, Christian Piguet, Mohab Anis, Howard Luong, Aleksandar Tasic, Eduardo Barros da Silva, Tor Sverre (Bassen) Lande, and Tsorng-Juu (Peter) Liang.

Every journal needs an advisor. I have been very fortunate that my predecessor, past Editor-in-Chief Gianluca Setti, has always been and is always willing to give his solicited and unsolicited, but highly appreciated, advice, comments, or relevant information. So a big thank you to Gianluca.

Since the fields of interest of TCAS-I and its sister journal, TCAS-II, are fully overlapping and both journals only differ in length, one can imagine that good interaction is required between the editors-in-chief of both journals. So, a big thank you goes to the Editor-in-Chief of TCAS-II, Yong Lian.

Checking whether the information provided at the time of submission, e.g., on the manuscript's history (e.g., prior submissions to a conference, another journal, or TCAS-I), checking the layout of the manuscript, its length, its readability, acknowledging the submission made, and verifying whether all items for the final paper were correctly submitted would considerably add to my work load and distract me too much from the technical content and my contact with authors, reviewers, and associate editors. These responsibilities were in the safe hands of my editorial assistants, Alistair Rennie and AnnaLaura Simoni, who were always there when I needed them and knew exactly what to do and when, so that I did not have to ask for it. So, a big thank you to both Alistair and AnnaLaura.

As a reader you may have not noticed it, but, as you can imagine, processing a large number of submissions in a timely manner also requires a good paper handling system. The TCAS-I paper handling system is Manuscript CAS (CAS-WMS), stationed in Torino, Italy, and maintained and improved by its system administrator, the amazing Alberto Grosso, who also maintains the systems for three other CASS journals, viz. TCAS-II, T-CSVT, and JETCAS. No matter how complicated the feature to implement was, Alberto never let me nor my colleague editors down and often had it implemented within a day or so. So, mille grazie, Alberto.

Once a final manuscript has been accepted for publication, it is relayed onto the IEEE Publications Department in Piscataway, NJ, USA. Though not on a daily basis, it required a perfect handover and subsequent acknowledgement. For this I would like to thank Senior Editor Dan Henson and Editorial Assistant Meera Patel for the smooth handover and good collaboration.

An important group of people that deserve to be thanked is the group of reviewers to the journal. Though not impossible, it simply would take up way too much time to list them all here. For the reviewers, please be aware that your good work has been highly appreciated and ranked. We count on your continued service to the journal.

My almost final thanks and thoughts go to my Deputy Editor-in-Chief, now Incoming Editor-in-Chief and my successor, Gabriele Manganaro. He served as TCAS-I Deputy-Editor-in-Chief (DEIC) in an amazing way, being not only hard-working and extremely reliable, but also very keen to propose new ideas and directions for enhancing the level of the journal and who, most importantly, is a great person to interact with. He was and is always there when I needed his input and help on new initiatives and the not-so-straightforward cases. I am sure that I leave the journal in the best capable hands and I wish Gabriele and his team the best possible success. Mille grazie!

My final thoughts and thanks go to my wife Marjo and my children Jeroen, Nienke, and Marleen. TCAS-I kept me busy for 20 hours a week for 2 years and required me being hooked up to the Internet for about 3 hours every day. Although I tried to reduce the burden on them to the minimum, there were many moments that I should have been with them while I was working on the journal instead. It has been their unconditional love and support that made and makes it possible for me to sustain it until the end of my term. Next holiday will be one without Internet. Promise!

Having said all that, dear readers of TCAS-I, I wish you a Merry Christmas and a Happy New Year!

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Wouter A. Serdijn (M'98–SM'08–F'11) was born in Zoetermeer ("Sweet Lake City"), The Netherlands, in 1966. He received the M.Sc. (*cum laude*) and Ph.D. degrees from Delft University of Technology, Delft, The Netherlands, in 1989 and 1994, respectively.

His research interests include low-voltage, ultra-low-power and ultra wideband analog integrated circuits for wireless communications, pacemakers, cochlear implants, portable, wearable, implantable and injectable ExG recorders and neurostimulators. He is coeditor and coauthor of the books *Ultra Low-Power Biomedical Signal Processing: An Analog Wavelet Filter Approach for Pacemakers* (Springer, 2009), *Circuits and Systems for Future Generations of Wireless Communications* (Springer, 2009), *Power Aware Architecting for Data Dominated Applications* (Springer, 2007), *Adaptive Low-Power Circuits for Wireless Communications* (Springer, 2006), *Research Perspectives on Dynamic Translinear and Log-Domain Circuits* (Kluwer, 2000), *Dynamic Translinear and Log-Domain Circuits* (Kluwer, 1998), and *Low-Voltage Low-Power Analog Integrated Circuits* (Kluwer, 1995). He authored and coauthored 6 book chapters and more than 200 scientific publications and presentations. He teaches analog electronics, analog signal processing, micropower analog IC design, and electronic design techniques. He received the Electrical Engineering Best Teacher Award in 2001 and 2004.

Dr. Serdijn has served as an Associate Editor for the IEEE TRANSACTIONS ON CIRCUITS AND SYSTEMS—PART I: REGULAR PAPERS (2004—2005) and the IEEE TRANSACTIONS ON CIRCUITS AND SYSTEMS—PART II: EXPRESS BRIEFS (2002—2003 and 2006—2007), as Deputy Editor-in-Chief for IEEE TRANSACTIONS ON CIRCUITS AND SYSTEMS—PART I: REGULAR PAPERS, as member of the Editorial Board of Analog Integrated Circuits and Signal Processing (Springer), as member of the Editorial Board of the *Journal on Low Power Electronics*, as Tutorial Session co-chair for ISCAS 2003, as Analog Signal Processing Track Co-Chair for ISCAS 2004 and ISCAS 2005, as Analog Signal Processing Track Chair for ICECS 2004, as Technical Program Committee member for the 2004 International Workshop on Biomedical Circuits and Systems, as International Program Committee member for IASTED CSS 2005 and CSS 2006, as Technical Program Committee member for APCCAS 2006, as Technical Program Committee member for the IEEE Biomedical Circuits and Systems Conference (BioCAS 2006, BioCAS 2007, and BioCAS 2008), as Special-Session Chair for ISCAS 2007, as International Program Committee member of the 2009 International Conference on Biomedical Electronics and Devices, as Special Session Chair for ISCAS 2009, as Special Sessions Chair for ICECS 2009, as Technical Program Committee member for ICUWB 2009, as Technical Program Chair for ISCAS 2010, as Technical Program Chair for BioCAS 2010, as chair of the Analog Signal Processing Technical Committee of the IEEE Circuits and Systems Society, as a member of the CAS-S Long Term Strategy Committee and as a member of the CAS-S Board of Governors Nominations Committee. He currently serves as a member of the Board of Governors (BoG) of the Circuits and Systems Society (2nd term), a member of the Conference Division of the CAS-S BoG, as Technical Program Co-Chair for ISCAS 2012, as Editor-in-Chief for IEEE TRANSACTIONS ON CIRCUITS AND SYSTEMS—PART I: REGULAR PAPERS (2010—2011) and as a member of the Steering Committee of the IEEE TRANSACTIONS ON BIOMEDICAL CIRCUITS AND SYSTEMS (T-BioCAS). He is an IEEE Fellow and a mentor of the IEEE.