

## Special issue on IEEE-NEWCAS2013

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This Special Issue of Analog Integrated Circuits and Signal Processing (ALOG) is devoted to analog, digital and mixed-signal topics from the IEEE International NEWCAS conference, held in Paris (France) on June 16–19, 2013. It gathers extended versions of selected papers covering a wide variety of subjects including analog & RF circuit design, digital and mixed-signal integrated circuits, computer architecture, signal processing, sensors, encompassing a broad range of applications such as telecommunications, imaging and vision, safety, energy and biomedical.

The major areas of circuits and systems covered by NEWCAS 2013 drew 247 submissions from 35 countries spanning the globe. After a rigorous review process involving 803 submitted reviews, 115 contributions were accepted for presentation. For the second time, the low acceptance rate of 43 % was fulfilled at NEWCAS. This accomplishment fits well the general trend of high and yet increasing quality of the conference, which has been inspired this year by the vision of the NEWCAS2013 General Chairs, Prof. Patrick Loumeau and Prof. Mohamad Sawan.

Among the published contributions in the NEWCAS2013 proceedings, a pre-selection of the 21 papers with the best reviews was made and the authors were invited for submission to this Special Issue. We received 12 extended manuscripts and after the review process, eight

papers have been accepted for publication. Selecting eight papers among 247 submissions was a critical task and can't be all-perfect. We are aware that we probably missed many excellent contributions; still, we did our best to put together a Special Issue as complete and representative as possible.

The technical program of NEWCAS 2013 is the result of a truly international cooperation of experts. We feel very much indebted to the Technical Program Committee for its invaluable work and for giving us the opportunity to organize this prestigious IEEE conference in Paris. We would like to thank the authors for their scientific contributions, and the numerous reviewers for their constructive evaluations. We really enjoyed interacting with them; they really made this journey exciting. We are grateful to Professor Mohammed Ismail, Editor-in-chief of Springer ALOG, for his invitation to guest edit this Special issue. We also express our deep appreciation of the efforts by the Springer personnel to make this Special issue possible, thanks to their expert help.



**Patricia Desgreys** (M'00–SM'12) was born in Bordeaux, France, in 1972. She received the M.Sc. degree and Ph.D. in Microelectronics from the University of Bordeaux in 1996 and 1999. Since 2000, she is associate professor, then Professor at the Department of Communication and Electrical Engineering, Institute Mines-Telecom-Telecom ParisTech. Since 2013, she is heading the Circuit and Communications Systems (C2S) research group in charge of

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System. So far, she has co-authored more than 90 technical publications on international journals (16+) and conference proceedings and has been involved in many collaborative projects.

Patricia Desgreys is a board member of the LTCI (Processing and Information Communication Laboratory), CNRS research laboratory of Telecom ParisTech. She is also animator of its thematic network within the Mines-Telecom Institute. Since 2007, she is a member of the Steering Committee of CNRS Research group on SoC-SiP in charge of animating the community of 600 French researchers on SoC-SiP design. In this context, she has organized more than ten workshops on hot topics with international renowned speakers. Patricia is an IEEE Senior Member, involved in the international animation of the CAS community, in particular Technical Program Chair of IEEE NEWCAS for 2012 & 2013 and Guest Editor of Special Issues in Analog Integrated Circuits and Signal Processing.



**Daniel Massicotte** (S'91–M'94–SM'08) received the B.Sc.A. and M.Sc.A. degrees in electrical engineering and industrial electronics in 1987 and 1990 respectively from the Université du Québec à Trois-Rivières (UQTR), QC, Canada. He obtained the Ph.D. degree in electrical engineering in 1995 at the École Polytechnique de Montréal, QC, Canada. In 1994, he joined the Department of Electrical and Computer Engineering, Université du Québec à

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of the Laboratory of Signal and Systems Integration. Since 2001, he has been Founding President and Chief Technology Officer of Axiocom Inc. He has been Head of the Industrial Electronic Research Group, since 2011 and Head of the Electrical and Computer Engineering Department, since 2014. He received the Douglas R. Colton Medal for Research Excellence awarded by the Canadian Microelectronics Corporation, the PMC-Sierra High Speed Networking and Communication Award and the Second place at the Complex Multimedia/Telecom IP Design Contest from Europractice in 1997, 1999 and 2000 respectively. His research interests include advanced VLSI implementation, digital signal processing for wireless communications, measurement, medical and control problems for linear and nonlinear systems. He has proposed many methods based on modern signal and biosignal processing such as neural networks, fuzzy logic, wavelet transform, and metaheuristics. He is the author or co-author of more than 130 technical papers in international conferences and journals, as well as author or co-author of 7 pending patents. Dr. Massicotte is also member of the “Ordre des Ingénieurs du Québec”, “Groupe de Recherche en Électronique Industrielle” (GREI), and “Microsystems Strategic Alliance of Quebec” (ReSMiQ).