

Minutes of 2015 Nano-Giga TC Annual Meeting at ISCAS 2015

Time/Date: 12:50 to 14:10, Tuesday, May 26, 2015.

Place: Room 15 - C. Paredes at Cultural Centre of Belém (CCB), Lisbon, Portugal

Acting Chair: Prof. Sorin Cotofana

1. Acting Chair, Prof. Sorin Cotofana, welcomed the attendees of Nano-Giga TC and started the meeting agenda.
2. Make NG-TC activities report.
 - (1) ISCAS 2015 review process in numbers
 - The papers were organized in 120 lecture and 45 poster sessions(51% acceptance rate)
 - 23 special sessions were organized (2 NG-TC)
 - (2) ISCAS 2015 – NG-TC,
 - 17 papers accepted: 3 Lectures (15) + 1 Poster (2) sessions
 - 2 Special Session: *Device-Circuit-System Integration Using Emerging Memory Part I & II* (organized by Profs. Meng-Fan Chang and Shimeng Yu)

ISCAS Submission	2008	2009	2010	2011	2012	2013	2014	2015
Regular Papers	31	50	77	37	38	27	25	35
Special Session Papers	0	10	10	0	0	0	4	9

- (3) Updates on the Member List
 - NG-TC members – 37 (+4 new members)
 - Active NG-TC members are expected to
 - Attend the TC meeting held every three year at ISCAS
 - Serve as a RCM every two years
 - Submit annual report
 - Participate in TC related activities (RCM, Session Chairs, review, organization of conferences/workshops supported by the TC, serving on editorial boards of the Transactions and Journals ...)
 - Activity is the key issue (No active members no TC!)
3. New Members nomination and approval (4 new TC members).

Approved new TC members are:

 - (1) Dr. Christos Papavassiliou, Dept. of Electrical Engineering, Imperial College London, UK
 - (2) Dr. Hai (Helen) Li, Dept. of Electrical and Computer Engineering, University of Pittsburgh, USA
 - (3) Dr. Jing Li, Dept. of Electrical and Computer Engineering, University of Wisconsin, USA
 - (4) Dr. Elisa Vianello, CEA-LETI (Laboratory of Electronics, Technology and Instrumentation of CEA, Grenoble), France

4. New TC Secretary elections and approval
 - Dr. Meng-Fan (Marvin) Chang, Full Professor, Dept. of Electrical Engineering, National Tsing Hua University (NTHU), Taiwan.
5. TC website: <http://ieee-cas.org/community/technical-committees/nano-giga-tc>
 - (1) Revise Scope and Mission of NG-TC to show our distinction.
 - (2) Secretary is responsible to keep the webpage up to date.
 - (3) Put a link to it in your Webpage to increase its visibility.
6. CASS plans on TCs
 - (1) New Bylaws and uniform policy are in place
 - (2) TC should play a greater role in CASS, e.g., define CAS-FEST topic candidates.
 - (3) TC will be reviewed on a regular base – they are *living statements* thus need periodic confirmation or revision (merge or termination are also possible!)
 - (4) Annual Reports should set out
 - (5) Drop or diminish the AR paper list
7. The NG-TC shall execute outstanding activities to cope with its mission and vision as stated in its bylaw. The following items are the actions.
 - (1) ISCAS 2016: more papers/tutorial/special sessions, and participate ISCAS 2016.
 - (2) Recruit more new members from all regions with nano-electronics profile
 - (3) Technically sponsor conferences
 - NANOARCH
 - (4) Increase collaboration w/ other TC
 - The Nano-electronics TC of IEEE Nano Council
 - Approach them to join our TC
 - IEEE NANO Conference
 - Funding sponsorship to this conference
 - (5) Special Section on IEEE
 - (6) Distinguish Lecturer nominations
 - (7) IEEE Fellow endorsements
 - (8) Summer School
 - (9) ISCAS 2016 will be held in Montreal, Canada, from May 22 to 25, 2016.
8. Annual TC member report (May 2014 to April 2015) contributed by 13 members has been submitted on May 28th. Update is still possible.
9. 2015 Curated Publication List
 - **M.-F. Chang**, Chien-Chen Lin, et al, "A 3T1R Nonvolatile TCAM Using MLC ReRAM with Sub-1ns Search Time," *IEEE International Solid-State Circuits Conference (ISSCC) Dig. Tech. Papers*, pp. 318-319, Feb. 2015.
 - I.-T. Wang, Y.-C. Lin, Y.-F. Wang, C.-W. Hsu, and **T.-H. Hou**, "3D synaptic architecture with ultralow sub-10 fJ energy per spike for neuromorphic computation," International Electron Devices Meeting (IEDM) 2014, pp. 665-668, San Francisco, CA, USA, Dec. 15-17, 2014.
 - D. Schinianakis and **T. Stouraitis**, "Multifunction Residue Architectures for

- Cryptography,” IEEE Transactions on Circuits and Systems I, vol. 61, no. 4, pp. 1156 – 1169, April 2014.
- **C.-C. Wang**, W.-J. Lu, K.-W. Juan, Wei Lin, H.-Y. Tseng, and C.-Y. Juan, “Process corner detection by skew inverters for 500 MHz 2xVDD output buffer using 40-nm CMOS technology,” *Microelectronics Journal*, vol. 46, no. 1, pp. 1-11, Jan. 2015.
 - C. Chen, M. Enachescu, and **S.D. Cotofana**, "Enabling Vertical Wormhole Switching in 3D NoC-Bus Hybrid Systems", 18th Design, Automation & Test in Europe conference (DATE 2015), Grenoble, France, 9-13 March 2015.
 - J. Chen and **S.D. Cotofana**, "Linear Compositional Delay Model for the Timing Analysis of Sub-Powered Combinational Circuits", IEEE Computer Society Annual Symposium on VLSI (ISVLSI 2014), Tampa, USA, 9-11 July 2014.
 - **Shuenn-Yuh Lee**, Jia-Hua Hong, Cheng-Han Hsieh, Ming-Chun Liang, Shih-Yu Chang Chien, and Kuang-Hao Lin, “Low-Power Wireless ECG Acquisition and Classification System for Body Sensor Networks”, *IEEE Journal of Biomedical and Health Informatics*. vol. 19, no.1, pp.236-246, Jan. 2015.
 - W. C. Liu, T.-C. Wei, Y. S. Huang, C. D. Chan, and **S. J. Jou**, “All-Digital Synchronization for SC/OFDM Mode of IEEE 802.15.3c and IEEE 802.11ad,” *IEEE Trans. Circuits Syst. I*, Vol. 62, No. 2, Feb. 2015, pp. 545-553.
 - C. Amat, A. Calomarde, F. Moll, and **A. Rubio**, “Feasibility of the embedded DRAM cells implementation with FinFET devices” *IEEE Transactions on Computers*, December 2014.
 - N. Aymerich and **A. Rubio**, “Reliability and performance tunable architecture: the partially asynchronous R-fold Modular Redundancy”, *IEEE Transactions on nanotechnology*, 13-3, pp. 617-622, May 2014.

End of Meeting.



Group photo at 2014 NG-TC Annual Meeting

Members who attended Nano-Giga TC at ISCAS 2015

No.	Name	Affiliation/ University	e-mail address
1.	Mladen Berekovic	Technical University of Braunschweig, Germany, Institute of Computer and Network Engineering, Germany	berekovic@ida.ing.tu-bs.de
2.	Hsie-Chia Chang	Department of Electronics Engineering National Chiao-Tung University, Taiwan	hcchang@mail.nctu.edu.tw
3.	Meng-Fan (Marvin) Chang	,National Tsing Hua University, Taiwan	mfchang@ee.nthu.edu.tw
4.	Robert Chen-Hao Chang	National Chung Hsing University, Taiwan	chchang@nchu.edu.tw
5.	Ching-Te Chiu	Department of Computer Science National Tsing Hua University	ctchiu@cs.nthu.edu.tw
6.	Herming Chiueh	Department of Communication Engineering National Chiao-Tung University, Taiwan	chiueh@ieee.org
7.	Sorin Cotofana	Delft University of Technology, NL	S.D. Cotofana@tunelft.nl
8.	Shyh-Jye (Jerry) Jou	Department of Electronics Engineering National Chiao-Tung University, Taiwan	jerryjou@mail.nctu.edu.tw
9.	Hai (Helen) Li	University of Pittsburgh, USA	HAL66@pitt.edu
10.	Jing Li	University of Wisconsin, USA	jli587@wisc.edu
11.	Christos Papavassiliou	Dept. of Electrical Engineering, Imperial College London, UK	c.papavas@imperial.ac.uk
12.	Themis Prodromakis	Nano Research Group, Electronics and Computing Dpt., University of Southampton, UK	T.Prodromakis@soton.ac.uk
13.	Antonio Rubio	Department of Electronic Engineering Universitat Politècnica de Catalunya, Spain.	antonio.rubio@upc.edu
14.	Elisa Vianello	CEA-LETI (Laboratory of Electronics, Technology and Instrumentation of CEA, Grenoble), France	Elisa.VIANELLO@cea.fr
15.	Shimeng Yu	Arizona State University, USA	shimengy@asu.edu