

**Midwest Symposium on Circuits and Systems Steering Committee**  
**Minutes of meeting held in Seattle, Washington, Monday, August 2, 2010**

**Steering Committee members present:** Hoda S. Abdel-Aty-Zohdy, M. Omair Ahmad, Majid Ahmadi, Magdy Bayoumi, Rick Branner, Jose Delgado-Frias, Shervin Erfani, Igor Filanovsky, Randy Geiger, Ken Jenkins, Manuel Jimenez, Rogelio Palomeres-Garcia, Sherif Michael, Wasfy Mikhael, Saeid Nooshabadi, B. Nowrouzian, Hector Perez-Meana, Carla Purdy, Nader Rafla, Gabriel Rincon-Mora, Michael Soderstrand, M.N.S. Swamy, Mona E. Zaghloul

**Guests Present:** Mario Chauca, Jong-Moon Chung, Waleed Khalil, Donald Lie, Sreeraman Rajan, GianLuca Setti, Thanos Stouraitis

The meeting was called to order at 8:30 p.m. by Prof. Mikhael. Prof. Delgado-Frias, 2010 Symposium Chair, welcomed the Steering Committee. The minutes of the 2009 meeting were read and approved.

The treasurer's report was given by Prof. Jenkins, who has succeeded Prof. Wierzba. The MWSCAS account will now be at Penn State. It will have no administrative fees or interest. The Committee approved a letter of thanks for Prof. Wierzba for his years of service to. Current account balance is \$24,217.60. An additional \$1000-\$1200 is expected from the 2009 Organizing Committee.

**Old business:**

**2007 Symposium:** Prof. Jenkins presented his analysis of the deficit incurred in 2007. The total deficit, shared equally between MWSCAS and the collocated NEWCAS, was \$47,858. NEWCAS responsibility is 50%, \$23,929. Since the MWSCAS Steering Committee and CASS split the MWSCAS portion equally, the Steering Committee is thus responsible for \$11,965. Prof. Sawan, 2007 Chair, has stated that his institution, École Polytechnique de Montréal, will contribute half of this. Prof. Michael moved that the Committee contribute \$6,000. Prof. Bayoumi seconded the motion.

Discussion centered on the reasons for the loss and how to prevent this in future. Prof. Jenkins conveyed Prof. Sawan's analysis: the negative balance was mainly due to the low number of conference hotel registrations, since there are many less expensive hotels near the conference site. Unused hotel rooms and meeting space rental fees accounted for \$24,000 of the loss. Several members suggested useful strategies, which were summarized by Prof. Mikhael into two important points for the future: (1) the guidelines for symposium organizers should clearly state that the organizers need to avoid being responsible for hotel rooms that are not used by attendees; (2) it is imperative that symposium organizers draw on the experience of senior Committee members to assist them in negotiations to avoid incurring similar fees in future.

The Committee's responsibility was discussed further. Prof. Bayoumi noted that since 1994 the policy has been 50% CASS and 50% the host institution. Prof. Mikhael noted that there is no policy in the Committee bylaws but that the Committee does receive \$5 per registrant each year. Since it would help Prof. Sawan and since the Committee has the funds, it is reasonable to help cover the shortfall. Prof. Soderstrand noted that the Committee has been setting aside the per-registrant contributions for this type of situation. He moved that the Committee pay the full \$11,900. After spirited discussion, Prof. Soderstrand's motion did not receive a second. The original motion, to contribute \$6,000, was then voted on and passed. Prof. Mikhael noted that the 2007 conference was excellent overall and the budget difficulties should not detract from the technically strong and enjoyable meeting. It was also noted that this action will still leave the Committee with a balance of approximately \$19,000 after the funds from the 2009 Symposium are received.

**2009 Symposium:** Prof. Perez-Meana reported on the 2009 Symposium. The report is attached at the end of these minutes. Prof. Soderstrand added a very positive review of the 2009 conference. Prof. Mikhael led the Committee in a round of applause to congratulate Prof. Perez-Meana and his organizing committee on their excellent work.

**2010 Symposium (preliminary report):** Prof. Delgado-Frias presented the preliminary report for 2010. Like Montreal, Seattle is very expensive. His Committee negotiated a room rate of \$189 but providing meals was too expensive (e.g., a hotel box lunch is \$27.00). However there are many reasonably priced restaurants nearby. Hosting the Symposium in an expensive metropolitan area is challenging and requires trade-offs. Prof. Soderstrand noted that IEEE might have insurance to help. There are over 300 registrants, in line with 2009, and 321 papers. He expects a small profit. Prof. Delgado-Frias thanked Prof. Palomeres-Garcia for extensive help with the program. Prof. Mikhael stated that the symposium so far has been very enjoyable experience and the sessions have been well-attended. He led the Committee in a round of applause for the 2010 organizers.

Prof. Soderstrand reported 2011 plans. The venue is Yonsei University, Seoul, one of Korea's premier universities, with spectacular facilities. He introduced Prof. Chung, the 2011 co-chair. There are several nearby hotels, with a range rates, and on-campus accommodations for students. Prof. Nooshabadi is technical program chair. The symposium will be August 7-10, with a traditional schedule, with possibly a half day Wednesday. There will be a plenary session, student paper contest, tutorials, banquet, and Steering Committee meeting. Lunches will be provided. Seoul's Incheon is excellent and there is good transportation in Seoul, including a reasonably-priced subway. Prof. Mikhael noted that many people will not be able to attend the symposium if their paper is not accepted and suggested that 4-page papers be requested. Prof. Nooshabadi stated that a number of distinguished speakers will be invited and that three journals have agreed to publish selected papers. Prof. Setti noted that the loan requested from CASS should be at most 20% of the budget and Prof. Mikhael remarked that this loan is traditionally seed money. CASS sponsorship is typically 50% but current plans are 20% from CASS and 80% from the University. Prof. Soderstrand indicated it is difficult to change that at this point. Prof. Erfani noted the importance of the student paper and suggested a return to traditional rules: the student must be first author, there can only be one student author, and the student must present the paper. Prof. Mikhael emphasized that this is advice only. Final rules are decided by the hosting committee and institution. Prof. Soderstrand agreed that these are good rules and that

they will be used in 2010. Prof. Mikhael noted that a web site with a lot of information can be as confusing as one with too little information. Prof. Soderstrand will make changes to improve readability.

#### **New business:**

**2012 Symposium:** Prof. Mikhael initiated discussion of 2012 proposals. For 2012 there are 2 proposals, Boise State and Ohio State.

Prof. Rafla presented the Boise State proposal. Prof. Mikhael noted they had also proposed hosting the 2011 symposium. The hotel rate will be \$97 per night, good facilities are available, and there may be additional events such as a rafting trip. He has support from three local industries and prospects for two more. Several suggestions budget changes to the budget were made, including the student registration fee. A low fee will attract more students but will increase costs. Prof. Rafla will rework this part of the budget.

Dr. Khalil, representing Prof. Ismail, presented the OSU proposal. OSU cannot bid for 2013 because of a conflicting conference at OSU which is already scheduled. MWSCAS has not been in the Midwest for a while. There are excellent facilities in the new Ohio Union and reasonably priced hotel rooms. The Air Force Research Lab (AFRL) will provide support. The proposal is for July 8-11, but August dates can be considered if the decision is finalized this year. There are a number of good-sized cities within driving distance, good service from several airline hubs, and good cultural attractions. The possibility of a conflict with NAECON was raised. Having the two events close together could be advantageous or not. Prof. Zohdy noted that a full proposal is needed. The Committee would like both institutions to host, but cannot have both in the same year. The Boise proposal was originally for 2011 and, at this point, is more complete. OSU cannot host in 2013 but could consider 2014. After additional discussion it was decided that the 2012 Symposium will be at Boise State: OSU is strongly encouraged to revise their proposal for 2013 or 2014.

**Future symposia:** Prof. Mikhael stated Orlando is a possibility for 2013 if there are no other proposals. Potential proposals include Lima, Peru (2014), Ottawa, and Western New England College. Prof. Zohdy encouraged anyone interested to send her proposals.

**Steering Committee membership:** Following committee membership rules posted on the website ([www.mwscas.org](http://www.mwscas.org)) members who have been inactive for three years (Badawy, Hamdy, Mandour, Salam) will be removed from the roster. The following new members were approved: Prof. Mario Chauca, Prof. Jong-Moon Chung, Prof. Paul Furth, Prof. Donald Lie, Prof. Neeraj Magotra, Dr. Sreeraman Rajan. Prof. Geiger noted the importance of recruiting young members and suggested thinking of ways to encourage this.

**Interaction with CASS:** Guests Prof. Setti, CASS president, and Prof. Stouraitis, CASS VP-Conferences, initiated a discussion of symposium organizing practices and CASS sponsorship. They stressed the importance of best practices and drawing on the expertise of successful organizers. CASS sometimes appoints co-chairs when they cosponsor, (e.g., ISCAS) and may expand this practice. Prof. Zohdy noted the many successful MWSCAS organizers on the Committee, and Prof. Setti agreed that in this case CASS does not need to appoint a co-chair. Prof. Bayoumi noted we should ensure this a regular practice. Previously, the CASS VP for conferences was a member of the Steering Committee, this worked well. Since all organizers are volunteers, it is important not to put unnecessary restrictions on them. Prof. Filanovsky noted that MWSCAS is much smaller than ISCAS and that the details of the venue change each year, thus guidelines are useful but need flexibility. Prof. Swamy noted that MWSCAS is the oldest conference. We are always open to good suggestions, but we have the necessary expertise. We should use best practices, in particular the general chair and technical chair should have previous experience or an experienced co-chair. It is important to have one leader but they should have an experienced advisor. We don't want "too many cooks in the kitchen". Prof. Palomares noted that for the 2006 symposium, their best guidelines came from discussions with previous organizers and such verbal guidelines are still being used. Rafla also thanked the committee for their help with his proposal, especially Prof. Soderstrand and Prof. Purdy. Prof. Mikhael noted that the Steering Committee needs to record its guidelines and update them every year. Now that MWSCAS has a permanent homepage, he encouraged Prof. Zohdy to work on this. It would be good to post a call for organizers 2-3 years in advance, along with guidelines. Prof. Ahmadi noted that IEEE has a template we could use or modify if needed. Prof. Swamy suggested we send best practices to Dr. Zohdy; she can circulate these for Committee approval. Prof. Setti also stressed the importance of the acceptance rate. Prof. Ahmed noted it is more important to set criteria than an arbitrary number. Prof. Swamy remarked that MWSCAS typically attracts a lot of students, particularly when it is on a university campus, and this is important as students are potential future CASS members. Prof. Zohdy noted there is typically an IEEE representative at ISCAS who will answer questions, e.g., on how to start a chapter. The CASS representatives stressed that their aim was not to impose rules, rules cannot be applied blindly. He also stated that CASS is willing to go up to 100% sponsorship if the organizer requests this. Prof. Geiger noted that this is the first time CASS has suggested taking an active role with MWSCAS. He also noted that there has been a decline in faculty and student participation also at ISCAS as past attendees lose their commitment and go to other conferences. He suggested that ISCAS and MWSCAS cooperate on venue choice, etc. to better serve the core constituency. For example 2011 MWSCAS and 2012 ISCAS are both in Seoul, it would be better to have them more distributed. Prof. Mikhael stressed that we want to reverse current attendance trends and attract students and young people. CASS used to have a table at MW. Prof. Ahmadi noted that the largest IEEE concentration is in North America and that our rule is to meet outside of North America at most once in every three years. Prof. Mikhael said it would be good to have someone from CASS on the Steering Committee and Prof. Stouraitis said this should be easy to achieve. Prof. Mikhael reiterated that we must be careful to allow flexibility to fit local culture and Prof. Setti stressed that CASS doesn't want to impose guidelines, they need a wealth of individual conferences. Prof. Mikhael thanked the distinguished guests and they thanked the Committee for listening.

By general agreement among the attendees, the meeting was adjourned.

Respectfully submitted,  
Carla Purdy

# Conference Report

## Midwest Conference on Circuit and Systems 2009

### August 2<sup>nd</sup> to August 5<sup>th</sup>

From August 2<sup>nd</sup> to August 5<sup>th</sup> the IEEE International Midwest Symposium on Circuits and Systems (IEEE-MWSCAS'09), the oldest CAS Society conference was held in Cancun, Mexico. The organizing committee of the MWSCAS2009, received 478 submissions from all over the world, which were categorized and sent to large number of reviewers carefully selected by 41 trackers from 9 different countries, who performed an important task of reviewing and selected them. Based on these reviews the Technical Program Committee prepared the technical program which consisted of 290 papers from 36 countries. These were organized as follows:

Monday August 3<sup>th</sup>, 6 parallel session from 10:30-11:50, 6 parallel session from 12:00-13:20, 5 parallel sessions from 16:30-18:10 and 1 poster session 15:00-16:30.

Tuesday August 4<sup>th</sup>, 5 parallel session from 10:30-11:50, 6 parallel session from 12:00-13:20, 5 parallel sessions from 16:30-18:10 and 1 poster session 15:00-16:30.

Wednesday August 5<sup>th</sup>, 5 parallel session from 10:30-11:50, 6 parallel session from 12:00-13:20, 5 parallel sessions from 16:30-18:10 and 1 poster session 15:00-16:30.

IEEE-MWSCAS2009 also presented 7 tutorials session presented in Sunday August 2<sup>nd</sup>, and 3 keynote talks, present one per day before regular sessions, given by prominent experts covering key areas of research in the field of Circuit and Systems that provided all attendees a unique forum for the exchange of ideas and results.

#### **Organizing Committee Attending the MWSCAS2009 in Cancun**

##### Honorary Chair:

Edgar Sanchez-Sinencio

##### General Chair

Hector Pérez Meana, IPN, México

##### Technical Program Chair:

Rubén Alejos Palomares, UDLA-P, México

##### Finance and Registration Co-Chairs:

Juan Antonio Navarro Martínez, UDLA-P, México

José Luis Vázquez González, UDLA-P, México

##### Local Arrangements Chair:

José Alejandro Díaz Méndez, INAOE, México

##### Publication Chair:

Rubén Vázquez Medina, IPN, México

##### Student contest Co-Chair

Mario Magaña Oregon State University

Felipe Gomez Castañeda, CINVESTAV-IPN. Mexico

##### Proceedings Editors

José Alejandro Díaz Méndez, INAOE, México

Ruben Alejos Palomares, UDLAP Mexico

#### **Advisory Committee:**

Don Bouldin, USA

Fernando Perez Gonzalez, Spain

Jinhui Chao, Japan

Mikahel Wasfy, USA

Lothar Schussele, Germany

Mario Magaña, USA  
Jose Delgado Frias, USA  
Mohamed Reza Asharif, Japan  
Rogelio Palomeres, Puerto Rico  
Pedro Julian, Argentina  
Ricardo Reis, Brasil

### Plenary Speakers:

1. Prof. Franco Maloberti, “Analog Design for Human-Centric Smart Living Technologies”, University of Pavia, Italy.
2. Prof. Volodymyr Ponomaryov, “Vector Order Statistics and Fuzzy Set Approaches in 3D Digital Processing of Multichannel Images and Video Sequences Employing DSP/FPGA”, ESIME-Culhuacan, National Polytechnic Institute , México
3. Prof. Wasfy B. Mikhael<sup>(1)</sup>, and Dr. Matthew T. Hunter<sup>(2)</sup>, “Reconfigurable Signal Processing in Software Defined Radio and Instrumentation”, (1) School of Electrical Engineering and Computer Science, University of Central Florida, (2) Chief Research Scientist Signal Processing and Communications DME Corporation

### Tutorials

To increase the number of participants attending the Tutorial Sessions, the registration fee included the registration to one of the Tutorial available. If some participant was interested in attending 2 tutorials, the second tutorial had an extra fee. Most participants attended only one tutorial. In total seven tutorials were presented:

1. *Jaime Ramirez-Angulo*, “Design of Low voltage power efficient analog and mixed signal circuits in deep sub-micrometer CMOS technology”, New Mexico State University, Las Cruces New Mexico USA.
2. *Ahmed A. Youssef*, “Modern Circuit Techniques and Architectures for Multimedia” Receivers University of Calgary/ Newport Media Inc. Canada.
3. *David J. Willis*, “A Practical Approach to Switched Capacitor Circuits” Principal Engineer ON Semiconductor, USA.
4. *Mohammed Ismail*, “BIST and Digital Self-Calibration of Nanometer RFICs” Professor and Founding Director Analog VLSI Lab., Ohio State University, USA.
5. *Edgar Sanchez Sinencio*” Low Voltage Amplifiers Design Techniques”, TI J. Kilby Chair Professor, Director of the Analog and Mixed-Signal Center, Texas A&M University, USA.
6. *Prof. V. G. Oklobdzija*, “Low-Power Design Techniques in Digital Systems” Professor Emeritus, University of California, Department of Electrical Engineering, University of Texas at Dallas, USA.
7. *Shahab Ardalan*, “Substrate Noise Mitigation in Systems on Chip”, Gennum Corp. R&D-Analog Mixed Signal Group, University of Waterloo. Canada.

### Winners of The Student Paper Award

1. Rajdeep Bondade. A DLL-Regulated SIMO Power Converter for DVS-Enabled Power-Aware VLSI Systems, The University of Arizona, USA

2. Christiane Leuer, Systematic derivation of reference circuits for wave digital modeling of passive linear partial differential equations, Ruhr-University Bochum, Germany
3. Juan Zeng, A 5Gb/s 7-Channel Current-mode Imaging Receiver Front-end for Free-Space Optical MIMO, Tufts University, USA.

### Best Paper Award

The election of the best paper of MWSCAS2009 was done by the Session Chairs who firstly elect the best paper his/her particular session and then, among all of them elect the best paper of the MESCAS2009. Thus using this procedure, winner of the Best Paper of MWSCAS 2009 is the paper entitled “**System Architecture of an RF-DAC Based Multistandard Transmitter**”, by Niklas Zimmermann, Björn Thorsten Thiel, Renato Negra, and Stefan Heinen, Email: [zimmermann@ias.rwth-aachen.de](mailto:zimmermann@ias.rwth-aachen.de)

### Trackers according to their nationality

1. Canada	1
2. Chile	4
3. Italy	6
4. Mexico	14
5. Spain	4
6. Thailand	1
7. Turkey	1
8. United Kingdom	1
9. USA	9

### Trackers according to the conference topics

1. Linear and Non Linear Circuit and Systems	1
2. MEMS and NEMS	2
3. Nanoelectronics and nanotechnology	1
4. Neural Networks and fuzzy systems	3
5. Optics and photonics	1
6. Power electronics and systems	3
7. Programmable logic VLSI CAD Layout	5
8. RF Microwaves and optical systems	1
9. Amplifiers and comparators	8
10. Data converters	2
11. Reconfigurable computing	1
12. Analog circuits and signal processing	11
13. Bioengineering circuits and systems	1
14. Communications and wireless systems	4
15. Control systems and mechatronics	3
16. Digital and adaptive signal processing	2
17. Digital circuits and computer arithmetic	3
18. EDA formal verification Boolean satisfiability	1
19. Embedded electronics	1
20. Image processing and multimedia systems	3

### Registration

The conference received in total 230 registered participants distributed as follows:

1. Students IEEE Members (Advanced registration)	29	\$350	\$ 10,500.00
2. Students IEEE	1	\$400	\$ 400.00

3. Author IEEE Member (Advanced registration)	153	\$500	\$ 76,500.00
4. Author IEEE Member	3	\$580	\$ 1,740.00
5. Author non IEEE member (Advanced registration)	41	\$600	\$ 24,600.00
6. Author non IEEE Member	3	\$650	\$ 1,950.00
Total amount	230		\$115,340.00

### Visas

Citizens of most countries does not require visa to travel to Mexico, however in cases that participants required visa, the Organizing Committee assisted the participant in obtaining their visas.

### Venue and Hotel Arrangements

The Fiesta Americana Condesa Hotel in Cancun, provided free of charge the conference rooms as well as the facilities for registration, coffee breaks and Steering Committee Meeting; while the Organizing Committee compromise 200 lunches every day, a continuous coffee break service during the four conference days and the Conference Banquet. On this basis it was not necessary to compromise any number of rooms.

### Steering Committee Meeting

The Steering Committee Meeting was held in the Fiesta Americana Condesa, the conference venue, on Monday August 3-th, 2009. After the meeting The Steering Committee members and some guests attended a dinner at the Restaurant Mr. Frog.

### Conference Banquet

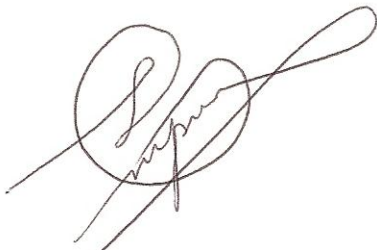
The Conference Banquet was held on Wednesday August 4<sup>th</sup>, 2009. During this event were delivered the Student Contest Awards, also it was presented the MWSCAS2010 by Prof. Jose Delgado-Frias. The event also included some Music presentation by a Mexican group and by a Mariachi.

### Poster Sessions

To allow that all participants may attend the poster sessions, they were held after lunch and before the afternoon parallel session

### Final Remarks:

The organizing Committee would like to take the opportunity to thank the participants attending the MWSCAS2009 despite the AH1N1 scare, as well as to the MWSCAS Steering Committee for selecting Cancun to celebrate the 2009 MWSCAS. The AH1N1 problem together with the worldwide economical situation that becomes worse from ending of 2008 surely inhibit the participation in the 2009 Midwest Symposium, but these are things beyond our control. Fortunately we did not have any participant sick during the realization of MWSCAS2009, and hope to have fulfilled the expectative of The MWSCAS Steering Committee when it accepted our proposal to organize the Symposium in Cancun, Mexico.



Hector Perez-Meana  
General Chair

## **Opinion of Dr. Michael Soderstrand**

First I would like to list some of the innovations that you were able to introduce at this year's symposium:

1. Including one tutorial with the registration was an excellent idea. This helped to populate the tutorials and made them more meaningful for everyone.
2. Running the poster sessions in their own time slot worked very well. In the past poster sessions have been in parallel with lecture sections which reduced attendance at both the lecture sections and the poster sessions.
3. The venue was superb. The conference rooms were of a perfect size for our lecture sessions and the poster sessions also fit perfectly.
4. The refreshments during coffee breaks were excellent.
5. Having the conference banquet at the hotel worked very well. The attendance at the banquet was excellent. The entertainment was superb and the food was of gourmet quality. Truly and outstanding experience.
6. The tour desk was excellent.

Next a few things that might be considered for future conferences as lessons learned:

1. The conference program was very helpful and the CD provided quick access to papers of interest. But authors' names were indexed by first name instead of last name, which was somewhat confusing.
2. It was unfortunate that the Student Paper Award winners did not arrive at the banquet until after their names were announced. It was also unfortunate that no winner of the Myril B. Reed award was chosen from the previous conference. Please be sure to select a Myril B. Reed winner for this year's conference and notify the chair of the Seattle conference so that the award can be given next year.
3. The charge for wireless access to the Internet at the hotel was rather high. In the future it would be nice to negotiate a reduced charge, or hopefully free access to the Internet for conference attendees.

During the conference I had a chance to talk with quite a few of the attendees and the consensus is that this was one of the better organized conferences. It is a shame that some people elected not to come to Mexico because of the H1N1 scare, but these are things beyond our control. In a personal note, my wife and I really enjoyed the conference, the food, and the tours. We personally thank you and your committee for all your hard work.

Michael Soderstrand  
MWSCAS Steering Committee