

TECHNICAL COMMITTEE ON _____ VLSI _____
 REPORT SUBMITTED BY: _____ Saraju P. Mohanty _____

KEY VOLUNTEERS (PLEASE LIST YOUR TC'S ExCom AND ANY OTHERS)

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PROGRESS REPORT & PLANS

Please enlist your membership's participation in your plans for the coming year by suggesting upcoming opportunities for Volunteer involvement.

ACTIVITY AREA	2015 ACCOMPLISHMENTS	2016 PLANS
<p>Highlights: Highlights of the past year, and special plans underway for the coming year. Indicate if you'd be interested in formally sharing your success stories with other TC Chairs at an upcoming CS TAC meeting.</p>	<p>The highlights of TCVLSI activities planned for the year 2015 are the following:</p> <ol style="list-style-type: none"> 1) TCVLSI site was hosted in a new domain at www.ieee-tcvlsi.org to attract more member visits. 2) Wikipage has been created and maintained for TCVLSI at: https://en.wikipedia.org/wiki/Technical_Committee_on_VLSI 3) The Wikipage has been continuously update to add the steering committee information of various meetings. 4) The organizers of various TCVLSI sponsored meetings have been continuously contacted to list TCVLSI 	<p>The highlights of TCVLSI activities planned for the year 2016 are the following:</p> <ol style="list-style-type: none"> 1) Moving TCVLSI site to www.computer.org is planned which clearly suggests TCVLSI is part of IEEE-CS is planned. Then a domain called ieee-tcvlsi.org will be used for easy access. 2) A new format is planned for the VLSI Circuits and Systems Letter (VCAL). 3) It is envisioned that the letter in the long run will become a forum for quick research dissemination, communication, and student activity medium and to

	<p>sponsored meetings as “Sister Meetings” to promote each other.</p> <ol style="list-style-type: none"> 5) Completed recruitment of several associate editors for the newsletter called “VLSI Circuits and Systems Letter (VCAL)”. Two issues of VCAL has been published. 6) TCVLSI awarded a total of 12 student travel grants for the financially sponsored meetings. 7) TCVLSI awarded 4 best student paper awards in the TCVLSI financially sponsored meetings. 8) The chair of TCVLSI and many members of the executive committee feel that in many parts of the world the majority of VLSI related meetings are mostly technically co-sponsored by IEEE-CS. There are lots of opportunities for financially sponsored meetings as well as a technical gap to meet the current technology trends. Thus a new meeting, IEEE International Symposium on Nanoelectronic and Information Systems (iNIS) was initiated in 2015. 9) iNIS 2015 was held at Indore, India, centrally located in India to attract maximum participation. 10) TCVLSI chair received a funding of \$2000 from IEEE Circuits and Systems Society (CASS) Outreach Initiative which was used to provide 4 student travels awards and also support quality keynote speakers. 11) TCVLSI outreach and executive committee meeting was held at ISVLSI 2015, Montpellier, France as well as iNIS 2015, Indore, India. 12) The chair of TCVLSI plans travelled to the IEEE Panel of Conference Organizers (POCO), Glasgow, Scotland, to learn more about conference organization and to further effectively run TC and sponsor meetings. 	<p>archive it in a more formal fashion in IEEE Xplore.</p> <ol style="list-style-type: none"> 4) TCVLSI is currently working to continue more number of students travel grants for the TCVLSI financially sponsored meetings. 5) TCVLSI is currently working to increase the number of best student paper awards in the TCVLSI financially sponsored meetings. 6) There are plans to expand the executive committee of the TCVLSI. 7) There are plans to expand the editorial board the editorial board of VCAL. 8) There are plans for increasing frequency of VCAL publication to 3 issues per year. 9) The chair of TCVLSI plans to travel to the IEEE Panel of Conference Organizers (POCO), Montreal, Canada, to learn more about conference organization and to further effectively run TC and sponsor meetings. 10) TCVLSI outreach and executive committee of meetings are planned at ISVLSI 2016, Pittsburgh, USA and iNIS 2016, Gwalior, India. <p>Opportunities for Volunteer Involvement: TCVLSI member and IEEE-CS members serve in the steering committee, organizing committee, and technical program committee of various TCVLSI sponsored meetings. Selected TCVLSI members are invited to serve on the executive committee of the TCVLSI. Many members of the TCVLSI serve as editors and associate editors of the VLSI Circuits and Systems Letter (VCAL). More TCVLSI members will be invited to serve on the VCAL editorial board in future when it is expanded. The members will also actively contribute to the TCVLSI contents.</p>
Conferences: Describe TC's	TCVLSI financially sponsored or co-sponsored many meetings	For the 2016 TCVLSI has the following plans for the

<p><i>sponsorship, co-sponsorship, or co-operation of conferences. Include any planned launches or discontinuations.</i></p> <p><i>Did the TC actively participate on any program committees, technical committees, or steering committees of these conferences?</i></p>	<p>in 2015 including the following:</p> <ol style="list-style-type: none"> 1) ASAP 2015 – IEEE International Conference on Application-Specific Systems, Architectures, and Processors 2) ASYNC 2015 - IEEE International Symposium on Asynchronous Circuits and Systems. 3) iNIS 2015 – IEEE International Symposium on Nanoelectronic and Information Systems 4) ISVLSI 2015 - IEEE Computer Society Annual Symposium on VLSI 5) IWLS 2015 – ACM/IEEE International Workshop on Logic and Synthesis 6) MSE 2015 – Microelectronic Systems Education (MSE) 7) SLIP 2015 – International Workshop on System Level Interconnect Prediction 8) ECMSM 2015 - IEEE International Workshop of Electronics, Control, Measurement, Signals and their application to Mechatronics <p>In 2015, two meetings were approved for technical co-sponsorship which are well attended by members of IEEE-CS and TCVLSI.</p> <ul style="list-style-type: none"> • ACSD 2015 - International Conference on Application of Concurrency to System Design • VLSID 2015 - International Conference on VLSI Design <p>In 2015, two meetings were not recommended for technical co-sponsorship:</p> <ul style="list-style-type: none"> • ISED 2015 - International Symposium on Electronic System Design, 2015, Malaysia. • RCITD 2015 - Research Conference in Technical Disciplines, 2015, Slovakia. 	<p>conferences:</p> <ol style="list-style-type: none"> 1) The executive committee of TCVLSI strongly believes in quality control of the conferences which run under IEEE-CS banner. So, it is making plans for rigorous evaluations of the meetings to ensure that a large number of scholars are benefitting from such meetings, a larger number of IEEE-CS members attend them and the meetings are organizationally sustainable. 2) TCVLSI is making plans to encourage more financially sponsored meetings than technically co-sponsored meetings so that they run under IEEE-CS umbrella with stricter quality enforcement. 3) The following meetings are planned to run under financial sponsorship or co-sponsorship of TCVLSI: <ol style="list-style-type: none"> 1. ARITH 2016 2. ASAP 2016 3. ASYNC 2016 4. ECMSM 2017 5. iNIS 2016 6. ISVLSI 2016 7. IWLS 2016 8. MSE 2016 9. SLIP 2016 4) Several meeting are planned for technical co-sponsorship such as ACSD 2016, ICCE 2016, and VLSID 2016. 5) The TCVLSI executive committee is making plans to make conference organizers aware of the sponsorship process. 6) The TCVLSI executive committee is making plans to make conference organizers aware of the need for closing conference accounts in time in the best interest of the conference as well as TCVLSI. 7) The TCVLSI executive committee is making plans to give a decision on endorsement of technical co-sponsorship within a one week timeframe.
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<p>Communication: Describe your TC's communications strategy (including frequency) with your membership (eg, newsletters, listservs, blogs, Twitter, Facebook, letter from the Chair, Web portal, etc.) Include info on how to subscribe. Any updates or changes completed or planned for the coming year?</p> <p>Please list your URL and the name & email of the Web</p>	<p>TCVLSI communication strategy has been the following:</p> <ol style="list-style-type: none"> 1) Email introduction of the executive committee of TCVLSI. 2) Emails members about TCVLSI conference activities in regular intervals. 3) Continuous update and maintenance of the TCVLSI website (http://www.ieee-tcvlsi.org). 4) The letter has been emailed to TCVLSI via the following mailing list: tcvlsi-announce@computer.org 5) Wikipedia page of TCVLSI has been maintained at: https://en.wikipedia.org/wiki/Technical_Committee_on_VLSI 6) A newsletter to be called "VLSI Circuits and Systems Letter (VCAL)". 	<p>TCVLSI communication plans for the future include:</p> <ol style="list-style-type: none"> 1) Continuous update and maintenance of the TCVLSI website which will be http://www.ieee-tcvlsi.org. 2) The newsletter to be called "VLSI Circuits and Systems Letter (VCAL)" will have additional editorial members to reach out and review. 3) The letter is planned to be made available at the website (http://www.ieee-tcvlsi.org) for availability to a global audience at any time. 4) The letter is to be emailed to TCVLSI via the following mailing list: tcvlsi-announce@computer.org 5) In future years onwards 3 issues of VCAL are planned. 6) Based on the response of the contributors and editors

<p><i>master.</i></p>	<p>7) First year 2 issues are published for wider benefit of the community.</p> <p>New website URL: http://www.tcvlsi.org/ Webmaster: Mike Borowczak mike@erebuslabs.com</p>	<p>the frequency may be increased further.</p> <p>Opportunities for Volunteer Involvement: IEEE-CS and TCVLSI volunteers are participating and will be participating as editors as well as contributors of the TCVLSI Letter. Volunteers will get a chance to publicize calls for papers for various conferences and journals. Job opportunities and funding opportunities will be helpful to the IEEE-CS and TCVLSI members, in particular student members. Members will get to interact with each other through the letter.</p>
<p>Meetings: Any TC meetings held/ planned? At what venue (at conferences, teleconferences, videoconferences?)?</p>	<p>In 2015, TCVLSI outreach and executive committee meeting was held at ISVLSI 2015, Montpellier, France as well as iNIS 2015, Indore, India.</p>	<p>A meeting of TCVLSI members is planned to be held at ISVLSI 2016, Pittsburgh, PA during July 2016 in which the TCVLSI chair is a technical program chair and steering committee member. Another possible meeting of TCVLSI members is at iNIS 2016 during December 2015 in India in which the TCVLSI chair is a general/steering-committee chair.</p> <p>Opportunities for Volunteer Involvement: Requests for volunteers will be circulated in these TCVLSI meetings. TCVLSI members as well as IEEE-CS members will be encouraged to join the TPC of meetings conducted under the TCVLSI banner.</p>
<p>Publications: Sponsored publications or hosted special issues of a Computer Society magazine? Plans for one?</p>	<p>The meetings sponsored by TCVLSI typically organize their special issues based on different themes. Various special issues in journals as well as book volumes are organized by the committees of these meeting.</p>	<p>The following are plans for TCVLSI 2016:</p> <ol style="list-style-type: none"> 1) Encourage organizers of meetings such as ASAP 2016, ISVLSI 2016, and iNIS 2015 to run special issues. 2) The TCVLSI editors will approach the EiC of an IEEE-CS magazine or transactions to run a special issue on an area within the scope of TCVLSI and matching with the recent technology trends. 3) A IEEE TNANO special issue has been planned which may extended versions of selected iNIS 2015 and ISVLSI 2016

		<p>papers.</p> <p>4) A IEEE TCAD special issue has been planned which may extended versions of selected ISVLSI 2016 papers.</p> <p>Opportunities for Volunteer Involvement: TCLVSI editors will welcome any suggestions for special issue topics related to the scope of TCVLSI. Volunteers can contribute to these special issues as authors. Volunteers can be reviewers for the papers submitted to these special issues as well.</p>
<p>Standards Committee Activities: <i>Describe TC's support of or participation in Standards-related activities.</i></p>	<p>Typically the TC does not handle standard related activities and hence nothing was tried in 2015.</p>	<p>If the TCVLSI executive is approached for any standardization activities that come under the scope of TCVLSI then such activities will be gladly undertaken.</p> <p>Opportunities for Volunteer Involvement: Volunteers may get opportunities to be involved in standardization activities as well as learn new standards.</p>
<p>Collaborative Efforts: <i>Collaboration with other TCs, IEEE, or other groups or committees?</i></p>	<p>TCVLSI currently collaboratively co-sponsors two meetings such as IWLS and SLIP with other technical committees. ISVLSI 2015 was technically co-sponsored by IEEE Circuits and System Society (CAS) and IEEE Electronic Design Automation (CEDA). iNIS 2015 ran under TCS of IEEE-CAS and IEEE CEDA.</p>	<p>The following is the plan of TCVLSI for 2016 collaborative effort:</p> <ol style="list-style-type: none"> 1) TCVLSI liaison vice chair to work with other TCs and societies for technical co-sponsorship of TCVLSI sponsored conferences. 2) ISVLSI 2016 is planned to run under TCS from IEEE-CAS and IEEE-CEDA. 3) iNIS 2016 is being planned to run under TCS of IEEE-CAS and IEEE-CEDA. <p>Opportunities for Volunteer Involvement: Volunteer will get liaison opportunities to publicize their meetings in various other non-profit organizations (like ACM), sister societies like CAS, Signal Processing, CEDA. In addition, TCVLSI members will have opportunities to be involved in other TCs like TCCA, TCSP, and TCDP.</p>

<p>Awards and Recognition: <i>Describe your TC's awards activities – given and planned.</i></p>	<p>In 2015, TCVLSI awarded a total of 12 student travel grants for the financially sponsored meetings. In 2015, TCVLSI awarded 4 best student paper awards in the TCVLSI financially sponsored meetings.</p>	<p>Travel grants and best paper awards are planned for 2016, particularly for students for the following meetings:</p> <ol style="list-style-type: none"> 1) ARITH 2016 2) ASAP 2016 3) iNIS 2016 4) ISVLSI 2016 5) IWLS 2016 6) SLIP 2016 <p>The organizing committees of the above meetings will be notified when budget is approved. They have been authorized to make selection of the students and best papers for these awards. Based on the budget, in future years these activities will be expanded further.</p>
<p>Concerns: <i>Share your TC-related concerns with your members.</i></p>	<p>Role of TCs in the society needs to be more evident. Membership of TCVLSI can be increased. Budget for support of TCVLSI can be increased to provide more student support for travel and best paper.</p>	<p>TCVLSI executive committee lead by the vice chair for membership who will reach out to researchers around the globe for membership. More financially sponsored conferences will be encouraged with surplus budget.</p> <p>Opportunities for Volunteer Involvement: Volunteers can help in membership drive and get a chance to communicate with other researchers. Student volunteers will benefit from the travel and best paper awards.</p>

Reports will be posted on the TC's Computer.org "Scope Page".