

60 years in control



Oratile Sematle, president, SAIMC

Unlike transition, transformation never ends. While we are celebrating '60 years in control', the SAIMC continues to cultivate that which needs to emerge. It is our common belief that we are 60 years in control because, as an organisation, we continue to embrace the notion of tinkering with competing orientations, thriving under uncertain outcomes and finding no distress with ambiguous demands. We hold high the idea that an organisation may be rich in what it loses over time. We are an organisation that is open at all

times, an organisation that wonders, open to all, and to transformation.

Given the sense of accountability and responsibility our members have entrusted us with, our actions in the industry reflect our belief in that a worthy organisational life must surely be constantly examined and observed. Actions must be thought through – consciously and purposefully. Our long standing commitment to cultivating change within the governmental and educational institutions (e.g. the recognition of automation as an engineering discipline) reflect a leadership that is concerned with the high levels of unemployment caused by the gap that exists between the modern skills that are required and the 'traditional skills' that we continue to produce.

The South African healthcare system, which is in desperate need of technological transformation, the widespread unrest of young people in our society, the gap between educational institutions and our workplaces, all leave us in relentless pursuit of appropriate measures and solutions. We remain steadfast in our ideal that the education, appropriate education, of young people will take us forward into the future. "Education is the most powerful weapon which you can use to change the world," the late Nelson Mandela once said. We agree with our late peace icon and we further expand on this knowledge to add: the education that got us here will not get us there. To this end we would like to extend our gratitude to the

Engineering Council of South Africa (ECSA) for collaborating with us in the relentless pursuit of putting the needs of others before our own, thus changing the South African education landscape, meeting the demands of the automation industry and as a result, driving the South African economy a nudge forward.

While in this reflexive trope of 60th celebration, it is an opportune time to look back. The SAIMC was originally founded, in 1957, with the intention to sharpen the voice of automation, instrumentation, measurement and control. Today, this voice expands to underlying dimensions such as poverty, education, economic drivers and the global competitiveness of the South African state. Our seven branches in multiple provinces across the country take this voice in different forms to their differing fields, dependent upon their local needs. Our branches are run autonomously by their respective chairmen and committees, but each follow the guidelines and core values set out by the president, executive board and the national council.

With respect to the future, a lighter pathway requires that we drop the heavy bonds, create new ones and embrace possibilities. While our core remains intact, we will forever reinvent.

In transformation we lay our trust!

Yours in automation
Oratile Sematle.

Oratile

SAIMC Mission

To advance the standards of theory and practice in the fields of automation through:

Recognition – The achievement of the highest possible industry recognition for the SAIMC and its members.

Stature and status – Enhancing the stature and status of members and patron members.

Recruitment – Encouraging recruitment to the industry.

Education – Ensuring that adequate standards of education, and appropriate curricula are available or developed at secondary and tertiary levels of education, and promoting mentorship programmes.

Continuing education and training –

Encouraging continuing education and training to ensure that the knowledge and skills of all members are continually updated, further developed and refreshed.

Exchange of ideas – Providing a communication forum for the regular exchange of ideas, applications and technologies between members.

Friendships, alliances and business opportunities – Promoting, locally and internationally, friendships, alliances and business opportunities at all levels in professional yet informal surroundings.

Disseminating and communicating relevant information – Disseminating and communicating

relevant information to the members and stakeholders in a controlled and coordinated manner.

Maintaining a source of technical information – Providing a platform with links to libraries of relevant books, publications and periodicals, and other sources of information on the SAIMC's website.

Terminology and standards – To assist in the development, improvement and customisation, through effective means, the necessary terminology and standards in all aspects of automation theory and technology.

Administration – The provision of an administrative system which will at all times ensure the effective and efficient functioning of the SAIMC.

Taking automation mainstream

Vinesh Maharaj and Oratile Sematle discuss the SAIMC and how it reinvented itself to emerge as automation's voice in South Africa.

By Steven Meyer, editor, SA Instrumentation and Control.



Automation whisperers Vinesh Maharaj (left) and Oratile Sematle.

The ample boardroom at Yokogawa South Africa's new head office in Randburg can easily accommodate twenty people around the working centre table. The four of us seem lost in the roominess, but that initial awkwardness soon fades and at the end of our allotted hour, there is barely enough space to contain the passion of two of the SAIMC's most enlightened presidents.

SA Instrumentation and Control product manager Jane van der Spuy and I are here to join Vinesh Maharaj (Yokogawa South Africa sales and marketing director, and immediate past president of the SAIMC) and Oratile Sematle (E&I Group manager at Sasol, and current SAIMC president).

We have all put aside our professional responsibilities for an hour and are meeting as volunteers serving an organisation that we are passionate about – the SAIMC. Our aim is to review the progress the Society has made since it became the recognised 'Voice of

Automation' in South Africa under Vinesh's capable leadership; and to talk about where it is headed, as Oratile carries the fire during his two-year tenure.

Vinesh's contribution to the SAIMC can be summed up in one word – transformation. "When I took over the presidency in 2013, Johan Maartens, my predecessor, had paved the way for change," he says. "But we needed more; it was time to take a calculated risk."

The plan was ambitious. "We needed to reinvent ourselves," explains Vinesh, "both in terms of our strategic objectives as an organisation, and in terms

"... instead of importing automation skills from abroad, we should be developing our own."

of our value proposition to members and to industry. We had to sweep away the cobwebs."

What followed completely redefined the SAIMC. A two-day strategy session with industry leaders sees the formulation of a medium-term business plan, which includes championing the cause for Automation as the tenth distinct engineering discipline recognised by ECSA (Engineering Council of South Africa). A modern new logo emerges and the Society unveils its fresh persona in a glittering function at the end of 2013. Automation's voice speaks its first words.

Something more subtle happens as well. A groundswell of urgency develops as the new culture takes hold. It draws industry leaders wishing to volunteer their time to serve at the top echelons of the organisation. People who want to get things done; people like Oratile Sematle.

"I've taken over a completely revitalised SAIMC thanks to the work of Council under Vinesh's leader-

ship,” says Oratile, who has been listening intently up until this point. “During my term, the challenge is different. My goal is to build on what we have already achieved, but we must take it further. We have to make people at the highest levels in our country understand that automation is not a threat, but rather, a key driver for industrialisation in our region.”

“This is crucial,” agrees Vinesh, “but it is only one of the missing pieces in the puzzle.”

“We need to get much closer to the industry fraternity and to the educators as well,” explains Oratile, as the vibe in the room starts to build.

“And to ECSA,” adds Vinesh, “but I know this has high priority on your agenda.”

What they are intimating is that the work has only just begun. While there is much that can be accomplished along the way to add to the value proposition for SAIMC members and patrons, both Vinesh and Oratile believe that the big payoff will come when ECSA inaugurates Automation as the tenth official engineering discipline.

“With the situation as it currently is, people often just fall into an automation career by accident,” explains Oratile. “Not just at engineer level, this applies to technicians and artisans as well. Most of them qualify in an electrical or electronic field and then it is up to their employers to equip them with the skills they need to undertake instrumentation or automation-related work.”

“To become more competitive as a nation we need to reindustrialise,” adds Vinesh in a tone that conveys quietly controlled passion. “The government already stated this, but they are getting the wrong advice on how to implement it. Automation is a key component, but instead of importing automation skills from abroad, we should be developing our own. We have everything we need; all that is lacking is a cohesive approach between the various stakeholders.”

The two believe that this is where the SAIMC can and must make a meaningful difference.

“One of the ways we can stimulate our economy is to cut our reliance on imports,” rationalises Oratile. “But in order to do this we must be able to offer a better quality of product at a price that compares with the cheaper imported equivalents, from China for arguments sake.”

“Automated production and quality control can help us achieve this,” adds Vinesh. “Look at the textile industry. It has been completely destroyed by cheap imports and thousands of workers have lost their jobs.”

What they are hinting at is the belief that with proper implementation and the right focus, automation can create new jobs by either revitalising an industry that has become uncompetitive, or by opening up opportunities in areas that are currently underexploited – minerals beneficiation for instance.

Vinesh contextualises it perfectly: “Automation is not a silver bullet that can fix everything that is wrong in South Africa. We are where we are for many reasons, some of which are the legacy of previous governments, and others which are not. What is important is that we don’t just accept that we are

“Automation is not a silver bullet that can fix everything that is wrong in South Africa.”

destined to stay where we are, and this is where automation has a role to play.”

“To be competitive globally, I believe that automation and labour have to be successfully combined,” says Oratile, warming to the theme. “You can no longer just rely on labour. The beauty of automation is that it cuts across all sectors, and with proper management, workers displaced by automation in one sector can be reskilled and deployed in another, which has become more competitive, because of automation.”

All very well, but how do we develop the capability?

“The question of skills shortage is a complex one,” outlines Oratile. “Traditionally we have been strong in instrumentation, but the problem we are faced with is that those skills, mostly learned through experience, are not successfully being transferred to the younger generation.”

“Exactly,” Vinesh joins in animatedly. “A skilled person is not just somebody with a qualification. A skilled person is someone with the right qualification for their profession, enhanced by good on-the-job experience. Automation has become much more complex than just instrumentation, these days it takes 3-4 years for someone from another discipline, electrical for instance, to become fully productive as an automation engineer after they qualify.”

“We could shorten that to 1-2 years if we had an appropriate automation qualification supported by relevant practical training,” adds Oratile. “What happens currently is that after the 3-4 years Vinesh mentioned, these people become highly sought after and are often lost by the employer who initially invested in them. Sometimes they are even lost by the country, and then the cycle starts all over again.”

The SAIMC identified this need early during Vinesh’s term when the business plan was drawn up and something it hopes to address through the work it is currently doing with the universities of technology and with ECSA.

“If the country is serious about a strategy to make local manufacturing more competitive, then automation is a key component of that and it is crucial that its role be adequately defined,” says Vinesh heatedly.

“What we are trying to explain to the authorities is that the automation courses we need already exist,” adds Oratile thoughtfully. “They just need to be repackaged into a qualification that can serve industry better. In the view of the SAIMC, it will not be necessary to introduce any new academic courses.”

What has been raised at ECSA is that people currently being registered as process engineers were never specifically trained in this discipline.

“This status quo could continue indefinitely unless we get buy-in from industry who are the

‘consumers’ of such process engineers,” explains Vinesh. “If we don’t do something to change the situation, properly trained and experienced process engineers will remain a scarce commodity, and they will have to be imported from abroad.”

“Surely it is better to develop our own people and then let them create jobs for others through the growth of our manufacturing sector as it becomes more competitive?” asks Oratile somewhat rhetorically. “Our responsibility as the voice of automation is to raise the profile of our profession. We can make a real contribution if we can show young people that automation is cool, and a career path worth following.”

“But we can’t do this without offering them a properly recognised qualification,” says Vinesh, in no mood to take prisoners. “We already know that there are universities eager to provide the courses we need. We need to prove that there is a critical mass, around four hundred industry people out there, ready to register in an automation engineering discipline. This is research that Johan Maartens is doing for us. And then, it is imperative that we take automation mainstream.”



Johan Maartens was president of the SAIMC in 2011 and 2012 and was appointed as COO in 2016.

In conclusion

Some of what has been discussed is idealistic, and most certainly there will be obstacles along the way. To sit in comfortable surroundings discussing the pros and cons of automation as a driver for economic growth in Africa is one thing, but overcoming the harsh political and demographic realities is quite another. What is undeniable though is that the new SAIMC has leaders of vision and purpose. If automation can make a meaningful contribution to South Africa’s growth and prosperity, then there is a passionate organisation run by a committed group of people all ready, willing and able to make it happen.

Tomorrow in their hands

The president and vice president of the SAIMC share their thoughts on the organisation's future objectives in southern Africa.

Q: During Vinesh Maharaj's tenure as president, the SAIMC set out to take automation mainstream and become the 'Recognised Voice of Automation' in South Africa. To date, how much success has been achieved in this regard with ECSA and other industry stakeholders?

A: While we have experienced a refreshing level of success in this endeavour, what has held us back to a certain extent is the lack, until now, of formal collaboration among all the affected institutions. To illustrate the point, at the recent workshops where we met with ECSA, the educational institutions and the private sector, all in the same forum, this is what we accomplished:

1. The SAIMC will form part of ECSA strategy group for the 2017 financial year. This will enable us to contribute in a mediatory role among the public and private sectors, the relevant educational institutions and civil society at large.
2. A dedicated task team has been formed under the leadership of Professor Collier-Reed, a former director of the Centre for Research in Engineering Education (CREE), which is assigned to address the matter of automation as the 10th official engineering discipline.
3. The investigation for establishing engineering disciplines has extended beyond the automation discipline discourse to other disciplines that are demanded by the needs of the private sector, and the shift required at the educational level to suit these emerging needs must be determined.

Q: What was the understanding reached at the meeting with the Engineering Standards Generating Body (ESGB) regarding the recognition of a 10th Engineering (A&C) discipline?

A: We are achieving our objective but via a different route. During the discussion it became clear that there are many disciplines of engineering today which do not exist autonomously. Automation is one such discipline, while others include marine and railway engineering. At the moment, our discussion with ECSA is not only about creating a new discipline, but ensuring that ECSA is structured to recognise and support a much larger range of disciplines. This means they, with the support of organisations such as ours, need to be involved in setting curricula for the different disciplines, creating a framework for recognition of these disciplines, and putting in place the process for recognition of engineers applying for professional registration in these different disciplines. This is a much larger objective, but we



Vice president Rob Mackenzie and SAIMC president Oratile Sematle.

will keep everyone updated through our media channels as the situation unfolds.

Q: Why was it considered necessary to create a 10th discipline in the first place?

A: While SAIMC has been the driving force for the automation discipline, the inception of this concept was inspired by the crisis facing the SAIMC patrons, Industrial Instrumentation Group (IIG) members and the manufacturing community in general. The crisis was the need for automation and instrumentation engineering graduates who can 'hit the ground running'. Vinesh [Maharaj] reshuffled things within the structures of the SAIMC and instilled the resolution of this issue as imperative. In the process, he established the need for the registration of a 10th distinct discipline.

Businesses are struggling with the widening mismatch between the skills of their workforce and the skills they require. The skills demanded by industry are changing as digitalisation and the ideas of Industry 4.0 become more important. Secondly, the demands of the private sector were not reaching the educational institutions effectively, and hence, what educational institutions produced was not necessarily what industry required. An integration and alignment of institutions was needed. The SAIMC

research surveys and dialogue across multiple organisations led to the idea of automation as an engineering discipline that could help close the gap.

Q: How will the decisions taken at the ESGB meeting impact on this?

A: We believe we are reaching consensus and more discussions are set to unfold in this regard. ECSA offices are now our new 'home' and we believe that the rapidly growing relationships between our two organisations will soon bear fruit and benefit the manufacturing industry at large. While we have not yet cemented the idea of the 10th discipline, for the first time, ECSA will revisit the nine disciplines that were identified prior to fields such as automation becoming as important as they are today. It opened up discussions not only for automation, but other disciplines like marine engineering as well.

The dialogue is open to all and will receive much broader attention as things progress. The thinking at the moment is that many engineering disciplines are converging and the boundaries have become blurred – mechatronics is a good example. The intention is to ensure an agile educational value chain that delivers the appropriate skills to industry. It is a daunting task, so we urge everyone with industry or educational insight to join us.

Q: *What is the state of play at the current moment, given that some months have passed since the meeting?*

A: There is a lot of work to be done with multiple institutions such as ECSA, other engineering professional bodies and the educational bodies for higher learning. For example, the SAIMC has engaged the University of Johannesburg and two SETAs in discussions about how to make this happen – a pilot project! But there is also a need for financial support. Creating a new curriculum requires training material and ultimately students. To create a critical mass we will need bursaries from the companies who will eventually employ these qualified engineers. This is the premise of the envisaged educational/workspace value chain integration initiative. The next step is to get, as mandated by ECSA, tertiary institutions to develop automation courses and to get industry to commit students to those programs via bursaries, loans etc. This process kicks off at the ‘Transforming the Automation Industry in Africa for the 4th Industrial Revolution’ breakfast to be held on the first day of Africa Automation Fair 2017.

Q: *What are the major obstacles you foresee?*

A: While one must be cautious about addressing challenges ahead of time, one nuance exists in the context of the interface between tertiary institutions and the industry at large. Tertiary institutions are creating a ‘product’ called a ‘graduate’. When measuring efficiency, the metric is most often the number of graduates that complete their studies, rather than: ‘How well are these graduates being accepted by industry?’ On the other hand, should the tertiary institutions decide to create an automation course, industry needs to understand that it will have to provide the students with bursaries, loans etc. This is a challenge, the ‘chicken and egg’ scenario.

Q: *How important is it to mobilise the end user community to come out in support of this initiative?*

A: Without end user support, the tertiary institutions will not develop automation courses. Without automation courses, South Africa will be unable to build the skills base needed to take advantage of the

4th Industrial Revolution. If that happens, we will remain a country that exports raw material, sells equipment imported from abroad, and loses our young talent to those parts of the world that have embraced the ideas of Industry 4.0. In other words, it is absolutely vital that the end user community joins us to address the challenge of skills development in automation in southern Africa.

Q: *It seems intuitively obvious that the end users (employers) of A&C engineers stand to benefit from the deeper talent pool, yet there has not been much interest expressed by them to date. Why is this?*

A: Automation is seen in South Africa as a method to execute a designed process, but not as a driver of the underlying design of that process itself. The Industrial Internet of Things will in many ways change this. We still find that industry tends to ‘dumb down’ automation in Africa as “we do not have the skills”. Most intelligent instruments are still connected on 4-20 mA for example i.e. all the added value is lost. The few Foundation Fieldbus installations we have, which have the capability for peer-to-peer communication for local control, are not implemented in this way. The benefit of smart automation is steered away from because of a perceived lack of skills. We say perceived, as one of the very best examples of a Profibus installation exists in the far north of Zambia. It is crucial that we address the challenge of skills development in automation if our manufacturing sector is to remain globally competitive.

Getting automation established as a recognised discipline is our most key objective. Our strategies are driven by the needs of the South African nation and those of the African continent, the automation industry, and those of our patron and individual members. It is not a nice to have; it is an objective based on needs driven by the latest trends in manufacturing.

Q: *What other objectives do you see as key for the future?*

A: The SAIMC plays an important role in standards development for our industry at the SABS, and we need to expand our involvement in this regard. We are also committed to mixing fun with technol-



Vinesh Maharaj, president of the SAIMC from 2013 to 2015.

ogy, hence our support for youth initiatives like the First Lego League. The branches must continue to host their various social activities, which include the popular technology evenings and site visits where members get to see the practical application of automation technology firsthand. While we would also like to increase our footprint and engage institutions in other parts of Africa, we realise that we have an enormous workload ahead of us here at home. However, the thought of expanding the ideals of the Society into Africa is constantly on our minds.



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SAIMC's involvement with standards and legislation



SAIMC councillor Gary Friend was instrumental in the formation of SABS TC165 and remains a member of the committee.

The SABS TC065 technical committee was established in 1992 as a mirror to IEC TC031 to provide, maintain and coordinate standards in the field of explosion prevention from both electrical and mechanical causes. The standards of this committee are used in any industry where explosive atmospheres of gas, vapour, mists and dusts may be present. Typical applications include the oil and gas, chemical, plastics, grain, pharmaceutical, shipping, mining and coal industries.

Until recently, the SAIMC had no direct involvement in SABS TC065, which was co-ordinated primarily by South African Flameproof Association.

SABS TC165 established

In 2014, a number of initiatives were kicked off from within the SAIMC. The primary aim was to form a SABS mirror to IEC TC065 for A&C in South Africa. Following discussions with the SABS itself and a degree of negotiation with SABS TC065 and SABS TC072, the SAIMC was able to establish SABS TC165 to manage A&C standards in South Africa. The initial objective was to prioritise the

“Measure what is measurable and make measurable what is not so.”

– Galileo

long list of international standards that needed to be adopted locally.

The benefits can vary significantly between different fields in which committees are involved. They can be economic (for example, cost savings, reduced time-to-market, easier access to certain regional or international markets, or lower sales prices), social (for example, improved safety for workers and the reduction of accidents), or they can be an improvement in environmental impact.

The potential disastrous consequences of explosions, in terms of human life, the environment and the economy, require standards aimed at the prevention or reduction of such explosions. This makes adherence to safety standards imperative.

Alignment with international standards

Internationally recognised IEC standards should be used to ensure that the latest technology from global suppliers can be used in South Africa, as well as to allow SA companies to supply internationally. There are cases, particularly in underground coal mining where the industry was well developed prior to the IEC standards. The SANS standards have been migrated closer to IEC standards, but on occasion, working groups have been set up to address these issues. To date, there has been no requirement for this for TC165.

Benefits are to identify standards that would be relevant for use in the country and which standards need to be reviewed, identify experts qualified to serve on the working group, and to give a mandate to South African representatives at international level.

SABS TC065 and TC165 standards contribute to safer and more efficient operations in the industries concerned, and prevent loss of life and destruction of equipment and the environment. Major environmental problems can occur as a result of explosions rupturing vessels, for example, an explosion on a super tanker or an oil rig, and the resultant release of materials due to that explosion into the environment.

In addition to SABS SANS standards, the SAIMC participated at NRCS for the consultation for the new Metrology Act and have had discussions with SANAS.

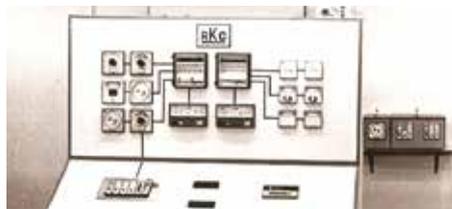
Technical experts are required for the various committees across industries. The SAIMC member companies are able to contribute and participate, but a significant commitment needs to be made. The next SABS TC165 meeting will be on 30 May at the SABS offices.



Vaal branch chairman Dirk van der Walt was involved early when SABS TC067/SC07 wanted to adopt the IEC61508 Standards. He was a founding member of SABS TC165 and was elected chairman in 2016.

A glimpse down memory lane

Somewhere amongst the cobwebs of the Technews archives, we unearthed a copy of the of the 1975 edition of the *Buyers' Guide*. The foreword was written by then president Mr G. Sommer, and one of his observations is as relevant today as it was back then: "The recent S.A.I.M.C. report on education has pinpointed the bottleneck preventing further expansion in instrumentation and control as the acute shortage of engineers and technicians that will face us in the coming years."



In 1975, there were less than 65 devices connected together in a crude version of today's Internet. In 2017, there are 25 billion devices connected online and many of these are monitoring critical process parameters right down at the control level of our production plants. If the shortage of suitably trained personnel was acute in 1975, it has become absolutely critical today. Little wonder then that the current SAIMC voices exactly the same concerns about the need to equip a new breed of automation and control engineers with the specific skills to understand, operate and maintain these rapidly evolving technologies.

We have pieced together some other interesting facts from SAIMC history and recorded them in the timeline that follows, interesting how education has always been prominent on the agenda:

1. In 1980 the membership fee is raised from R10 to R15 per annum, while Patron Members could join for R30. Education becomes a serious point on the agenda.
2. In 1990 The Engineering Professions of SA Act is passed and ECSA is born. Electrical engineering companies join the Exhibition in Electronics Measurement and Control, and the Electrex exhibition comes into being.
3. In 1994 the branch in Richards Bay is renamed the Zululand branch. Change is afoot in the industry as well as in the country: the Electrex exhibition is handed over to TMC/Reid and the era of apartheid draws to a close.
4. In 1996, after 20 years of service, the SAIMC's *Pulse* magazine is replaced by a more professional Technews publication: *SA Instrumentation and Control* is still distributed to all members free of charge. Membership reaches 1000.
5. In 2008 the SAIMC plays a pivotal role, together with other voluntary associations, to prevent the nationalisation of ECSA and the implementation of the South African Council for the Built Environ-



ment Act, which would have cost all technicians, technologists and engineers their international accreditation.

6. In 2010 the name changes from South African Society for Instrumentation, Measurement and Control to Society for Automation, Instrumentation, Measurement and Control – maintaining the abbreviation SAIMC.
7. In 2011 the SAIMC builds a trailer to house 10 First Lego League sets for schools which cannot afford their own. The SAIMC becomes a Section 21 Company with its own compliance guidelines and the branches are no longer seen as separate from Council. A 'new' SAIMC is born in which branches become the hands and feet of the organisation.
8. In 2012 membership reaches 1300. The SAIMC and Technews arrange the Society's first Webinar, which gives SAIMC leadership greater insight into the requirements of its members. SAIMC joins the Automation Federation and is nominated onto the board of directors. The Society also institutes working committees at Council level to co-ordinate all the activities, from website design to reviewing the brand and the constitution. Education remains a serious point on the agenda.
9. 2013 SAIMC holds a Strategic Planning Session and invites industry to assist with developing a five year business plan. The result is a fresh new image which appeals to all, as well as a new scoring system for branches. Branches now strive to attain a status based on the value that they add for members.
10. In 2013 the SAIMC appoints its first non-white president, Vinesh Maharaj, who is succeeded by Oratile Sematle in 2016. The SAIMC becomes an NPC and grows from strength to strength. The first Gala Dinner becomes a premier industry event at which guests are welcomed to learn



about the Society at an evening of fun and entertainment.

11. In 2014 the SAIMC provides R200 000 for the upgrade of the Automation Control laboratory at UP. A student requests help with his final year project and within a week Patron Members provide R100 000 worth of equipment and expertise. The SAIMC also contributes to the Department of Higher Education and Training's, Strategic Infrastructure Projects skills development report, and ensures that the need for automation and control engineers, as well as MIS/MES engineers, is highlighted.
12. In 2015 the SAIMC spearheads the creation of SABS Technical Committee TC165, which mirrors IEC TC065 for adoption of international A&C standards in South Africa. Talks also begin with UJ regarding the establishment of an Institute for Process Automation. The SAIMC plays a major role, together with the IIG, in the reinvention of the Process Expo, thereby creating an international class exhibition – Africa Automation Fair.
13. In 2016 the SAIMC continues to champion the recognition of Automation and Control as the 10th engineering discipline of ECSA. SAIMC representatives address the Engineering Standards Generating Body, describing the need for an automation discipline. The first workshop takes place, which requires much time and effort to align industry requirements with the curricula of the tertiary institutions. The first SAIMC members are trained on how to evaluate automation candidates for professional membership status, and the Society commits R600 000 towards equipping a laboratory at UJ as part of its commitment to support the Institute for Process Automation.



Join the evolution

The past 60 years of success for the SAIMC would not have been possible without the support of our loyal members. Through your support, both financially and through your active participation in our various sub-committees, we have been able to execute the business plan developed in 2013.

To recap, the strategic objectives of this plan were:

- Global recognition for the SAIMC and its members.
- To establish an extensive database of industry expertise.
- To act as a catalyst between industry and education.
- To ensure that the automation and control industry's best interests are represented at all levels.
- Formal recognition of Automation & Control (A&C) as the 10th engineering discipline by ECSA.
- Keeping members aware of the latest industry trends and technology.

The majority of these objectives have either been achieved, or the efforts are well underway. Our endeavour to bridge the gap between the expectations of industry and the universities' education programmes has reached the stage where we are in the process of assisting with the development of a curriculum for an A&C degree to be offered by

leading educational institutions. The determination and persistence of our current president and COO have made the recognition of our profession a key focus at ECSA.

Another milestone relates to ensuring that the A&C industry's interests are adequately represented at all levels. Historically, the SAIMC and its members had no direct input into the standards that were being created or adopted for local implementation. In 2014, under the inspired leadership of Gary Friend, the SAIMC lobbied SABS for the creation of SABS TC165 (IEC TC 065 mirror) for A&C standards and started participating formally in TC065 (IEC TC031 mirror) for hazardous areas (led by South African Flameproof Association (SAFA).

As a result, the SAIMC is now the driver of the adoption/modification of the international standards that affect our industry.

In conclusion, although the SAIMC has made significant progress since 2013, on a number of the objectives set out in the business plan, there is still much work to be done in order for us to achieve all our goals and truly become the Voice of Automation and Control in our region.

We require the support of all industry players in order to make this endeavour a success. In particular, we require more end users to become patron members in order that we can engage more meaningfully to understand and address their challenges.

Currently the majority of our patron members are vendors, who may have different requirements to end users.

We also need more active members within our branches, to help, amongst other things, inform the youth in schools and universities around the country about our exciting profession – which does not currently get the recognition it deserves in society. We must attract the best and brightest young minds to join our ranks and elevate our profession even further in the future. The IIoT and Big Data are driving convergence between A&C and ICT, which opens a whole host of new opportunities to these leaders of the future.

My earnest appeal to you all is please join the SAIMC and help to make us a much stronger organisation than we already are; an organisation that speaks on behalf of all its stakeholders to represent the interests of our industry in every sphere of society. The Fourth Industrial Revolution is about to change everything. Join the evolution; let's show the world how automation just became cool.

Yours in automation,
Vinesh Maharaj

SAIMC National Patron Members

