



Southern African Transport Conference

*Incorporating the
4th International
Conference on
Transport Infrastructure*

Towards a desired transport future:
safe, sufficient and affordable

9 – 12 July 2018

The 37th annual

SOUTHERN AFRICAN TRANSPORT CONFERENCE and EXHIBITION and the 4th INTERNATIONAL CONFERENCE ON TRANSPORT INFRASTRUCTURE

THEME

**TOWARDS A DESIRED TRANSPORT FUTURE: SAFE, SUFFICIENT AND
AFFORDABLE**

PATRON

THE MINISTER OF TRANSPORT

**CSIR International Convention Centre (CSIR ICC)
Pretoria, South Africa**

9 to 12 July 2018

“Early Bird” registration from 2 May - 10 June 2018
(The full registration fee applies after 10 June)

FINAL ANNOUNCEMENT AND PROVISIONAL PROGRAMME

CONTACT DETAILS

CONFERENCE SECRETARIAT (Correspondence and Enquiries)

Ms Jacqui Oosthuyzen
Mobile: +27 (0)83 324-9622

Webpage: www.satc.org.za
E-mail: satc.conference@gmail.com

ORGANISING COMMITTEE SATC

| | |
|---|---------------------------------------|
| Behrens, A/Prof Roger | University of Cape Town |
| Gräbe, Prof Hannes | University of Pretoria |
| Jennings, Ms Gail | Independent Transportation Researcher |
| Kistan, Mr Kenny (Chair of the ATC Board) | CSIR Built Environment |
| Maina, Prof James (Chairman) | University of Pretoria |
| Manana, Ms Khibi | Department of Transport |
| Mashiri, Mr Mac | Gwarajena TRD |
| Mokonyama, Dr Mathetha | CSIR Built Environment |
| Naidoo, Dr Kavendra | CSIR Aeronautics Systems |
| Nordengen, Dr Paul | CSIR Built Environment |
| Oosthuyzen, Ms Jacqui | Secretariat |
| Pretorius, Dr Pieter | Innovative Transport Solutions |
| Ribbens, Dr Hubrecht | Consultant |
| Ssamula, Dr Bridget | AECOM |
| Steyn, Prof Wynand | University of Pretoria |
| Verhaeghe, Mr Benoit | CSIR Built Environment |
| Visser, Prof Alex | University of Pretoria |
| Wang, Mr Yuchen | SACTCC |

ORGANISING COMMITTEE ICTI

- INTERNATIONAL ORGANIZING COMMITTEE

| | |
|------------------------|---|
| Bocci, Maurizio | Polytechnic University of Marche, Italy |
| Di Benedetto, Herve | ENTPE, France |
| Fortes, Rita Moura | Mackenzie Presbyterian University, Brazil |
| Fwa, Tien Fang | National University of Singapore, Singapore |
| Lee, Hosin "David" | University of Iowa, USA |
| Losa, Massimo | University of Pisa, ITALY |
| Merighi, Joao Virgilio | Mackenzie Presbyterian University, Brazil |
| Ong, Ghim Ping | National University of Singapore, Singapore |
| Papagiannakis, Tom | University of Texas at San Antonio, USA |
| Pasetto, Marco | University of Padova, Italy |
| Pereira, Paulo | University of Minho, Portugal |
| Pratico, Filippo | Mediterranea University of Reggio Calabria, Italy |
| Raab, Christiane | EMPE, Switzerland |
| Santagata, Ezio | Politecnico di Torino, Italy |
| Tebaldi, Gabriele | University of Parma, Italy |
| Uddin, Waheed | University of Mississippi, USA |
| Wilson, Douglas | The University of Auckland, NZ |
| Woodside, Alan | University of Ulster, UK |

- LOCAL ORGANIZING COMMITTEE

| | |
|--|------------------------|
| Mgangira, Dr Martin (Conference Chair) | CSIR |
| Oosthuyzen, Ms Jacqui | SATC |
| Steyn, Prof Wynand J v d M | University of Pretoria |
| Visser, Prof Alex | University of Pretoria |

TECHNICAL COMMITTEE

| | |
|--------------------|---|
| Mohan, Prof Dinesh | Shiv Nadar University, India |
| Prozzi, Prof Jorge | The University of Texas, USA |
| Wegman, Prof Fred | Delft University of Technology, The Netherlands |
| Sweatman, Dr Peter | CAVita LLC, USA |

INVITATION

Everyone in any way connected with transport is invited to register for the 37th Southern African Transport Conference (SATC 2018) and the 4th International Conference on Transport Infrastructure. It will be of particular interest to: municipal and provincial employees, policy and decision-makers, academics, researchers, students and professionals active in the

planning, construction, manufacturing, logistics, operation and safety of passenger and freight transport, road traffic, rail, ports, maritime and aviation. End-users will also find the conference of interest.

SYNOPTIC PROGRAMME

From Monday to Thursday the sessions/workshops (1A-1D, 2A-2D, 3A-3D, 4A-4B) take place over a full day and it is therefore possible to **register for only one session** per day. However, once at the conference, delegates are welcome to **move between sessions**, space permitting.

| DATE | SESSION NO | EVENT |
|-------------------------------|-------------------|--|
| Monday, 9 July | | Opening Session |
| | 1A | 4th International Conference on Transport Infrastructure (ICTI) |
| | 1B | Treasury Workshop - Public Transport and Spatial Transformation |
| | 1C | Rural Development/ Capacity Building |
| | 1D | Freight and Logistics |
| Tuesday, 10 July | 2A | 4th International Conference on Transport Infrastructure (ICTI) |
| | 2B | Urban Transport |
| | 2C | Rail |
| | 2D | Traffic Management, Safety and Security in combination with the Road Safety Audits in SA Workshop |
| Wednesday, 11 July | 3A | Public Transport and Paratransit |
| | 3B | Traffic Engineering |
| | 3C | 5th China-Africa Co-operation Forum |
| | 3D | Aviation |
| Thursday, 12 July | 4A | Integrated Public Transport Networks: Mapping, Data and ICT |
| | 4B | 'International Society for Weigh-in-Motion' Workshop |

SPECIAL EVENT

Opening – SOUL BLEND (Afro-Soul acapella group)

SOCIAL FUNCTIONS

Cocktail Party – 17:00 to 18:30, Sponsored by Innovative Transport Solutions:

A cocktail party will be held at the conference venue after the day's proceedings on **Monday, 9 July 2018**. The following awards for papers presented at the conference will be announced:

- SATC Award for the **“Best Paper”**;
- SATC Award for the **“Best Practical Paper”**
- ICTI Award for the **“Best Paper”**
- SAICE Transportation Division Award for the **“Best Paper by a Young Professional”**
- The **‘Distinguished SATC Fellow’** award

Delegates registered for any of the four days of the conference are invited to attend and are requested to indicate their attendance on the registration form.

ICTI SOCIAL FUNCTIONS

Delegates registered for the Monday ICTI session (1A) and the Tuesday ICTI session (2A), may attend the following functions:

Sunday evening, 8 July: Welcome cocktail function at the City Lodge Lynnwood – 17h00 (An amount of R150 will be added to your invoice when registering online. Please ensure that you select the function when registering)

Tuesday evening, 10 July: Farewell Barbecue (Entertainment: Zasha Afrika Marimba Band) at the CSIR ICC – 17h30 (An amount of R300 will be added to your invoice when registering online. Please ensure that you select the function when registering)

ICTI delegates may attend the Monday evening cocktail function (There is no cost as this is a sponsored event. Please ensure that you select the function when registering)

EXHIBITION

An exhibition – a showcase for all related industries – will run concurrently with the conference from Monday, 9 to Thursday, 12 July 2018. Exhibition space (3m x 3m) is available on a first come, first served basis. Organisations wishing to exhibit are requested to contact the Conference Secretariat.

PROMOTIONAL OPPORTUNITIES

Organizations interested in Promotional Opportunities should contact the Conference Secretariat.

ACCOMMODATION

The following special rates will apply to SATC and ICTI delegates

| | |
|---|--|
| <p>TOWN LODGE MENLO PARK Atterbury Rd, Menlo Park, Pretoria</p> <p>Tel: 012 348-2711 (Ask for reservations) E-mail: tmenlo.resv@citylodge.co.za</p> | <p>CITY LODGE LYNNWOOD Cnr Lynnwood & Daventry Rds, Lynnwood, Pretoria</p> <p>Tel: 012 471-0300 (Ask for reservations) E-mail: cllynnwood.resv@citylodge.co.za</p> |
| <p>R955 single R1 059 double (p/room)</p> | <p>R1 342 single R1 618 double (p/room)</p> |
| <p>Full English Breakfast R160p.p</p> | <p>Full English Breakfast R155p.p</p> |
| <p>Quote <u>SOUTHERN AFRICAN TRANSPORT CONFERENCE (or Guest File no 1030685)</u> in order to qualify for the discounted rate</p> | <p>Quote <u>SOUTHERN AFRICAN TRANSPORT CONFERENCE (or Guest File no 1030685)</u> in order to qualify for the discounted rate <u>ICTI DELEGATES, PLEASE QUOTE ICTI</u> for discounted rate</p> |

The above hotels are recommended for accommodation during the conference. **Delegates are responsible for their own arrangements.** They should book by E-Mail sending all the relevant details as well as either credit card details or prepayment and quoting the above reference details in order to qualify for the discounted rates and to ensure a booking at the hotel of their choice.

TRANSPORT (Courtesy bus)

The organisers will arrange a courtesy bus to transport delegates from the above hotels to the CSIR ICC in the morning and back after the day's proceedings/social function. **Delegates wishing to make use of the courtesy bus should tick the relevant section on the registration form.**

CONFERENCE DOCUMENTATION

Delegates registered for any of the conference sessions and workshops will receive the following documentation:

- Conference Handbook containing the programme and abstracts of the papers presented at SATC 2018;

- Memory Stick containing the full papers presented at SATC 2018;
- Delegate bag
- Pen and Notebook

Extra copies of the memory sticks will be available at a cost of R150,00.

STUDENT ESSAY COMPETITION

The Organising Committee has instituted an essay competition open to all registered students (undergraduate as well as postgraduate) at tertiary institutions. The competition is held within the institutions (the Organising Committee has already been in contact with the institutions) and each institution will select its two winners.

Students need to prepare a five-page essay on "TOWARDS A DESIRED TRANSPORT FUTURE: SAFE, SUFFICIENT AND AFFORDABLE". This relates to the theme of SATC this year. Final selections will be done by each institution, and the winning essays submitted to the SATC Secretariat (satc.conference@gmail.com) by 14 May 2018.

The two top authors from each institution and their lecturer will be supported to attend SATC 2018. For winners from outside Gauteng, transport (economy class airfare/ bus), accommodation in Pretoria, meals and registration will be provided.

REGISTRATION AND PAYMENT

REGISTRATION – OPENING 2 MAY 2018

Registration is per day. This four-day conference consists of an opening session, plenary and parallel sessions, including Workshops and Forums.

The **conference sessions** (1A-1D, 2A-2D, 3A-3D and 4A-4B) take place over a full day and it is therefore possible to **register for only one session per day**. However, once at SATC, delegates are welcome to move between the sessions. ICTI Delegates must please ensure that the correct sessions (1A and 2B) and functions are selected

Registrations are done via the SATC website: www.satc.org.za

FEES AND PAYMENT

Registration fees are payable in advance by:

▪ DIRECT DEPOSIT

Direct deposits may be made into the following bank account and proof of payment sent to the SATC Secretariat (email: satc.conference@gmail.com). Please use the pro forma invoice number as reference so that the payment can be identified and the correct delegate(s) credited:

| | |
|------------------------|---|
| Bank | FNB |
| Branch and code | Hatfield 242-145 |
| Account name | Annual Transportation Convention |
| Account No | 54501151268 |
| Swift code | FIRZAJJ (for transfers from foreign countries) |

▪ CASH PAYMENT AT THE CONFERENCE

If time is short, registration fees may be paid at the conference (IN SUCH CASES THE LATE REGISTRATION FEES WILL APPLY). **Please arrange with the SATC Secretariat prior to attending the conference**

We do not accept credit card payment.

The late registration fee will apply for all payments received after 10 June 2018.

ID NUMBER IS REQUIRED FOR REGISTRATION FOR ALL SOUTH AFRICAN RESIDENTS

If you register as a STUDENT, you are required to mail a copy of your student card to the secretariat prior to the event. You will also be requested to present your student card at the registration desk.

| Fees are per day Fees include 15% VAT (please supply your company VAT number on registration form) | Early bird fee: (For registrations AND PAYMENT up to 10 Jun) | Late fee (For registrations AND PAYMENT from 11 Jun) |
|---|---|---|
| Student | R 880 | R 980 |
| Presenter (on day of presentation) | R1 310 | R1 910 |
| Young Professional (under35) | R1 930 | R2 130 |
| Delegate | R2 350 | R2 950 |

THE REGISTRATION FEE FOR THE CONFERENCE SESSIONS AND WORKSHOPS, INCLUDE:

- Attendance on the registered day(s).
- Lunch and refreshments on the day(s) of attendance.
- Attendance of the cocktail party on Monday, 9 July. (Please indicate on the registration form).
- Transport between the appointed hotels and the conference venue. (Please indicate on the registration form).
- A briefbag containing the conference documentation including the written papers (received in time for printing) on Memory Stick and a Programme Handbook containing the Final Programme and Abstracts of the papers presented.

CONFIRMATION

Once your registration is complete, you will receive a pro-forma invoice via e-mail. Therefore, please ensure that your current e-mail address is given on the registration form.

CANCELLATION

Notification of cancellation received, in writing, prior to or on Friday, 6 July 2018 will be subject to a 25% handling fee and processed after the conference. Delegates may be substituted at any stage. No refunds will be made on cancellations received after 6 July 2018.

DELEGATES ARE REMINDED THAT A COMPLETED REGISTRATION FORM IS TAKEN AS A FIRM COMMITMENT AND IN THE EVENT OF NON-ATTENDANCE, THE DELEGATE WILL BE HELD RESPONSIBLE FOR PAYMENT OF THE FULL ACCOUNT.

Please send proof of payment, using the pro forma invoice number as reference.

(A Tax invoice is issued after payment reflects on our bank statement)

CPD ACCREDITATION

The conference is SAICE accredited and professional engineers will earn one credit per day of attendance. No attendance certificates will be issued. ***In order to apply for credits, professional engineers must sign the special registration sheets (not the SATC conference registration sheets) at the conference registration desk on EACH DAY OF ATTENDANCE.***

OPENING ADDRESS

TO BE CONFIRMED

DEPARTMENT OF TRANSPORT

PLENARY SPEAKERS

MONDAY

Mr Skhumbuzo Macozoma

CEO, SOUTH AFRICAN NATIONAL ROADS AGENCY SOC LIMITED (SANRAL)



Mr Skhumbuzo Macozoma (42), is a civil engineer with extensive experience in the infrastructure and construction environments is leading SANRAL into its third decade as the state-owned agency responsible for the management of the country's national road network.

He is the Chief Executive Officer of the South African National Roads Agency with a vision to ensure the country's road transport system delivers a better South Africa for all.

Under his leadership SANRAL has developed a new, long-term strategy, Horizon 2030, and initiated a process to transform the construction and built environments through its procurement and developmental policies.

Macozoma joined SANRAL in 2016 following a career that included the management of the Johannesburg Roads Agency and the coordination of transport planning for the 2010 Soccer World Cup.

He joined the CSIR in 1993 where he conducted research into the design of water and waste management systems within sustainable human settlements. In 2003 he took over responsibility for transport infrastructure development at the Department of Transport. As Chief Director, Infrastructure Network Development he coordinated the drafting of the Road Infrastructure Strategic Framework and the National Overload Control Strategy.

He also served on the Board of SANRAL, oversaw the performance of the Airports Company South Africa and was part of the team that developed the National Freight Logistics Strategy.

In the run-up to the 2010 FIFA World Cup he was deployed to the organising committee to coordinate transport infrastructure and services and manage activities in the fields of transport, logistics, accommodation and hospitality.

In 2012 Macozoma was appointed Managing Director of the Johannesburg Roads Agency and given the responsibility to develop a ten-year roads development programme for the country's largest metro. During his tenure the JRA's budget grew from R800-million to R2.5-billion and introduced a comprehensive plan for road resurfacing and resealing.

Prior to his appointment at SANRAL he served as CEO of Electronic Toll Concession Limited. Macozoma has a BSc-degree in Civil Engineering and an MSc from the University of the Witwatersrand.

TUESDAY

Prof Robert Cervero

UNIVERSITY OF CALIFORNIA, BERKELEY, USA



Prof Robert Cervero is Professor Emeritus of City and Regional Planning at the University of California, Berkeley, where he chaired the department and directed the Institute of Urban and Regional Development and the University of California Transportation Center. His research focuses on sustainable transportation policy and the nexus between urban transportation and land-use systems. He has written numerous books and articles in these areas, including the recently released *Beyond Mobility* (2017), and was a contributing author to IPCC's Fifth Assessment on climate change and UN-Habitat's 2013 Global Report on Sustainable Mobility. Over his career he has been an academic Fellow or Visiting Professor at universities in Singapore, Brazil, Indonesia, China, Australia, UK, South Korea, UAE, and Saudi Arabia. In 2013, UMB's Future Cities ranked him among the top 100 City Innovators Worldwide. Currently, he is co-editor of *Access* magazine, a consultant with the World Bank, and a visiting professor at NYU-Abu Dhabi.

WEDNESDAY

Mr Vuyani Jarana

SOUTH AFRICAN AIRWAYS



Mr Vuyani Jarana was appointed as CEO of the South African Airways Group on 1 November 2017, after an exemplary career with Vodacom mobile communications company, which he left as Chief Officer of its Business Division.

With his proven track record of sound leadership and success, he is an excellent choice to take SAA forward into a successful future.

His deep understanding of strategy-formulation processes, ability to work with people and navigate complex issues, and his mix of humility and robust fortitude have given him the ability to succeed against difficult odds.

At Vodacom, he focused on building a strong team and developing technological capabilities that would see the Group become an industry leader. His passion for people, customer service and results and his resilience, drive and competitiveness will stand him in good stead as he takes SAA into a new era.

His career spanning 22 years in the telecoms industry had a number of highlights.

- In 2000, he joined the Vodafone Global Leadership Programme, the company's prestigious initiative aimed at developing leadership capacity within the Group. He was appointed as Vodacom's representative in major stakeholder engagements in the Eastern Cape Province.

- As Operations Manager Southern Gauteng, he led a team that unearthed a major software defect in the Motorola radio system. In 2003, he was awarded a CEO's Award for this achievement, which he immediately attributed to his team's efforts.
- In 2004, he was the first to join the elite Vodacom Advanced Executive Programme.
- In 2005 he was appointed as a Managing Executive Eastern Region, with the focus on regaining market share.
- He was appointed to a newly created position as Director of Regional Operations in 2009. Within three months he had made major changes which led to new regional growth and an improvement in customer experience.
- In 2010, he was appointed as Group Chief Operating Officer, with Customer Care and Facilities Management added to his portfolio. He drove the implementation of self-service channels and the remote configuration of mobile-phone settings, a major reduction of traffic to call centres.
- During this time, he was also Acting Managing Director of Vodacom South Africa for six months.
- In 2011, he was appointed Chairman of Stortech, a Vodacom subsidiary that was facing a decline due to technology transitions, changing the company's strategy to focus on services and diversification. Today Stortech is growing from strength to strength and in many areas, is beating its competitors.
- Also in 2011 he was appointed Chairman of Mezzanine, a start-up company established to focus on digital health. He expanded the company's focus to include educational and agricultural solutions. Today it is a solid pan-African digital services provider in areas such as agriculture, education and healthcare delivery helping national economics leapfrog under development cycles.
- In 2012, he was appointed as Chief Officer Vodacom Business, which included the integration of Vodacom Business Africa into the Enterprise Portfolio. The integration was successful and defined a new operating model for Enterprise for the Vodacom Group. His focus in the new role was to stem losses in the Vodacom Business Africa Group. By the end of the first year, the group had broken even. Since then he has focused on driving growth for Vodacom Business Africa and has achieved success despite the fragility of Africa's currencies. After his appointment he spotted the potential of machine-to-machine solutions, now called the Internet of Things. M2M was started, which today is worth half a billion rand and projected to grow by billions over the next three to five years.
- In 2017, he was selected and awarded the University of Stellenbosch Business School's Alumnus of the Year.

SESSIONS

MONDAY, 9 JULY

| | |
|------------------------|---|
| 07:30 - 08:30 | REGISTRATION |
| 08:10 | Briefing for presenters and chairs in their respective venues |
| OPENING SESSION | |
| 08:30 – 08:50 | PERFORMANCE BY URBAN MELODY, INCLUDING THE NATIONAL ANTHEM OF SA |
| 08:50 – 08:55 | INTRODUCTION – Prof James Maina, Conference Chairman |
| 08:55 – 09:05 | WELCOME, SATC – Mr Kenny Kistan, Chairman, ATC Board |
| 09:05 – 09:20 | WELCOME, ICTI – Dr Hosin 'David' Lee , President, iSMARTi |
| 09:20 – 10:00 | PLENARY ADDRESS – Mr Skhumbuzo Macozoma, SANRAL CEO |
| 10:00 – 10:30 | OPENING ADDRESS – Mr Blade Nzimande, Minister of Transport |
| 10:30 – 11:00 | REFRESHMENTS |

DELEGATES BREAK INTO PARALLEL SESSIONS AFTER THE REFRESHMENTS BREAK

MONDAY, 09 JULY

| | |
|---|---|
| 07:30 - 08:30 | REGISTRATION |
| 08:10 | Briefing for presenters and chairs in the respective venues |
| 08:30 - 10:30 | OPENING SESSION |
| 10:30 - 11:00 | REFRESHMENTS |
| SESSION 1A – 4th INTERNATIONAL CONFERENCE ON TRANSPORT INFRASTRUCTURE | |
| CHAIR: Mr Julius Komba, CSIR | |
| 11:00 – 11:30 | THE THIRD REPORT CARD: TRANSPORT FIXED INFRASTRUCTURE RESULTS, AND CONCLUSIONS – K Wall , University of Pretoria and C Rust , CSIR Built Environment |
| 11:30 – 12:00 | AN ECONOMICS-BASED ROAD CLASSIFICATION SYSTEM FOR SOUTH AFRICA – D Ross and M Townshend , University of Cape Town |
| 12:00 – 12:30 | PROPOSED METHOD TO CALCULATE ASSET VALUES FOR ROAD STRUCTURES – M Roux , I Sallie, M Kemp and V De Franca, CSIR Built Environment |
| 12:30 – 13:00 | INVESTIGATION OF FLOOD EFFECTS ON ROAD PERFORMANCE: A CASE OF ARUSHA, TANZANIA - O Tendwa and S Krygsman, University of Stellenbosch and P Valimba, University of Dar es Salaam |
| 13:00 – 14:00 | LUNCH |
| 14:00 – 14:30 | BHUTANESE ROAD AND BRIDGE RESILIENCE TO FLOODS AND LANDSLIDES – FIRST SUGGESTIONS FOR ASSESSMENT AND RESPONSE – AR Dawson , LAC Neves, University of Nottingham, R Sarkar, University of Bhutan and T Dijkstra, Loughborough University |
| 14:30 – 15:00 | CONSEQUENCES OF DELAYED MAINTENANCE OF PAVEMENT NETWORKS – C Chang , University of Texas, E Rodriguez, University of Piura, M Yapp and L Pierce, NCE |
| 15:00 – 15:30 | REFRESHMENTS |
| 15:30 – 16:00 | CLOGGING CHARACTERISTICS OF POROUS ASPHALT MIXTURES - L Chu And TF Fwa, Chang'an University |
| 16:00 – 16:30 | POROSITY AND PERMEABILITY EVALUATION OF PERVIOUS CONCRETE USING THREE-DIMENSIONAL X-RAY COMPUTED TOMOGRAPHY - A Jagadeesh and G Ong , National University of Singapore and Y Su, National Kaohsiung University of Applied Sciences |
| 16:30 – 17:00 | DEVELOPMENT OF WARM IN-PLACE RECYCLING TECHNIQUE AS AN ECO-FRIENDLY ASPHALT REHABILITATION METHOD - A Bozorgzad and H Lee , University of Iowa, S Kwon and K Jeong, Korea Institute of Civil Engineering and Building Technology and N Cho, Korea University of Technology and Education |
| 17:00 – 18:30 | COCKTAIL PARTY |
| 18:30 | BUS DEPARTS FOR APPOINTED HOTELS |

MONDAY, 09 JULY

| | |
|--|--|
| 07:30 - 08:30 | REGISTRATION |
| 08:10 | Briefing for presenters and chairs in the respective venues |
| 08:30 - 10:30 | OPENING SESSION |
| 10:30 - 11:00 | REFRESHMENTS |
| SESSION 1B – TREASURY SESSION – PUBLIC TRANSPORT AND SPATIAL TRANSFORMATION | |
| CHAIR: Dr Mathetha Mokonyama, CSIR and Michael Kihato, National Treasury | |
| 11:00 – 11:30 | PRESENTATION OF LAST YEAR SESSION REPORT AND FORMAT OF THE 2018 SESSION – M Kihato , National Treasury Cities Support Programme and M Mokonyama , CSIR Built Environment |
| 11:30 – 12:00 | INTEGRATED URBAN DEVELOPMENT FRAMEWORK (IUDF) AND LAND REFORM FOR SUSTAINABLE DEVELOPMENT - J Lodi , Department of Cooperative Governance and Traditional Affairs |
| 12:00 – 12:30 | NATIONAL TREASURY INSTRUMENTS IN THE CONTEXT OF LAND REFORM – D van Niekerk , National Treasury |
| 12:30 – 13:00 | FACILITATED DISCUSSION: INSTRUMENTS FOR SUSTAINABLE LAND REFORM |
| 13:00 – 14:00 | LUNCH |
| 14:00 – 14:30 | LAND REFORM – HOW CAN IT BE IMPLEMENTED TO BETTER SUPPORT VIABLE PASSENGER RAIL SERVICES? - T Hlongwane , Intersite Asset Investments and S Maboza , Passenger Rail Agency of South Africa |
| 14:30 – 15:00 | FACILITATED DISCUSSION: EFFECTIVE LAND REFORM IN SUPPORT MASS PUBLIC TRANSPORT SYSTEMS |
| 15:00 – 15:30 | REFRESHMENTS |
| 15:30 – 16:00 | LESSONS FROM PRACTICAL EXPERIENCES WITH LAND EXPROPRIATION FOR PUBLIC TRANSPORT PROJECT AND PROGRAMMES: CITY PERSPECTIVES – S Mahlangu , City of Tshwane |
| 16:00 – 16:30 | LESSONS FROM PRACTICAL EXPERIENCES WITH LAND REFORM FOR SUSTAINABLE DEVELOPMENT: PROPERTY DEVELOPER PERSPECTIVES - L Mthembu , Abland Property Developers |
| 16:30 – 17:00 | FACILITATED DISCUSSION: LESSONS FROM PRACTICAL EXPERIENCES WITH PROJECT LEVEL LAND EXPROPRIATIONS |
| 17:00 – 18:30 | COCKTAIL PARTY |
| 18:30 | BUS DEPARTS FOR APPOINTED HOTELS |

MONDAY, 09 JULY

| | |
|---------------------------|--|
| 07:30 - 08:30 | REGISTRATION |
| 08:10 | Briefing for presenters and chairs in the respective venues |
| 08:30 - 10:30 | OPENING SESSION |
| 10:30 - 11:00 | REFRESHMENTS |
| SESSION 1C – RURAL | |
| | CHAIR: Mr Bongisizwe Mpondo, SAFIRI |
| 11:00 – 11:30 | INFLUENCING FACTORS FOR FUTURE YOUTH ENTREPRENEURS: A CONCEPTUAL FRAMEWORK FOR THE TRANSPORT INDUSTRY - S Hughes and C Schachtebeck , University of Johannesburg |
| 11:30 – 12:00 | EMPOWERMENT OF WOMEN IN THE TRANSPORT SECTOR VALUE CHAIN: LESSONS FOR POLICY AND PRACTICE - M Mhlanga-Mochadibane , South African Network of Women in Transport (SANWIT) and M Mokonyama, CSIR |
| 12:00 – 12:30 | POLICY & IMPLEMENTATION IN THE AVIATION INDUSTRY – T Teegler , Lanseria International Airport |
| 12:30 – 13:00 | DISCUSSION |
| 13:00 – 14:00 | LUNCH |
| 14:00 – 14:30 | LOCKED-UP GAINS AND MISSED OPPORTUNITIES: A RAPID REVIEW OF THE 2007 AND 2018 VERSIONS OF THE RURAL TRANSPORT STRATEGY FOR SOUTH AFRICA– J Chakwizira , University of Venda and M Mashiri, GTRD |
| 14:30 – 15:00 | THE 4TH INDUSTRIAL REVOLUTION, IMPROVE YOUR SKILLS OR BE DEEMED IRRELEVANT– K Muronga , CSIR |
| 15:00 – 15:30 | REFRESHMENTS |
| 15:30 – 16:00 | PASSENGER TRANSPORT BY LIGHT DELIVERY VEHICLE (LDV) IN THE VHEMBE DISTRICT MUNICIPALITY OF LIMPOPO PROVINCE, SOUTH AFRICA - T E Munwana |
| 16:00 – 16:30 | EXPLORING INDUSTRY’S CONTRIBUTION TO THE LABOUR INTENSIVE CONSTRUCTION OF LOW ORDER RURAL COMMUNITY ACCESS ROADS - S Jairam and D Allopi, Durban University of Technology |
| 16:30 – 17:00 | SCIENTIFIC APPROACHES TO LINK THE TARGETS IDENTIFIED IN NATMAP AND NLTSF TO MEASURABLE AND COMPARABLE ANNUAL TARGETS APPLICABLE TO THE LOCAL MUNICIPALITY SPHERE OF GOVERNMENT - I Schoeman , North West University |
| 17:00 - 18:30 | COCKTAIL PARTY |
| 18:30 | BUS DEPARTS FOR APPOINTED HOTELS |

MONDAY, 09 JULY

| | |
|---|--|
| 07:30 - 08:30 | REGISTRATION |
| 08:10 | Briefing for presenters and chairs in the respective venues |
| 08:30 - 10:30 | OPENING SESSION |
| 10:30 - 11:00 | REFRESHMENTS |
| SESSION 1D – FREIGHT AND LOGISTICS | |
| CHAIR: Dr Paul Nordengen, CSIR Built Environment | |
| 11:00 - 11:30 | INTERVENTIONS TO IMPROVE FREIGHT VEHICLE ROAD SAFETY IN ETHEKWINI MUNICIPALITY - D Hiralall and P Taylor, eThekwini Transport Authority |
| 11:30 - 12:00 | DRIVE: A DISTANCE-BASED ROAD USER CHARGE VOLUNTARY EXPERIMENT - J van Rensburg and S Krygsman, University of Stellenbosch |
| 12:00 - 12:30 | GEOTRACK: AN EFFICIENT SIMULATION TOOL FOR THE ANALYSIS OF HEAVY VEHICLE MANOEUVRABILITY - C de Saxe and R Berman, CSIR |
| 12:30 - 13:00 | Discussion |
| 13:00 - 14:00 | LUNCH |
| 14:00 - 14:30 | THE TRUTH ABOUT PIRACY - S Smith-Godfrey , CSIR Built Environment, |
| 14:30 - 15:00 | 3D PRINTING IMPACTS ON SOUTH AFRICAN THIRD PARTY LOGISTIC SERVICE PROVIDERS - N Radebe , University of South Africa, S Nabee and P Thomas, University of Johannesburg |
| 15:00 - 15:30 | REFRESHMENTS |
| 15:30 - 17:00 | PANEL DISCUSSION - SUSTAINABLE ROAD INFRASTRUCTURE FUNDING – WHAT ARE THE SOLUTIONS? |
| 17:00 - 18:30 | COCKTAIL PARTY |
| 18:30 | BUS DEPARTS FOR APPOINTED HOTELS |

TUESDAY, 10 JULY

| | |
|---|---|
| 07:30 - 08:30 | REGISTRATION |
| 08:10 | Briefing for presenters and chairs in the respective venues |
| 08:30 - 09:25 | PLENARY ADDRESS: Prof Robert Cervero; UNIVERSITY OF CALIFORNIA, BERKELEY, USA |
| 09:25 – 09:30 | Plenary breaks up into parallel sessions |
| SESSION 2A – 4th INTERNATIONAL CONFERENCE ON TRANSPORT INFRASTRUCTURE | |
| CHAIR: Dr Emile Horak | |
| 09:30 – 10:00 | RESEARCH ON BOND EFFECT OF HIGH-PERFORMANCE EMULSIFIED ASPHALT FOR TACK COAT – P Sun, S Han and W Li, Chang’an University |
| 10:00 – 10:30 | LABORATORY EVALUATION OF ROAD CONSTRUCTION MATERIALS ENHANCED WITH NANO-MODIFIED EMULSIONS (NMEs) - I Akhalwaya and F Rust, CSIR Built Environment |
| 10:30 – 11:00 | REFRESHMENTS |
| 11:00 – 11:30 | DEVELOPMENT OF A NEW LABORATORY ACCELERATED MACHINE-MULTIVARIABLE ACCELERATED ABRASION MACHINE - W Ren , S Han, J Zhang and Y Ma, Chang’an University |
| 11:30 – 12:00 | AN INVESTIGATION OF AGGREGATE DEGRADATION IN A HIGH STRESS FIELD - M Mgangira , CSIR Built environment, S Xungu and J Giani, CSIR Materials Science and Manufacturing |
| 12:00 – 12:30 | THE EFFECTS OF ANGULARITY OF COARSE AGGREGATES ON ASPHALT MIXTURES HIGH-TEMPERATURE PERFORMANCE AND COMPACTION PERFORMANCE - J Gao and H Wang, Chang’an University, Z You, Michigan Technological University and Y Bu, Chang’an University |
| 12:30 – 13:00 | EVALUATION OF STIFFNESS OF CEMENT STABILIZED GRANULAR LATERITIC SOILS USING ULTRASONIC PULSE VELOCITY (UPV) TEST - DR Biswal, UC Sahoo , and SR Dash, School of Infrastructure, IIT Bhubaneswar, India |
| 13:00 – 14:00 | LUNCH |
| 14:00 – 14:30 | IMPORTANCE OF THE ZERO POINT IN DCP TESTING OF STRUCTURAL CAPACITY OF FLEXIBLE PAVEMENTS - F Netterberg , Pavement Materials & Geotechnical Specialist |
| 14:30 – 15:00 | FINITE ELEMENT ANALYSIS OF EFFECTS OF ASPHALT PAVEMENT DISTRESSES ON FWD DYNAMIC DEFLECTION BASIN- Q You, Chang'an University and J Ma, Xi'an University of Finance and Economics and X Qiu, Zhejiang Normal University |
| 15:00 – 15:30 | REFRESHMENTS |
| 15:30 – 16:00 | EFFECT OF MOISTURE CONTENT AND ROCK CONTENT ON THE RESILIENT MODULUS OF WEATHERED PHYLLITE FILLERS – F Liu and X Mao, Chang’an University, W Li, Zhengzhou communications planning survey and design institute, Q Wu and Y Zhao, Chang’an University |
| 16:00 – 16:30 | RESEARCH ON UNEVEN SETTLEMENT OF SUBGRADE WITH MICRO-PILES - X Gao , W Tian, Chang’an University and Z Zhang, Xian University of Science and Technology |
| 16:30 – 17:00 | THE APPLICATION OF SEMI-CONTINUOUS POST-TENSION PRESTRESSING BOX GIRDER BRIDGES IN AFRICA – M Heng , Chang’an University and First Highway Consultant Company |
| 17:00 – 17:30 | THE ECONOMIC IMPORTANCE OF AN OPTIMAL ROAD INVESTMENT POLICY IN SOUTH AFRICA - D Ross and M Townshend , University of Cape Town |
| 17:30 | FAREWELL BARBECUE FUNCTION |
| 19:00 | BUS DEPARTS FOR APPOINTED HOTELS |

TUESDAY, 10 JULY

| | |
|---|--|
| 07:30 - 08:30 | REGISTRATION |
| 08:10 | Briefing for presenters and chairs in the respective venues |
| 08:30 - 09:25 | PLENARY ADDRESS: Prof Robert Cervero; UNIVERSITY OF CALIFORNIA, BERKELEY, USA |
| 09:25 – 09:30 | Plenary breaks up into parallel sessions |
| SESSION 2B – URBAN TRANSPORT | |
| CHAIR: A/Prof Roger Behrens, University of Cape Town | |
| 09:30 – 10:00 | CAN PERSONAL TRAVEL PLANNING SHIFT MODE CHOICE AND TRAVEL BEHAVIOUR? LESSONS FROM AN EMPLOYEE PROGRAMME FOR WWF SOUTH AFRICA – G Jennings , Research Consultant and I Modau, Researcher/ WWF |
| 10:00 – 10:30 | IMPROVING THE PROVISION OF TRANSPORT FOR YOUTH WITH DISABILITIES IN CAPE TOWN– C Rivasplata , San Jose State University and M Le Roux, Artscape Theatre Centre |
| 10:30 – 11:00 | REFRESHMENTS |
| 11:00 – 11:30 | THE RELATIONSHIP BETWEEN TRANSIT-ORIENTED DEVELOPMENT, ACCESSIBILITY AND PUBLIC TRANSPORT VIABILITY IN SOUTH AFRICAN CITIES: A LITERATURE REVIEW AND PROBLEM FRAMING – S Cooke , R Behrens and M Zuidgeest, University of Cape Town |
| 11:30 – 12:00 | DECADES OF LEARNING FROM TRENDS IN LAND USE AND TRAVEL: TRAVEL AND TRANSPORT DEMAND ESTIMATION IN THE CITY OF TSHWANE – B Venter , 4in1 Simulations, N VanZyl, Royal HaskoningDHV and N Shivambu, City of Tshwane |
| 12:00 – 12:30 | INTEGRATING LAND-COVER DATA WITH DATA ON POPULATION AND HOUSEHOLD CHARACTERISTICS TO ASSESS DENSIFICATION ALONG THE BRT ROUTE IN THE CITY OF TSHWANE – N Dudeni-Tihone , E Petzer, A Gxumisa, J Holloway and S Khuluse-Makhanya, CSIR |
| 12:30 – 13:00 | COMPARISON OF NEW PEAK HOUR TRIP GENERATION RATES WITH EXISTING RATES IN THE SOUTH AFRICAN TRIP DATA MANUAL – L Mogakabe , City of Tshwane, J Anochie-Boateng, CSIR and G Ochieng, Vaal University of Technology |
| 13:00 – 14:00 | LUNCH |
| 14:00 – 14:30 | THE SPATIAL TREND ASSOCIATIONS BETWEEN SOCIO-ECONOMIC FACTORS AND HOUSEHOLDS’ TRAVEL PATTERN IN GAUTENG – R Luke and N Pisa , University of Johannesburg |
| 14:30 – 15:00 | PROGRESSIVE OR REGRESSIVE: EFFICACY OF INNOVATIVE URBAN PUBLIC TRANSPORT SYSTEMS ON URBAN MOBILITY IN THE CITY OF TSHWANE – B Ndwandwe and T Gumbo, University of Johannesburg |
| 15:00 – 15:30 | REFRESHMENTS |
| 15:30 – 16:00 | THE EFFECT OF SMOG POLLUTION ON TRANSPORT MODE CHOICE: A CASE STUDY OF XI’AN, CHINA – D Zhao and H Chen, Chang’an University, China |
| 16:00 – 16:30 | EQUITY IN TRANSPORT PLANNING: ARE WE ASKING THE RIGHT QUESTIONS? – M Thanjekwayo , Western Cape Department of Transport and Public Works |
| 16:30 – 17:00 | UBERPRENEURSHIP: TO BRAND OR NOT BRAND, THAT IS THE QUESTION? – C Diniso and C Schachtebeck , University of Johannesburg |
| 17:10 | BUS DEPARTS FOR APPOINTED HOTELS |

TUESDAY, 10 JULY

| | |
|--|--|
| 07:30 - 08:30 | REGISTRATION |
| 08:10 | Briefing for presenters and chairs in the respective venues |
| 08:30 - 09:25 | PLENARY ADDRESS: Prof Robert Cervero; UNIVERSITY OF CALIFORNIA, BERKELEY, USA |
| 09:25 – 09:30 | Plenary breaks up into parallel sessions |
| SESSION 2C – RAIL | |
| CHAIR: Mr David Mpye, University of Pretoria | |
| 09:30 – 10:00 | RAIL COMMUTER SERVICE QUALITY IN SOUTH AFRICA: RESULTS FROM A LONGITUDINAL STUDY - GJ Heyns and R Luke, University of Johannesburg |
| 10:00 – 10:30 | A CASE STUDY ON PLATFORM-TRAIN INTERFACE OCCURRENCES AT A METRORAIL PASSENGER STATION - RL Myoya , PJ Gräbe and CJ Venter, University of Pretoria |
| 10:30 – 11:00 | REFRESHMENTS |
| 11:00 – 11:30 | A REVIEW ON THE CURRENT CONDITION OF RAIL INFRASTRUCTURE IN SOUTH AFRICA - TB George, R Mokoena and C Rust, CSIR Built Environment |
| 11:30 – 12:00 | THE INFLUENCE OF BALLAST FOULING ON TRACK SETTLEMENT - A Rampersad , TB George, R Mokoena, M Mgangira, CSIR Built Environment and PJ Gräbe, University of Pretoria |
| 12:00 – 12:30 | DEVELOPMENT AND CALIBRATION OF A WIRELESS, INERTIAL MEASUREMENT UNIT (KLI-PI) FOR RAILWAY AND TRANSPORTATION APPLICATIONS - A Broekman and PJ Gräbe, University of Pretoria |
| 12:30 – 13:00 | DISCUSSION |
| 13:00 – 14:00 | LUNCH |
| CHAIR: Mr William Dachs, Gautrain Management Agency | |
| 14:00 – 14:30 | GAUTRAIN PRESENTATION 1 – TO BE CONFIRMED |
| 14:30 – 15:00 | GAUTRAIN PRESENTATION 2 – TO BE CONFIRMED |
| 15:00 – 15:30 | REFRESHMENTS |
| 15:30 – 17:00 | PRESENTATIONS TO BE CONFIRMED |
| 17:10 | BUS DEPARTS FOR APPOINTED HOTELS |

TUESDAY, 10 JULY

| | |
|---|--|
| 07:30 - 08:30 | REGISTRATION |
| 08:10 | Briefing for presenters and chairs in the respective venues |
| 08:30 - 09:25 | PLENARY ADDRESS: Prof Robert Cervero; UNIVERSITY OF CALIFORNIA, BERKELEY, USA |
| 09:25 – 09:30 | Plenary breaks up into parallel sessions |
| SESSION 2D – TRAFFIC MANAGEMENT, SAFETY AND SECURITY IN COMBINATION WITH THE ROAD SAFETY AUDITS IN SA WORKSHOP | |
| CHAIR: Prof Marianne Vanderschuren, University of Cape Town | |
| 09:30 – 10:00 | GIS BASED IDENTIFICATION OF HAZARDOUS LOCATIONS IN THE WESTERN CAPE - M Vanderschuren , A Janmohammed, S Phayane, University of Cape Town and M Arendse, Western Cape Government, Transport and Public Works |
| 10:00 – 10:30 | EVALUATION OF THE SAFETY BENEFITS OF THE EXCLUSIVE AND CONCURRENT GREEN MAN PHASINGS FOR PEDESTRIANS IN CAPE TOWN - M Sinclair and G Dennysen, University of Stellenbosch |
| 10:30 – 11:00 | REFRESHMENTS |
| 11:00 – 11:30 | REVISED WHITE PAPER ON NATIONAL TRANSPORT – M Kgamanyane , Dept of Transport |
| 11:30 – 12:00 | HORIZONTAL ROAD MARKINGS AND AUTONOMOUS DRIVING – BACK FROM THE FUTURE - H Mosbock , E Tomasz and T Burghardt, SWARCO |
| 12:00 – 12:30 | ANALYSING ROAD FATALITIES IMPACTING CHILDREN AGED 0-17 IN THE CASE OF GAUTENG: A THREE-YEAR ANALYSIS (2015-2017)– A Janmohammed , Childsafe South Africa, M Vanderschuren, University of Cape Town and S van As, Childsafe South Africa |
| 12:30 – 13:00 | DISCUSSION |
| 13:00 – 14:00 | LUNCH |
| 14:00 – 15:00 | RTMC/ SARF/ SANRAL ROAD SAFETY AUDITS IN SOUTH AFRICA WORKSHOP 1. Opening, Welcome & Purpose of the Session - R Mongale , RTMC 2. Road Safety Tools and Current Status of Road Safety Audits at SANRAL - R Cable , SANRAL 3. Road Safety Auditors Training - B Jonsson , SARF |
| 15:00 – 15:30 | REFRESHMENTS |
| 15:30 – 17:00 | RTMC/ SARF/ SANRAL ROAD SAFETY AUDITS IN SOUTH AFRICA WORKSHOP CONTINUED 4. Practical Traffic and Road Safety Engineering - L Roodt 5. Formalization of Road Safety Audit Processes in South Africa - D Roux , RTMC 6. Review of the SARSAM-2012 - K Labuschagne , Gauteng Dept of Roads and Transport 7. Conclusions and Resolutions - R Cable , SANRAL |
| 17:10 | BUS DEPARTS FOR APPOINTED HOTELS |

WEDNESDAY, 11 JULY

| | |
|---|--|
| 07:30 - 08:30 | REGISTRATION |
| 08:10 | Briefing for presenters and chairs in the respective venues |
| 08:30 - 09:25 | PLENARY ADDRESS: Mr Vuyani Jarana; SOUTH AFRICAN AIRWAYS |
| 09:25 – 09:30 | Plenary breaks up into parallel sessions |
| SESSION 3A – PUBLIC TRANSPORT AND PARATRANSIT | |
| CHAIR: Ms Gail Jennings, Independent Transportation Researcher and Dr Herrie Schalekamp, University of Cape Town | |
| 09:30 – 10:00 | EXPLORING THE DESIGN AND MANAGEMENT OF LEARNER TRANSPORT SERVICES - G Hitge |
| 10:00 – 10:30 | EVALUATION OF NATIONAL ROAD NETWORK FUNDING IN NAMIBIA: THE CURSE OF EFFICIENT ROAD USER CHARGES – H Petrus and S.Krygsman, University of Stellenbosch |
| 10:30 – 11:00 | REFRESHMENTS |
| 11:00 – 11:30 | ACTIVITY PARTICIPATION AND PERCEPTIONS ON INFORMAL PUBLIC TRANSPORT AND BUS RAPID TRANSIT IN DAR ES SALAAM CITY - L Joseph and A Neven, Transportation Research Institute (IMOB) Hasselt University, K Martens, Israel Institute of Technology & Radboud University, O Kweka, University of Dar es Salaam, G Wets and D Janssens, Transportation Research Institute (IMOB) Hasselt University |
| 11:30 – 12:00 | UNDERSTANDING THE OPERATIONAL CHARACTERISTICS OF PARATRANSIT SERVICES IN ACCRA, GHANA: A CASE STUDY - S Saddier , Transitec Consulting Engineers and A Johnson, Department of Transport, Accra, Ghana |
| 12:00 – 12:30 | PASSENGER SATISFACTION WITH MINIBUS-TAXI FEEDER SERVICES AT THE MITCHELLS PLAIN PUBLIC TRANSPORT INTERCHANGE IN CAPE TOWN - R Behrens , S Dodgen, T Fusire and T Mukhuba, University of Cape Town |
| 12:30 – 13:00 | TOOLS TO ASSIST IN DETERMINING BUSINESS VALUES OF INDIVIDUAL MINIBUS-TAXI OPERATIONS IN RUSTENBURG, NORTH-WEST, SOUTH AFRICA - J Coetzee , GoMetro, A Mulla MESH Integrated Solutions and N Oosthuizen, Glad Africa |
| 13:00 – 14:00 | LUNCH |
| 14:00 – 15:00 | PANEL DISCUSSION: RETHINKING THE APPROACH TO PUBLIC TRANSPORT REFORM – Keynote inputs plus three invited speakers |
| 15:00 – 15:30 | REFRESHMENTS |
| 15:30 – 16:00 | TOWARDS A STATED CHOICE METHODOLOGY TO DETERMINE MINIBUS-TAXI DRIVER WILLINGNESS TO PROVIDE OFF-PEAK FEEDER SERVICE - C Plano , R Behrens and M Zuidegeest, University of Cape Town |
| 16:00 – 16:30 | BEYOND BRT: INNOVATION IN MINIBUS-TAXI REFORM IN SOUTH AFRICAN CITIES - H Schalekamp , University of Cape Town and J Klopp, Columbia University |
| 16:30 – 17:00 | SUCCESS AND DELAY IN IPTN PROJECTS: CASE STUDY ANALYSIS OF THREE SOUTH AFRICAN CITIES - M Manuel and R Behrens, University of Cape Town |
| 17:10 | BUS DEPARTS FOR APPOINTED HOTELS |

WEDNESDAY, 11 JULY

| | |
|---|--|
| 07:30 - 08:30 | REGISTRATION |
| 08:10 | Briefing for presenters and chairs in the respective venues |
| 08:30 - 09:25 | PLENARY ADDRESS: Mr Vuyani Jarana; SOUTH AFRICAN AIRWAYS |
| 09:25 – 09:30 | Plenary breaks up into parallel sessions |
| SESSION 3B – TRAFFIC ENGINEERING | |
| CHAIR: Dr Herman Joubert, Tech-IQ Consulting Engineers | |
| 09:30 – 10:00 | TRAFFIC IMPACT OF PEDESTRIANISATION IN STELLENBOSCH - WS Mohr and SJ Andersen, University of Stellenbosch |
| 10:00 – 10:30 | TRAFFIC IMPACT OF THE ITS TIME EVENT - JM Schmidt , SJ Andersen and M Bruwer, University of Stellenbosch |
| 10:30 – 11:00 | REFRESHMENTS |
| | INTELLIGENT, SMART AND AUTONOMOUS TRANSPORT – NOW AND THE FUTURE IN SOUTH AFRICA |
| 11:00 – 11:25 | SMART ROADS AND AUTONOMOUS VEHICLES – SJ Andersen , Techso |
| 11:25 – 11:50 | INTELLIGENT PUBLIC TRANSPORT SYSTEMS – C Krogscheepers , Innovative Transport Solutions |
| 11:50 – 12:15 | SMART CITIES AND TRANSPORT – J Coetzee , Innovative Transport Solutions |
| 12:15 – 13:00 | PANEL DISCUSSION AND QUESTIONS |
| 13:00 – 14:00 | LUNCH |
| 14:00 – 14:30 | FACTORS THAT INFLUENCE THE GEOMETRIC DETECTION PATTERN OF VEHICLE-BASED LICENCE PLATE RECOGNITION CAMERA SYSTEMS - MC Rademeyer , MJ Booysen and A Barnard, University of Stellenbosch |
| 14:30 – 15:00 | TBA |
| 15:00 – 15:30 | REFRESHMENTS |
| 15:30 – 16:00 | INTELLIGENT TRANSPORTATION SYSTEM AS AN EFFECTIVE REMEDY TO IMPROVE THE PUBLIC ROAD TRANSPORTATION IN SOUTH AFRICA - OS Abejide , JA Adedeji and M Mostafa Hassan, Central University of Technology |
| 16:00 – 16:30 | PERCEPTIONS OF THE FACTORS CAUSING TRAFFIC CONGESTION AND PLAUSIBLE MEASURES TO ALLEVIATE THE CHALLENGE IN BLOEMFONTEIN, SOUTH AFRICA - XE Feikie , Durban University of Technology, DK Das and MMH Mostafa, Central University of Technology, Free State |
| 17:10 | BUS DEPARTS FOR APPOINTED HOTELS |

WEDNESDAY, 11 JULY

| | |
|--|--|
| 07:30 - 08:30 | REGISTRATION |
| 08:10 | Briefing for presenters and chairs in the respective venues |
| 08:30 – 09:25 | PLENARY ADDRESS: Mr Vuyani Jarana; SOUTH AFRICAN AIRWAYS |
| 09:25 – 09:30 | Plenary breaks up into parallel sessions |
| SESSION 3C – 5TH CHINA AFRICA CO-OPERATION FORUM | |
| CHAIRS: Ms Ivandra Udoyen, SACTCC and Mr Gerhard de Beer, GIBB | |
| This session is aligning with the 18th International Conference on SETMI (Science, Engineering & Technology and Management of Innovation) hosted by the Southern Africa-China Science, Engineering & Technology and Education Association (SETEA), South African Academy of Engineering (SAAE), University of Pretoria and Chinese Chang'an University with Southern Africa-China Transport Co-operation Center (SACTCC) | |
| 09:30 – 10:00 | PRESENTATIONS ON THE BELT AND ROAD INTERNATIONAL TRANSPORT ALLIANCE (BRITA) - Honourable MP M Weng, N Guan, H Zhang, World Transport Convention (WTC) and China Highway and Transport Society(CHTS) |
| 10:00 – 10:30 | DEEP CO-OPERATIONS BETWEEN CHANG'AN UNIVERSITY AND UNIVERSITY OF PRETORIA - H Wang , Chang'an University |
| 10:30 – 11:00 | REFRESHMENTS |
| 11:00 – 11:30 | DEVELOPMENT OF STABILIZED RUBBER AND MIXTURE - R Ren , School of Transport, Shandong University of Civil Engineering |
| 11:30 – 12:00 | PANEL PRESENTATIONS: J Li and H Shao , Chang'an University |
| 12:00 – 12:30 | EVALUATION OF PERFORMANCE OF PAVEMENT POTHOLE PATCHING MATERIALS CONTAINING COOKING WASTED OIL - L Geng , School of Transport, Shandong University of Civil Engineering |
| 12:30 – 13:00 | DESIGN AND CONSTRUCTION TECHNOLOGY OF RUBBER ASPHALT PAVEMENT - R Yang , Chang'an University |
| 13:00 – 14:00 | LUNCH |
| 14:00 – 14:10 | OVERVIEW OF HEBEI TRANSPORT AND TECHNOLOGY EDUCATION - C Lei , Hebei Transport College |
| 14:10 – 15:00 | PANEL PRESENTATIONS: S Bian , Shaanxi Transport Consultants Co. Ltd, Y Yang , Shaanxi Transport Technology College, Z Jiang and C Zhang , Shaanxi Provincial Highway and Transport Society, T Lei , Shanxi Road Bureau and Q Song , Shanxi Quality Control and Inspection Center |
| 15:00 – 15:30 | REFRESHMENTS |
| 15:30 – 16:00 | End of Session |
| 17:10 | BUS DEPARTS FOR APPOINTED HOTELS |

WEDNESDAY, 11 JULY

| | |
|-------------------------------------|---|
| 07:30 - 08:30 | REGISTRATION |
| 08:10 | Briefing for presenters and chairs in the respective venues |
| 08:30 – 09:25 | PLENARY ADDRESS: Mr Vuyani Jarana; SOUTH AFRICAN AIRWAYS |
| 09:25 – 09:30 | Plenary breaks up into parallel sessions |
| SESSION 3D – AVIATION | |
| CHAIR: Dr Kaven Naidoo, CSIR | |
| 09:30 – 10:00 | TRENDS IN INTERNATIONAL AVIATION RESEARCH - K Naidoo, CSIR |
| 10:00 – 10:30 | THE CIVIL AVIATION REGULATORY ENVIRONMENT – South African Civil Aviation Authority |
| 10:30 – 11:00 | REFRESHMENTS |
| 11:00 – 11:30 | AIRLINE NETWORK-BASED MODELING ASPECTS AND METHODOLOGIES FOR MULTIDISCIPLINARY OPTIMIZATION - S Matema, Aerospace Transport and Operations/ Centre for Aviation Studies in Southern Africa |
| 11:30 – 12:00 | THE COST OF KNOWLEDGE – B van Niekerk, Bronberg Engineering |
| 12:00 – 12:30 | REFLECTIONS – R Ledwaba, Women and Aviation |
| 12:30 – 13:00 | A NEW CONCEPT FOR A VERTICAL TAKE OFF AND LANDING BUSINESS JET – R Mia, Pegasus Aerospace |
| 13:00 – 14:00 | LUNCH |
| 14:00 – 14:30 | APPLICATIONS FOR REMOTELY PILOTED AIRCRAFT SYSTEMS – J Monk, CSIR |
| 14:30 – 15:00 | AEROSPACE TECHNOLOGY: CRYSTAL BALL GAZING – D Barker, Retired |
| 15:00 – 15:30 | REFRESHMENTS |
| 15:30 – 16:00 | RPAS INTEGRATION INTO CIVIL AIRSPACE – P Ndlovu, Denel |
| 16:00 – 16:30 | A CONCEPT FOR A SOUTH AFRICAN REGIONAL AIRCRAFT – V Xaba, Denel |
| 16:30 – 17:00 | DISCUSSION |
| 17:10 | BUS DEPARTS FOR APPOINTED HOTELS |

THURSDAY, 12 JULY

| | |
|---|--|
| 08:00 - 08:30 | REGISTRATION |
| 08:10 | Briefing for presenters and chair in the Diamond Auditorium |
| SESSION 4A – INTEGRATED PUBLIC TRANSPORT NETWORKS: MAPPING, DATA AND ICT | |
| CHAIR: Ms Gail Jennings, Independent Transportation Researcher and Dr Herrie Schalekamp, University of Cape Town | |
| 08:30 – 09:30 | TECHNOLOGY AND FORMALISATION IN THE MINIBUS-DOMINATED PUBLIC TRANSPORT SECTOR IN SOUTH AFRICA – H Schalekamp , University of Cape Town |
| 09:30 – 10:30 | PRESENTATIONS BY STUDENT ESSAY WINNERS 1. FUTURE TRANSPORTATION, HUMAN LIKE TRANSPORTATION – F Guo , Chang'an University 2. OPERATION OPTIMIZATION CONSIDERING ORDER CANCELLATION AND TICKET DISCOUNT FOR ON DEMAND BUS SYSTEM – X Chen , Chang'an University 3. IDENTIFICATION OF TRIP CHARACTERISTICS IN URBAN RAIL TRANSIT SYSTEM USING WIFI INFORMATION - S Nan , Chang'an University 4. SOLUTIONS TO PUBLIC TRANSPORT CHALLENGES: THE SOLUTION OF URBAN PUBLIC TRANSPORTATION -THE DEVELOPMENT AND APPLICATION OF BRT - X Ni , Chang'an University 5. TOWARDS A DESIRED TRANSPORT FUTURE: SAFE, SUFFICIENT AND AFFORDABLE - X Li , Chang'an University 6. SOLUTIONS TO PUBLIC TRANSPORT CHALLENGES: CASE STUDY OF XI'AN CITY - Z Xing , Chang'an University 7. TOWARDS A DESIRED TRANSPORT FUTURE: SAFE, SUFFICIENT AND AFFORDABLE - Y Yang , Chang'an University 8. SUSTAINABLE URBAN TRANSPORT DEVELOPMENT: URBAN TRAFFIC INTEGRATION MODEL BASED ON INTERCHANGE - Y Zhao , Chang'an University 9. FUTURE URBAN TRANSPORT: BICYCLE VIADUCTS - C Zhang and Z Mo, Chang'an University 10. PROMOTING LOW-CARBON TRANSPORT IN AFRICAN CITIES - P Muchibwa , University of Nairobi 11. IMPACT OF MINIBUS TAXI SCHEDULING ON ROUTE EFFICIENCY - S Masuku , University of Pretoria |
| 10:30 – 11:00 | REFRESHMENTS |
| 11:00 – 11:30 | MEASURING INDIVIDUALS' TRAVEL BEHAVIOR BY USE OF A GPS-BASED SMARTPHONE APPLICATION IN DAR ES SALAAM CITY – L Joseph and A Neven, Transportation Research Institute (IMOB) Hasselt University, K Martens, Technion-Israel Institute of Technology & Radboud University, O Kweka, University of Dar es Salaam, G Wets and D Janssen, Transportation Research Institute (IMOB) Hasselt University |
| 11:30 – 12:00 | PUBLIC TRANSPORTATION AND LAND USE IMPACTS ON ACCESSIBILITY FOR SUSTAINABLE PUBLIC TRANSPORTATION SYSTEM IN BLOEMFONTEIN – N Bashingi , M Mostafa Hassan and D Das, Central University of Technology, Free State |
| 12:00 – 12:30 | SMART SPATIAL DATA: PERFORMING PUBLIC TRANSPORT-RELATED TASKS USING THE ETHEKWINI TRANSPORT AUTHORITY'S SMART PORTA– R Pillay , eThekwini Transport Authority |
| 12:30 – 13:00 | MAPPING MINIBUS-TAXI OPERATIONS AT A METROPOLITAN SCALE– METHODOLOGIES FOR UNPRECEDENTED DATA COLLECTION USING A SMARTPHONE APPLICATION AND DATA MANAGEMENT TECHNIQUES – J Coetzee , Go Metro, C Krogscheepes, Innovative Transport Solutions and J Spotten, City of Cape Town |
| 13:00 – 14:00 | LUNCH |
| 14:00 – 15:00 | PANEL DISCUSSION: DATA AND PLANNING NEEDS FOR INTEGRATED TRANSPORT NETWORKS – Keynote input plus 3 invited speakers |
| 15:00 – 15:30 | REFRESHMENTS |

| | |
|---------------|---|
| 15:30 – 16:00 | WOMEN AND RIDE-HAILING IN SOUTH AFRICA – Y Kani , UBER |
| 16:00 – 16:30 | DISCUSSION |
| 17:00 | BUS DEPARTS FOR APPOINTED HOTELS |

4B to continue on next page

THURSDAY, 12 JULY

| | |
|---|--|
| 07:30 – 08:30 | REGISTRATION (Coffee/ Tea and refreshments) |
| 08:10 | Briefing session for presenters and chairs in the respective venues |
| SESSION 4B – INTERNATIONAL SOCIETY FOR WEIGH-IN-MOTION WORKSHOP (IS-WIM) | |
| 08:30 – 09:00 | WELCOME AND OPENING OF WORKSHOP Introduction ISWIM and Purpose of Workshop – L Kannemeyer , SANRAL and C Koniditsiotis , ISWIM |
| 09:00– 09:30 | USE OF WIM IN SOUTHERN AFRICA Overview of WIM applications in South Africa/ Plans for future use of WIM – L Kannemeyer , SANRAL |
| 09:30 – 10:00 | INTERNATIONAL DEVELOPMENTS IN WIM Current applications of WIM around the world/ Development of new advanced applications – H van Loo , Corner Stone Int. |
| 10:00 – 10:30 | SHOW CASE PROJECTS FROM INTERCOMP Various examples of the application of WIM systems – C Bower , Intercomp Europe |
| 10:30 – 11:00 | REFRESHMENTS |
| 11:00 – 11:30 | ADDING VALUE TO HIGH SPEED WIM N3 Speed over distance project integrated with Weigh In Motion – M Hellens , Mikros Traffic Monitoring Syntell |
| 11:30 – 12:00 | APPLICATIONS AND DEVELOPMENTS IN WIM IN BRAZIL Status of Brazilian National WIM projects, PIAF, PNCT/ Plans for use of WIM for direct weigh enforcement and tolling by weight – G Otto , UFSC/ LabTrans Coordinator WIM Projects |
| 12:00 – 12:30 | USE OF WEIGHT DATA FOR TOLLING BY WEIGHT Experiences with the implementation of WIM systems for Tolling by Weight applications from various countries around the world – S Daxberger , Kapsch Traficom |
| 12:30 – 13:00 | NEW INTERNATIONAL STANDARD ON WIM Development and content of new WIM standard/ Procedures for System Testing and Approval/ Steps for successful implementation of Standard – C Oosterman , NMi Certin BV |
| 13:00 – 14:00 | LUNCH |
| 14:00 – 14:30 | CALIBRATION AND QUALITY MANAGEMENT OF WIM DATA Development of the Truck Tractor (TT) Method/ Current extent of application and challenges to meet with changes in truck loading characteristics – G de Wet , Static Motion Ltd. |
| 14:30 – 15:00 | EXPERIENCES WITH THE USE OF ON-BOARD MASS MONITORING Experiences with the use of on-board mass monitoring/ National Telematics Framework in Australia/ Different applications and levels of assurance of mass data – G Hill , TCA |
| 15:00 – 15:30 | REFRESHMENTS |
| 15:30 – 16:00 | COMMERCIAL VEHICLE SCREENING FOR ANOMALOUS TIRES Weigh in Motion and additional screening parameters/ Tire Anomaly and Classification System (TACS) for detection of tire problems – R Malhotra , IRD |
| 16:00 – 16:30 | DEVELOPMENT IN STRESS-IN-MOTION (SIM) Status of SIM Technology in South Africa and it's implementation in Accelerated Pavement Testing (APT) – M de Beer , CSIR |

| | |
|---------------|--|
| 16:30 – 17:00 | WRAP UP AND CLOSURE Conclusions and possible follow up – C Koniditsiotis, ISWIM |
| 17:00 | BUS DEPARTS FOR APPOINTED HOTELS |

Please note that this is a DRAFT Programme and may be subject to some alterations before the Conference.

Please register on-line at www.satc.org.za

We look forward to welcoming you at SATC 2018