



Faculty of Engineering,  
Built Environment and  
Information Technology  
Fakultet Injeneriewese, Bou-omgewing en  
Inligtingsteunende Tegnologie en Injenerie  
Tsekoala ya Kaqalele Theknoloji ya Tshetrimoto



**12 -14 July 2017**  
**CSIR Knowledge Commons**  
**Ulwazi Auditorium**  
**Pretoria, South Africa**

# SEMINAR

## SMART AND SUSTAINABLE CITIES & TRANSPORT

### DRAFT PROGRAMME

**Wednesday, 12 July 2017**

<b>08:00</b>	<b>Arrival and Registration</b> <i>Foyer, Knowledge Commons Building, CSIR</i>
<b>08:30</b> Chair	<b>Day 1 - Session 1: Welcome and Keynotes</b> <i>Prof Chrisna du Plessis</i>
<b>08:40</b>	WELCOME - University of Pretoria <i>Prof Jan Eloff, Deputy Dean Research, EBIT, University of Pretoria</i>
<b>08:50</b>	WELCOME - CSIR <i>Mr Kenny Kistan, Acting Executive Director, CSIR Built Environment</i>
<b>09:00</b>	SETTING THE SCENE – TU Delft <i>Prof Peter Russell, Dean: Faculty of Architecture and the Built Environment, TU Delft</i>
<b>09:30</b>	OPENING ADDRESS: CITY OF TSHWANE <i>The Honourable Mayor, Mr Solly Msimanga (provisional)</i>
<b>10:00</b>	KEYNOTE ADDRESS: PEOPLE ORIENTATED DEVELOPMENT <i>David van Niekerk, Head: Neighbourhood Development Programme, National Treasury</i>
<b>10:30</b>	<b>Tea/Coffee in foyer</b>
<b>Chair</b>	<b>Day 1 - Session 2: Invited speakers</b> <i>Prof Chrisna du Plessis</i>
<b>11:15</b>	'SMART CITY' PROGRAMME <i>City of Tshwane (TBC)</i>
<b>11:45</b>	INTEGRATED APPROACHES TO URBAN AGRICULTURE <i>Rehann Calitz</i> <i>Director of Farm this City</i>
<b>12:15</b>	THE DATA-TO-KNOWLEDGE VALUE CHAIN IN SMART CITY PLANNING <i>Burgert Gildenhuys</i> <i>Director of MapAble, South Africa</i>
<b>12:45</b>	DISCUSSION/QUESTION SESSION
<b>13:00</b>	<b>Lunch in foyer</b>

<b>Chair</b>	<b>Day 1- Session 3: Academic Programme</b> <i>Dr Dirk Conradie</i>
14:00	[SSC-13]: EMBEDDING A CULTURE OF PARTICIPATION TOWARDS COLLABORATIVE URBAN CITIZENSHIP <i>Dr Carin Combrinck</i> <i>University of Pretoria, South Africa</i>
14:25	[SSC-03]: DEVELOPING A FRAMEWORK FOR INNER CITY REGENERATION THROUGH THE ARTS AND CREATIVE CULTURES <i>Gert Van der Merwe</i> <i>University of Pretoria, South Africa</i>
14:50	DISCUSSION/QUESTION SESSION
15:00	<b>Tea/ Coffee in foyer</b>
15:30	[SSC-04]: A REVIEW OF CULTURAL AND HERITAGE SENSITIVE ADAPTATION MEASURES IN CLIMATE CHANGE ADAPTATION PLANS OF SOUTH AFRICAN METROPOLITAN CITIES <i>Llewellyn van Wyk</i> <i>CSIR Built Environment, South Africa</i>
15:55	[SSC-14] SMART DESIGN IN THE COMPLEX CITY, CRITICAL ENGAGEMENTS WITH CONTEXT AND HISTORY <i>Johan Swart</i> <i>University of Pretoria, South Africa</i>
16:20	[SSC-10]: CULTURAL RESILIENCE AND THE SMART SUSTAINABLE CITY – EXPLORING CHANGING CONCEPTS OF BUILT HERITAGE AND URBAN REDEVELOPMENT <i>Nicholas Clarke</i> <i>TU Delft, The Netherlands</i>
16:45	DISCUSSION/QUESTION SESSION
17:00 <i>In foyer</i>	<b>Launch of ‘Footsteps Along the Tracks’</b> <i>Prof Roger Fisher(UP) and Nicholas Clarke (TU Delft)</i> <b>Sponsored by the Embassy of the Netherlands</b>

## Thursday, 13 July 2017

08:00	<b>Arrival</b>
<b>Chair</b>	<b>Day 2 -Session 1: Academic Programme</b> <i>Prof Andy van den Dobbelsteen</i>
08:30	[SSC-05]: BIOCLIMATIC TECHNIQUES TO QUANTIFY MITIGATION MEASURES FOR CLIMATE CHANGE WITH SPECIFIC REFERENCE TO PRETORIA <i>Dirk Conradie</i> <i>CSIR Built Environment, South Africa</i>
08:55	[SSC-01]: PRE-DESIGN CONSIDERATIONS FOR URBAN CLIMATE CHANGE ADAPTION AND MITIGATION STRATEGIES <i>Jeremy Gibberd</i> <i>CSIR Built Environment, South Africa</i>
09:20	[SSC-02]: KEY PRINCIPLES AND GOALS FOR ADAPTING SOUTH AFRICAN SETTLEMENTS TO CLIMATE CHANGE <i>Llewellyn van Wyk</i> <i>CSIR Built Environment, South Africa</i>
09:45	[SSC-15]: A PROCESS FRAMEWORK TO IMPROVE THE URBAN CLIMATE RESILIENCE OF CITIES THROUGH THE COLLECTIVE RETROFITTING OF THEIR INTERSTITIAL SPACES. <i>Jan Hugo</i> <i>Department Architecture, University of Pretoria, South Africa</i>
10:10	DISCUSSION/QUESTION SESSION
10:20	<b>Tea/Coffee</b>

Chair	<b>Day 2 -Session 2: Academic Programme</b> <i>Dr Dirk Conradie</i>
10:40	[SSC-12]: QUANTIFYING URBAN ENERGY POTENTIALS: PRESENTING THREE EUROPEAN RESEARCH PROJECTS <i>Michiel Fremouw</i> <i>TU Delft, The Netherlands</i>
11:05	[SSC-06]: BIG DATA: THE ROLE IT CAN PLAY IN URBAN RESILIENCE AND PLANNING IF UTILIZED. <i>Hendrik Labuschagne</i> <i>Economic Intelligence, City of Tshwane, South Africa</i>
11:30	[SSC-11]: URBAN DENSIFICATION - SMART AND SUSTAINABLE OR CATASTROPHIC AND CALAMITY? <i>Lodie Venter</i> <i>City of Tshwane, South Africa</i>
11:55	[SSC-16] OVERCOMING DATA CHALLENGES FOR WASTE MANAGEMENT IN DEVELOPING CITIES <i>Dr Elias Willemse</i> <i>University of Pretoria, South Africa</i>
12:20	DISCUSSION/QUESTION SESSION
12:30	<b>Lunch in foyer</b>
Chair	<b>Day 2 - Session 3: Academic Programme</b> <i>Prof Chrisna du Plessis</i>
13:30	[SSC-09]: SUSTAINABLE RENEWAL OF EVERYDAY MODERN BUILDINGS <i>Wessel de Jonge</i> <i>TU Delft, The Netherlands</i>
13:55	[SSC-08]: SENSING THE FUTURE OF ARCHITECTURE, THE MICROBIAL PARADIGM <i>Jaco Nice</i> <i>Built Environment, CSIR, South Africa</i>
14: 20	[SSC-07]: BILATERAL COLLABORATION IN BUILT HERITAGE MATERIAL RESEARCH AND RESOURCE MAINTENANCE SUPPORTIVE TO SMART AND SUSTAINABLE CITIES <i>Wido Quist</i> <i>TU Delft, The Netherlands</i>
14:30	DISCUSSION/QUESTION SESSION
14:45	<b>Tea/Coffee</b>
15:15	<b>DEPART FOR SITE VISITS AND CONFERENCE DINNER</b> <i>(Venues to be confirmed)</i>

SEE NEXT PAGE FOR CLOSED WORKSHOP PROGRAMME

**Friday, 14 July 2017**  
**Closed workshop for UP, TU DELFT, CSIR and invited Parties**

08:30	<b>Arrival</b>
	<b>Day 3 - Session 1</b> <i>Prof Chrisna du Plessis</i>
09:00	STATEMENTS OF INTENT <i>Prof Andy van den Dobbelsteen(TU Delft); Dr Dirk Conradie (CSIR); Prof Chrisna du Plessis (UP)</i>
09:20	WORKSHOP PART 1: FUTURE COLLABORATION <i>Teasing out Themes</i>
10:30	<b>Tea/Coffee</b>
11:00	WORKSHOP PART 2: FUTURE COLLABORATION <i>Practical steps forward</i>
12:30	<b>Lunch in foyer</b>
<b>Chair</b>	<b>Day 3 -Session 2</b> <i>Prof Andy van den Dobbelsteen</i>
13:30	WORKSHOP PRESENTATIONS
14:30	<b>Closing remarks</b> <i>Prof Jan Eloff, UP; Prof Peter Russel, TU Delft; Dr Chris Rust, CSIR Built Environment</i>
15:00	<b>Tea/Coffee</b>