



UNIVERSITEIT VAN PRETORIA  
UNIVERSITY OF PRETORIA  
YUNIBESITHI YA PRETORIA

## Faculty of Engineering, Built Environment and Information Technology

Fakulteit Ingenieurswese, Bou-omgewing en  
Inligtingtegnologie / Lefapha la Boetšenerere,  
Tikologo ya Kago le Theknološhi ya Tshedimošo

## Invitation Uitnodiging Taletšo

Centre for Asset Integrity Management (C-AIM)

Sentrum vir Fisiese Batebestuur

Setši ša Letlotlo le Botšepahi

27 March 2017

[www.up.ac.za](http://www.up.ac.za)



The Centre for Asset Integrity Management (C-AIM), University of Pretoria is hosting its bi-annual

### Power Seminar

#### Programme Attached

Die Sentrum vir Fisiese Batebestuur, Universiteit van Pretoria hou sy twee-jaarlikse

### “Power” Seminaar

#### Program Aangeheg

Setsi ša Letlotlo le Botšepahi, Yunibesithi ya Pretoria e swara habedi ka ngwaga

### Seminareng ya “Power”

#### Lenaneho la Tšhipidišo

<b>Date</b>	Monday, 27 March 2017
<b>Time</b>	08:00-14:00
<b>Venue</b>	Engineering 1 Building, Lecture Hall 1-12, Hatfield Campus, University of Pretoria
<b>RSVP</b>	bonolo.mokoka@up.ac.za by 22 March 2017 <b><u>I will attend</u></b> <b><u>I cannot attend</u></b>
<b>Enquiries</b>	Bonolo Mokoka, 012 420 2096 or bonolo.mokoka@up.ac.za
<b>Parking</b>	Engineering 3 Parkade
<b>GPS</b>	25°45'15.46"S 28°13'35.41"E

<b>Datum</b>	Maandag, 27 Maart 2017
<b>Tyd</b>	08:00-14:00
<b>Plek</b>	Ingenieurswese 1 Gebou, Lesingsaal 1-12, Hatfieldkampus, Universiteit van Pretoria
<b>RSVP</b>	bonolo.mokoka@up.ac.za teen 22 Maart 2017 <b><u>Ek sal bywoon</u></b> <b><u>Ek sal nie bywoon nie</u></b>
<b>Navrae</b>	Bonolo Mokoka, 012 420 2096 of bonolo.mokoka@up.ac.za
<b>Parkering</b>	Ingenieurswese 3-parkade
<b>GPS</b>	25°45'15.46"S 28°13'35.41"E

<b>Tšatšikgwedi</b>	Mošupologo, 30 Hlakola 2017
<b>Nako</b>	08:00-14:00
<b>Lefelo</b>	Mohaho wa Boetšenerere 1, Puo holo ya 1-12, Khamphase ya Hatfield, Yunibesithi ya Pretoria
<b>Phetolo</b>	bonolo.mokoka@up.ac.za ka la 22 Hlakola 2017 <b><u>Ke a tlaa</u></b> <b><u>Ga ke tle</u></b>
<b>Dipotšišo</b>	Bonolo Mokoka, 012 420 2096 goba bonolo.mokoka@up.ac.za
<b>Bophako</b>	Bophako bja Boentšenerere 3
<b>GPS</b>	25°45'15.46"S 28°13'35.41"E

**CENTRE FOR ASSET INTEGRITY MANAGEMENT (C-AIM)****POWER INDUSTRY RESEARCH SEMINAR****27 MARCH 2017****ENGINEERING BUILDING 1, ROOM 1-12****AGENDA**

08:00 – 08:10	Prof Stephan Heyns	C-AIM	Welcome
08:10 – 08:40	Prof Stephan Heyns	C-AIM	Overview of C-AIM long term research plan in the power (and related industries)
08:40 – 09:00	Dylan Armfield and Ricardo Ludeke	M	Improved finite element modelling techniques for laser shot peening
09:00 – 09:20	Rikus van Niekerk	M	Degradation estimation of high energy steam piping based on historical site survey data
09:20 – 09:40	Stephan Schmidt	M / PhD	Vibration based condition monitoring of gearboxes operating under non-stationary operating conditions
09:40 – 10:00	Daniel van Heerden	M	Feasibility study of heat treatment ramp rates on thin walled components
10:00 – 10:20	Tea		
10:20 – 10:40	Alida Auret	Hons	Optimisation of the maintenance system applied on raw water supply plant at Grootvlei Power Station
10:40 – 11:00	Charl Mare	M	Force models to improve the probabilistic models for turbine blade remaining useful life
11:00 – 11:30	Prof Schalk Kok	Staff	Selecting, implementing and calibrating advanced material models
11:30 – 11:50	Wihan Booyse	M	Artificial intelligence for diagnostic purposes of critical plant
11:50 – 12:10	Jaques Calitz	D Tech (TUT)	The effect of non-uniform microstructure on the failure mode of hammer forged line hardware failure prediction
12:10 – 12:30	Ronald du Toit	M	The use of blade tip timing to predict the remaining useful life of turbine blades
<b>12:30 – 13:00</b>	<b>Dr Johann Wannenburg</b>	<b>Keynote</b>	<b>Asset management</b>
13:00 – 13:15	Prof Stephan Heyns	Close	
13:15 – 14:00	Lunch		
<b>Keynote speaker:</b> Dr Johann Wannenburg will officially join C-AIM on 1 April as Associate Professor and also become the incumbent of the Eskom Chair in Asset Management. For the last three years Johann led the asset management function at Anglo Platinum, and before that he was Head of Engineering Governance for Anglo American. He is however not unfamiliar with the university, having been a Senior Lecturer in the Department of Mechanical and Aeronautical Engineering during the period 1989 to 1998.			