

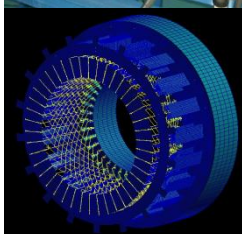


UNIVERSITEIT VAN PRETORIA  
UNIVERSITY OF PRETORIA  
YUNIBESITHI YA PRETORIA

## Invitation to Research Seminar: 23 April 2012 Physical Asset Management and Condition Monitoring



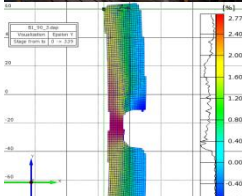
Engineering companies are increasingly realising the importance of the optimal management of their physical assets on company return on investment. At the same time there is also a growing awareness of the role that condition monitoring and assessment can play to enhance the reliability, availability, maintainability and safety of these assets and systems.



The University of Pretoria has a well-established research activity in this broad field, as well as very strong interactions with industry. To further stimulate research interest and awareness in Physical Asset Management and Condition Monitoring (PAM&CM) in South Africa, the University of Pretoria is pleased to invite you to attend a research seminar on the topic.



The seminar will be exploring some of the cutting edge research done at the university. We are however very pleased to also have a number of prominent academics and practitioners from other universities and companies who will participate, and help create productive and thought provoking interactions.



The seminar will be followed by cocktails in the Laboratory for Structural Mechanics in the Department of Mechanical and Aeronautical Engineering, where participants will have an opportunity to see the state-of-the art equipment in the laboratory in action.

You are cordially invited to attend. The seminar is free of charge, but we ask that you book with Marietjie Calder, and if you later find that you are unable to attend, that you please advise us as soon as possible.



**Contact:** Marietjie Calder, secretary to Prof Stephan Heyns  
e-mail: [marietjie.calder@up.ac.za](mailto:marietjie.calder@up.ac.za)  
or tel: +2712 4202432 (8:00 to 13:00)



We need to finalise lunch arrangements and places are limited to 84, so booking is essential. You are however most welcome to forward the invitation to colleagues who might be interested, as long as they book too.

**Venue:**  
SRC Hall / VSR Raadsaal in the Conference Centre  
University of Pretoria, Pretoria, South Africa



For more details about the seminar go to:  
<http://web.up.ac.za/default.asp?ipkCategoryID=18453&subid=18453&ipklookid=7>  
and look under Events

## Programme: Research Seminar: Physical Asset Management and Condition Monitoring

23 April 2012

SRC Hall UP Conference Centre and Laboratory for Structural Mechanics, University of Pretoria

Time	Topic	Speaker
08:00	Registration	SRC Hall /VSR Raadsaal in the Conference Centre, University of Pretoria, Pretoria Building 50 on map. See link below
08:30	Welcome	<b>Prof Sandenbergh</b> (Dean of Engineering, University of Pretoria)
	Physical Asset Management & Condition Monitoring at the University of Pretoria	<b>Prof Stephan Heyns</b> (Department of Mechanical and Aeronautical Engineering, University of Pretoria)
08:50	<b>Keynote address: Integration of condition monitoring data in decision support systems for asset management: A fusion approach</b>	<b>Prof Diego Galar</b> (Department of Civil, Environmental and Natural Resources Engineering, Operation, Maintenance and Acoustics, Lulea University of Technology, Sweden)
09:20	<b>Maintenance outcomes modelling and the substantiation of maintenance budgets.</b>	<b>Prof Jasper Coetzee</b> (Department of Mechanical and Aeronautical Engineering, University of Pretoria)
09:50	<b>The Engineering Asset Management Paradigm and Its Imperatives</b>	<b>Prof Joe Amadi-Echendu</b> (Graduate School of Technology Management, University of Pretoria)
10:20	<b>PAS55 and ISO55000</b>	<b>Alan Tait</b> (PRAGMA)
10:50	Tea	
11:00	<b>Asset Management using Modelling and Simulation Tools and Techniques</b>	<b>Prof Krige Visser</b> (Graduate School of Technology Management, University of Pretoria)
11:40	<b>Reliability Analysis of complex mechanical systems</b>	<b>Prof Sarma Yadavalli</b> (Department of Industrial and Systems Engineering, University of Pretoria)
12:10	<b>Condition Monitoring Using Computational Intelligence</b>	<b>Prof Tshilidzi Marwala</b> (Dean of Engineering, University of Johannesburg)
12:40	<b>The PAM&amp;CM academic programme in Mechanical Engineering</b>	<b>Dr Coenie Thiarth and Dr Barend Botha</b> (Department of Mechanical and Aeronautical Engineering, University of Pretoria)
13:00	Finger lunch	

13:40	<b>Gear vibration monitoring under fluctuating conditions</b>	<b>Prof Stephan Heyns</b> (University of Pretoria) <b>Theo Heyns</b> (CSIR: MSM, SST)
14:10	<b>Automated diagnostics and prognostics</b>	<b>Peter Schön</b> (Department of Mechanical and Aeronautical Engineering, University of Pretoria)
14:30	<b>Vibration monitoring in power generation</b>	<b>Dr Abrie Oberholster</b> (Department of Mechanical and Aeronautical Engineering ,University of Pretoria)
14:50	<b>Haul Road condition monitoring</b>	<b>Harry Ngwangwa</b> (Department of Mechanical and Industrial Engineering, UNISA) <b>Theo Heyns</b> (CSIR: MSM, SST)
15:10	<b>Response Reconstruction for fatigue testing</b>	<b>Jan Eksteen</b> and <b>Prof Stephan Heyns</b> (University of Pretoria)
15:30	<b>Laboratory for Structural Mechanics</b>	<b>Prof Stephan Heyns</b> (University of Pretoria)
16:00 - 18:00	<b>Lab visit and cocktails</b>	Building 15 on map. Delegates who are interested can walk together (about 10 minutes) while we show you part of the campus and tell you something about its history. Alternatively you can drive. We will provide full details at the seminar.

Link to campus map:

<http://web.up.ac.za/sitefiles/file/Maps&Directions/2012/Hatfieldkampus.pdf>