UNIVERSITEIT·STELLENBOSCH·UNIVERSITY
jou kennisvennoot • your knowledge partner

Three Day Course on

Pipeline & Pumpstation Design

Wednesday 15 to Friday 17 April 2009
Venue: Protea Hotel Techno Park, Stellenbosch, SOUTH AFRICA

ECSA Continuing Professional Development (CPD) accredited course*
PRELIMINARY PROGRAMME

15-Apr-09	**Duration**	**Wednesday**		
Start Time	**minutes**	**Description**	**Presenter**	**Organisation**
7:30 to 8:30	60	*Registration*		
8:30 to 9:15	45	Pipe flow theory, pipe material & hydraulic roughness, secondary losses and pipe ageing	**Prof Gerrit Basson**	Univ. of Stellenbosch
9:15 to 10:00	45	Municipal water demand, peak flows, guidelines and the impact of Water Demand Management	**Dr Heinz Jacobs**	Univ. of Stellenbosch
10:00 to 10:30	30	*Tea*		
10:30 to 11:15	45	Pipe material selection	**Heinrich Mostert**	Manufacturer
11:15 to 12:15	60	Hydraulic Pressure Transients in pipelines	**Eddie Bosman**	Univ. of Stellenbosch
12:15 to 13:00	45	CFD modelling to inform pumpstation design	**Wageed Kamish**	
13:00 to 14:00	60	*Lunch*		
14:00 to 15:00	60	Pipeline design considerations	**Schalk van der Merwe**	Ninham Shand
15:00 to 15:30	30	*Tea*		
15:30 to 16:15	45	Air valves & design principles	**Stephan Kleynhans**	Ninham Shand
16:15 to 16:45	30	Ductile Iron pipes		Manufacturer
16-Apr-09		**Thursday**		
8:00 to 8:30	30	*Late Registration*		
8:30 to 9:00	30	Pipe flow measurement		
9:00 to 10:00	60	Corrosion causes & mitigation: factors which aggrevate corrosion of pipes and pumps		
10:00 to 10:30	30	*Tea*		
10:30 to 11:15	45	Design of river pumpstations	**Prof Gerrit Basson**	Univ. of Stellenbosch
11:15 to 12:00	45	Vaal River Emergency Supply Augmentation Project (VRESAP) Case study	**Dr Andre Bester**	Goba/VPC
12:00 to12:45	45	Pump selection and High lift pump station design	**Schalk vd Merwe**	Ninham Shand
12:45 to 13:30	75	*Lunch*		
13:30 to 17:00	150	***Site visit to Berg River Supplement Scheme & pumpstation***	**Schalk van der Merwe**	US, TCTA & DWAF
17-Apr-09		**Friday**		
8:00 to 8:30	30	*Late Registration*		
8:30 to 9:15	45	Water Services water quality monitoring	**Grant MacKintosch**	Emanti
9:15 to 10:00	45	Environmental considerations during pipeline design and construction	**Jonathan Crowthier**	CCA Environmental
10:00 to 10:30	30	*Tea*		
10:30 to 11:15	45	Concrete pipes: selection process & installation	**Alaster Goyns**	Pipeline Engineering Services
11:15 to 12:00	45	Case study: Large diameter pipeline design & optimization		
12:00 to 13:00	60	Control Valves: pressure, flow rate, water level, etc.	**Andre Volschenk**	Bermad
13:00 to 14:00	60	Lunch		
14:00 to 14:45	45	Groundwater management and artificial recharge	**Dr Ricky Murray**	GroundWater Africa
14:45 to 15:15	30	*Tea*		
15:15 to 16:00	45	Pipeline surveylance & rehabilitation		
16:00 to 16:05	5	Closure	**Prof Gerrit Basson**	Univ. of Stellenbosch

Note: * CPD commenced in January 2006 whereby all professional engineering persons are required to obtain 25 credits over a 5 year cycle, with a minimum of 3 credits per year, for renewal of registration with ECSA from 2007. This course is a Category 1 activity and offers 3.0 credits. A maximum of 4 credits may be accumulated under this category per year. For more details see *www.ecsa.co.za*

SCOPE

This 3 day course on ***Pipeline and Pumpstation Design*** has been structured to give state-of-the-art theory and practise on pipe hydraulics, river pumpstations, high lift pumpstations, pump-pipe systems with transient flow, water quality, valves and control systems. Mathematical models to describe the design of air valves and transient flow behaviour will be presented. Several case studies will be discussed including planning, design and construction aspects. The course includes a field visit to the Berg River Project Supplement Scheme and high lift pump station. Presenters are drawn from university, consulting engineering and environmental companies, and industry. This popular course was last presented in 2007. Related courses for 2009 could be viewed at www.civeng.sun.ac.za

REGISTRATION FORM – *Pipeline and Pumpstation Design Course* 2009

Kindly complete this registration form and fax it to **fax number +27-21 4130447** or mail the form to:
The Secretary, Institute for Water and Environmental Engineering, Department of Civil Engineering, University of Stellenbosch, *Pipeline and Pumpstation Design* 2009 Course, Private Bag X1, MATIELAND, 7602, SOUTH AFRICA. Or by email to**: msb@aspt.co.za**
On receipt of the completed registration form, an invoice will be faxed or emailed to participants within 3 working days. Payment can be made electronically (details will be provided on the invoice) or by cheque, to be made payable to **University of Stellenbosch**.

CLOSING DATE FOR REGISTRATION AND PAYMENT: 1 April 2009

Title		Surname		Name	
Company					
	VAT registration number:		Business registration number		
	Postal address:		Street address:		
Tel	( )		Fax	( )	
Email			Delegate		Y/N
Special dietary requests			Presenter		Y/N
Name/Email of person regarding payment			Student		Y/N

FEES: R6000-00 for 3 days (Includes tea, lunch, course notes & presentations)

R4500-00 for 2 days; **R3000-00 for 1 day**

Indicate dates of attendance: Apr 15 ☐ Apr 16 ☐ Apr 17 ☐

The fee for late registration after 1 April 2009 will be 20 % more than the above fees.

Cancellations will be accepted in writing and without penalty, up to 10 working days prior to commencement of the course. Participants cancelling in writing less than 10 working days prior to commencement of the course will be liable for a 50% cancellation fee. Following registration without attendance and without written cancellation, delegates will be held responsible for the full course cost.

I HAVE READ AND AGREE TO THE CONDITIONS OF REGISTRATION AS STIPULATED ABOVE

Signature: _____ Date: _____

Enquiries can be directed to:

Ms L du Preez
Inst for Water & Environmental Engineering
Dept Civil Engineering,
University of Stellenbosch
Tel: +27-21 8082100/0794909210
Email: msb@aspt.co.za or ldpreez@sun.ac.za

or

Prof Gerrit Basson
Inst for Water & Environmental Engineering
Dept Civil Engineering,
University of Stellenbosch/SANCOLD
Tel: +27-21 808 4355
grbasson@sun.ac.za