

The SAIEE Nuclear Chapter Launch

Thursday 28 November 2019 - Thursday 28 November 2019

Sandton Convention Centre



**Inaugural Conference
SAIEE Nuclear Chapter**



Book of Abstracts

Contents

Welcome Address	1
Introduction to the Power and Energy Section	1
Introduction to the Nuclear Chapter	1
Koeberg, History and Life Extension	1
Nuclear New Build, history and prospect	1
Small Modular Reactors, PBMR and others	2
South African Regulatory History	2
Taking Stock: South African Nuclear Technology	2
Early Years 1940s-1960s	2
Pelindaba, 1960s - present	3
SAFARI-1 – recent history, present and future	3
OSCAR: Reactor Simulation and Design	3
Radioactive Waste Management	3
Nuclear Science related training	4
Comments by the Sponsor	4
Comments by the Sponsor	4

Session 1 : Welcome and Introduction / 0

Welcome Address

Author: George Debbo¹

¹ SAIEE

Corresponding Author: george.debbo@gdtelecom.co.za

Welcome Address - President of SAIEE

Session 1 : Welcome and Introduction / 1

Introduction to the Power and Energy Section

Author: Scebile Ntombela¹

¹ ESKOM

Corresponding Author: dubesp@eskom.co.za

Introduction to the Power and Energy Section - Chair

Session 1 : Welcome and Introduction / 2

Introduction to the Nuclear Chapter

Author: David Nicholls¹

¹ UJ/SAIEE

Corresponding Author: nicholdr@iburst.co.za

Introduction to the Nuclear Chapter - Chair

Session 1 : Taking Stock: South African Nuclear Power / 4

Koeberg, History and Life Extension

Author: Bravance Mashele¹

¹ Eskom

Corresponding Author: bravance.mashele@eskom.co.za

Koeberg, History and Life Extension

Session 1 : Taking Stock: South African Nuclear Power / 5

Nuclear New Build, history and prospect

Author: David Nicholls¹

¹ *UJ/SAIEE*

Corresponding Author: nicholdr@iburst.co.za

Nuclear New Build, history and prospect

Session 1 : Taking Stock: South African Nuclear Power / 6

Small Modular Reactors, PBMR and others

Author: Mark Mitchell¹

¹ *USNC*

Corresponding Author: mark.mitchell@usnc.com

Small Modular Reactors, PBMR and others

Session 1 : Taking Stock: South African Nuclear Power / 7

South African Regulatory History

Author: Bismark Tyobeka¹

¹ *CEO – NNR*

Corresponding Author: bmtyobeka@nnr.co.za

South African Regulatory History

8

Taking Stock: South African Nuclear Technology

Author: Jabu Mangena¹

¹ *NECSA*

Corresponding Author: jabu.mangena@necsa.co.za

Taking Stock: South African Nuclear Technology

Session 2 : Taking Stock: South African Nuclear Technology / 9

Early Years 1940s-1960s

Author: Johan Slabber¹

¹ *University of Pretoria*

Corresponding Author: johan.slabber@up.ac.za

Early Years 1940s-1960s

Session 2 : Taking Stock: South African Nuclear Technology / 10

Pelindaba, 1960s - present

Author: Mike Twine¹

¹ *NECSA*

Corresponding Author: michael.twine@necsa.co.za

Pelindaba, 1960s - present

Session 2 : Taking Stock: South African Nuclear Technology / 11

SAFARI-1 – recent history, present and future

Author: Lesego Moloko¹

¹ *NECSA*

Corresponding Author: lesego.moloko@necsa.co.za

SAFARI-1 – recent history, present and future

Session 2 : Taking Stock: South African Nuclear Technology / 12

OSCAR: Reactor Simulation and Design

Author: Rian Prinsloo¹

¹ *Necsa*

Corresponding Author: rian.prinsloo@necsa.co.za

OSCAR: Reactor Simulation and Design

Session 2 : Taking Stock: South African Nuclear Technology / 13

Radioactive Waste Management

Author: Alan Carolissen¹

¹ *CEO NRWDI*

Corresponding Author: alan.carolissen@nrwdi.org.za

Radioactive Waste Management

Session 2 : Taking Stock: South African Nuclear Technology / 14

Nuclear Science related training

Author: Jan de Kock¹

¹ *NWU*

Corresponding Author: jan.dekock@nwu.ac.za

Nuclear Science related training

15

Comments by the Sponsor

Session 1 : Welcome and Introduction / 16

Comments by the Sponsor

Author: Ryan Collyer¹

¹ *Deputy CEO of Rosatom Central and Southern Africa (Pty) LTD*

Corresponding Author: rcollyer@rosatom.co.za

Comments by the Sponsor