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Celebrating women in Chemical Engineering

by Michelle Low

In celebration of National Women's Day in South Africa on 9 August, I decided to search for women who had studied chemical engineering, in particular, those who are excelling in spaces such as research, science and technology, non-profit or innovation. This turned out not to be an easy search. Therefore, in this Spotlight article, I am featuring women I know of, or I have heard about. As a consequence, this is not a complete list, and if you know any female chemical engineer in South Africa making an impact in her workplace, please let me know via the email given at the end of this article.

Sue Harrison, based at the University of Cape Town (UCT), is the Director: Centre for Bioprocess Engineering Research, DST/National Research Foundation (NRF) Chair: South African Research Chairs Initiative (SARChI), Bioprocess Engineering, UCT. Professor Harrison holds a PhD in Chemical Engineering from Cambridge University. In 2016, Professor Harrison was awarded the 2015/2016 NSTF-South32 Award for engineering capacity development over the last five to ten years. More info: <http://www.ceber.uct.ac.za/>

Diane Hildebrandt is based at the University of South Africa (Unisa) and is the co-director for the research Unit MaPS (Material and Process Synthesis) at Unisa and a professor. In 1998 Professor Hildebrandt became the first woman in South Africa to be made a full professor of chemical engineering when she was appointed as the Unilever Professor of Reaction Engineering at the University of the Witwatersrand. She is a board Member of SANEDI (South African National Energy

Development Institute) and Member of the University of Johannesburg Council. Find out more <http://www.unisa.ac.za/default.asp?Cmd=ViewContent&ContentID=97559>

Claire Jannish is the founder and head of biomimicrySA, and co-founder of Imaginature and of The Genius Lab. She holds a BSc and an MSc Degree in Chemical Engineering. Claire was selected by the 'Mail & Guardian' as one of 200 young South Africans in 2009, 2010 and 2011. She is also on the Wisdom Board for the upcoming Sustainability Summit in September 2016. See more <http://biomimicrysa.co.za/> or <http://www.imaginature.co/>

Alison Lewis is based at the University of Cape Town (UCT) where she is a Professor and Dean of the Faculty of Engineering & the Built Environment. She is also the Director of the Crystallization and Precipitation Research Unit at UCT. Professor Lewis is UCT's first female dean. Furthermore, in

2012 for her outstanding contribution to building South Africa's scientific and research knowledge base, she was awarded the "Distinguished Woman Scientist" award from the Ministry of Science and Technology. Find out more <http://whoswho.co.za/alison-lewis-1872936>

Boni Mehlomakulu has been the CEO (Chief Executive Officer) of the SABS (The South African Bureau of Standards) since 2009, and has a PhD in Chemical Engineering from the University of Cape Town. Dr Mehlomakulu has served on many boards in South Africa; this includes Board of Eskom Holdings, and the Technology Innovation Agency. https://www.sabs.co.za/About-SABS/about_executive.asp

Rethabile Melamu is based at the Gauteng Provincial Government as Director: Green Economy, Gauteng Department of Economic Development, and currently Acting Chief Director: Sector and Industry Development, Gauteng Department of



SAICHE ICHEME NEWS

Member group news: KZN

The South African Institution of Chemical Engineers KwaZulu-Natal branch hosted its annual Research Day on the 13th of July 2016 at the University of KwaZulu-Natal School of Engineering building.

Six researchers from local universities and research institutes participated in the event, delivering talks on biomass valorisation, chemical intermediates and gas hydrate separations technology. The participants also presented posters on their topics during a mid-programme poster session and refreshment break.

The overall winner was Prelene Naidoo, a BSc student working with the SMRI Sugarcane Biorefinery Research Team.



Economic Development. She has a PhD in Chemical Engineering from the University of Cape Town. You can find Dr Melamu at impactful events related to energy such as African Utility Week (moderator), and as a panellist at the Biogas Conference 2015 and Directors Event. She is on the Wisdom Board for the upcoming Sustainability Summit in September 2016.

Hannelie Nel is an Extraordinary Associate Professor at the School of Mechanical & Nuclear Engineering - North West University, Managing Director of Tennelli Industries and Research Associate with the Faculty of Engineering and the Built Environment at the University of Johannesburg (UJ). Her BSc Degree is in Chemical Engineering from the University of Pretoria, and she has a Doctorate in Engineering Management from UJ. In 2014 Dr Nel was a finalist in the Standard Bank Top Women in Business Awards. She will

Her presentation was entitled "Production of bagasse briquettes: a first step in the upcycling of residues". In second place was Nadia Croeser, an MSc student within the Thermodynamics Research Unit at UKZN. Her work on the treatment of vinasse using gas hydrate technology was funded in part by the SMRI Sugarcane Biorefinery Research Chair. Tamrat Tafsaye, a researcher at the CSIR Forestry and Forest Products Research Centre and PhD candidate, came third overall for his work on the valorisation of mango seed via the extraction of starch.

Process design practices

Date: 7 to 11 November 2016
Venue: Kopanong Hotel and Conference Centre in Benoni, Gauteng
Registration: Before 31 August 2016 to avoid late registration fee.

SAIChE accredited for 5 CPD credits (SAIChE-139) and now also accredited as an IChemE Approved Course with 30 hours CPD.

be speaking at the SciTech Women in University-Industry Collaboration Summit in October 2016.

See more <http://www.hannelienel.co.za/>

Hema Vallabh is the founder and CEO of The Passionate Professional, and co-Founder of WomEng and JourneyMap. Hema holds a BSc and an MSc Degree in Chemical Engineering. Hema was selected in the 'Mail & Guardian' 200 young South Africans in 2011 and she was selected to attend the FORTUNE/US State Department Global Women's Mentoring Program. She is also the Program Director and Founder of the School of Mentorship with the IDM Business School. See more

<https://www.thepassionatprofessional.org/> or <http://www.womeng.org/>

Want to nominate someone in the Spotlight?

Contact Michelle Low at:
Michelle.Low.za@gmail.com

His study has significance to his home country, Ethiopia, where large quantities of mango seed waste are generated each year with little commercial value.

Dr Maggie Chetty, chair for the event, thanked all attendees for supporting this edition of the Research Day, and encouraged the participants to submit their work to the 'South African Journal of Chemical Engineering'.

Written by David Lokhat on behalf of SAIChE IChemE KZN Members Group

SAIChE IChemE



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