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Professor Stephanie Burton holds an MSc in Organic Chemistry (1990) and a PhD in Biochemistry (1994) from Rhodes University.

Professor Burton has lectured in Biochemistry and Biotechnology at Rhodes University, and then Chemical Engineering at the University of Cape Town. In 2009, she was appointed Director of Postgraduate Studies at Cape Peninsula University of Technology. Professor Burton took up her present position as Vice-Principal: Research and Postgraduate Education at the University of Pretoria, in 2011. Her research interests are in the field of applied biochemistry and biotechnology, including biocatalysis, bioremediation and beneficiation of industrial wastes. She is on the Editorial Board of three prominent international journals in her field and has reviewed papers for numerous international journals. Professor Burton is a Fellow of the Royal Society of South Africa and a member of the Academy of Science of South Africa.

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Rupert Gouws holds a PhD degree in Electrical and Electronic Engineering from North-West University (Potchefstroom campus). He consulted to a variety of industry and public sectors in South Africa and other countries in the fields of energy engineering and engineering management. Currently he is appointed as a senior lecturer specialising in energy engineering, electrical machines and control at North-West University. The Engineering Council of South Africa registered him as a Professional Engineer and the Association of Energy Engineers certified him as a Certified Measurement and Verification Professional.

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Prof. Sue Harrison holds the SARChI Research Chair in Bioprocess Engineering at the University of Cape Town. She is Deputy Dean (Postgraduate and Research) in the Faculty of Engineering and the Built Environment, and Director of the Centre for Bioprocess Engineering Research (CeBER) in the Department of Chemical Engineering at UCT. She has over twenty years' experience in industrial and academic research, and in university teaching. This time has resulted in nearly 100 co-authored research papers in refereed journals and books, 80 international conference presentations, and supervision of almost 60 postgraduate students to completion. Sue is well known for commitment to collaborative research, particularly with a cross-disciplinary focus, both nationally and internationally.

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Leon Liebenberg is a contract professor in the School of Engineering at the North-West University, and consultant to HVAC International (Pty) Ltd and TEMM International (Pty) Ltd. Prof. Liebenberg currently supervises seven doctoral candidates and 11 master's candidates in a variety of mechanical engineering fields. Prior to that appointment, he lectured for five years at the University of Pretoria and for nine years at the University of Johannesburg. His research interests include advanced energy systems, unmanned aerial vehicles, simulation of the human energy system, and technology awareness programmes. He is author or co-author of 44 ISI-rated journal papers and 47 conference articles, of which six were keynote lectures at international conferences. In 2005, Prof. Liebenberg won the Stoecker International Visitor Award, and subsequently spent a period of six weeks at the Air-Conditioning and Refrigeration Center of the University of Illinois at Urbana-Champaign. He also won a two-month fellowship of the Japan Society for the Promotion of Science in 2008, for performing research at the Heat Transfer Institute of Kyushu University.

Prof. Liebenberg co-founded the TechnoLab technology awareness facility at the then Rand Afrikaans University in 1994, which has since accommodated 60 000 school learners and teachers. He founded the Space and Aviation Challenge for School Learners at the University of Pretoria. He also founded and edited (for four years) the University of Pretoria's Innovate magazine and was editorial consultant for the independent Mechanical Technology magazine for 13 years.

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Simisha Pather-Elias attained a master's degree in Biotechnology from Rhodes University in 2005 and thereafter worked as a Scientific Officer at UCT in the Bioprocess Engineering Research Unit working on several projects relating to environmental sustainability. In 2011, she was awarded a Master's degree in Energy and Development at the Energy Research Centre at UCT. She has since worked for Conservation International's Climate Action Partnership division where she engaged with government, business and civil society on climate change mitigation and adaptation technologies and ecosystem-based demonstration projects. Simisha also worked for the Botanical Society of South Africa, assisting the Director with managing operations, maintaining and building on the sustainability profile of the organisation and extending the portfolio of projects through forming partnerships with international and national organisations. She has now joined Sustainable Energy Africa where she coordinates the rollout of low carbon energy projects in conjunction with government.

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Houshang Taghizadeh is an Associate Professor in Industrial Management. He has got his bachelor's degree in industrial engineering and his master's degree and PhD in industrial management. He has published several books and articles and participated in a number of national and international conferences. His areas of interest include: Evaluating the efficiency of decision making units, using data envelop analysis, assembly line balance, value engineering, energy management systems, privatisation, multiple attribute decision making, lean thinking, and outsourcing management.

### **Harro von Blottnitz** (Pr.Eng.) B Sc Eng

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Harro von Blottnitz (born 1968 in Grahamstown) is a Professor at the University of Cape Town. He holds BSc and MSc degrees in Chemical Engineering from this institution, and a Doctorate in Engineering from the RWTH Aachen. His research interests are inspired by the multiple challenges of sustainable development in the resource industries esp. in developing country settings, and span topics in the fields of Environmental Systems Analysis, Bio-Fuels Processing, and Waste Management, esp. in the contexts of the mining industry and in African Cities. Since joining the University of Cape Town as a staff member in 1998, he has introduced sustainable development into the curriculum at undergraduate and postgraduate level. 36 Masters and 3 PhD students have completed their dissertations under his supervision.