



CURRICULUM VITAE: EUGÉNE CHRISTIAAN JOUBERT

Institution : Stellenbosch University
Profession : Engineer
Specialization : Fluid dynamics, structural analysis and thermodynamics
Position in Institution : Research Engineer
Year appointed : 2014
Nationality : South African
Language Proficiency : English, Afrikaans

EDUCATION AND PROFESSIONAL STATUS

Qualification	Institution	Year
BEng (mechanical)	Stellenbosch University, South Africa	2007
MEng (mechanical)	Stellenbosch University, South Africa	2010
PhD (Mechanical)	Stellenbosch University, South Africa	current

EMPLOYMENT AND EXPERIENCE OVERVIEW

Eugéne Joubert has bachelor degree in mechanical engineering, a masters degree in science and is currently completing his doctorate in engineering at Stellenbosch University. Towards the end of the bachelors and throughout the postgraduate studies he specialised in the fields of computational fluid dynamics, structural analysis and thermodynamics. His master thesis, which he completed with distinction, looked at large scale numerical analysis of the fluid dynamics over a desert terrain. This included aspects such as wind resource measurement, atmospheric boundary layer modelling, turbulence modelling, particle distribution and wind erosion. After completing his masters he started his PhD part-time looking at the modelling and analysis of flow-induced structural loading as well as advanced methods of turbulence modelling. Apart from his academic career, Eugéne also worked for Stellenbosch University during his post graduate studies as a research engineer in the thermofluids division of the Department of Mechanical and Mechatronic Engineering. Work included assisting in thermofluid related projects with advanced measurements, analysis, equipment procurement and setting up safety regulations. After that he moved to the Centre for Renewable and Sustainable Energy Studies at Stellenbosch University where he is currently responsible for managing employees and students working on projects related to energy efficiency, solar process heat, geographic information systems (GIS), mechanical design and heliostat fluid dynamics and loading.

Recent, Selected Project Experience:

Year	Description, client
2014	Pre-feasibility studies for large scale solar thermal systems for industry, Various clients. Resource assessment for solar process applications, Various clients. Reviewing existing solar thermal technologies, Various clients. Identifying key regions interest for PV development using GIS tools, KZN Government. Managing the procurement, installation and commissioning of a 100m ² CPV system, CRSES Strategic environmental sensitivity mapping for renewable energy applications using GIS, CSIR.

PUBLICATIONS

Joubert EC, Harms TM, and Venter G, 2014, One-way FSI Around A Vertical Cantilever Beam, SACAM Conference, Somerset West, South Africa
Joubert EC, Harms TM, Muller A, Hipondoka M and Henschel JR, 2012, A CFD study of wind patterns over a desert dune and the effect on seed dispersion, Journal of Environmental Fluid Mechanics 12, pp. 23-44
Joubert EC, 2010, A Computational Fluid Dynamic Study Of The Near Surface Wind Patterns Over A Desert Dune And The Effect On Seed Dispersion. MScEng Thesis, Stellenbosch University, South Africa
