

Lecturer: Mr MC Tshamala	Email:	mctshamala@sun.ac.za
	Tel:	+27 21 808 4243
	Office:	M529/A610

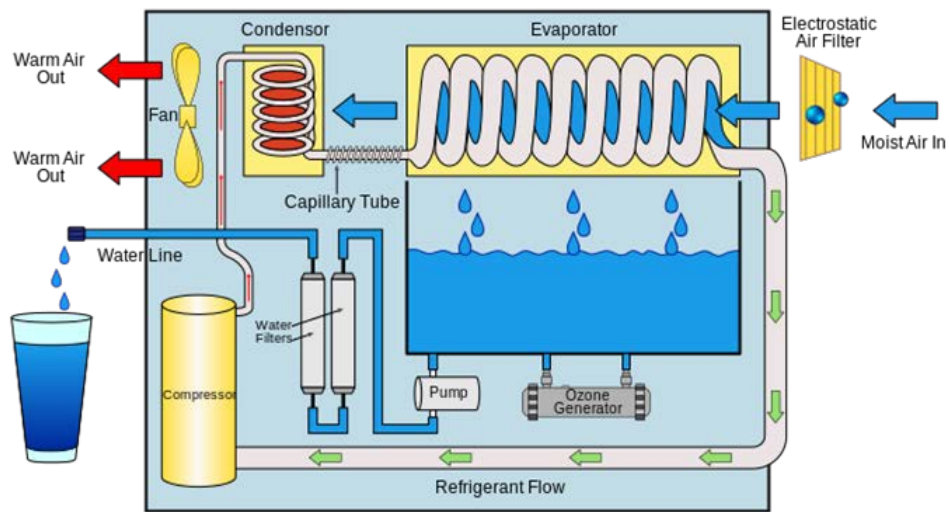
Fakulteit / Faculty: Engineering	Departement / Department: Mechanical and Mechatronics Engineering
--	---

Afdeling / Division:
Design & Mechatronics / Mechanics / Thermo fluids / Renewable Energy

Navorsingsveld / Research field:
Water Generation/Supply Technology

Algemene beskrywing van navorsingsveld:
General description of research field:

In light of the recent drought experienced in South Africa in general, it is mandatory to research for alternative energy efficient sources of drinkable water to effectively ensure water supply to public area such as parks that have been cut out of water supply. Previous research and technology developments have looked at the atmospheric air as viable source of drinkable water and have developed a number of atmospheric water generator unit designs. For this project, an absorption refrigeration cycle will be used to provide the necessary cooling for atmospheric water condensation. A calculation model is to be developed to quantify the possible recoverable amount of water in various weather conditions. Experimental validation will be considered, subject to resources availability.



Lys van onderwerpe/List of topics:	MEng (Structured)	MEng (Research)	PhD	Funding
Development of calculation model and experimental validation of a solar powered absorption cycle for an atmospheric water generator.	X	X		Pending funding application

Spesifieke voorvereistes / Specific requirements: