

## A Synopsis of Green Energy Technology Implementation In South Africa

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**Abstract :** BACKGROUND :- Human mind is a double-edged sword, it is both arduous and obtuse, vague and explicit. The neuroscience of brain has baffled all and left none. In this labyrinth, a novel neurotransmitter has set its foot. D-Aspartic acid, which has been established in rats and animals' brain as a neurochemical in controlling behaviour, aggression, fertility, cognition and memory is set to formulate a new benchmark as a marker among suicidal and accidental death victims. Without losing sight of the fact, we have endeavoured to dig out the biochemical relation behind suicide in our research. We in our research have exerted to decipher the puzzle among humans for D-Aspartic acid using HPLC. METHODS:- We have taken 30 samples each of pre-frontal cortex of brain from suicide and road traffic accidents victims for our case-control research to establish brain D-Aspartic acid level using HPLC as a marker for suicide. RESULTS:- By using Independent/Unpaired T-Test Analysis:- The two-tailed P value is less than 0.0044. MEAN (mMOL/mL/G) for D-Aspartic acid in control is  $24.2737 \pm 7.5958$  and for cases is  $19.5540 \pm 4.2647$ . By conventional criteria, this difference is considered to be extremely statistically significant. CONCLUSION:- (1) Brain D-Aspartic acid has an effect in the act of suicide and its values show a large drop before the act of suicide is commenced as compared to road traffic accidents which correlates with the study where D-AA was studied as a novel endogenous neurotransmitter in case of mental health disorders in humans, though never studied on suicide victims, likely getting its reference from research occurring on rats where it was discovered that D-AA plays a role in cognition, personality development, thought process, aggression. (2) The other study which was related to humans and signified the role of D-AA in reproduction, where low D-AA leads to infertility and depression and hence providing the much needed proof of role of D-AA in mental health disorders and suicide, and subsequently to the act of suicide.

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