Amnesia
i) Anti-inflammatory and Diuretic activity of Indian south peninsular coast sponge *Axinella donnani*.

The effects of different extracts of the marine sponge *Axinella donnani*, were explored for the anti-inflammatory and diuretic potencies. The methanolic extract displayed a broad spectrum of activity in both the cases. In the case of diuretic activity, the methanolic extract showed statistically significant activity than other extracts, and the electrolytes excretion in the urine also was much pronounced. Based on the present findings it could be inferred that, the methanolic extract of *A. donnani* may come up with novel potent anti-inflammatory and diuretic activities.

ii) Memory enhancement phenomenon of Santalum album extracts on albino mice

Alzheimer disease, one of the neurodegenerative diseases severely affecting aged people. In order to prevent and reduce this disorder, number of therapeutic measures was undertaken. *Santalum album*, a well defined medicinal plant in India, has the potential to tackle dementia and memory loss, which is associated with AD. Attempts have been made to standardize the dose and the efficacy of different solvent extracts were carried out. The *S. album* extracts such as methanolic, petroleum ether and water were used to quantify the acetyl cholinesterase inhibitory activity and anti-oxidant activity in albino mice. The methanolic extract is proven as a better one through acetyl choline esterase inhibitory activity at a rate of 180µg/ml., which is statistically significant than the other extracts. All the extracts considerably scavenged the DPPH radicals and super oxide radicals in a dose dependent manner which produced the better IC50 value of 191µg/ml and 160µg/ml respectively. The total antioxidant capacity of the methanolic extracts was also good. It was found that, the methanolic extract had higher phenolic fractions than the other extracts of *S. album*. 