## Template for two page research proposal

#### 1 Title

title and Student information (name, email) and Application No.
[An example] Infrared Sensor to measure the hydrocarbon in water
Chandrasekaran A, <a href="mailto:chandru@gmail.com">chandru@gmail.com</a>

### 2 Area of research & Domain of research

Nuclear Physics & Radiation induced luminescence

### 3 Objective of the proposal

A short clear description of the proposed work. What you are planning to do?

[An example] The aim of this proposal is to develop a technical prototype of an infrared sensor that will measure hydrocarbons in water. The sensor will use a fiber optic cable, coated with a polymer and the level of the hydrocarbons will be determined by measuring the changes in refractive index. The key research challenges will be: assessing the use of infrared to measure the level of hydrocarbon in water; identifying a range of polymers that could be used in the sensor and finally assessing the accuracy of the sensor.

## 4 Background/short description

Why you are doing it? Answer the following key questions.

- 1. What problem are you trying to solve?
- 2. Is the solution already available?

# 5 Expected results

What will come out of the project?

#### 6 References

7 TURN-IT-IN Similarity check report with percentage (will be done by respective School office):  $\Leftrightarrow \Leftrightarrow \Leftrightarrow \Leftrightarrow$