

**THESIS COMPLETION CERTIFICATE**

This is to certify that the thesis entitled “**CAPABILITY ENHANCEMENT OF SHIP DETECTION ALGORITHMS BY USAGE OF CIRCULAR TRANSMIT, LINEAR RECEIVE (CTLR) MODE OF RISAT-1 SAR DATA**” by **S Senthil Kumar (SAP ID: 500023981)** in partial completion of the requirements for the award of the Degree of Doctor of Philosophy (Engineering) is an original work carried out by him under our joint supervision and guidance.

It is certified that the work has not been submitted anywhere else for the award of any other diploma or degree of this or any other University.

  
**Dr. Pankaj Kumar Srivastava**  
Associate Professor  
Department of Petroleum Engineering & Earth Sciences  
School of Engineering, University of Petroleum & Energy Studies (UPES)  
Vill & P.O.-Bidholi, Via-Premnagar  
Dehradun - 248007  
Email: pksrivastava@ddn.upes.ac.in  
Date: March, 2018