

Declaration by the Candidate

I declare that thesis entitled “*Synthesis of Nanomaterial from Heavy Fraction of Crude Oil*” is my own work conducted under the supervision of **Dr. Mahesh M. Savant** at Department of **Chemistry**, Faculty of **Science**, Atmiya University, Rajkot, Gujarat, India and approved by the Director of Research.

I further declare that to the best of my knowledge the thesis does not contain any part of any work which has been submitted for award of any degree either in this University or any other University without proper citation.

Date: 15/10/2025

Place: Rajkot

Dalsania Ravikumar Vinodray

Certificate of Supervisor

This is to certify that work entitled “*Synthesis of Nanomaterial from Heavy Fraction of Crude Oil*” is a piece of research work done by **Mr. Dalsania Ravikumar Vinodray** under my supervision for the degree of Doctor of Philosophy in Department of **Chemistry**, Faculty of **Science**, Atmiya University, Rajkot, Gujarat, India

To the best of my knowledge and belief the research work and thesis

- I. Embodies the work of candidate himself / herself,
- II. Has duly been completed,
- III. Fulfils the requirement of ordinance related to Ph.D. degree of the University &
- IV. is up to the standard both in respect of content and language for being referred to the examiner.

Date: 15/10/2025

Place: Rajkot

Dr. Mahesh M. Savant

Thesis Approval Form

The Viva-Voce of the Ph.D. thesis entitled “*Synthesis of Nanomaterial from Heavy Fraction of Crude Oil*” submitted by **Mr. Dalsania Ravikumar Vinodray (Enrolment No.)** was conducted on _____ at Atmiya University, Rajkot, Gujarat

Based on the Performance of the Candidate, We, the panel of examiners, recommend that
(Please tick any of the following)

1. He / She be awarded Ph.D. Degree
2. The following modifications are to be incorporated in the thesis within one month and viva-voce be re-conducted by the same panel of examiners

Please Suggest Modification

3. He / She should not be awarded Ph.D. Degree

Please mention Reason for Rejection

Date: 15/10/2025

Place: Rajkot

| | | | |
|-----------|---------------------|--------------------|-------------------|
| Signature | | | |
| | Research Supervisor | University Nominee | External Examiner |

Declaration by Research Scholar

Submission of Thesis

I declare that the submitted thesis entitled “*Synthesis of Nanomaterial from Heavy Fraction of Crude Oil*” incorporates

1. All the suggestions / directions / modifications / additions / deletions received from the supervisor and the external examiners through their thesis evaluation reports.
2. All the suggestions / directions / modifications / additions / deletions received from the panel of examiners during the public viva-voce (Open Defence) conducted on

Date: 15/10/2025

Place: Rajkot

Signature of the Research Scholar

Dalsania Ravikumar Vinodray

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Dalsania Ravikumar Vinodray