

### **CANDIDATE'S STATEMENT**

I, **Chodvadiya Darshilkumar Pravinbhai**, hereby declare that the work incorporated in the present thesis is original and has not been submitted to any other University/Institution for the award of a Diploma or Degree. I further declare that the results presented in the thesis and considerations made therein contribute in general to the advancement of knowledge behind the underlying physics and the fundamental properties of two-dimensional materials for water splitting and hydrogen storage applications.

A handwritten signature in black ink, appearing to read 'Darshil', with a horizontal line underneath.

**Place: Vadodara**

**(Chodvadiya Darshilkumar Pravinbhai)**

**Date: 25-09-2023**