

DECLARATION

I hereby declare that this thesis entitled “**Efficacy Appraisal of Synthetic Bimetallic Nano-aggregates for Fluoride Removal from Drinking Water through Batch and Fixed-Bed Column Operation Technology**” contains original research work carried out by me under the able guidance of Dr. Sasikumar Palani, Assistant Professor, Department of Chemistry, Presidency University, Kolkata, India, as part of the PhD programme.

All information in this document has been obtained and presented in accordance with academic rules and ethical conduct.

I also declare that, as required by these rules and conduct, I have fully cited and referenced all materials and results that are not original to this work.

I also declare that, this work has not been submitted for any degree either in part or in full to any other institute or University before.

Kolkata, India

Date: 08.08.2019

Kankan Mukhopadhyay
(KANKAN MUKHOPADHYAY)

**Department of Geology
Presidency University**



PRESIDENCY UNIVERSITY
KOLKATA

Presidency University

Hindoo College (1817-1855), Presidency College (1855-2010)

Certificate From Supervisor

This is to certify that the thesis entitled “**Efficacy Appraisal of Synthetic Bimetallic Nano-aggregates for Fluoride Removal from Drinking Water through Batch and Fixed-Bed Column Operation Technology**” submitted by Smt. Kankan Mukhopadhyay (Registration No. R-14RS15210048 and Date of Registration-13.05.2016), who got her name registered for PhD programme under my guidance. Neither her thesis nor any part of the thesis has been submitted for any degree/diploma or any other academic award anywhere before.

To the best of my knowledge, the results presented in this thesis have not been submitted elsewhere for the award of any other degree or diploma.

Kolkata, India

Date: 8/8/19

(Sasikumar Palani)

Assistant Professor,

Dr. Sasikumar Palani

Assistant Professor
Department of Chemistry
Presidency University, Kolkata-700 073

