Dedicated to

My

Beloved Parents

&

Sisters

Declaration by the candidate

The thesis entitled "**Design and Development of a Continuous Ohmic Heating System for Thermal Processing of Pineapple Juice**" is being submitted to the **School of Engineering, Tezpur University** in partial fulfilment for the award of the degree of **Doctor of Philosophy** in the **Department of Food Engineering and Technology** is a record of research work accomplished by me under the supervision of **Prof. Brijesh Srivastava** and co-supervision of **Dr. Md. Rahat Mahboob**.

All helps from various sources have been duly acknowledged.

No part of the thesis has been submitted elsewhere for award of any other degree.

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Date: 24.12.2024

Place: Tezpur University

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(सर्वोत्तम विश्वविद्यालय के लिए कुलाध्यक्ष पुरस्कार, 2016, भारत के 100 श्रेष्ठ उच्च शिक्षण संस्थानों में पंचम स्थान और 'नाक' द्वारा 'ए' ग्रेड प्राप्त विश्वविद्यालय)
(Awardee of Visitor's Best University Award, 2016, 5th among India's Top 100 Universities, MHRD-NIRF Ranking, 2016 and NAAC Accredited with "A" Grade)

Certificate of the Supervisor

This is to certify that the thesis entitled **"Design and Development of a Continuous Ohmic Heating System for Thermal Processing of Pineapple Juice"** submitted to the **School of Engineering, Tezpur University** in partial fulfilment for the award of the degree of **Doctor of Philosophy** in the **Department of Food Engineering and Technology** is a record of research work carried out by **Mr. Amardeep Kumar** under co-supervision of **Dr. Md. Rahat Mahboob** and my supervision and guidance

All helps received by him from various sources have been duly acknowledged.

No part of this thesis has been submitted elsewhere for the award of any other degree.

Signature by Supervisor

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Certificate of the Co-supervisor

This is to certify that the thesis entitled **"Design and Development of a Continuous Ohmic Heating System for Thermal Processing of Pineapple Juice"** submitted to the **School of Engineering, Tezpur University** in partial fulfilment for the award of the degree of **Doctor of Philosophy** in the **Department of Food Engineering and Technology** is a record of research work carried out by **Mr. Amardeep Kumar** under the supervision and guidance of **Prof. Brijesh Srivastava** as supervisor and myself as co-supervisor.

All helps received by him from various sources have been duly acknowledged.

No part of this thesis has been submitted elsewhere for the award of any other degree.

24/12/24

Signature by Co-supervisor

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Amardeep Kumar

Amardeep Kumar

Date: 24.12.2024

Place: Tezpur University

LIST OF FIGURES