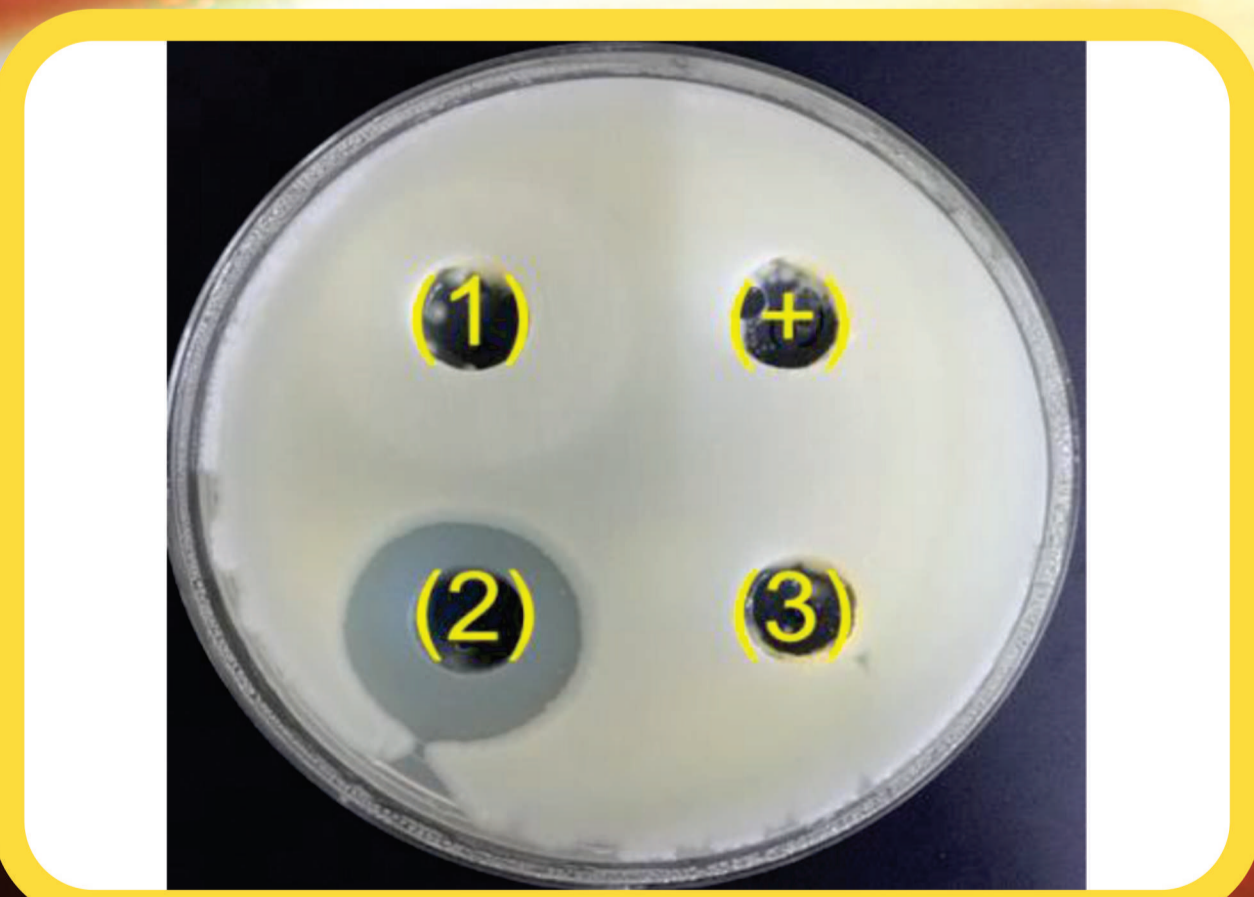
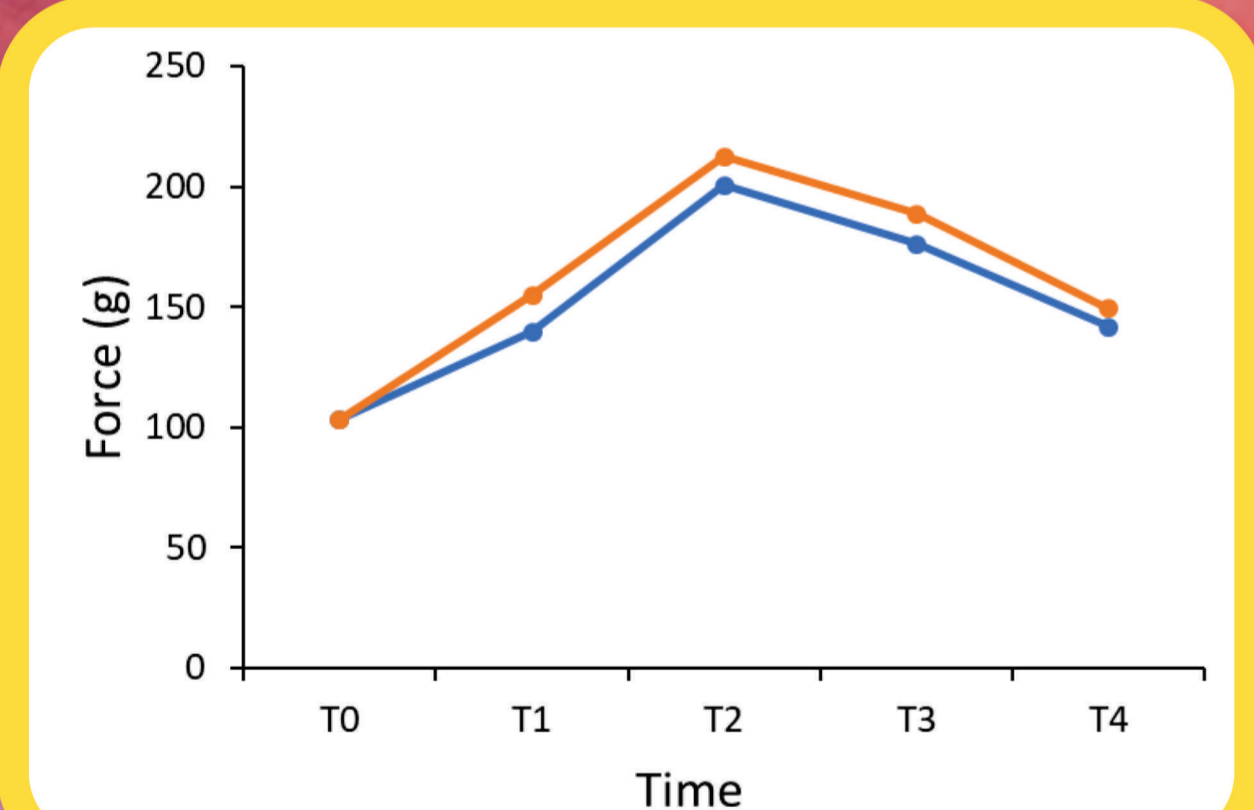
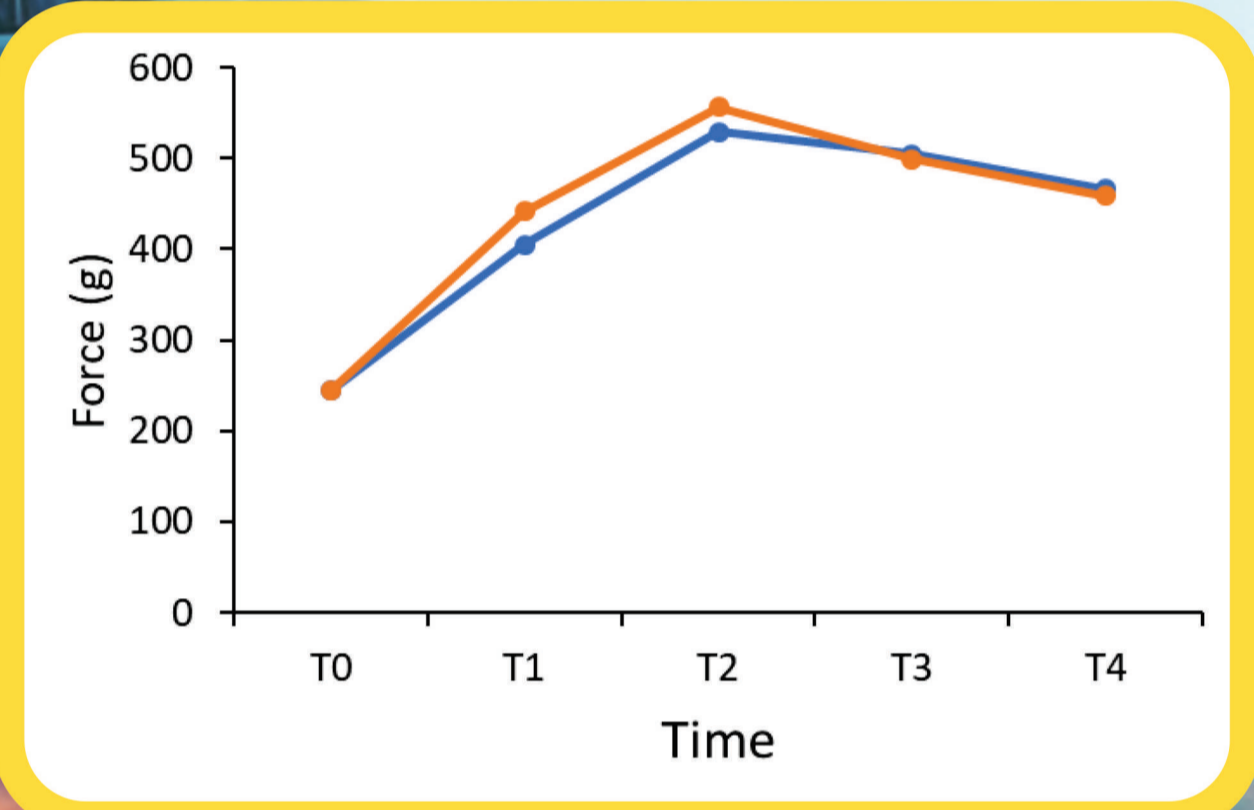


Researchers:

ASSOC. PROF. IR. TS. DR. ZURATUL AIN ABDUL HAMID
 Assoc. Prof. Dr. Siti Noor Fazliah Mohd Noor
 Bazli Hilmi
 Dr. Juzailah Rofie

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Innovative Eco-Grip Denture Adhesive



INTRODUCTION

• **Eco-Grip Denture Adhesive** is an innovative and high performance denture adhesive that is engineered from a combination of eco-friendly polymer materials.

PROBLEM STATEMENT

- Current commercial denture adhesive has several drawbacks such as causing severe allergic reactions, dental biting and chewing problems.
- The available commercial denture adhesive is expensive as it is imported from overseas.

NOVELTY AND INVENTIVENESS

- It is based on eco-friendly polymer materials.
- It has anti-microbial activities towards microorganisms such as *C. Albicans*, *S. Aureus* and *E. Coli* species.
- FREE from hazardous chemical for example zinc, paraben and petrolatum.

INTELLECTUAL PROPERTY (IP) STATUS

- 2 Copyrights granted by MyIPO (LY2018004322 & LY2019006122)
- Filed for Trade Secret (TS/IO/2020/086)

USEFULNESS AND APPLICATION

- **Eco-Grip Denture Adhesive** enhances the gripping between gum and denture and can be easily washed using tap water.
- It can prevent bacterial growth during application.
- Non-toxic to human gingival fibroblast, dental pulp stem cell and periodontal ligament fibroblast.

STATUS OF INVENTION

- Prototype ready and it has been clinically tested by patients (TRL 6).

COMMERCIAL POTENTIAL

- High potential for commercialization as the ingredient used are eco-friendly, cheaper and abundantly available.
- Manufacturing does not require high technology equipment, thus low cost processing.
- Global Dental Adhesive Market is expected to reach US\$ 3.02 billion in 2024 at 6.84 % CAGR. In Malaysia, 4.31 million senior citizen aged 45 and above with approximately 2.1 million denture users.

POTENTIAL PARTNERS

- FZ Natural Resources (Zara Naturlich)
- Dental companies and health based industry.

KNOWLEDGE MANAGEMENT

- Supporting Grant: Bridging Grant, USM (304/PBAHAN/6316233)
- Outputs: 3 ISI and Scopus cited publications (Journal of Adhesion Science and Technology, Journal of Physical Science & Journal of Engineering Science (under review), 3 International Conference (Abstract book)

IMPACT OF THE PRODUCT

- High performance, cost effective and sustainable eco-friendly denture adhesive.
- Safe to be used by patients and it has improved the patient's quality of life
- Local industry could be the key player for the manufacturing of this innovative and high performance denture adhesive for dental application

Contact Person

ASSOC. PROF. IR. TS. DR. ZURATUL AIN ABDUL HAMID
 School of Materials & Mineral Resources Engineering,
 Engineering Campus, Universiti Sains Malaysia, MALAYSIA
 Tel: +604-599 6153 Fax: +604-599 6907 E-mail: szuratulain@usm.my