



SDG REPORT

Rajamangala University of Technology Phra Nakhon 2022

9 INDUSTRY, INNOVATION
AND INFRASTRUCTURE



- CATSS Medical Cannabis and Narcotic plants at faculty of Science and Technology
- Chalad-oon.com is a collaborative project of RMUTP, aiming to support the efforts to prevent and combat online professional misconduct or cybercrimes.
- Bean Butter: Enhancing the Novel Food Industry with No Additives and Anti-aging Properties.





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On April 17, 2022, the Center of Analytical Testing Standard Service for Medical Cannabis and Narcotic Plants (CATSS), which operates under the collaboration of the Faculty of Science and Technology at Rajamangala University of Technology Phra Nakhon and the company Epizode Co., Ltd., achieved ISO/IEC 17025:2017 certification from the American Association for Laboratory Accreditation (A2LA). A2LA is one of the largest and globally recognized accreditation bodies, classified as a nonprofit 501(c)(3) organization.

A2LA was established in 1978 as a public service organization to certify testing laboratories and calibration laboratories (including medical laboratories). It provides convenience in various fields, including biotechnology, inspection agencies, product certification organizations, proficiency testing providers, and reference material producers. A2LA has certified over 4,000 organizations in all 50 states of the United States and more than 50 countries worldwide.

For this specific certification, it covers chemical testing of dried cannabis plant materials (such as inflorescences/flowers/buds) and cannabis oil. The focus of the testing includes cannabinoid content and potency, terpene identity and content, heavy metals, and residual solvents.

The CATSS Medical Cannabis and Narcotic Plants Center at Sci-RMUTP is a part of efforts to promote and support farmers, community enterprises, and entrepreneurs to access development and quality assurance for the safety and quality of cannabis plant products.



Chalad-oon.com is a collaborative project of RMUTP, aiming to support the efforts to prevent and combat online professional misconduct or cybercrimes.

President, and project advisor stated that the project aims to develop a prototype system to support the prevention and suppression of cybercrimes. The prototype system is designed to aid in tracking down and prosecuting individuals who commit offenses under the Computer-Related Offenses Act, B.E. 2560. It serves as an intermediary for the public to verify fraudulent activities such as scam calls, misleading SMS messages, and online scams. The system also functions as a hub for checking the legitimacy of online accounts through the website "Chaladoon.com," providing a sense of security before making decisions to transfer money for goods and services.

The establishment of the operational center involves collecting information about online scams, issues, and vulnerabilities, with more than 80,000 recorded instances to date. The project aims to share knowledge, approaches, and legal techniques for prosecuting offenders, freezing fraudulent accounts, and preventing further instances of public deception.





Bean Butter: Enhancing the Novel Food Industry with No Additives and Anti-aging Properties.

Bean butter is a popular food due to its widespread appeal across all genders and ages. It boasts a delicious and aromatic taste, while being a rich source of protein, vitamins, and minerals. Furthermore, soybean butter can be incorporated into various dishes and cuisines. However, excessive consumption of soybean butter may lead to an intake of high levels of fats and calories, which could pose challenges for individuals with health concerns or those seeking weight management.

In light of these considerations, Assoc. Prof. Dr. Sirirat Panitch, a faculty member of the Chemistry Department at the Faculty of Science and Technology, RMUTP has pioneered research and development of a novel food product – "Bean Butter," which offers health benefits for people of all ages and genders.

Assoc. Prof. Dr. Sirirat Panitch stated that the concept for the product emerged from earlier research involving soybean milk. The research, supported by funding from RMUTP, uncovered that Bean possesses exceptional properties compared to other legumes. It is rich in essential amino acids, including omega-3, -6, and -9 fatty acids, as well as essential minerals and nutrients beneficial for bone health,

skin, and muscles. Recognizing these advantages, the team focused on developing a soybean-based butter product that capitalizes on these inherent qualities while avoiding the addition of other enhancing ingredients. The innovation, known as "Roasted bean butter," was achieved by meticulously controlling temperature and timing during production and combining a soaking process in a sodium carbonate solution to eliminate the characteristic green odor associated with soybeans. The result is a uniquely aromatic, sweet, and easily consumable butter with a smooth texture and light brown color.

Assoc. Prof. Dr. Sirirat Panitch concluded by highlighting the potential health benefits of roasted soybean tofu butter, emphasizing its role in fighting free radicals and countering premature aging. This innovative soybean-based food product can serve as a nutritious alternative for those aiming for a healthier lifestyle or managing excessive fat intake. It can be enjoyed on bread or as an ingredient in various dishes. The patent application for this invention has been submitted, and those interested in learning more can contact Assoc. Prof. Dr. Sirirat Panitch directly.

