

# Sustainable Food Technology

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### Cover

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## EDITORIAL

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### Introduction to 'Advances in valorising underexplored biomasses to obtain food ingredients, additives, and products'

Elena Ibañez, Jose Mendiola and Lidia Montero

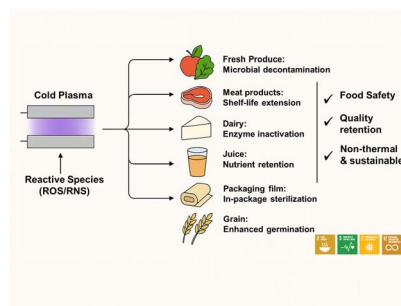


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### A comprehensive review on cold plasma applications in the food industry

Raju Sasikumar,\* Selva Kumar T., Irengbam Barun Mangang, G. Kaviarasu, Ravinder Kaushik, Paul Mansingh, Vidisha Tomer and Amit K. Jaiswal\*



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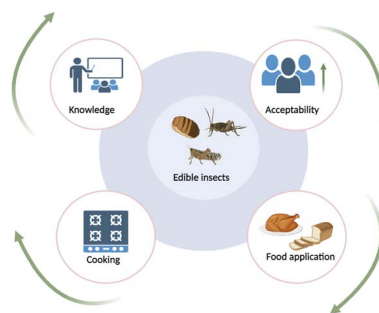
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## REVIEWS

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**The gastronomic art of edible insects: cooking methods and food innovation**

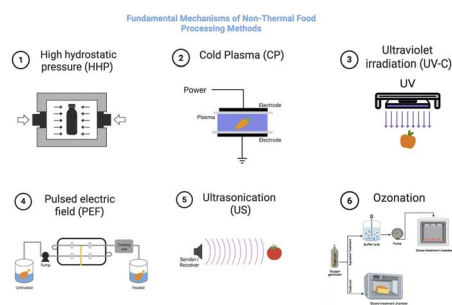
Guoqiang Zhang,\* Shaopu Liu, Feiyu An and Rina Wu



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**Advances in non-thermal food processing: a comprehensive approach to nutrient retention, food quality, and safety**

Duygu Ağagündüz, Gamze Ayakdaş, Beyza Katircioğlu and Fatih Ozogul\*

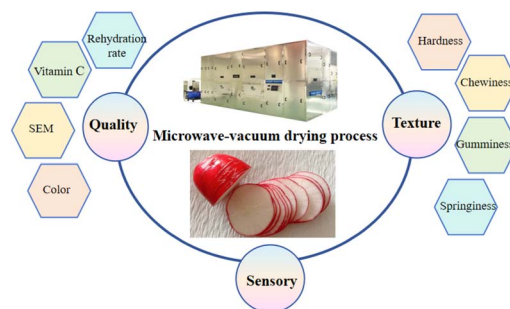


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**Effect of vacuum microwave drying pretreatment on the quality characteristics and textural structure of new paocai raw materials**

Yage Xing,\* Tingting Zhang, Tianyi Yue, Rumeng Yi, Qinglian Xu and Li He

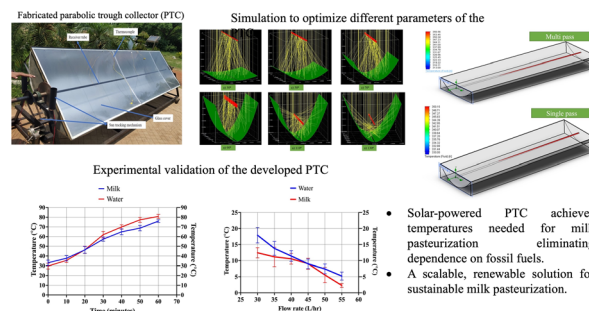


## PAPERS

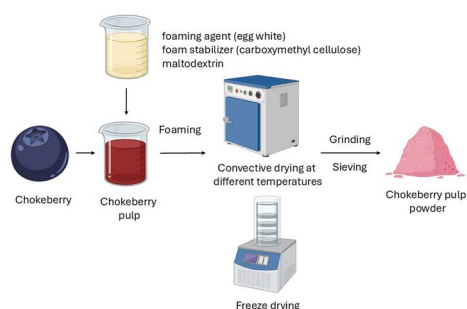
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**Design and development of a parabolic trough solar collector for pasteurization of milk**

Shyam Kumar Singh\* and Ashis Kumar Datta



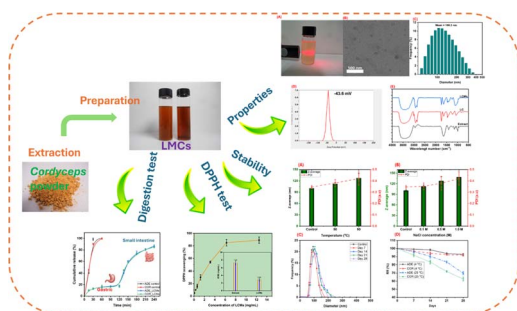
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### Production of chokeberry pulp powder by convective and freeze-drying foam-mat techniques: effects on physicochemical properties, bioactive content, and antioxidant activity

Yasemin Yikilkan, Ali Ali Redha,\* Beyza Kaba, Hojjat Pasazadeh\* and Ilkay Koca

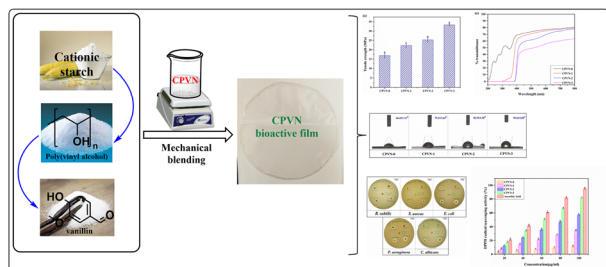
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Nguyen Quynh Dao, Nguyen Thanh Tan, Nguyen Ba Thanh, Le Minh Hung, Nguyen Van My, Nguyen Minh Hai, Nguyen Phuong Tuyen, Nguyen Quoc Thang, Tran Chi Dung and Tran Quang Hieu\*

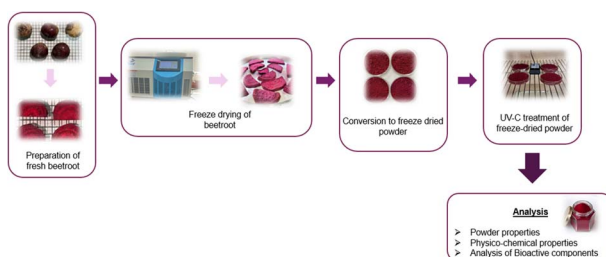
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### Vanillin reinforced cationic starch/poly(vinyl alcohol) based antimicrobial and antioxidant bioactive films: sustainable food packaging materials

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### Effects of UV-C irradiation on the physicochemical properties of freeze-dried beetroot (*Beta vulgaris*) powder

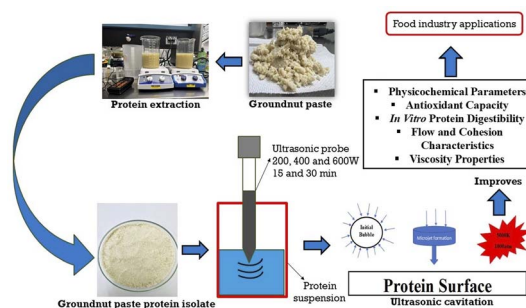
Karishma Dhowtal, Che John\* and Rohanie Maharaj



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## Effect of high-intensity ultrasound on the physicochemical, nutritional, rheological, microstructural, and techno-functional properties of a groundnut (*Arachis hypogaea* L.) paste protein isolate

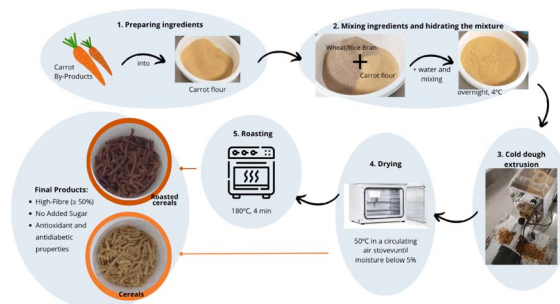
Ángel Efraín Rodríguez Rivera, José Armando Ulloa,\*  
Nitzia Thalía Flores Jiménez and Judith Esmeralda Urías-Silvas



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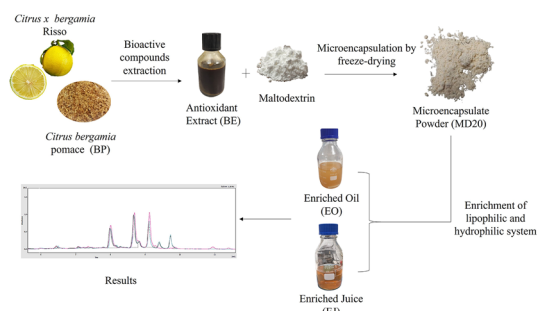
Diva Santos, Manuela Pintado and José A. Lopes da Silva\*



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## Freeze-dried microencapsulation of bergamot pomace extract: stability and antioxidant performance in hydrophilic and lipophilic systems

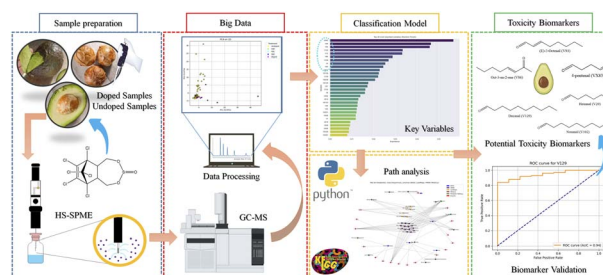
Antonio Gattuso, Corinne Giacondino,  
Simone Santacaterina, Amalia Piscopo and Alessandra De Bruno\*



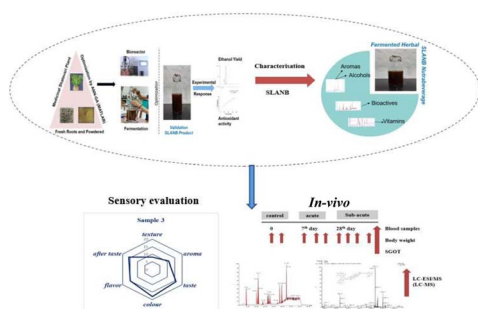
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## Xenovolatilomic profiling of Hass avocado (*Persea americana* Mill.) tissues exposed to endosulfan: identification of potential toxicity biomarkers

Juan Pablo Betancourt Arango, Alejandro Patiño Ospina,  
Jhon Alexander Fiscal Ladino and Gonzalo Taborda Ocampo\*



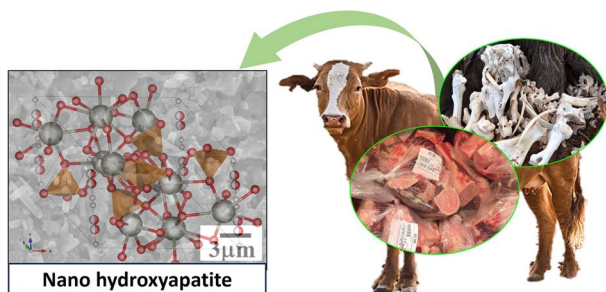
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### Toxicological evaluation of *Asparagus racemosus* – based low-alcohol nutraceutical beverage: acute and subacute safety assessment in mice

Divya Choudhary,<sup>\*</sup> S. N. Naik, Vidushi Tyagi, Anirban Pal and P. Hariprasad

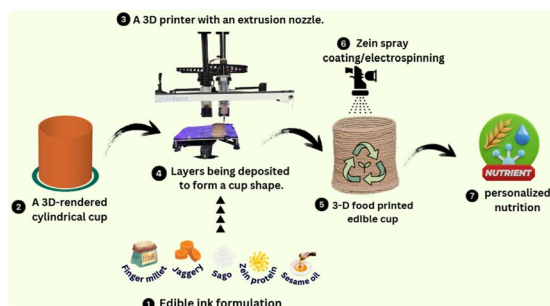
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### Effects of vibro-milling time and sintering temperature on the formation and selected properties of nano-hydroxyapatite ceramics derived from bovine bone

Anirut Raksujarit and Tanagorn Sangtawesin<sup>\*</sup>

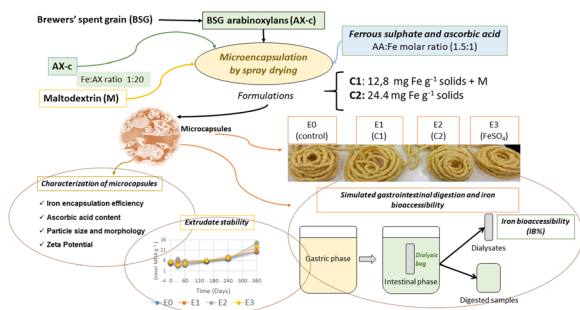
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### Sustainable sips: optimising ragi–sago edible ink for 3D printing eco-friendly, edible cups

Dravin Pratap Singh, Harish Ganesan Sudha and Gopinath Packirisamy<sup>\*</sup>

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### Development of iron–ascorbic acid microcapsules using Brewer's spent grain arabinosylans as wall materials and study of their application as fortifiers in extruded corn products

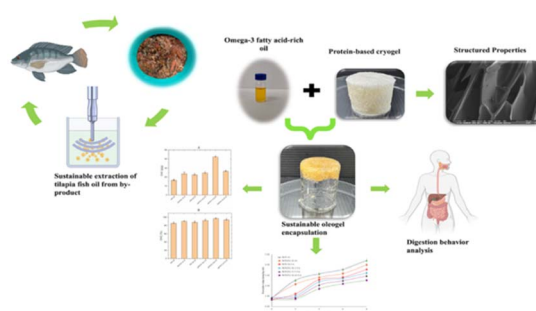
Gabriel D. Heinen, Raúl E. Cian and Silvina R. Drago<sup>\*</sup>



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## Sustainable oleogel encapsulation of tilapia fish oil using protein-based cryogels: fabrication, characterization, and digestion behavior

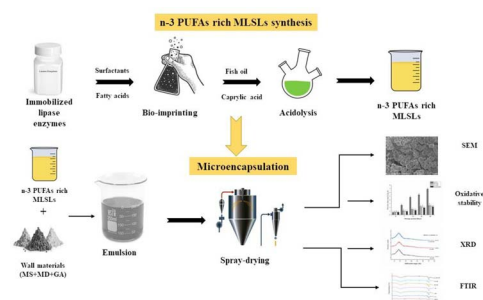
Daniel Tua Purba, Jaydeep Dave and Pichayada Somboon\*



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## Enhanced stability of n-3 PUFAs rich structured lipids via spray-dried microencapsulation with tailored wall materials

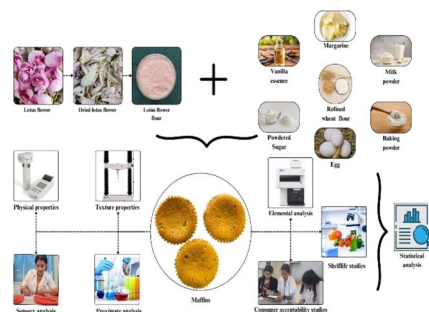
Mudassar Hussain, Abhishek Bisht, Imad Khan, Muneeba Naseer Chaudhary, Nida Kanwal, Muhammad Umair Khalid, Mst Nushrat Yiasmin, Arif Hussain and Xiaoqiang Zou\*



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## Development of muffins fortified with *Nelumbo nucifera* dried flower flour as a source of dietary fibre: analysis of quality, nutritional value, and consumer acceptability

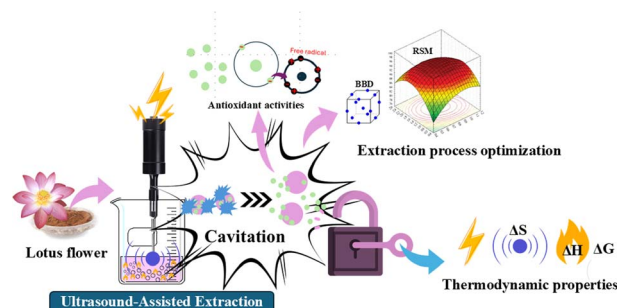
Ashoka S,\* Revanna M L, Shamshad Begum S, Raju C A, Mounika Patiballa, Babu Rajaram Mohan Ray, Vasantha Kumari R, Vijayalaxmi K G, R. S. Upendra and R. Karthik



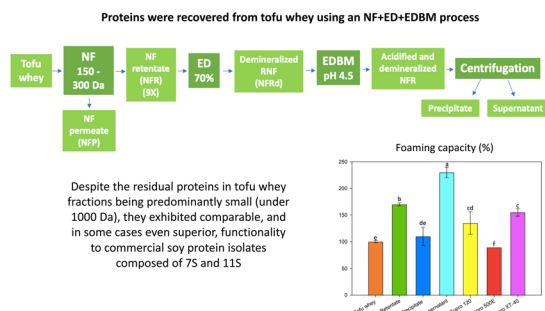
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## Sustainable recovery of bioactive compounds from *Nelumbo nucifera* using ultrasound-assisted extraction optimized through response surface methodology

Thiti Sonphakdi, Mohammad Fikry, Saranya Jansamutr and Kitipong Assatarakul\*



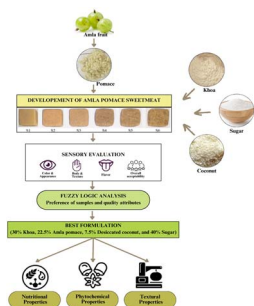
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## Sustainable recovery of residual proteins from tofu whey by coupling nanofiltration with electromembrane processes and functional properties of resulting protein fractions

Rosie Deschênes Gagnon, Marie-Ève Langevin, Florence Lutin and Laurent Bazinet\*

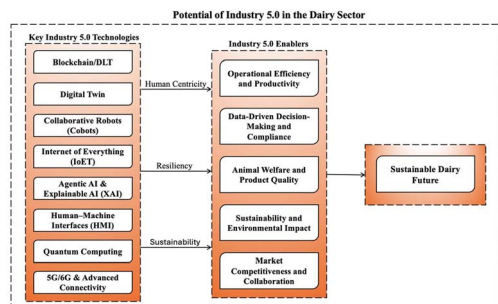
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## Sustainable valorization of amla pomace: optimization of a sweetmeat using the fuzzy logic approach and its quality characterization

Sumaiya Fatima and Vivek Kumar\*

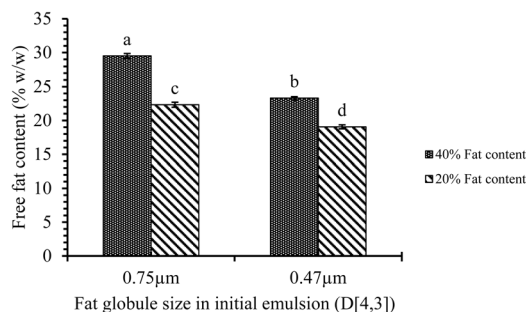
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## Drivers of Industry 5.0 technologies in dairy industry: an exploratory study

Mohit Malik, Rahul S Mor,\* Vijay Kumar Gahlawat, Abdo Hassoun and Sandeep Jagtap

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## Innovative formulations using spray-drying technology for plant-based high-oil powders: physicochemical and micro-structural analyses

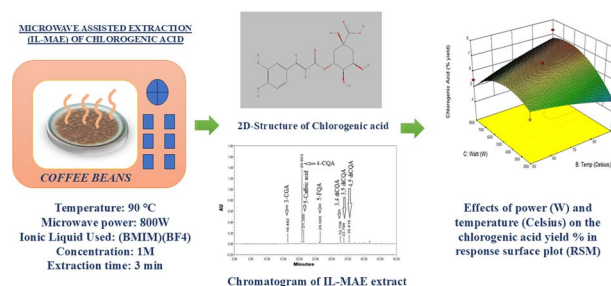
Sudip Adhikari, Rewati Raman Bhattarai, Hani Al-Salami and Pramesh Dhungana\*



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## Ionic liquid-based microwave-assisted extraction of chlorogenic acid from green coffee beans

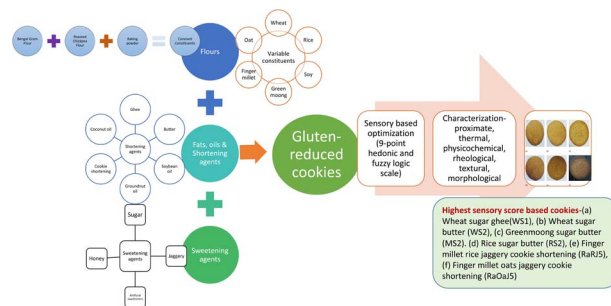
Ramalakshmi Kulathooran,\* Subhapiya Pushparaju, Dhanapal Venkatachalam, Divyashree Jangam Seshagiri, Katyaini Panday and Jagan Mohan Rao Lingamallu



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## Formulation and characterisation of sustainable nutritious gluten-reduced cookies with indigenous grains from Northeast India

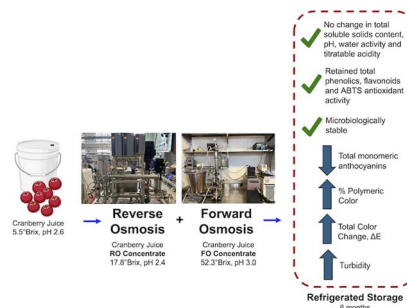
Paushali Mukherjee and Ramagopal Uppaluri\*



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## Reverse osmosis and forward osmosis concentration of cranberry juice: processing effects on juice quality

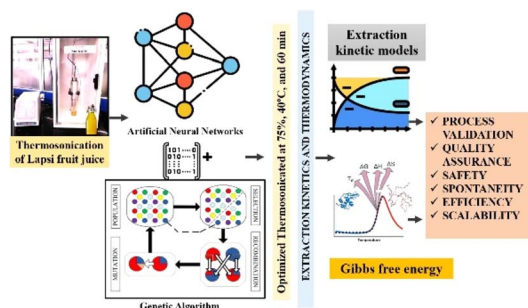
Mark Emile H. Punzalan and Olga I. Padilla-Zakour\*

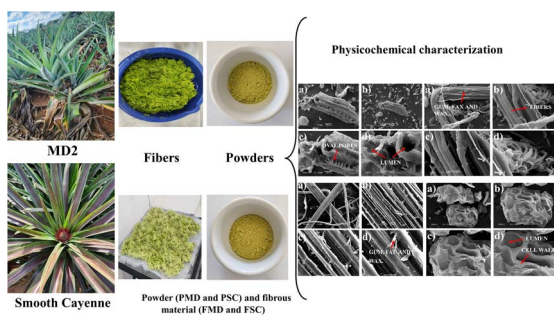


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## Kinetic and thermodynamic characterization of thermosonication-assisted extraction of bioactives from lapsi fruit juice optimized by ANN-GA

Puja Das, Prakash Kumar Nayak and Radha krishnan Kesavan\*





## Physicochemical and techno-functional characterization of fibers and powders from leaves of stubble of two cultivars (MD2 and Smooth Cayenne) of pineapple (*Ananas comusus* L.)

Jennifer Patricia Silva-Cardenas, Ma.  
Estela Vázquez-Barrios,\* Luis F. Zubieta-Otero  
and Mario E. Rodriguez-Garcia\*

