

SURIYAPRAKASH LAKSHMI BALASUBRAMANIAM

suriyaprakash.lakshmibalasubrmaniam@maine.edu

Orono, Maine-04473

309-6135832

EDUCATION

University of Maine (G.P.A 3.83/4)

Doctoral candidate in Food and Nutrition sciences

Orono, Maine

Expected August 2022

Illinois Institute of Technology (G.P.A 3.74/4)

Master's in Food Process Engineering

Chicago, Illinois

August 2017

Bannari Amman Institute of Technology (C.G.P.A 7.37/10)

Bachelor of Technology in Biotechnology

Tamil Nadu, India

April 2015

RESEARCH EXPERIENCE

University of Maine

Orono, Maine

Graduate Research Assistant (School of Food and Agriculture)

Sep 2017-present

- Addressed need of a local business (Dupont, Maine) by developing a simple, inexpensive and reliable method of detection of carrageenan in the industrial wastewater
- Prepared composite films containing carrageenan and nanocellulose with antioxidant properties
- Investigate the anti-microbial properties of nano-cellulose
- Collaborate with chemical engineering department in designing food packaging material made of locally obtained nanocellulose and fatty acids with controlled water vapor barrier property
- Aid in encapsulation of seaweed bio actives using nanocellulose and asses its delivery in the human intestinal tract
- Perform statistical data analysis using statistical programs (i.e. SAS and JMP) to obtain significant difference
- Assist in maintenance of food process engineering laboratory by managing lab safety and inventory

Illinois Institute of Technology

Chicago, Illinois

Graduate Research Assistant (Institute for food safety and health)

Nov 2015- Aug 2017

- Fabricated and tested food packaging material made of LDPE and organically modified clay nanoparticles
- Quantified migration of chemical additives from the food packaging material into food as mentioned by FDA guidelines
- Identified and characterized bio-actives in purple potatoes using mass spectrometer

Bannari Amman Institute of Technology

Tamil Nadu, India

Undergraduate Research Project

2014-2015

- Created a novel method for textile dye degradation using a combination of saw dust from prosopis juliflora and bacteria isolated from soil

RLELEVANT COURSEWORK

- Developed new innovative food product (Root rounds) by going through ideation, concept development and product development process for the course Food Product Development (University of Maine)
- Generated food safety plan for sea food salad as a part of HACCP planning and implementation course work (Illinois Institute of Technology)

CERTIFICATIONS

Innovation Engineering (University of Maine)	December 2018
FSPCA preventive controls for human food training (Institute for food safety and health)	June 2016
HACCP training course (Institute for food safety and health)	May 2016
Better Process Control School (Institute for food safety and health)	March 2016

POSTERS and PUBLICATIONS

- Jablonski JE, Yu L, Malik S, Sharma A, Bajaj A, **Balasubramaniam SL**, Bleher R, Weiner RG, Duncan TV. Migration of Quaternary Ammonium Cations from Exfoliated Clay/Low-Density Polyethylene Nanocomposites into Food Simulants. ACS Omega. 2019 Aug 7.
- Patel AS, **Lakshmibalasubramaniam S**, Nayak B. Steric stabilization of phycobiliprotein loaded liposome through polyethylene glycol adsorbed cellulose nanocrystals and their impact on the gastrointestinal tract. Food Hydrocolloids. 2020 Jan 1;98:105252.
- Lakshmibalasubramaniam S, Nayak B. Reinforcement of carrageenan graft gallic acid with micro-fibrillated cellulose. 256th ACS National meeting and Exposition; 2018 Aug 19-23; Boston, MA
- Lakshmibalasubramaniam S, Nayak B. Surface Modification of Cellulose for Developing High Water Resistance Packaging Film for Food Products. IFT 19; 2019 June 2- 5; New Orleans, LA

LEADERSHIP EXPERIENCE

University of Maine	Orono, Maine
Graduate Student Government-Secretary	May 2019-Present
<ul style="list-style-type: none">• Organize and assist in proceeding of meetings by keeping proper track of time, facilitating votes and by transcribing meeting details• Correspond with senators and other graduate school officials in a timely fashion• Manage graduate student government website	
Graduate Student Government-Senator	Jan 2019-May 2019
<ul style="list-style-type: none">• Communicated queries from the department to the graduate student government	
South Asian Student Association-Vice President	March 2019-Present
<ul style="list-style-type: none">• Organize and manage community events across campus such as Diwali and Holi in collaboration with the office of international programs and the student governments	

SKILLS

- Ability to utilize Nutritionist Pro and generate nutrition label for foods
- Capacity to utilize instruments like Mass Spectrometer, HPLC, FTIR, Colorimeter, Water activity meter and UV-Vis spectrophotometer

