

**List of M.TECH Research Projects Undertaken During 2017-19 by Students of Food Processing Engineering Management**

RESEARCH TITLE
1. Drying of paneer
2. Development of a bio- composite.
3. Effect of edible coating with essential oils on the quality and shelf life of fruits.
4. Design and fabrication of bomb calorimeter for measurement of the steam quality.
5. Drying of elephant foot yam
6. Development of constructs for 3D printing
7. Influence of microfluidization processing on the bioactive compounds and antioxidant activity of sugarcane juice.
8. Development of wireless sensor for quality assessment of paneer (Indian soft cheese)
9. Change in proximate composition and flavour generation during roasting of chickpea.
10. Effect of replacement of sugar and egg with WPC, stevioside, sorbitol on the batter viscosity, rheology and quality characteristics of muffins.
11. Ohmic heating behaviour of fruit juices.
12. Optimization of formulation and process condition for partial or fully replacement of egg in cake with lecithinated soy flour.
13. Optimization and formulation of chocolate using autoclaved soymilk a complete replacement for milk.
14. Design and fabrication of a heat pump dryer.
15. Design and Fabrication of Solar Evacuated tube dryer.
16. Drying of papaya
17. Development of moringa based edible coating for shelf life enhancement of fruits.
18. New food product development from waste of any processing industries

**List of M.TECH Research Projects Undertaken During 2017-19 by Students of Food Safety and Quality Management**

RESEARCH TITLE
1. Utilization of Green Banana flour as a source of resistant starch in the preparation of Chocolate Bar
2. Development of Biofortified Fermented Soy Product using a
3. riboflavin producing novel Lactobacillus isolate. (Tentative)

4. Quality Evaluation of Packaged Fruit Juices
5. Development & study of physico-chemical characteristics of multi- pulse soup premix powder.
6. Street food frying oil quality analysis using FTIR spectroscopy.
7. Study the effect of environmental conditions, Bio- preservative and Phytochemical ON growth and survival of <i>E.coli</i> in Paneer.
8. Importance of ISO method for Total Polar Materials and validation of an alternative method for Total Polar Materials.
9. Development of a nutritious, ready to eat product “Harira” as a galactagogue and its physicochemical analysis.
10. Development of Value Added Probiotic Shrikhand With Tropical Guava.
11. Proximate and Elemental Analysis of Nutrient of Pulses cooked in different cookware
12. Assessment of probiotic potential of riboflavin producing lactobacillus isolates.
13. Synthesis and Characterization of Titanium based Bio-nanocomposite derived from Food waste as an Anti-microbial Food Packaging material(tentative)
14. Utilization of corn grit (by-product) in product development and quality evaluation
15. Shelf life Enhancement of Paneer using Hurdle Technology.

**List of M.TECH Research Projects Undertaken During 2017-19 by Students of Food Technology and Management**

RESEARCH TITLE
1. Studies on effect of centrifugation for gulabjamun made from partial replacement of khoya with soy khoa
2. Development of Beetle Leaf based dairy products
3. Development of protein based edible film coatings for shelf life enhancement of selected indian dairy based sweet
4. Development of spirulina based chocolate
5. To develop & validate an alternative rapid method to determine degree of sterilisation in steamed noodles
6. Incorporation of Soy okara in traditional savoury items
7. Development & standardisation of coriander chutney powder
8. Quality evaluation of unleavened flat bread by incorporation of potato peel powder
9. Development of protein enriched granola bar
10. Standardisation & optimization of freeze dried flavoured camel milk powder
11. Wastage reduction in plant in bread manufacturing
12. Development & characterisation of lassi using orange pulp powder, pectin, guar gum & orange peel extracts using microfluidisation

13. Development of energy bar & evaluation of influence of addition of bioactive compounds & under utilised millets
14. Analysis of heavy metal in various Indian black tea varieties
15. Formulation of gluten free buckwheat bread enriched with sweet potato
16. Development of healthy pasta product
17. Development of nutraceutically improved traditional savoury item
18. Development & quality evaluation of RTS beverage with pineapple cucumber & turmeric

**List of M.TECH Research Projects Undertaken During 2017-19 by Students of Food Supply Chain and Management**

RESEARCH TITLE
1. Optimization of ultrasonic assisted solvent extraction of sea buckthorn oil using response surface methodology
2. Optimization of ultrasonic assisted enzymatic extraction of sea buckthorn oil using response surface methodology
3. A study on Consumer Behaviour and concerns during supply chain of fresh fruits
4. A Study on shelf life of minimally processed cauliflower
5. A study on microfinancing opportunities and challenges in Agri food supply chain"
6. Feasibility study for prospect of constructing an In- house storage location
7. Effect of active MAP on physiology and shelf life of aloe vera gel and rosehip oil impregnated pomegranate arils".
8. Thiol and papaya seed fortification for cancer- preventive value- based cookies
9. A study on development of fruit and vegetable fiber enriched sorghum biscuits
10. A study on development of fruit- based energy bar by using pumpkin seeds
11. Consumer's buying behaviour and concerns towards fresh fruits and vegetables in Durgapur, West Bengal
12. Effect of active modified atmospheric packaging on physiology, quality and shelf- life of edible coated pomegranate arils.
13. Fortification of Nan Khatai using vacuum dried oyster mushroom powder
14. Thiol and garlic fortification for radio- protective value-based biscuits

**List of M.TECH Research Projects Undertaken During 2017-19 by Students of Food Plants  
Operation and Management**

<b>RESEARCH TITLE</b>
1. Total Productive Maintenance in Food Processing Industry
2. Enabling business of agriculture via New Financing Technology
3. Evolution of Food Safety Standards in India
4. The Evolution of Barley Varieties in India & Study on Status of Farmers in India
5. Value Chain Analysis of Jaggery (Sugarcane)
6. Lean manufacturing: Scope and benefits for Food and Nutraceutical Industries
7. To Study the Lean Manufacturing and Its Implementing Approach in Rice Industry
8. OEE improvement through IL6S implementation in Food Processing Plant
9. Impact of Green Marketing on Customer Buying Behaviour in Super Markets: Special Reference to Maharashtra, India
10. Government Interventions on Doubling of Farmers' Income by 2022 and its effect on Minimum Support Price (MSP) on Market price of Minor Crop (Barley)
11. Green Management Practices and Supply Chain Performance of Food Processing Industries in India
12. Waste Management in Food Processing Industry (Chips Industry)
13. Value Chain Analysis of High Value Spices: Black Pepper, Small Cardamom and Clove
14. An empirical study on consumer behaviour and preference towards different brands of chocolates
15. To Study the Total Productive Maintenance and Its Implementing Approach in Dairy Industry
16. Development of protein rich vegan mayonnaise and market potential