ST ALOYSIUS COLLEGE (AUTONOMOUS)

MANGALORE 575 003

DEPARTMENT OF POSTGRADUATE STUDIES IN CHEMISTRY

Offers

Online Certificate Courses

In

1. SPECTRAL INTERPRETATION OF ORGANIC COMPOUNDS
2. CULINARY CHEMISTRY - EVERYDAY CHEMISTRY OF COOKING
3. COSMETIC CHEMISTRY
4. REAGENTS IN ORGANIC SYNTHESIS
5. MOLECULAR SPECTROSCOPY – A THEORETICAL APPROACH
6. SEPARATION TECHNIQUES IN CHEMICAL ANALYSIS

Apply online

Register before November 25, 2021

For registration click here:
https://bit.ly/3mi4cwA

or scan the QR code:

2.Culinary Chemistry - Everyday Chemistry of Cooking

Course Coordinator : Ms Jyothi Vaz

Objectives : Culinary Chemistry-Everyday chemistry of cooking is a 30 hours Certificate online course aims to explore basic chemical concepts of everyday used materials in kitchen. Students will be able to relate food and related topics to various chemistry concepts and understand the Chemical reactions, processes of cooking. This is an interesting and applicable course which encourages the students to explore science, specially Chemistry in everyday life.

Eligibility : All B.Sc/M.Sc students who have studied chemistry at PUC level

Contents: Taste and Flavor : Sense of taste and smell, Chemical reactions in cooking, Maillard reactions. Foams: Egg Foam, Fat foam, Gluten foam, Sugar foam, Gelatin foam – bread recipe, leavening alternatives. Protein Chemistry: Amino acids, Denaturing proteins, milk, egg, meat, enzymes, glutamate and cheese. Emulsions: Emulsifying agents, Gum stabilizers. Colloids, Gel and suspensions: Water based colloids, Starches, Agar and agarose, pectin and protein gels. Oils and Fats: Saturated fats, Monosaturated fats, polysaturated fats, Omega-3 and Omega-6 fats, trans fats. Solutions: Syrups and broth, candy and liquors. Crystallization: Sugar crystals and controlling the size of the crystals. Heating: Browning reactions, Protein denaturing, volume reducing and drying, flavour producing, carcinogens, colour changes, nutrition changes and leavening. Acids and bases: Cooking with acids and cooking with bases. Oxidation and Reduction: Apples, Avacados and lemon juice, Vinegar from wine, antioxidants. Boiling and Freezing: Raising the boiling point, Pressure cookers; Lowering the freezing point, making ice cream. Chemistry of yeast, yogurt, buttermilk, wine and beer. Cooking utensils: Methods and gadgets

Learning outcomes:- After successful completion of this course candidate will be able understand the chemistry of food products, chemical reactions involved in cooking and understand the right use of various gadgets and utensils used in kitchen.

Timings : 5.00 to 6.30 pm (Once in a week)