

Tools and Practices for New Product Development for Food and Bio-Industries

Registration Link : https://docs.google.com/forms/d/e/1FAIpQLSdGj-pgdk1R0AA_NX8dSwtIwqOh36HkV5xBRKpaIcjYr5wMRA/viewform?usp=pp_url

About the Course / Event:

The purpose of this STC is to discuss a framework of critical success factors, tools and techniques for implementing metrics for each stage of the New Product Development process in food and bioprocessing.

The course is designed for both researchers and working professionals to get a structured overview of NPD. NPD is usually defined as a multi-step process that organizations employ in the complex system of delivering new products to the market. Many of the academic R&D projects also involve one or multiple steps of various NPD. However, in both academic and industry the success rate of commercially new products is very low. This is a great challenge at present time since many of the organizations are finding it difficult to cope up with NPD requirements in response to an emerging situation like COVID 19. Usually the turnaround time is very short for development of the products like sanitizers, medicines, testing kits, protective gears, immune boosting foods etc. to fight a fast spreading pandemic. These limitations occur due to lack of innovation and structured approach in NPD. To make product development process faster and sustainable, certain skills are need to be acquired by the product developers. This course is trying to highlight some of them. The general tools and practices presented by the academic and Industry coaches and hands on sessions will not only strengthen the continuing food and biotechnology researchers in terms of better planning & execution but also encourage them in delivering market ready products for emerging situations like COVID 19.



Objective of the Course:

- Understanding of complete product development process involving the individual steps; Idea generation . . Idea screening. . Concept testing. . Buisness Analysis. . Product Development. . Test Marketing. . Commercialization
- Understand how to build products with sustainable competitive advantage
- Learning the R&D sequence including the proof-of-concept to scale-up tools for NPD
- Realizing the role of multiple stakeholders of a NPD
- Learn how to conduct a project financial analysis, develop product pricing, product forecasts etc.

Important Dates:

Registration Date : 02.11.2020

Course Date : 06.11.2020 to 10.11.2020

Eligibility:

The STC is open to Faculty members and PhD students of TEQIP listed Institutions. About 30% seats will be open for Research Scholars and Faculty Members of other Institutions and Industry Members.

Course Content:

The course is designed for both researcher and Industry Professionals to get involve in NPD. The tools like search engine optimization, life cycle analysis, Ishikawa diagrams will be discussed that are essential in planning a NPD. Also various statistical and optimization techniques important in the proof-of-concept stage or in the scale- up or pilot trial stage will be deliberated. An introduction to Design of Experiments (DOE) is provided. DOE is an extremely efficient method to understand which variables (and interactions) affect key outcomes and allows the development of mathematical models used to optimize process and product performance. The concepts behind DOE are to be covered along with some effective types of screening experiments. In addition to that for some specific product development like herbal medicines and nutraceuticals the R&D sequence will be shared.

For all the tools discussed in the lectures a separate e-practical session will be there and for better retention of the concepts Case studies will also be presented to illustrate the methods. To broaden the scope of learning for the audiences Industry experts will lecture on sectorial practices of NPD particularly related to food and bio Industries.

To inspire the participants , best performer of the course will get a seperate certificate as well as an award.



Speakers:

- Dr. Siddhartha Singha, Asst.Prof., CRT, IITG
- Prof. Latha Rangan, BSBE, IITG
- Prof. Ramagopal Uppaluri, Chem. Engg., CRT, IITG
- Dr. Selvaraju N, Asst.Prof, BSBE, IITG
- Dr. Sibabrata Mukherjee, Leaf by Lesaffre
- Mrs. S D Choudhury, Reckitt Benckiser Pvt. Ltd
- Prof. M K Dutta, HSS, IITG
- Prof. Ratnajit Bhattacharjee,EEE, IITG
- Dr. Sudip Mitra, Asst.Prof., CRT, IITG
- Prof. Sanjukta Patra, BSBE, HOD CRT, IITG

About TEQIP:

TEQIP conceived in pursuance of the NPE-1986 (revised in 1992) by Govt of India as a long term program to be implemented in different phases. After successful execution of TEQIP II, TEQIP III started from 2017-18 as Central Sector Scheme with a focus on the Low Income States, Northeast, Hill States and Islands. KIC (Knowledge Incubation Cell for TEQIP), established at IIT Guwahati under 2nd phase of TEQIP, functions as a multi-disciplinary as well as interdisciplinary Innovation Incubation Centre with a focus to impart Knowledge, infusing innovation and leading a path to achieve academic excellence.

For more information visit –
<https://www.iitg.ac.in/cet/teqip3.html>

Course Coordinator:

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Registration Fee:

TEQIP members - ₹ 1000/- (refundable)
Non-TEQIP members - ₹ 2500 + 18% GST /-
Industry Members - ₹5000 + 18% GST /-

Banking Details:

Branch Name - IIT Guwahati Branch
Bank Name- State Bank of India
Branch Code- 14262
Account Number - 33755947572
IFSC Code- SBIN0014262

About IIT Guwahati:

IIT Guwahati campus is spread over a sprawling 785 hectares plot of green land on the north bank of the river Brahmaputra around 25 km from the heart of the city. With hills and vast open spaces, the campus provides an ideal setting for training.
IITG website: www.iitg.ac.in

About KIT:

KIT (Knowledge Incubation Cell for TEQIP) at IIT Guwahati functions as a multi-disciplinary as well as interdisciplinary Innovation Incubation Centre with a focus to impart Knowledge, infusing innovation and leading a path to achieve academic excellence. Its activities are in the area of improving quality of technical education, incubator of Innovative Ideas; implementer of contemporary pedagogy practices and development of Learning Content in Technical institutions while mentoring them.

Centre for Rural Technology:

Centre for Rural Technology at IIT Guwahati is established in the year 2016 to promote multidisciplinary activities. Centre promote interdisciplinary research for Rural Development the Centre has two academic programmes - Doctor of Philosophy (PhD) and Master of Technology (MTech) with special emphasis on training and research needs of the Indian rural sector and contributing to International research in Appropriate Technology for rural community. The Centre in close collaboration with NGO, voluntary organizations, R&D institutes, Government programs/ schemes will provide facilities to innovators/ engineers to contribute meaningfully to the nation.

CONTACT US

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