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# SAMUDRAMANTHAN

## IIT KHARAGPUR

# Innotect





# RULES

## Introduction to the Event

Innotect 2021 is a case-specific design and logistics competition aimed at students with an interest in problem solving, business, and logistics. The event involves a problem statement provided to participants with a potential scenario in the maritime industry. Rather than focus on the complex engineering behind ships, this event looks at the design theory, operations, and planning behind them.

Entry to this event is by registering on the official Samudramanthan website. All intimations and communications to the team will be through the portal, so kindly ensure you are registered in advance. Samudramanthan welcomes teams from colleges all over India to take part in this unique and challenging contest!

## Stages & Timeline

Innotect 2021 will be organized in 2 rounds where participants will receive an opportunity to submit their designs to the judging panel, and if selected for the next round, they will receive a chance to present and field questions on their submission.

## ***Stage 1: Operation & Business Document Submission***

The problem statement for Innotect 2021 is provided in the next section. Participating teams must work on solving the business and operation problem posed. Their submission will cover topics on the business plan, operational planning, and structural designs. The solution must be both feasible and practical. The submission will be in a single .pdf file that must be mailed to [samudramanthan.iitkgp.2021@gmail.com](mailto:samudramanthan.iitkgp.2021@gmail.com) within the specified deadline. The deadline for stage 1 is 14th March, Sunday, 2021 at 11:59 PM.

## ***Stage 2: Business Presentation during SM21***

Once your team is selected to progress to round 2 of Innotect 2021, we will intimate the platform for presentation and the timing. You will be required to present your earlier submission to a judging panel. The limit for this is strictly 10 mins, with an additional 5 mins reserved for a QnA session.



## Problem Statement

The problem statement for Innotect 2021 is as follows:

*You are the chief planning consultant for FishTech Enterprises. The company specializes in building fishing boats that they use along the coast of India. The company headquarters are in Kolkata, the main fishing region is off the coast of Tamil Nadu, and their fish processing factory is in Cochin.*

*The process undertaken by the company is as follows:*

*A fishing trawler leaves Kolkata Port and heads to the fishing region off Tamil Nadu. From there, they spend 3 days fishing, with at least 16 hours a day spent on catching fish. From there, they then head to Cochin Port, where the fish is moved to their processing warehouse 10 kilometers away from the port.*

*Faced with this supply chain operation, you are called upon to plan an ideal coastal route covering all the required regions. You must take into account the provisions (food and water) keeping in mind a crew of 10 people, the fuel for the voyage (based on total route distance planned), and you can take an average fuel consumption based on historic data. You must also decide on the type of truck or trailer required to move the caught fish to the warehouse (factor in weight, and charges for leasing this vehicle per hour).*



*You must also take a reasonable assumption of the weight of fish caught per hour, make provisions for suitable storing them, and looking at working vessel conditions to ensure the fish retains its quality during the journey.*

*Finally, plan the daily wages of the 10-member crew, in order to satisfy Government of India regulations on minimum wages. Your main task is to decide on a prize for the fish (per kilo) to be sold at Cochin. You must have a healthy profit margin to ensure the operation can continue.*

*If you find the price to be too high (due to ill-planning), propose an alternate timeline (such as, 5 days of fishing to increase your catch) to ensure you comply with the rules of this event.*

*You are allowed to make reasonable assumptions about the details. However, mention these assumptions clearly in your submission, for us to evaluate you.*

## **Judging Panel & Criteria**

The judging for Innotect 2021 will be solely on the basis of criteria as laid down by the judges. The judging panel will comprise of esteemed professors and technical experts from the Department of Ocean Engineering and Naval Architecture, IIT Kharagpur.

### ***Judging criteria for round 1:***

1. Adherence to rules stated in this document (10)
2. How well the idea is presented in the submission (30)
3. Has the problem statement been adequately addressed (30)
4. Proposed solutions and methodology (30)

### ***Judging criteria for round 2:***

1. Originality and creativity (20)
2. Organization and logical presentation of thoughts (20)
3. Presentation and delivery (20)
4. Knowledge on the subject (20)
5. Question-Answer session (20)



## Rules and Regulations

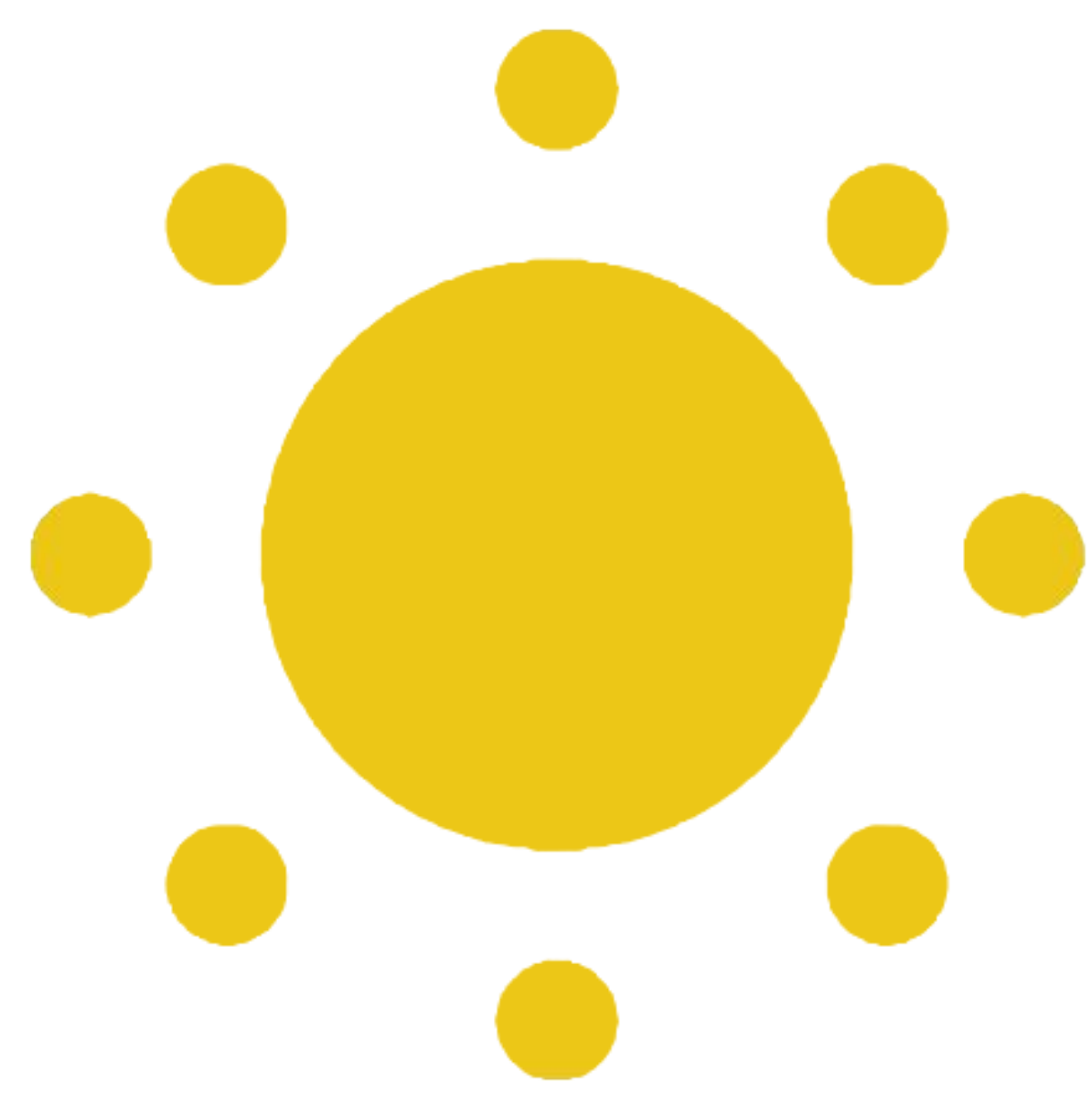
1. Teams can consist of up to 3 - 5 members. The members need not be from the same university/organization.
2. Participants are advised to check <https://www.samudramanthan.in> regularly for updates.
3. The deadline for submission is 14th March 2021 at 11:59 PM, and it must be in a single file uploaded in the .pdf format. All submissions must be on the Samudramanthan portal and no mailed-in submissions will be considered.
4. Only the top 20% of participants will be considered for stage 2.
5. Selected teams will be informed about the platform for stage 2 in advance, and must ensure it is installed and in working condition.
6. Strict adherence to the time limit is encouraged, with the risk of a penalty for exceeding it.
7. Plagiarism is strongly discouraged, and any team found indulging in unfair practices will be summarily removed from the event. If the violation is found to be serious, they may also be removed from Samudramanthan 2021.
8. The decision of the judges is final and binding on all participants and teams.

## **Prizes & Rewards**

All participating teams will receive certificates of participation from Samudramanthan, IIT Kharagpur. The top submissions may be published on our social media pages to appreciate their unique designs and design approach.

Innotect 2021 will award cash prizes to the top 3 participating teams on the basis of the presentation made in round 2. The overall prize money is ₹ 15,000/- for this event. The winners will also receive e-Certificates from Samudramanthan and a mention on our social media pages.





# QuantSolar

*Floating Solar PV Systems*

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(19<sup>th</sup> - 21<sup>st</sup> March 2021)

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For queries, contact : [samudramanthan.iitkgp.2021@gmail.com](mailto:samudramanthan.iitkgp.2021@gmail.com)



## NAROE

Department of Ocean Engineering and  
Naval Architecture

Indian Institute of Technology  
Kharagpur