



# GAYATRI VIDYA PARISHAD COLLEGE OF ENGINEERING (A)

Approved by AICTE, New Delhi affiliated to JNTU Kakinada

Re accredited by NAAC with "A" Grade with CGPA of 3.47/4.00

Madhurawada ,Visakhapatnam - 530048



IICHE

## DEPARTMENT OF CHEMICAL ENGINEERING IICHE-GVPCE(A) STUDENT CHAPTER

# NEWSLETTER



## THE EDITION 5.3

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STUDENT CHAPTER**

**JANUARY 2021 -  
MARCH 2021**

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Issue No : 3**

The IICHE-GVPCE(A) Student Chapter is functioning actively with highly energetic student members. Since three years, more than 200 students have enrolled themselves as IICHE Student Members enabling them to participate in various chemical engineering conferences/workshops in various premier institutes . IICHE Student Chapter is stretching its events beyond on-campus and hosted off-campus activities both in technical and societal grounds. Activities update can be viewed at [www.iichegvpchem.org](http://www.iichegvpchem.org).

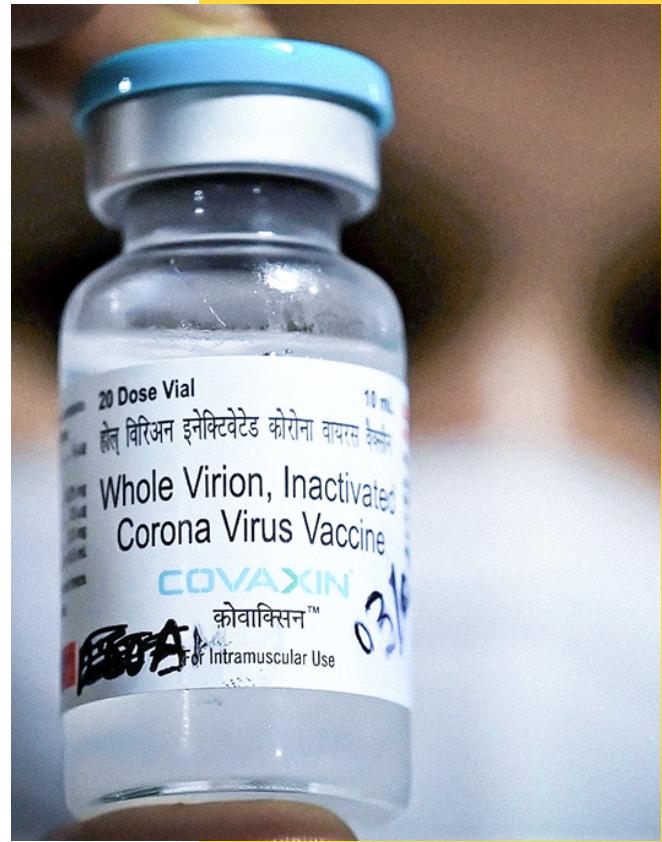
During the Academic year 2020-2021, a Governing Body has been formed, and since then the Student Chapter rose to new heights, hosting new and innovative events and enrolling more students into the Student Chapter.

To show the world it's Student Chapter, IICHE-GVPCE(A) Student Chapter in collaboration with Department of Chemical Engineering has started to issue newsletters.

# COVAXIN - INDIA'S FIRST INDIGENOUS COVID-19 VACCINE

COVAXIN, India's indigenous COVID-19 vaccine by Bharat Biotech is developed in collaboration with the Indian Council of Medical Research (ICMR) - National Institute of Virology (NIV).

The indigenous, inactivated vaccine is developed and manufactured in Bharat Biotech's BSL-3 (Bio-Safety Level 3) high containment facility.



The vaccine is developed using Whole-Virion Inactivated Vero Cell derived platform technology. Inactivated vaccines do not replicate and are therefore unlikely to revert and cause pathological effects. They contain dead virus, incapable of infecting people but still able to instruct the immune system to mount a defensive reaction against an infection,

## WHY DEVELOP INACTIVATED VACCINE?

Conventionally, inactivated vaccines have been around for decades. Numerous vaccines for diseases such as Seasonal Influenza, Polio, Pertussis, Rabies, and Japanese Encephalitis use the same technology to develop inactivated vaccines with a safe track record of >300 million doses of supplies to date. It is the well-established, and time-tested platform in the world of vaccine technology.

## **KEY ATTRIBUTES:**

COVAXINTM is included along with immune-potentiators, also known as vaccine adjuvants, which are added to the vaccine to increase and boost its immunogenicity. It is a 2-dose vaccination regimen given 28 days apart.

It is a vaccine with no sub-zero storage, no reconstitution requirement, and ready to use liquid presentation in multi-dose vials, stable at 2-8oC.

## **PRE-CLINICAL STUDIES:**

Demonstrated strong immunogenicity and protective efficacy in animal challenge studies conducted in hamsters & non-human primates.

The vaccine received DCGI approval for Phase I & II Human Clinical Trials in July, 2020. A total of 375 subjects have been enrolled in the Phase 1 study and generated excellent safety data without any reactogenicity. Vaccine-induced neutralizing antibody titers were observed with two divergent SARS-CoV-2 strains. Percentage of all the side-effects combined was only 15% in vaccine recipients.

In Phase 2 study, 380 participants of 12-65 years were enrolled. COVAXIN led to tolerable safety outcomes and enhanced humoral and cell-mediated immune responses. Know more about our phase 2 study.

## **PHASE 3 MULTI-CENTRE TRIAL:**

The first dose of vaccination has been given to all the participants and presently, second dose of either vaccine/placebo is being administered.

Efficacy is estimated by the incidence of COVID-19 cases accrual between the vaccine and the placebo group, which will commence two weeks after the second dose.

The interim efficacy estimate will be generated by the end of Feb, 2021.

COVAXINTM has been granted approval for emergency restricted use in India by DCGI-CDSCO on Jan 03, 2021.

## **GLOBAL ACCEPTANCE OF COVAXINTM:**

Bharat biotech has been approached by several countries across the world for the procurement of COVAXINTM.

Clinical trials in other countries to commence soon.

Supplies from government to government in the following countries to take place:Mongolia, Myanmar, Sri Lanka, Philippines, Bahrain, Oman, Maldives and Mauritius.

# EVENTS:

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Madhurawada, visakhapatnam-530 048

**COLLEGE OF ENGINEERING  
(AUTONOMOUS)**

**INDIAN INSTITUTE OF CHEMICAL ENGINEERS  
ESTD. 1947**

**IICHE**

**IICHE-GVPCE(A) STUDENT CHAPTER  
DEPARTMENT OF CHEMICAL ENGINEERING  
PRESENTS**

# **QUIZMO**

**WILL BE HELD ON '28 TH OF FEBRUARY 2021'**

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**28-02-2021 :-QUIZMO**

**QUIZMO IS A FUN EVENT WHERE PARTICIPANTS HAVE TO GUESS THE NAME OF EQUIPMENT OR INSTRUMENTS RELATED TO CHEMICAL ENGINEERING.**

**THE MAIN OBJECTIVE BEHIND THIS IS TO TEST THEIR SKILLS AND ALSO MAKING THEM AWARE OF EQUIPMENT OR INSTRUMENTS RELATED TO CHEMICAL ENGINEERING.**

**THE WINNERS WERE FEATURED IN OUR INSTAGRAM HANDLE @IICHE\_GVPCE.A**