



CHAITANYA DEGREE & PG COLLEGE FOR WOMEN

Affiliated to Andhra University, Chaitanya nagar, Old Gajuwaka, Visakhapatnam-530026.





WEBINAR

on **“Passion and Discoveries in Science”**
with two technical talks and an online quiz through
Google meet organised by **SACSE** to promote and
popularize chemistry was organised on **11-12-2021**



**Society for Advancement of Chemical Sciences and Education
(SACSE)**

Date: 08.12.2021
Place: Kalpakkam

Dear Sir/Madam,
Greetings !!!

Indira Gandhi Centre for Atomic Research (IGCAR), Kalpakkam has been actively engaged in organizing various events, to promote and popularize chemistry amongst the student and research community at both school and college levels. These include lectures, chemistry demonstrations, quizzes and theme meetings on focused areas of current interest. All these are being organized under the auspices of **Society for Advancement of Chemical Sciences and Education (SACSE)**, launched in 2012.

In the year 2019, we conducted a program at your premises and your feedback was very encouraging. This year with your collaboration, a one day webinar on “Passion and Discoveries in Science” with two technical talks and an online quiz is being organized on 11-12-2021. We request you to make arrangements for audio visual aids for conducting the same. The program will be conducted through google meet and the details for joining the meet will be communicated on 10-11-2021. The schedule of the program is given below for your reference.

S.No	Program	Timings (hh.mm)
1.	Introductory remarks	10.00 – 10.15
2.	“Accidental Discoveries in Science” by Dr. N. Ramanathan	10.15 – 11.00
3.	“On the discovery of world’s rarest naturally occurring element – briefing Marguerite Perey’s work” by Dr. A. Sree Rama Murthy	11.00 – 11.45
4.	Quiz program & prize distribution	11.45 – 12.45
5.	Concluding remarks	12.45-13.00

Thanking you and with best regards

Yours sincerely,

To
The Principal,
Chaitanya Degree & PG college for women,
Visakhapatnam,
Andhra Pradesh

(Dr. V. Jayaraman)
President, SACSE,
Associate Director, FMCG/ MC& MFCC
Indira Gandhi Centre for Atomic Research,
Kalpakkam
Ph: 044-27480500-24290



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The screenshot shows a Gmail inbox with a search filter for 'kalapakkam'. The selected email is an invitation from 'sacse.kalpakkam@gmail.com' dated Friday, December 10, 2021, at 10:04 AM. The subject is '(No Subject) @ Sat Dec 11, 2021 9:30am - 2pm (IST) (principal.chaitanyacollege@gmail.com)'. The email body includes a calendar card for Saturday, December 11, 2021, with the event '(No Subject)' from 9:30am to 2pm IST. The 'Who' field lists several email addresses: vjramster@gmail.com, cvsbrao@gmail.com, sreeram.murthy2004@gmail.com, and shymalapulipaka06@gmail.com. An 'Agenda' section on the right shows the event at 9:30am.

The screenshot shows a Gmail inbox with a search filter for 'kalapakkam'. The selected email is a Google Meet invitation from 'principal.chaitanyacollege@gmail.com' dated Friday, December 10, 2021, at 10:04 AM. The subject is '(No Subject)'. The email body includes a green banner stating 'You have been invited to the following event.' followed by the event details: '(No Subject)' on Saturday, December 11, 2021, from 9:30am to 2pm India Standard Time - Kolkata. The 'Joining info' section provides a Google Meet link: meet.google.com/www-jdth-afg. The 'Calendar' field lists the organizer as 'sacse.kalpakkam@gmail.com' and other attendees: vjramster@gmail.com, cvsbrao@gmail.com, sreeram.murthy2004@gmail.com, shymalapulipaka06@gmail.com, principal.chaitanyacollege@gmail.com, and nram@gcar.gov.in. At the bottom, there is a response prompt: 'Going (principal.chaitanyacollege@gmail.com)? Yes - Maybe - No more options >'. A footer note states: 'Invitation from Google Calendar. You are receiving this email at the account principal.chaitanyacollege@gmail.com because you are subscribed for invitations on calendar.principal.chaitanyacollege@gmail.com.'



IGCAR (Indira Gandhi Centre for Atomic Research), Kalpakkam is one of the premier nuclear research centers in India.

Presenters:

- 1. Dr. C.V S BRAHAMANDA RAO**
- 2. Dr. A. SREE RAMA MURTHY**
- 3. Dr. N RAMANATHAN**

Key Notes

- **Importance of science.**
- **Lecture on Accidental discoveries in science.**
- **Discovery of world's rarest naturally occurring element.**
- **Quiz programme.**



Estd. 1996

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IMPORTANCE OF SCIENCE

WHY IS SCIENCE IMPORTANT?

- You don't study science just to learn the names of interesting elements. In science you learn how to plan, think for yourself, solve problems and reason logically. You work independently and as part of a group.
- You predict what might happen in a certain situation and learn how to base your conclusions on the evidence available.
- All these skills are vital in every walk of life. That's why employers like people to have at least two good science GCSE's and why science is a core subject along with English and Maths



LECTURE ON ACCIDENTAL DISCOVERIES IN SCIENCE.

Accidental
Discoveries
In science



DISCOVERY OF WORLD'S RAREST NATURALLY OCCURRING ELEMENTS

Astatine is the rarest naturally occurring element on Earth.

Name comes from "astatos", the Greek word for "unstable"

Most stable isotope has a half-life of 8.1 hours.

Total amount in Earth's crust is less than one ounce

Could potentially help treat certain cancers

At



Source: Jefferson Lab,
Royal Society of Chemistry, NPR



QUIZ PROGRAMME

Quiz program_details

SACSE_Kalpakkam <sacse.kalpakkam@gmail.com>
to me, Shyamala, Brahmananda, vjramster, nramanathan

Dec 10, 2021, 12:51PM

Dear Madam, I request you to make the following arrangements for conducting Quiz. We are going to conduct the quiz through Kahoot platform.

1. Total of 45 teams can participate at a time for the quiz. So, please make all participating students into a maximum of 45 teams and name them as Team1, Team2 and so on. (Eg: 1 each from B.Sc 1st, 2nd and 3rd year, like that, depending on the number of students).
2. Each should have one smartphone with a Kahoot app installed. This can be installed from google play store.
3. Students will be provided with 'GAME PIN' at the start of the quiz.
4. They have to open the Kahoot app from their phone and enter 'GAME PIN' and 'Nick name (Team No)'
5. The quiz questions will be displayed on the screen through Gmeet presentation sharing from us and also will be read aloud.
6. They have to choose correct option from their mobile.
7. Answer options will be displayed only on the screen. In mobile they find only corresponding colors/symbols to choose. So, it is mandatory that they have to participate in the quiz only from the room/hall containing the screen.
8. Depending on the correctness and fastness, the score will be assigned automatically and will be updated for every question.
9. We will conduct a trial game first to get familiarized before the actual one.
10. More details can be found at <https://kahoot.com>

With regards,
A. Sree Rama Murthy

SACSE Chemistry Quiz

Name: _____
Class: _____
College/University: _____

College Name: _____

Rules

1. Choose one best answer and write your choice on the right column
2. Each question carries 4 marks and wrong answer carries -1 mark
3. Total time : 10 minutes

Q. No	Question	Choice
1	Which chemist got the Nobel prize in chemistry for the synthesis of chlorophyll? a) R Woodward b) H C Brown c) E J Corey d) R Hoffmann	
2	The transition metal present in Zeise's Salt is a) Platinum b) Palladium c) Iridium d) Vanadium	
3	The measurement in bomb calorimeter is carried out constant a) Temperature b) Pressure c) Volume d) Energy	
4	The lack of which chemical among the following is responsible for Parkinson's disease a) Tyrosin b) Acetylcholine c) Oxytocin d) Dopamine	
5	Gadolinium is a a) Ferromagnetic material b) Paramagnetic material c) diamagnetic material d) none of the above	
6	Which law states that the entropy of vaporization is almost the same value, about $85-88 \text{ J K}^{-1} \text{ mol}^{-1}$, for various kinds of liquids at their boiling points a) Hess's Law b) Trouton's Rule c) Nernst Rule d) None of these	
7	Ruby and gems is chemically a) Silica b) Beryl c) Fluorosilicate d) Corundum	
8	The constituents of brass is a) Sn & Pb b) Sn & Zn c) Cu & Zn d) Zn & Pb	
9	Rockwell's scale is used to measure the a) Hardness b) Softness c) Density d) Viscosity	
10	The enzyme present in yeast is a) Zymase b) Lactase c) Galactase d) Erythrose	
11	The higher stability of tertiary carbocation is due to a) Hyperconjugation b) Electromeric effect c) Inductive effect d) Resonance	
12	Carotenes are colored because of a) Benzene rings b) Conjugation c) Large number of carbon atoms d) None of the above	
13	A macromolecule exhibits better binding if its affinity for its ligand changes with the amount of ligand already bound. This is known as a) Lock and Key effect b) Cooperative effect c) Enzymatic effect d) Hill's effect	
14	The Kroll process produces a) Calcium b) Sodium c) Aluminum d) Titanium	
15	Conversion of gel to sol a) Peptisation b) Gelation c) Coagulation d) Solvation	
16	Of the four elements given below, which element is not found in nature a) Promethium b) Osmium c) Gallium d) Tellurium	
17	What am I really taking when I have a barium meal is a) Barium lactate b) Barium sulfate c) Barium citrate d) Barium carbonate	
18	Which among the following is an extensive variable a) viscosity b) Volume c) Temperature d) Density	
19	Nuclides with the same number of neutrons are a) Isotones b) Isobars c) Isotopes d) Isotomers	
20	The units of Boltzmann's Constant is a) J K^{-1} b) J mol^{-1} c) J^{-1} d) $\text{J}^{-1} \text{K}^{-1}$	
21	In Crystal field theory, the presence of ligands split the square planar complex into a) Two groups b) Three groups c) Four groups d) Five groups	
22	Neutron was discovered by a) Madame Curie b) Henry Becquerel c) Niels Bohr d) Chadwick	
23	Which one of the following elements is generally used in Atomic clocks a) Barium b) Rubidium c) Cesium d) Radium	
24	The oil of mirbane is a) Sulfuric acid b) Nitrobenzene c) Toluene d) Nitric acid	
25	What is termed as Fool's Gold a) PbS b) Lignite c) Silver d) FeS ₂	
26	Hardening of Cement is due to a) Dehydration b) Hydration c) Oxidation d) Absorption	
27	Daltonism is a) Color Blindness b) Cell destruction c) Tuberculosis d) Mumps	
28	Philosopher's Wool is a) ZnO b) CaO c) Cotton d) Jute	
29	The interpretation of the wave function was given by a) Max Plack b) Heisenberg c) Schrodinger d) Born	
30	In Tanabe Sugano diagram the y axis is E/B. What does the B stand for a) Number of unpaired electrons b) Crystal field energy c) Racah parameter d) Magnetic field	
31	The metal present in carboxypeptidase is a) Ca b) Co c) Fe d) Zn	
32	Karl Fischer titration is used for the estimation of a) Sulf content b) Moisture content c) Acid content d) Alcohol content	
33	 The above name reaction is a) Wittig's Reaction b) Chichibabin Reaction c) Arbusov Reaction d) Barton's Reaction	
34	The element Copernicium in the periodic table is represented by a) Cp b) Cn c) Co d) Cm	
35	The element Strontium in the periodic table belongs to a) s block b) p block c) d block d) f block	

W: _____
UA: _____

Total: _____



It was a great opportunity for students and teachers to be a part of this webinar through which they got a lot of interest and motivation regarding science and research.

They have given a briefing regarding the internship programmes & Project works organizing by IGCAR for students who are interested to make their career in Atomic research which is a great opportunity for students.

The screenshot shows the website of the Indira Gandhi Centre for Atomic Research (IGCAR). The page is titled "Opportunities to the Student Community" and specifically focuses on "Guidelines for doing Project Work at IGCAR". The page is divided into several sections:

- Opportunities:** A sidebar menu with options: Project, Visit, Check Availability for Visit, Contact Us, and Download.
- Eligibility:**
 - Students in Post Graduate Programme only
 - Students from any Institution are eligible and accommodation will be provided based on availability on chargeable basis at the prevailing rates
 - Only Indian Nationals are permitted
- Duration of the Project Work:**
 - Project work for longer duration typically for one semester duration (3 to 8 months) are encouraged. Short term projects and In-plant Training are not permitted.
- Procedure:**
 - Post Graduate Students have to submit a project request addressed to dirsec@igcar.gov.in / shure@igcar.gov.in
 - The received requests will be circulated to all Senior colleagues of the Centre for getting the approval for carrying out the project work and identifying the suitable guide
 - Based on the inputs received from the Senior Colleagues, the requests are processed further after the approval of Director
 - Only limited accommodation is available and after ascertaining the availability of the accommodation, necessary forms will be forwarded to the students along with the approval letter via email
 - In case of wards of DAE employee, the parent should submit a formal request letter with the approval of the guide identified by them
 - It is mandatory for the students to submit a report of the work carried out during the period of their stay at IGCAR
- Details of forms to be submitted at P&HRMD, OFFICE**