



Parvatibai Chowgule College of Arts and Science  
Autonomous

Accredited by NAAC with Grade "A+" (CGPA Score 3.27 on a 4 Point Scale) Best affiliated College-Coa University Silver Jubilee Year Award

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Dear Readers.....  
In this issue, we will recount the various projects, achievements, and activities by the Department of Geology and by the Club Nebulites. A huge thank you to all the persons who contributed to writing the wonderful and inspiring articles, without which there wouldn't have been this newsletter issue. I thank my whole team for making this issue possible.  
--Sakshi Parwar

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# WRITE WHAT SHOULD NOT BE FORGOTTEN



## LONG LONG AGO.....

WAIT! FEW HUNDRED YEARS? FEW THOUSAND YEARS? FEW MILLION YEARS? NO! 4.6 BILLION YEARS AGO, A PLANET LIKE NO OTHER WAS BORN! A HOT GIANT BALL OF FIRE THAT SUBSEQUENTLY GAVE RISE TO TODAY'S CALM AND BEAUTIFUL PLANET; ME-THE EARTH, THE HOST OF TODAY'S TIME TRAVEL. WE ARE GOING TO WITNESS SOME OF THE MOST REMARKABLE MOMENTS OF MY LIFE TILL NOW. THE PROCESSES AND THE CHANGES I HAVE GONE THROUGH ALL THESE YEARS HAVE MADE MY JOURNEY WORTH IT. IT ALL SEEMS LIKE A MYSTERY; BUT WAIT, IS IT REALLY A MYSTERY OR WAS THERE A SEQUENCE OF EVENTS THAT ARE EXPLANATORY? LET'S FIND OUT THROUGH SOME PROMINENT PHENOMENA. SO, ARE YOU READY TO TRAVEL THROUGH THE PAST? FASTEN YOUR SEATBELTS, BECAUSE WE ARE READY TO GO!. [READ MORE](#)

### Hiawatha Crator: A possible glimpse into the earth's climate history

A 31Km wide impact crater in Greenland, known as the Hiawatha impact crater buried under ice was dated by researchers and has been stated that the meteorite impacted a few million years after the extinction of the dinosaurs and sheds new light on Earth's evolution in the post-dinosaur era. [READ MORE](#)



The 'Bermuda Triangle' also known as the 'Devil's triangle' is one of the most controversial and mysterious places on the earth and it has always been controversial and debated due to strange incidents and happenings around it throughout history. [READ MORE](#)



The East African Rift system is a geological wonder of the earth. At which the two plates are constantly in motion and trying to split apart. Along the rift, a new continent is breaking away from the larger African landmass, this will give rise to the new ocean in the world. A Rift is a fracture on the earth's surface that widens over time as an elongate basin bounded by opposed steeply dipping normal faults. The best example of Rift is an East African system that we are experiencing for the past 30 Ma years. [READ MORE](#)





# ALUMNI SPEAKS

My name is Shravan Prabhu. I have persuaded my Master's degree in Geospatial Technology from the Symbiosis Institute of Geoinformatics, Pune, and a Bachelor's in Geology from Parvatibai Chowgule College of Arts and Science.

Currently, I am working with the Climate Risks and Adaptation team at CEEW. The Council on Energy, Environment, and Water (CEEW) is one of Asia's leading not-for-profit policy research institutions. CEEW is ranked as South Asia's top think tank (15th globally). At the council, my work primarily revolves around integrated data analysis by leveraging GIS and remote sensing techniques that help design robust climate risk assessment and mitigation tools, which in turn would develop partnerships with public and private institutions, and engages with the wider public. [READ MORE](#)

I had the pleasure of graduating from Chowgules in 2012 from the Department of Geology, under the guidance of highly efficient management and teachers. I went on to complete my Masters in Geology, from Goa University in 2014. I then got an opportunity to teach at Chowgules on a Lecture basis, after which I joined Schlumberger Pvt Ltd and worked in the field of Oil and Gas for 6 years. Currently, I work as an Assistant Professor (Geology) at Dynaprassarak Mandals College and Research Center Assagao Goa.

Being in the field of Geology is always exciting, the subjects learned connects you to earth. It can provide someone with great career choices if one seeks a keen interest in the subject. [READ MORE](#)



## TY Project

### Petrological studies of the Chandranath Granite South Goa

The Chandranath granite is a large 276 Sq.km wide crystalline body that covers the area from Betalbatim to Carmona in the coastal area and it extends till Loutolim and Sanguem. The Chandranath granite as per Gokul was placed stratigraphically placed at 2600 – 100 Ma younger than the Goa group of rocks. In the new classification of lithostratigraphy by A.G Dessai, it was identified as a basement for the Goa group of Rocks, the objective of this project is to study the variation in the mineralogical properties of the samples collected from the various outcrop of Chandranath granite and also study the associated structural features, the structural reading can be taken on the field and the samples which were collected will be studied in hand specimen and thin section. The project is ongoing under the guidance of Ms. Swati Ghadi. By doing this project we got lots of experience in fieldwork, mapping techniques, and taking readings with different equipment like Brunton compass and clinometer. [READ MORE](#)

BY:-Meldrin Afonso TYBSc



Transparent Gypsum crystals  
From Guizhou, China



Amazing Terminated Damage Free Natural Aquamarine  
Crystals Bunch On Mica From Nagar Pakistan

YEP ( youth exchange programs) all over India 100 best cadets are selected from 17 directorates and they are sent to 11 different countries. This camp provides these cadets to exchange their culture and their knowledge. My first interview was done by 1 Goa Batallion Unit and only 3 cadets were selected from Goa then there was a written test at ground level in Belagavi after the written test there was a 6 bench interview with DG NCC in online mode. Through this program, the cadet gets the opportunity to represent his/ her directorate and country at the international level which is a dream of every NCC cadet.



-Padam Singh Rajput





## CONTROL CRICKET TOURNAMENT



Department of Geology in collaboration with Nebula club had organized an interclass controlled cricket tournament on 20 November 2021 between 2 00 pm to 5.00 pm, near the futsal court. The participating teams were Third Year (TY), Second Year (SY), and First Year(FY) students of the department.

[Read more](#)



## INTERCLASS FUTSAL TOURNAMENT



Club Nebula, Department of Geology organized an interclass futsal tournament for the students of the Department of Geology on 2/12/2021, on the Tiger's Ghol. The event started with an introductory ceremony with our HOD Dr. Meghana Devli kicking the ball into the goal declaring the event open, followed by a motivational speech from Sir Nadkarni. [READ](#)

[MORE](#)



## MINERALS DAY



Club nebulites, Department of Geology organized "Minerals day 2021" on 13/11/2021. The objective of the event was to spread awareness and appreciation of minerals in day-to-day life. The faculty of the department organized three competitions based on the theme, the events were 1. Minerals Poster Competition, 2. Introduce a mineral (presentation), 3. Minerals Quiz.

[READ MORE](#)



## FOSSIL DAY



As a part of Azadi ka Amrut Mahotsav Club Nebula, Department of Geology organized Fossil day on 27/11/2021 in the Department of Geology. The events for Fossil Day were 1. Poster Presentation 2. Fossil Clay Model making, 3. Dumb Charades. The topic for poster making was Fossil Geoheritage in India. Each team presented their understanding of the topic. Keshav presented first from team Meteorites, Followed by Relicts, Glorious, then sparkles, Relicts secured first place in the event followed by sparkles in second place.

[READ MORE](#)





# Student's Achievement

## Field trip to Sanquelim Reclaimed iron ore mine

A Half-day field trip to sanquelim reclaimed iron ore mine for the students of the Department of Geology, was organised, to give the students exposure to the mining industry. Sanquelim Mine is the only mine in Goa that has been Reclaimed successfully which is a legal requirement as per the laws like ( MCDR 1966 ) governing the mining operations. The students got to witness how a mining site & its biodiversity can be restored back after the closure of mine. [READ MORE](#)



## Department of Geology wins at Geosphere 2022

Dnyanprassarak Mandal's College and Research Center, Assagaon Mapusa, Goa in association with Geological Society of Goa had organized a one day event, "GEOSPHERE- Where geologists meet' on 20th April 2022. resources. The purpose of this student's conference was to introduce the students to numerous opportunities in the field of geology and give them an exposure to the career potentials in oil exploration, mining industry, hydrology, seismology, volcanology, remote sensing, Marine Geology and research in the subject. [READ MORE](#)



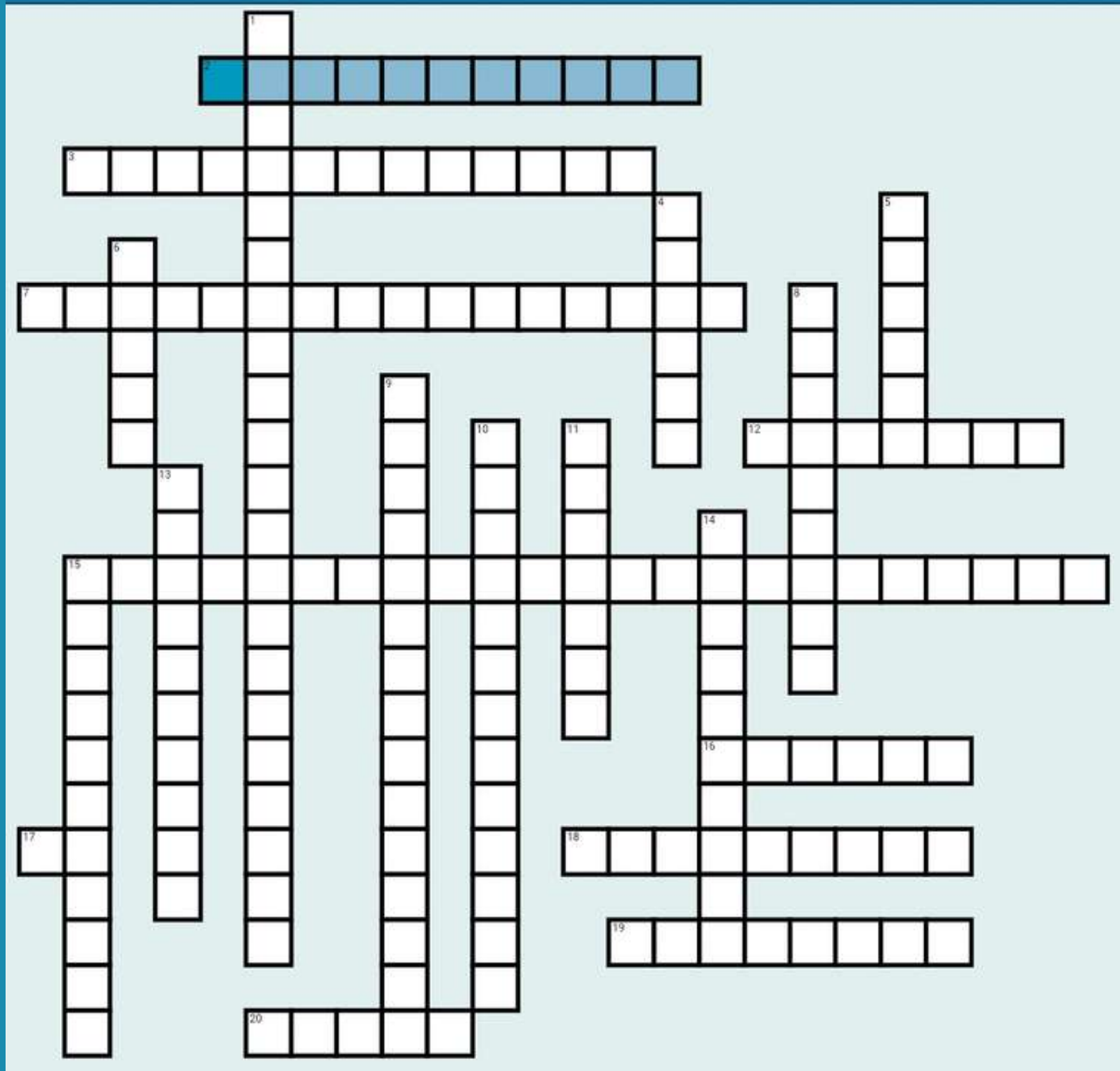
## HYPE STORIES 2021 (FUN WEEK)

Department of Geology wins 1st Runner-Up Parvatibai Chowgules College of Arts and Science organized Hype Stories 2021, for the students to showcase their talents from 21/12/21, 22/12/21 and 23/12/21. The programme was meticulously executed by Tiger Club Management Board with collaboration with other Department of Club, with a variety of competitions, games, events etc. across three days. [READ MORE](#)

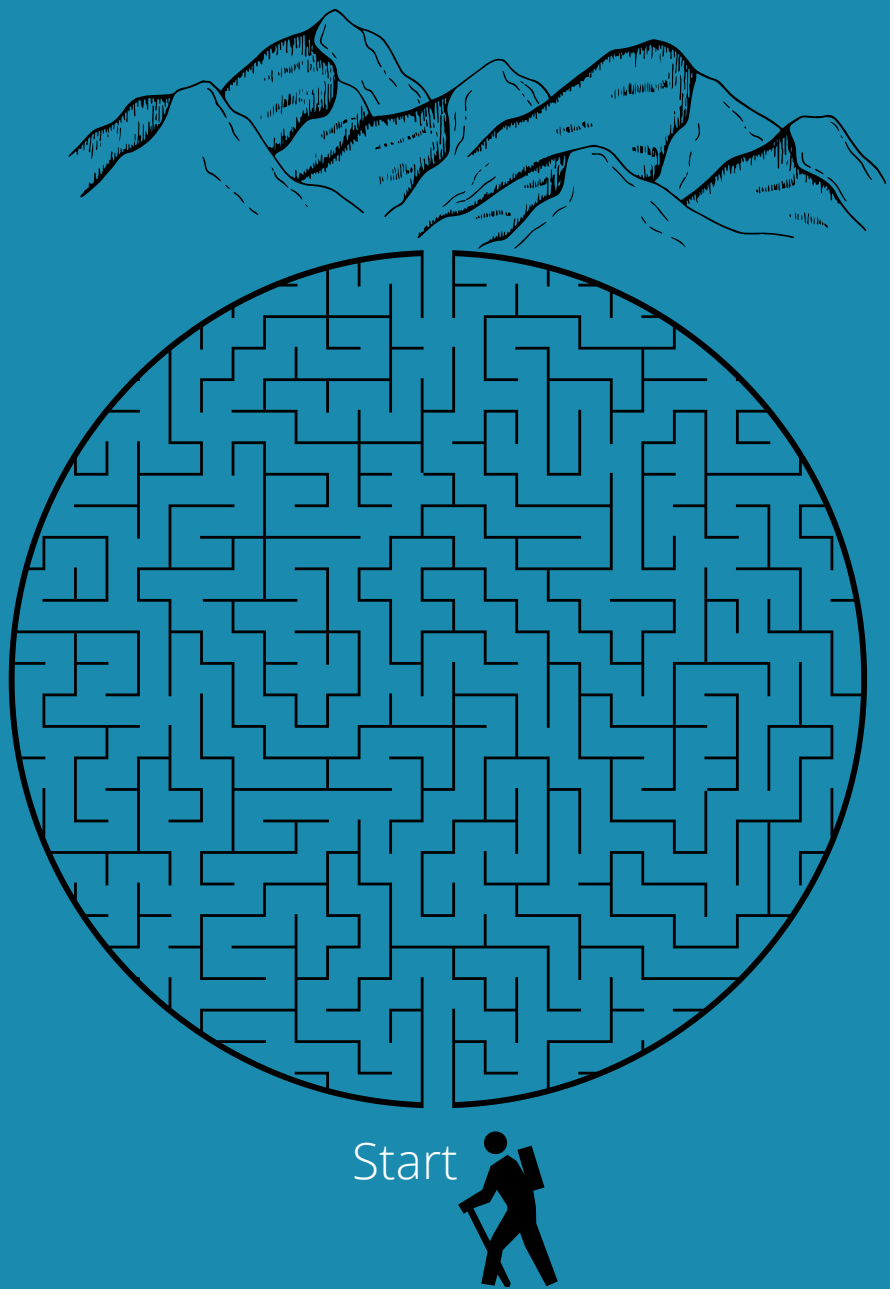




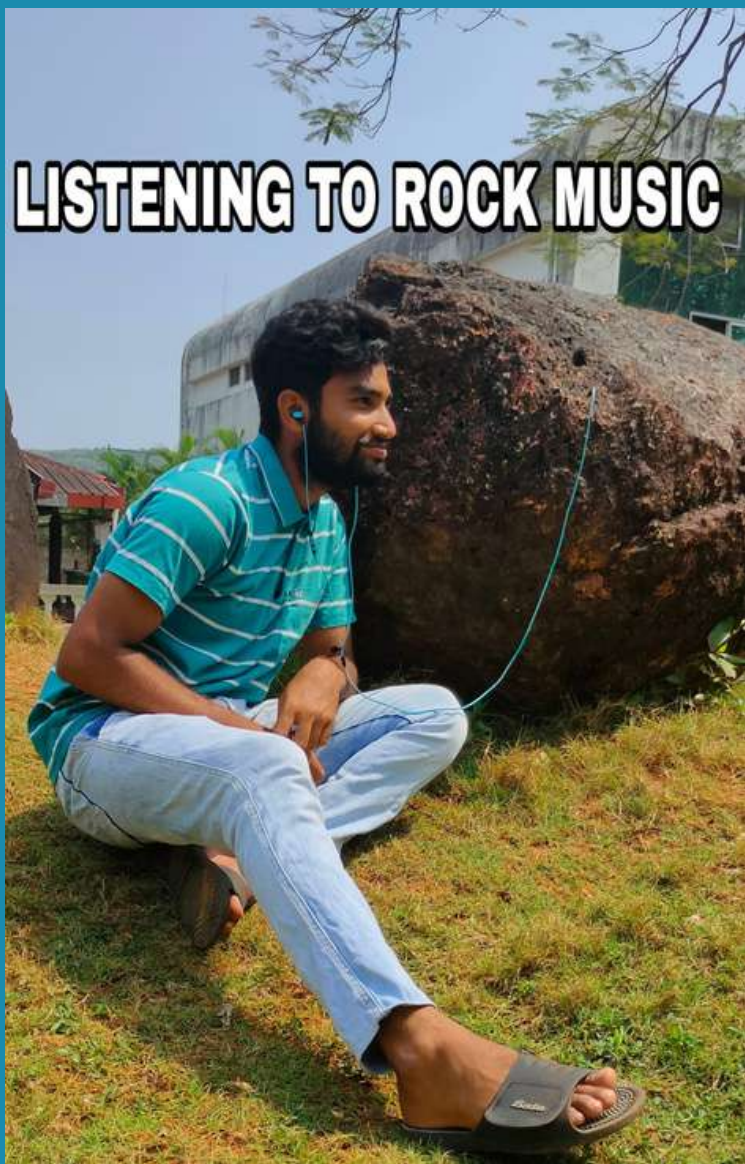
# GAME SPACE



- 1 Down: Boundary between tectonic plates in which two plates move away from each other  
4 Down: The layer of hot solid material between the earth's crust and core  
5 Down: A section of lithosphere that slowly moves over the asthenosphere  
6 Down: The molten mixture of rock forming Substance  
8 Down: A layer of molten iron and nickel surrounding inner core of earth  
9 Down: Theory of earth's lithosphere being in constant motion  
10 Down: A crack in the lithosphere where two of Earth's plates meet  
11 Down: Study of the earth  
13 Down: Where warmer parts rise and cooler parts Sink  
14 Down: Strong lower part of the mantle Breaks  
15 Down: Stress that squeezes rock until it folds or
- 2 Across: The rigid of outer layer of the earth that includes the crust and upper mantle  
3 Across: Upper part of the mantles where plates Move  
7 Across: A formation of new ocean floor through volcanic activity  
12 Across: Stress that stresses rock so that it becomes thinner in the middle  
15 Across: Boundary between two colliding plates  
16 Across: Large ancient land mass that composed of all continents joined together  
17 Across: Theory that pieces of earths lithosphere are in constant motion  
18 Across: A dense sphere of solid iron and nickel  
19 Across: Stress that pushes a mass or rock in the opposite direction  
20 Across: The layer of rock that forms the earth's outer surface



## MEME



Amazing aquamarine crystals from Erongo Mountains, Namibi



Rough Indonesian fossil coral,



amethyst geodes from Uruguay



Pink Tourmaline with albite. Mualevi Pegmatite , pachigram Pegmatite field , Nuristan , Afghanistan

## NEW ADDITIONS TO THE GEOLOGY MUSEUM COLLECTION

The rock formation of Agate is very common. It consists of Chalcedony and Quartz as primary components; it comes in a variety of colors. Agate is commonly formed within volcanic and metamorphic rocks. [READ MORE](#)



Halite is commonly known as rock salt; halite is the mineral form of sodium chloride (NaCl). The name halite itself comes from the Greek word for 'salt'. Halite forms isometric crystals. [READ MORE](#)



## ONLINE GEOLOGY

- <https://www.virtualmicroscope.org/about/virtual-microscope>
- <https://www.qgis.org/en/site/forusers/download.html>
- <https://geology.com/>
- <https://www.britannica.com/>
- <https://earth.google.com/web/>
- <https://app.visiblegeology.com/>

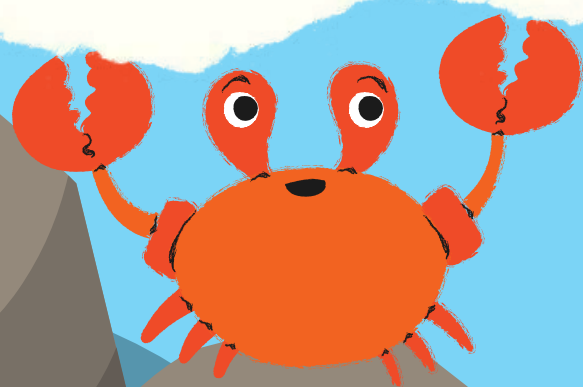




# NEWSLETTER TEAM



**DESIGN CONCEPT BY :  
MELDRIN TITAN AFONSO**



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