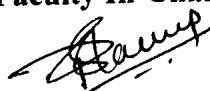
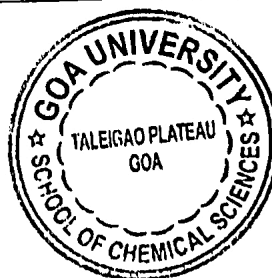


School of Chemical Sciences Goa University

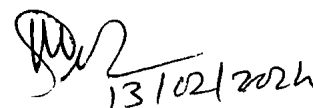
REPORT on a talk on 'Why Gold Is Rare?' by Prof. Vithal Tilvi, GSHEC, DHE, Goa.

Activity	A talk on 'Why Gold Is Rare?' by Prof. Vithal Tilvi, GSHEC, DHE, Goa
Date and time	13/02/2024 at 11.30 am
Faculty attended	12
Students attended	134
Participants	146
The objective/description of the activity	<p>Objective: To introduce the students the astronomical concepts of beginning of Universe and how it led to the various elements on earth and their composition.</p> <p>The talk was organised as a part of the Vidnyan Dhara 2024 lecture series by School of Chemical Sciences in association with the Goa State Higher Education Council and Directorate of Higher Education, Goa.</p> <p>Dr. Prachi Torney welcomed the audience and introduced the speaker. Prof. Tilvi explained to the students the process of origin and evolution of the universe which began 13.8 billion years ago from the big bang process. He also elaborated on the process of how stars are born and the production of various elements like H₂, He, O₂, C and Si and the time taken for their formation. He mentioned that apart from these elements, all the other elements were formed within 2 second and are less in abundance. He also presented his discoveries of some of the farthest galaxies and demonstrated the working of his portable telescope.</p> <p>The talk was followed by interactive session with active participation from students and faculty members. The seminar concluded with Q&A session where students clarified their doubts and with a vote of thanks from Dr. Prachi Torney. The Dean of SCS presented a memento to the speaker as a token of appreciation.</p>
Benefit/Key outcome of the event	The students were enlightened on the process of origin and evolution of universe and its impact on the present composition of various elements. Students were mesmerized after knowing about the different processes that occur in the space.

Faculty In-Charge

Dean, SCS





Goa University
School of Chemical Sciences
in association with
Goa State Higher Education Council
and
Directorate of Higher Education, Goa



Organises

Vidnyan Dhara 2024

Talk on the topic

Why Gold is Rare?



Date: 13th February, 2024

Time: 11.30 am

Venue: Auditorium, SCS, GU.

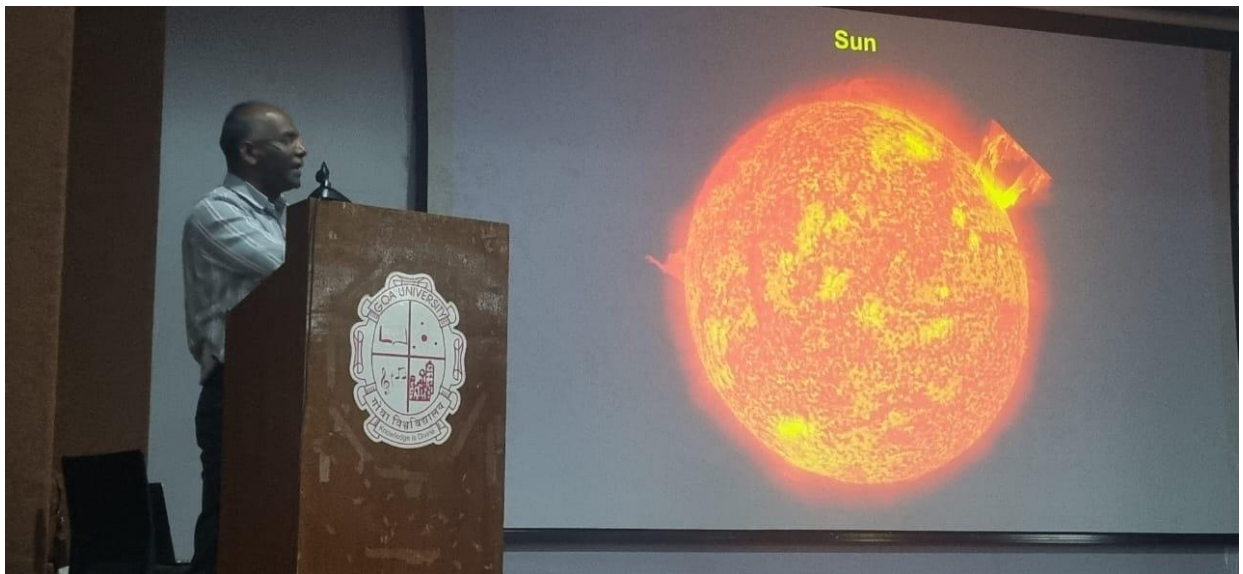
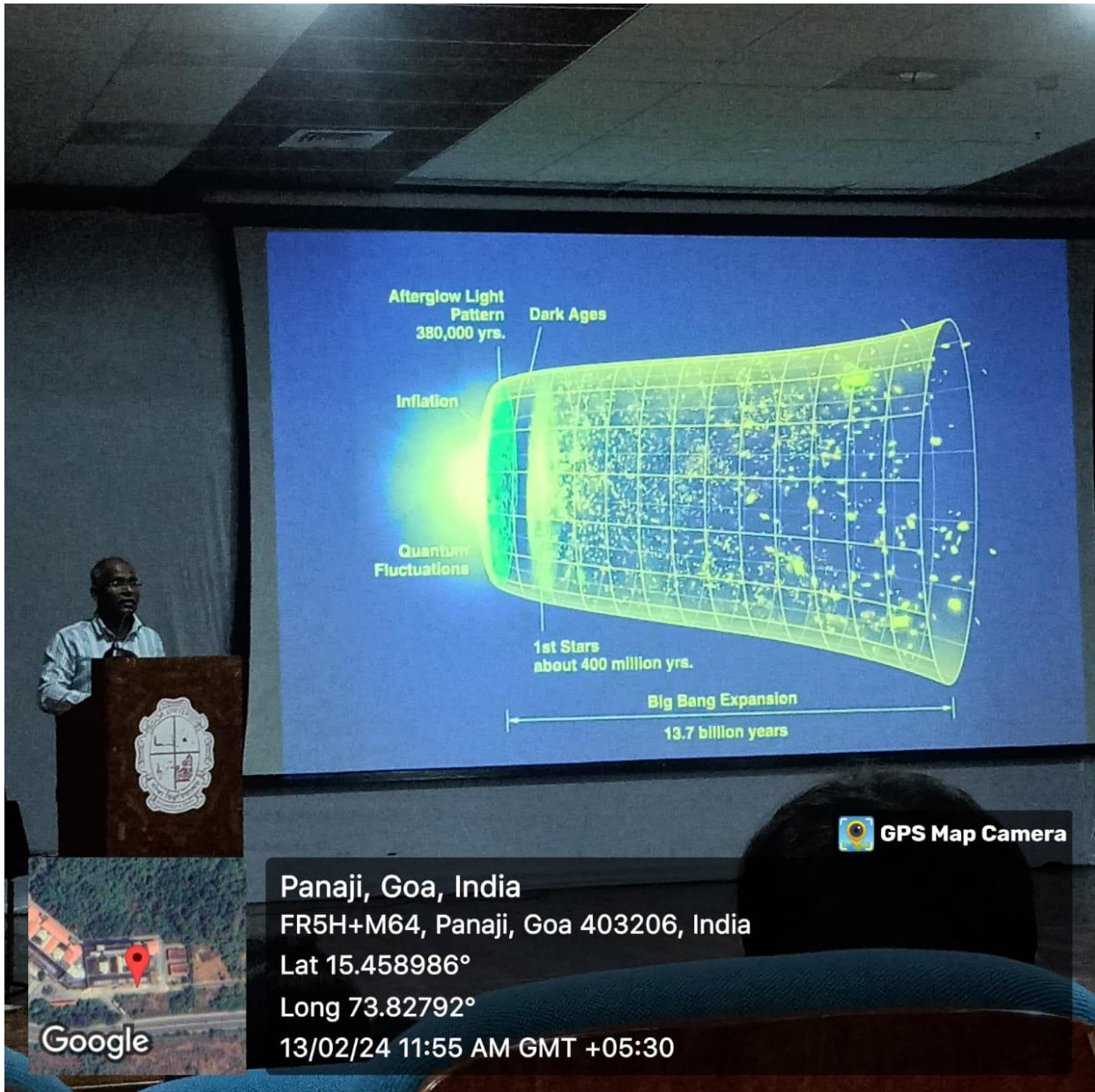
Speaker: **Prof. Vithal Tilvi,**

Professor, Centre for Research, Development & Innovation, Goa State Higher Education Council, Directorate of Higher Education, Goa

All are Cordially Invited!!

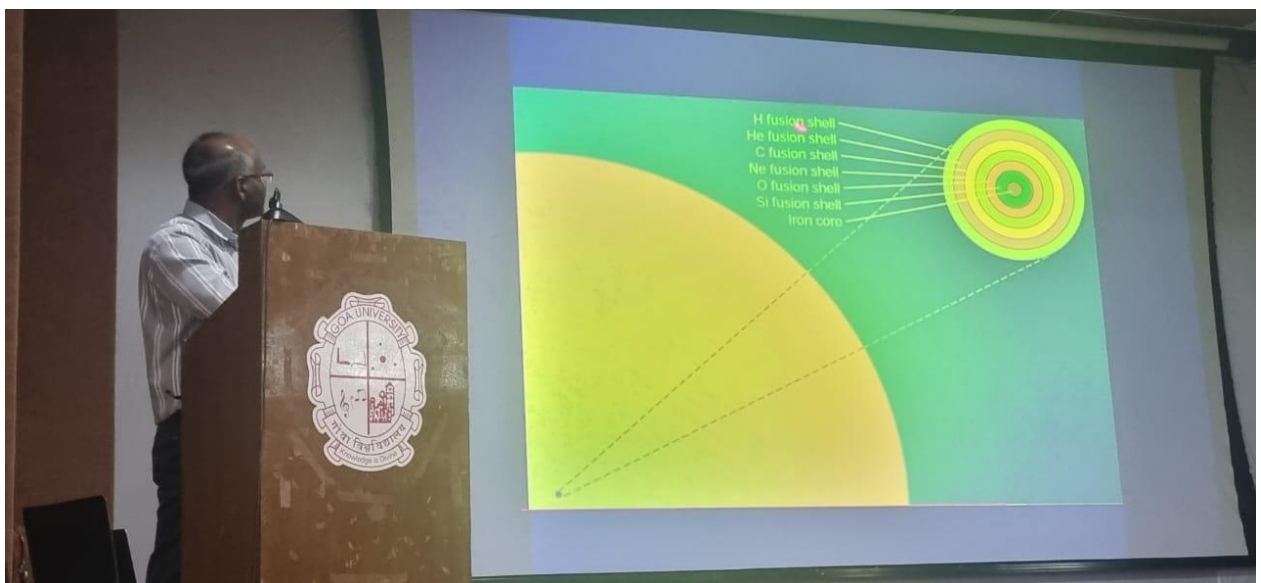
Dr. Prachi Torney, SCS Coordinator

Prof. V. M. S. Verenkar, Dean, SCS





Panaji, Goa, India
FR5H+M64, Panaji, Goa 403206, India
Lat 15.458986°
Long 73.827919°
13/02/24 11:43 AM GMT +05:30



Chemical abundance

Hydrogen
Oxygen
Carbon

Hydrogen 64.99%
Oxygen 25.99%
Carbon 10.99%

Korzhobsky

GPS Map Camera

Panaji, Goa, India
FR5H+M64, Panaji, Goa 403206, India
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Google

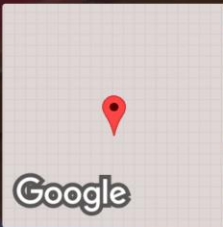
Evolution of High Mass Stars

Additional heavy element synthesis:


$${}_{14}^{28}\text{Si} + {}_2^4\text{He} \rightarrow {}_{16}^{32}\text{S} + {}_2^4\text{He} \rightarrow {}_{18}^{36}\text{Ar} + {}_2^4\text{He} \rightarrow$$

$${}_{20}^{40}\text{Ca} + {}_2^4\text{He} \rightarrow {}_{22}^{44}\text{Ti} + {}_2^4\text{He} \rightarrow {}_{24}^{48}\text{Cr} + {}_2^4\text{He} \rightarrow$$

$${}_{26}^{52}\text{Fe} + {}_2^4\text{He} \rightarrow {}_{28}^{56}\text{Ni} \rightarrow {}_{26}^{56}\text{Fe}$$




Dona Paula, Goa, India
Goa University Science Block, MDR3, Dona Paula, Panaji, Goa 403206, India
Lat 15.458917°
Long 73.827232°
13/02/24 12:20 PM GMT +05:30


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 **GPS Map Camera**




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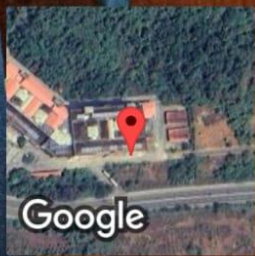
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Long 73.82792°
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Lat 15.458986°
Long 73.827919°
13/02/24 12:30 PM GMT +05:30

Date: 13.2.24

Seminar
(Vidhyan Dhara 2024)

11:30am

Name of the Speaker: Prof. Yithal Tilvi

Title of the talk.: Why gold is scarce.

Attendance

Sr. NO.	Name	Sign
1.	Kanchanmala Deshpande	KCD
2.	Amila Kharengai	Au
3.	Deepika Karmakar	Deepika
4.	Sauresha Shetgaonkar	Sauresha
5.	Samantha Da Costa	Sauresha
6.	Rutuja Gawas	Rutuja
7.	Dweta Matondkar	Matondkar
8.	Trisha Matondkar	Matondkar
9.	Gayatri Gawade	Gayatri
10.	Shruti Velpule	Shruti
11.	Arva M Wankar	Arva
12.	Ria Colaco	Ria
13.	Deepthi Velip	Deepthi
14.	Shoungi Bhatkar	Shoungi
15.	Ravina S. Vaz	Ravina
16.	Pratiksha P. Thakur	Pratiksha
17.	Sanita B. Talikotti	Sanita
18.	Rafiq R.A Khan	Rafiq
20.	Shruti R. Chari	Shruti
21.	TERENCE GODINHO	Terence
22.	Abhishek Rasaikan	Abhishek
23.	Sarvanand Velip	Sarvanand
24.	Saurav Sattarke	Saurav
25.	Disha Gaus	Disha
26.	Shefali Ainkar	Shefali
27.	Chaitali Nark	Chaitali

22	28	Neha Savant	<u>Nha</u>
23	29	Deepti Mohite	<u>Amohite</u>
24	30	Elvisha Colaco	<u>Colaco</u>
25	31	Ankita Shivveikar	<u>Shiv</u>
26	32	Lakisha Gaunekar	<u>Gaunekar</u>
27	33	Aksha S. Chari	<u>Achari</u>
28	34	Shubheeksha Naik	<u>Shik</u>
29	35	Shannon C. Mascarenhas	<u>Shmas</u>
30	36	Sueta Amare	<u>Sueta</u>
31	37	Nidhi m. Naik	<u>Nidhi</u>
32	38	Sonali Gaonkar.	<u>Sonali</u>
33	39	SHUBHAM GAWDE	<u>Sham</u>
34	40	PAVAN KUMAR PATIL	<u>Patil</u>
35	41	Apetsha H. Naik	<u>Ashat</u>
36	42	Vignesh R Naidu	<u>Vaidu</u>
37	43	Siddhi K. Salgaonkar	<u>Salgaonkar</u>
38	44	Dr Savitri A. Kundlikar	<u>SAT</u>
39	45	Dr. Delicia A. Barretto	<u>Barretto</u>
40	46	Priyanka S. Modak	<u>Modak</u>
41	47	Upma Gaonkar	<u>Upma</u>
42	48	Shivani S. Desai	<u>Desai</u>
43	49	Asmita B. Phadte	<u>Phadte</u>
44	50	Priachi P. Vaichya	<u>Vaichya</u>
45	51	Vaishnavi V. Grawas	<u>Grawas</u>
46	52	Chandrakant S. Raut	<u>Raut</u>
47	53	Ganesh D. Gaonkar	<u>Gaonkar</u>
48	54	Deepti N. Naik	<u>Deepti</u>
49	55	Aishwarya A. Vaigankar	<u>Vaigankar</u>
50	56	Tanvi Mhavalankar	<u>Tanvi</u>
51	57	Anushka Fulari	<u>Anushka</u>
52	58	Arya Mulni	<u>Mulni</u>
53	59	Aditya Sant Morgkar	<u>Sant</u>
54	60	Mayank N Prabhuji	<u>Prabhuji</u>
55	61	Priya Singh	<u>Singh</u>
56	62	Manisha A. Kamble	<u>Kamble</u>

Sarawati

Contd.

13th February 2024 ; 11:30 am ;

Lecture by
Name of the speaker - Prof Nithal Tilvi

Title of the talk : why gold is rare

No.	Name	Signature
63	Mark Rodrigues	
64	Gulrez Sheikh	
65	Sonal Jainwal	
66	Nitesh Vengli	
67	Rudhaksb Naik	
68	Vaibhav Asolkar	
69	Shreyash A. Sawant	
70	Manish H. Naik	
71	Gaurang V. Acharekar	
72	Jeshu Elie Miranda	
73	Pratham V. Kumbhar	
74	Kanti Mayanekar	
75	Manusha Gankar	
76	Vneel Mandhalekar	
77	Rupesh Patre	
78	Shereen H. Khandeparkar	
79	Vaishnavi Gaude Agadyekar	
80	Siddhika U Gankar	
81	Samuel Fernandes	
82	PRATIK RAIKAR	
83	Amisha Colaco	
84	Daksha Andrade	
85	Heidi Aranyo	
86	Vaishnavi A.S. Jambulkar	
87	Tanisha M.S. Navjekar	
88	Eshita R. Kakodkar	
89	Donali S. Gavada	

91.	Andrea C. Da Costa	Scarb
92	Leo P. Saung	Id
93	Prachi Torng	Prany
94	S.N. Dhruvi	Y
95	P.P. Moorjekar	Cup
96	R. S. Gad	Trud
97	V.M.S. Vernekar	Pr
98	Greeta Oliveira	Oh
99	Shenai T. de Long Fdes	sk
100	Nikita Kumari	Prany
101	Kanta Kumari V. Baid	Prany
102	Huddhi Bondre	Bardur
103	Nishanka Naik	Prak
104.	Shreya Gaonkar	Prany
105.	Sonal Naik	Prak
106.	Ifrati Shaik	Prak
107.	Basha Khan	Prak
108	Sneha Desai	Prak
109	Sakshi Ravi	Prak
110	Ankita Tivrekar	Prak
111	Akshata Gaonkar	Prak
112	Narmata Naik	Prak
113	Amisha Anurkar	Prak
114	Vruti Mayekar	Prak
115	Parag Naik	Prak
116	Harshad Gaude	Prak
117	Vishant Gaonkar	Prak
118	Vineesha Saudatiko	Prak
119	Sejal Parrikar	Prak
120	Sheffali Jena	Prak
121	Anusha Barbosa	Prak
122	Sanjita Halder	Prak
123	Siya Gaonkar	Prak

124	Sannudhi Parkar	Parkar
	Faizah Khan	Khan
125	Rupali Mestry	Mestry
126	Sujay Gawde	Gawde
127	Gajesh Gaonkar	Gaonkar
128	Tejaswee Gaonkar	Gaonkar
129	Sainesh Naik	Naik
130	Pralay Deikar	Deikar
131	Saishil Borkar	Borkar
132	Roshni Mohawani	Mohawani
133	Samiksha Naik	Naik
134	Samiksha Naik	Naik
135	Prayaz	Prayaz
136	Sainesh	Naik
137	Armita Naik Gaonkar	Naik
138	Shanaja Dalosta	Dalosta
139	Tanavi Tari	Tari
140	Omkar Chodankar	Chodankar
141	Pratay D	D
142	Fredal Filer	Filer
143	Anurag Sawant	Sawant
144	Rishabh S Kemp	Kemp
145	Harishkumar D. Naik	Naik
146		