

Report on MOF-based Host-Guest materials for Sustainable Energy by Prof. Samar K. Das, organized by seminar Committee of School of Chemical Sciences, Goa University

Activity Report

Title of the Event : MOF-based Host-Guest materials for Sustainable Energy

Date and Time : 10-04-2026 and 03:00 PM

Mode of conduct : Offline

School / Directorate / Section : School of Chemical Sciences, Goa University

Collaborating Agency : –

Detail of the Resource Person : Prof. Samar K. Das
School of Chemistry, University of Hyderabad,
Hyderabad-500046
E-mail: skdas@uohyd.ac.in

Number of Faculty attended : 11

Number of Student attended : 23

No. of external participants : 0

The objective : To motivate Faculty, M.Sc. and Ph.D. students

Description of the activity : Refer Page 2

Benefit / Key outcome of the event : Refer Page 2

Enclosure : Brochure (Page 3), photographs (page 3 & 4) and Attendance (Page 5 & 6)


22/04/2026
Dr. Kedar U. Narvekar
Convenor


22/04/2026
Prof. Vidhyadatta M. Shet Verenkar
Dean, SCS



Description of the activity

The Seminar Committee of School of Chemical Sciences - Goa University organized a seminar on 10th April 2026 at 03:00 PM in Chemistry Lecture Hall - 1, School of Chemical Sciences Goa University on the topic " MOF-based Host-Guest materials for Sustainable Energy ". Dr. Kedar U. Narvekar, Convener of the event welcome the speaker and others present. He introduced the speaker, Prof. Samar K. Das, Professor, School of Chemistry, University of Hyderabad, Hyderabad-500046, briefing about his career and achievements. Prof. Samar K. Das delivered the talk. The Speaker being visiting the School of Chemical Sciences (erstwhile Department of Chemistry) - Goa University on several occasions shared his experience. He further added some glimpses of the work carried out at the place where he is presently working. He talked on MOF-based Host-Guest materials for Sustainable Energy where he explained about the MOF compounds synthesized by his group using known MOF which were encapsulated with simple coordination compounds, polyoxometalate (POM), etc., respectively. He added that the host which were non-catalytic, unstable initially were showing catalytic properties and were found to be stable when encapsulated. These MOF-based Host-Guest materials showed application in electrochemical water oxidation (electrocatalyst). One of the stabilized host encapsulated inside the well-defined confined space of the MOF acted as an active site for oxygen evolution reaction (OER) in a wide pH range. He further talked on post synthetic modification of the known MOFs and their proton conductivity studies. Finally, MOF-GO (graphene oxide) composites exhibiting enhanced proton conductivity were discussed. Students and faculties interacted with the speaker and asked their question. The speaker gave satisfactory explanation. Overall, it was a prolific interactive session. The seminar ended with vote of thanks to the speaker by the convener.

Benefit / Key outcome of the event

Students got to know about future opportunities with respect to research. Students realized about the importance and requirement of knowledge acquired at masters level for choice of a good research topic for a better future. Other than academia, they realized that there is a good scope in field of research in MOF with the topic being in trend due to the recent Nobel Prize in Chemistry awarded for work on MOF and, the variety of application it had. Students and faculties had a good interaction during the talk. Students could have a glimpse in depth of the recent advancement in research making them realize the need of the hour. As per New Education Policy 2020, students have a research component of one full semester duration. This talk will encourage students to participate in research projects, bringing in them a motivation to take up a research topic to give a fruitful research output. Overall the achievements of the speaker was itself a great motivation for the students to shape their future.

Enclosure



Goa University School of Chemical Sciences

Organises a talk on the topic

'MOF-based Host-Guest materials for Sustainable Energy'

Date: 10th April, 2026
Time: 3.00 pm
Venue: Lecture Hall-1, SCS, GU.

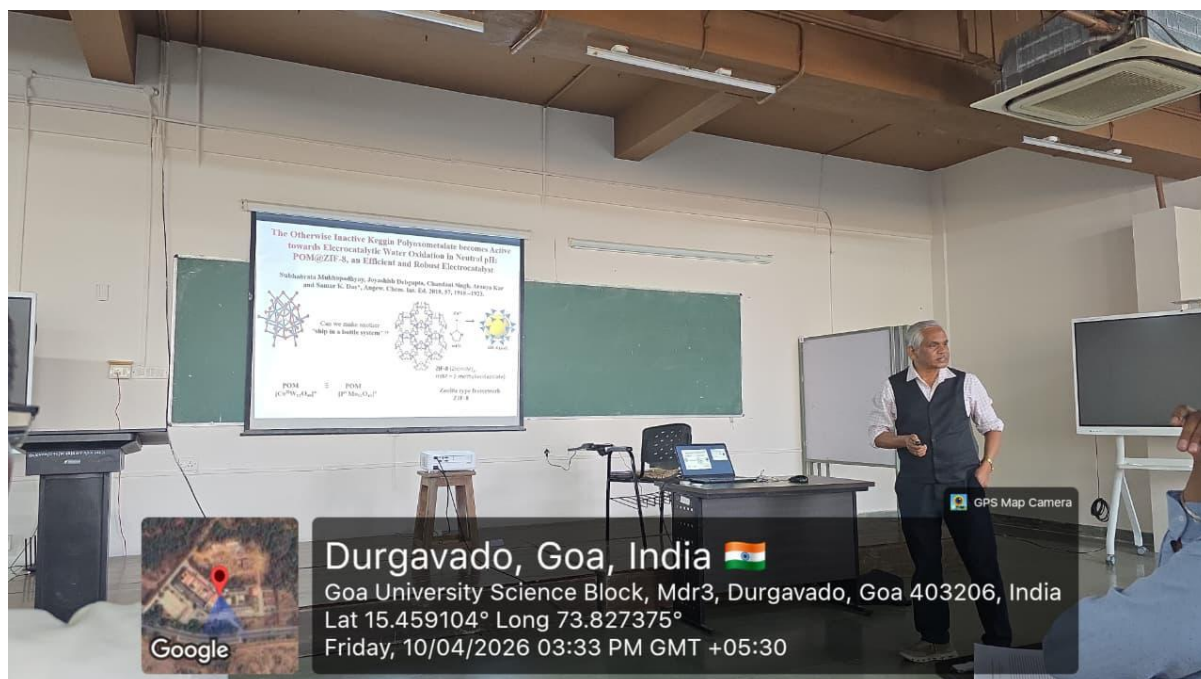


Speaker:
**Prof. Samar K. Das, FNA, FASc.,
FNASc.**
J. C. Bose National Fellow
School of Chemistry, University of
Hyderabad
Hyderabad – 500046

All are Cordially Invited!!

Dr. Kedar Narvekar,
Convenor

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





Attendance

Invited Talk

Topic: MOF-based Host-Guest Materials for Sustainable Energy

Date: 10th April 2026 at 03:00 PM

Speaker: Prof. Suman K. Das

Venue: LH-1, SCS

Convenor: Dr. Kedar V. Narvekar

Attendance

SR. No.	Name	Institute	Sign
1.	Kedar V. Narvekar	SCS, GU	
2.	Ankita Desai	SCS, GU	
3.	Sanku A. Kumbalkar	SCS, GU	
4.	Rupesh Padhe	SCS,	
5.	Digamber A. Porecha	SCS	
6.	HARI K. KADAM	SCS	
7.	Pranesh S. Yawalkar	SCS	
8.	Deepika Karmalkar	SCS	
9.	Amrita N. Vekurkar	SCS	
10.	Prachi Torang	SCS	
11.	Delicia A. Barretto	SCS	
12.	Reshma Mulla	SCS	
13.	Medha M. Gaude	SCS	
14.	Priyanka Pednekar	SCS	
15.	Manjusha M. Gaonkar	SCS	
16.	Deepthi Krishna Velip	SCS	
17.	Milagrima D Souza	SCS	
18.	Disha Gauris	SCS	
19.	V. SWAPNA	SCS	
20.	Vignesh R. Naidu	SCS	
21.	Raneet R. Gaware	SCS	
22.	Paathuram Gaonkar	SCS	
23.	Shirani. S. Pagui	SCS	
24.	Kartik Sawant	SCS	
25.	APRISHA H. NAIK	SCS	

26.	Smriti Kulkarni	SCS	Smriti
27.	Gahil S. Komarpant	SCS	Gahil S. Komarpant
28	Trima Fernandes	SCS	Trima
29	Aditya Dias	SCS	Aditya
30.	Shubham Dhanuwat	SCS	Shubham
31	Shraddha Ainkar	SCS	Shraddha
32	Shraddha R. Thonekar	SCS	Shraddha R. Thonekar
33	Manasi Ugvekar	SCS	Manasi Ugvekar
34	Leo Dsouza	SCS	Leo Dsouza