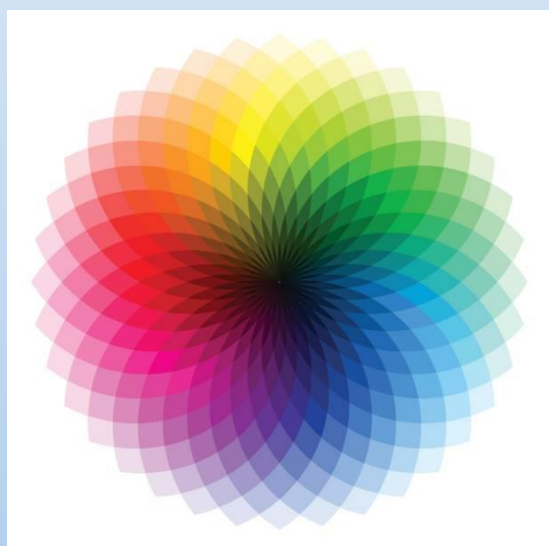




Craftopia Colorimeter

One-Day Hands-on
Training on Low-Cost
Colorimeter Design
Using a Craft Box and
Smartphone Application

Presented by Kamla Nehru
Mahavidyalaya, Nagpur,
and Shri Shivaji Science
College, Nagpur



Event Details:

Date: **13/03/2024**

Time: **9.30 AM**

Venue: **Chemistry Lab Kamala Nehru
Mahavidyalaya, Nagpur**



Kamla Nehru Mahavidyalaya, Nagpur

Report on Craftopia Colorimeter : One-Day Hands-on Training on Low-Cost Colorimeter Design

Date: March 13, 2024

Time: 9:30 AM

Venue: Kamla Nehru Mahavidyalaya, Nagpur

Introduction

On **March 13, 2024**, Kamla Nehru Mahavidyalaya, Nagpur, in collaboration with Shri Shivaji Science College, Nagpur, organized a one-day hands-on training session on "Low-Cost Colorimeter Design Using a Craft Box and Smartphone Application for Color Analysis and Concentration Measurements." This innovative training program was notable for featuring two college students as resource persons, marking the first time students have led such a session for both students and faculty members.

Resource Persons

Ms. Shabhat Khan from PG Chemistry, Shri Shivaji Science College

Ms. Shrushti Ninawe UG, Shri Shivaji Science College

Program Overview

The training commenced at 9:30 AM with an introduction to the objectives and significance of the session. The collaboration between the Chemistry Departments of Kamla Nehru Mahavidyalaya and Shri Shivaji Science College aimed to provide an accessible and affordable approach to colorimetry through the use of craft boxes and smartphone applications.

Key Learning Outcomes

Basics of Color Analysis and Concentration Measurements:

Participants were introduced to the fundamental principles of colorimetry and its applications in various scientific fields.

Building a Low-Cost Colorimeter:

The hands-on session guided participants through the process of constructing a functional colorimeter using simple materials such as a craft box and basic electronic components.

Utilizing Smartphone Applications:

Participants learned to use smartphone applications for accurate color analysis and concentration measurements, demonstrating the integration of technology with traditional scientific methods.

Participation and Engagement

The training saw active participation from both students and faculty members of Kamla Nehru Mahavidyalaya. The unique approach of having student resource persons led to an engaging and interactive learning environment. The session provided a platform for students to showcase their knowledge and teaching skills, inspiring their peers and faculty members alike.

UNESCO Goal Alignment

This activity aligned with UNESCO's Sustainable Development Goals (SDGs) by promoting quality education and fostering innovation. The hands-on training emphasized the importance of accessible and practical scientific education, contributing to the broader goal of enhancing scientific literacy and skills.

Feedback and Conclusion

The feedback from participants was overwhelmingly positive. Both students and faculty members appreciated the practical approach and the innovative use of everyday materials to conduct scientific experiments. The collaboration between the two colleges was highlighted as a successful model for future educational initiatives.

In conclusion, the one-day hands-on training on low-cost colorimeter design was a resounding success. It not only provided valuable scientific knowledge and skills but also set a precedent for student-led educational activities. The Chemistry Departments of Kamla Nehru Mahavidyalaya and Shri Shivaji Science College look forward to more such collaborative efforts in the future.



Figure 1- Ms. Shrushti Ninawe Delivering a Training Note to the Audiences



Figure 2- Ms. Shabhat Khan Delivering a Training Note to the Audiences





Figure 3- Students were Busy with Smart Phone applications and Craft Colorimeter

[For More Details Click](#)

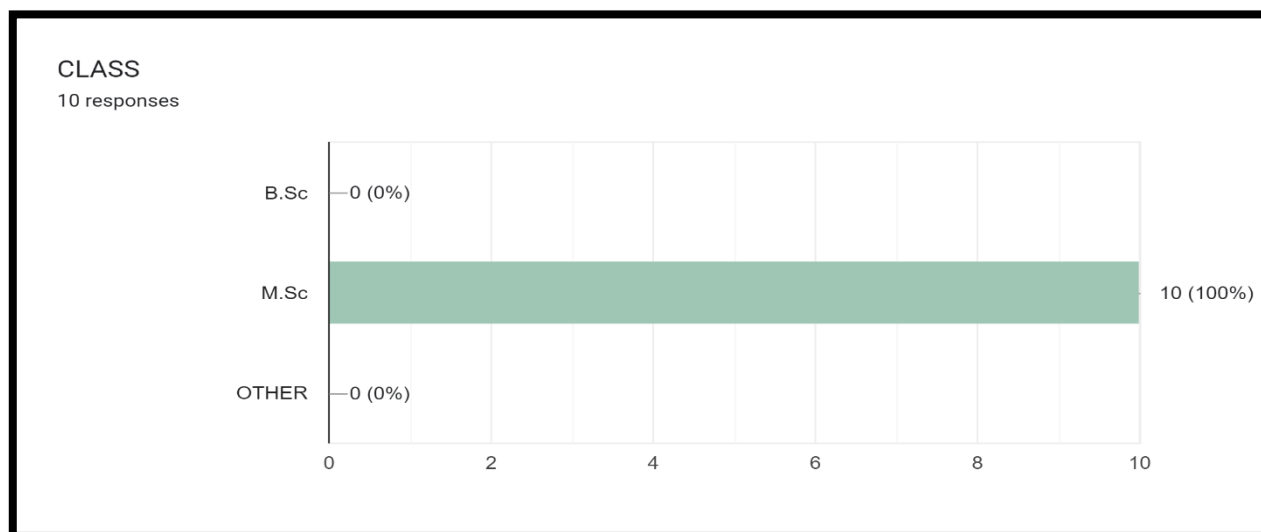


One-Day Hands-on Training on Low-Cost Colorimeter Design Using a Craft Box and Smartphone Application

On 13th March 2024 at 9:30 am

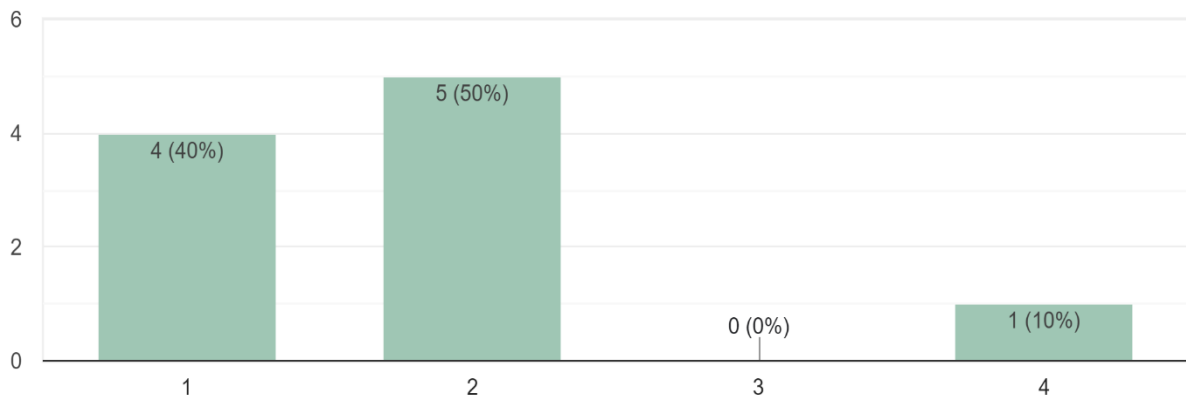
Venue: Department of Chemistry, Kamla Nehru Mahavidyalaya, Nagpur.

FEEDBACK ANALYSIS AND ACTION TAKEN REPORT



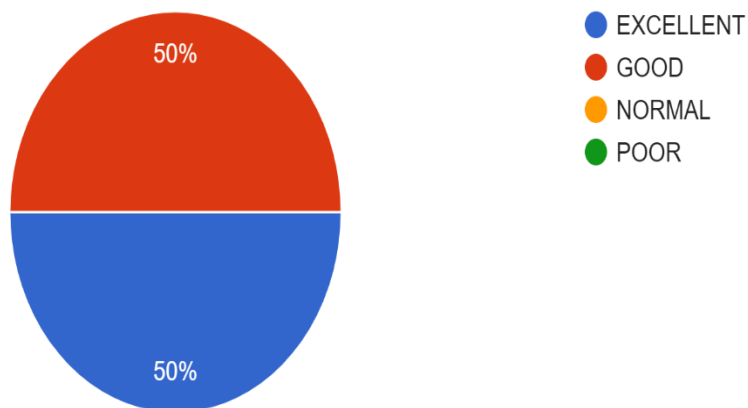
How satisfied were you with the Workshop?

10 responses



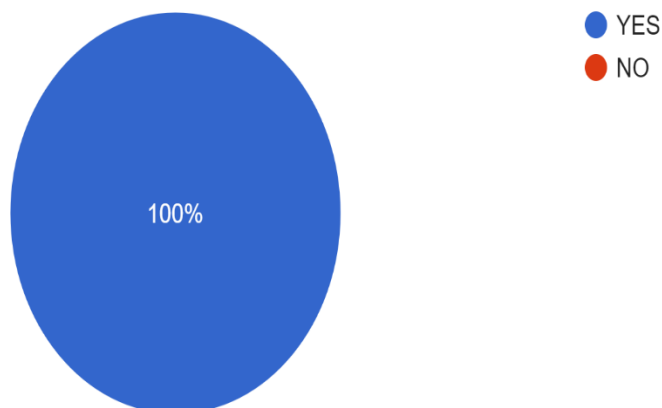
OVERALL CONTENT AND PRESENTATION RESOURCE PERSONS MS. SHABAT KHAN AND MS SHRUSHTI NINAWA.

10 responses



IS IT NECESSARY TO ORGANISE SUCH EVENT IN FUTURE FOR HOLISTIC DEVELOPMENT OF STUDENT?

10 responses



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A total 50 Students were participated for the workshop.

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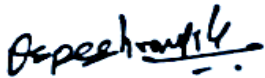
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Action Taken:


This activity was organized under the MOU signed between Shivaji Science College, Nagpur and Kamla Nehru Mahavidyalaya, Nagpur.

Based on written feedback collected from students is necessary to conduct such type of events for the overall development of Students, hence it is decided to conduct this activity every year for benefit of students.


Professor & Head
Department of Chemistry,
Shivaji Science College,
Nagpur


Principal
Shivaji Science College, Nagpur.


HOD, Chemistry,
Head of the Department
Kamla Nehru Mahavidyalaya, Nagpur.


Principal
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Congress Nagar, Nagpur.
OD, Chemistry,
Shivaji Science college, Nagpur


Principal
Shivaji Science College, Nagpur.


OD, Chemistry,
Head of the Department,
Kamla Nehru Mahavidyalaya, Nagpur.
Kamla Nehru Mahavidyalaya
Kardara Chowk, Nagpur


Principal
Kamla Nehru Mahavidyalaya, Nagpur.

**One-Day Hands-on Training on Low-Cost Colorimeter Design
Using a Craft Box and Smartphone Application
On 13th March 2024 at 9:30 am**

**Venue: Department of Chemistry, Kamla Nehru Mahavidyalaya, Nagpur.
STUDENT ATTENDANCE SHEET**

S.NO	NAME OF STUDENT	CLASS	SIGNATURE	REMARK
01	shubham D. shahane	Msc-II chemistry	<i>Shahane</i>	
02	Rushabh C. Lute	B.Sc III rd yr	<i>Rushabh Lute</i>	
03	Prashant S - Rahulkar	B.Sc III rd yr	<i>Prashant</i>	
04	Ayush .B. Hatwara	BSc III rd yr	<i>Hatwara</i>	
05	Bhavya N. Kamdar.	MSc I st year Chemistry	<i>Kamdar</i>	
06	Rutuja R. Raut	M.Sc I year chemistry	<i>Rutuja R. Raut</i>	
07	Shivani G. Bhute	M.Sc I year Chemistry	<i>Shivani</i>	
08	Apurva. K. Kumbhar	M.Sc I year chemistry	<i>Apurva</i>	
09	Mahi. U. Kaware	M.Sc I year Chemistry	<i>Mahi</i>	
10	Mansi . R. Thawkar.	M.Sc I year chemistry	<i>Mansi</i>	
11	Bhagyeshri D. Sharnayat	M.Sc I year chemistry	<i>Bhagyeshri</i>	
12	Payal Gurudeo Bhatnagar	M.Sc I year chemistry	<i>Bhatnagar</i>	
13	Mayuri Nandlal Bealesexik	M.Sc I year chemistry	<i>Bealesexik</i>	
14	Runi Umashankar sah	M.Sc sem II I year (chem)	<i>Runi</i>	
15	Vibha R. Mishra	M.Sc SEM-II	<i>Vibha</i>	
16	Madhuri. R. Bhaloi	M.Sc sem-II	<i>Bhaloi</i>	
17	Shubham S. Dhok	M.Sc sem II	<i>Dhok</i>	
18	Mansi P. Bhaire	M.Sc 4 sem IV	<i>Bhaire</i>	
19	Pranali .M. Khadse	M.Sc sem IV	<i>PKhadse</i>	
20	Prachi S. Atkare	M.B.C sem IV	<i>Prachi</i>	

[Signature]
ORGANIZING SECRETARY

[Signature]
HEAD OF DEPARTMENT

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S.NO	NAME OF STUDENT	CLASS	SIGNATURE	REMARK
21	Shreaddhan Sawarkar	M.Sc IV	<u>Shreaddhan</u>	
22	Eka R. Sahare	-	<u>Eka</u>	
23	Sejal S. Dhorkar	-	<u>Sejal</u>	
24	Mayuri S. Pandhare	-	<u>Mayuri</u>	
25	Shrushti R. Jangy	BSC 3 rd year	<u>Shrushti</u>	
26	Sakshi G. Shete	M.Sc. II yr	<u>Sakshi</u>	
27	Harshada S. Thakre	M.Sc. II yr	<u>Harshada</u>	
28	Akanksha H. Ninawe	M.Sc. II yr	<u>Akanksha</u>	
29	Prachi P. Rokade	M.Sc. I yr	<u>Prachi</u>	
30	Prachi B. R. Sahare	M.Sc. I yr	<u>Prachi</u>	
31	Sanjireni C. Jangale	M.Sc. I yr	<u>Sanjireni</u>	
32	Divyani Mahulkar	M.Sc. I yr	<u>Divyani</u>	
33	Saaksha Chikhale	M.Sc. I yr	<u>Saaksha</u>	
34	Kavita Badwalk	M.Sc. I yr	<u>Kavita</u>	
35	Rhutiya P. Dhame	BSC 3 rd yr	<u>Rhutiya</u>	
36	Purva S. Lokhande	BSC 3 rd yr	<u>Purva</u>	
37	Shruti D. Mahure	BSC 3 rd year	<u>Shruti</u>	
38	Dhanashri R. Khodke	BSC 3 rd yr	<u>D.R. Khodke</u>	
39	Saloni L. Mehra	BSC 3 rd yr	<u>Saloni</u>	
40	Mayuri N. Bhojkar	BSC 3 rd yr	<u>Mayuri</u>	


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S.NO	NAME OF STUDENT	CLASS	SIGNATURE	REMARK
41	priyanka S. Dhore.	B.Sc II sem	P. Dhore	
42	anishwari C. Karkare.	B.Sc VI sem	<u>Olay</u>	
43	krunika M. Kumbhare.	B.Sc II sem	Kumbhare	
44	shradha V. Patil.	B.Sc VI sem	Patil	
45	khushi G. Nerkar	B.Sc II sem	K. Nerkar	
46.		-		