

WORKSHOP REPORT

Date of Visit: 28th March 2025

Venue: Chemistry Department, Shaheed Rajguru College of Applied Sciences for Women, Delhi University

Attendee: Mr Umesh Verma

Organized by: Shaheed Rajguru College of Applied Sciences for Women, University of Delhi (Nodal Agency, SARTHI)

Under the Aegis of: Entrepreneurship Development Club in collaboration with the Department of Chemistry, CMRIE & IQAC

Objective of the Workshop:

The primary objective of this hands-on workshop was to introduce educators to the formulation and preparation of cosmetic products. Participants gained practical experience in the preparation of talcum powder, shampoo, and toothpaste, while learning about the chemical compositions, functions of ingredients, and scientific techniques involved in cosmetic production.

Overview of the Workshop:

The workshop, conducted under the ATL Sarthi initiative for East Delhi Cluster-4, took place on 28th March 2025 at the Chemistry Department of Shaheed Rajguru College of Applied Sciences for Women. The session was designed to provide educators with a comprehensive understanding of the cosmetic production process, focusing on practical skills and scientific knowledge to effectively teach these concepts in the classroom.

Session 1: Introduction to Cosmetic Production

The workshop began with a brief introduction, where Dr. Shuchi Dhingra Assistant Professors in the Department of Chemistry, set the tone by explaining the importance of cosmetic formulations in both educational and industrial contexts. The session also covered the role of various ingredients and their chemical properties.

Session 2: Preparation of Talcum Powder

Participants learned about the formulation of talcum powder, including the characteristics of a good product like absorbency, adhesiveness, and stability. They worked with ingredients such as talc, calcium carbonate, zinc oxide, kaolin, and starch to prepare a fine-textured talcum powder, which was the first hands-on activity of the workshop.

Session 3: Shampoo Formulation

The focus shifted to shampoo production, where the educators were introduced to the chemistry behind shampoos. They learned the role of surfactants like sodium lauryl sulphate and conditioning agents such as dimethicone. Educators were given the opportunity to prepare a mild shampoo, ensuring it had a balanced pH to promote hair health.

<u>Session 4: Toothpaste Development:</u> The fourth session revolved around toothpaste production, where participants explored the scientific aspects of toothpaste formulation. They learned about abrasives, humectants, and foaming agents. Using ingredients like precipitated chalk, glycerine, gum tragacanth, and peppermint oil, participants created a sample toothpaste.

Session 5: Scientific and Industrial Applications

In this session, Dr. Anjeeta provided valuable insights into how cosmetic formulations are developed, tested for quality, and undergo safety evaluations. The discussion focused on the significance of scientific research in ensuring the efficacy and safety of cosmetic products.

<u>Highlights of the Workshop:</u>

Hands-on experience in the preparation of talcum powder, shampoo, cold cream, vanishing cream and toothpaste

Detailed understanding of the chemical principles behind cosmetic products Insights into the quality control and safety testing of cosmetics Practical approach to integrating cosmetic formulation concepts into the curriculum

Reflection and Feedback:

The workshop was highly interactive, with participants enthusiastically engaging in the hands-on activities. The practical sessions provided an invaluable learning experience, enabling educators to apply scientific principles in a tangible way. Educators appreciated the integration of theoretical knowledge with practical skills, which they can now incorporate into their teaching.

Conclusion:

The hands-on workshop on cosmetic production was a successful and enriching experience for the educators. It allowed participants to explore the science behind everyday products and gain insights into the cosmetic industry's workings. The knowledge gained through the workshop will empower educators to teach cosmetic chemistry more effectively, enhancing students' learning experiences. The event also helped bridge the gap between theoretical learning and applied sciences, in line with the objectives of the ATL Sarthi initiative.



Felicitation of Dr. Anjeeta

Hands on activity, shampoo making.



Group of teachers from different EDCs

Prepared by: Umesh Verma