

Date:25/02/2020

Report

Event: Innovation 2019-2020

Name of Project: Spreadability

Duration: 1 hr

Purpose: To enhance, upgrade & make our students familiar with the recent technologies.

Staff involved: Miss Ruchika R. Tiwari

Volunteers: Second year D. Pharmacy students of SIPS.

We, the SIPS have successfully organized the Innovative project.

Spreadability :

The therapeutic efficiency of a formulation depends on its spreading value. The term spreadability denotes the extent of area to which a semisolid spreads on application to skin or other surfaces. Spreadability values during these studies were calculated from this equation:

$$S=m \cdot l/t,$$

where: m - weight tied to upper slide, l - length of slides, t - time taken to separate the slides.

Procedure of project:

Spreadability studies were carried out using a glass disc and a glass plate with a millimeter grade scale. An opened syringe was used to put 1 cm³ of a sample in the center of the plate. Pre-weighted glass disc was put on the plate spreading the sample. Diameters of spread circles were measured after 1 min. A flyweight of 200 g was put on the centre of the glass disc and the diameter of spread was again measured after 1 min. This procedure was repeated by adding another flyweight of 200 g till a weight of 1000 g was reached. The spreadability is considered as area (cm²) covered by the sample. The bigger is the area, the more spreadable is the sample. Spreadability studies were made in single measurements. Results were shown as dependence between covered area and the weight applied.

Conclusion:

Spreadability tests revealed that oleogels were easier to spread if compared with organogels. Spreadability of oleogels Organogel spreadability decreased with increasing the amount of gelling agent. It was found that oleogel spreadability depends on the oil used.

Photos:

