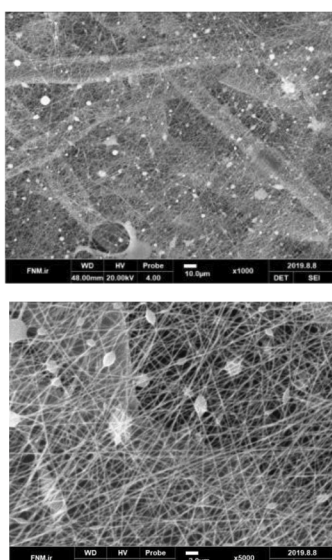


Beauty Face Mask

Properties of nanofibers can be specified as having low diameter, high surface area to volume ratio, high strength value, low basis weight, high porosity and small pore size. These make them indispensable in numerous applications.

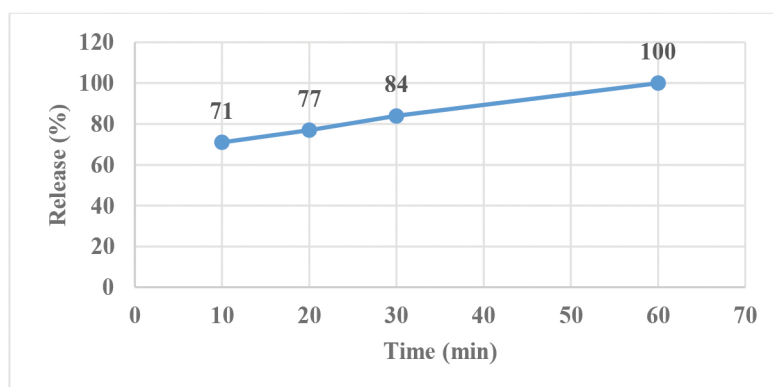
Increasing the number of fibers in a unit volume can be achieved by decreasing the diameters of fibers and by migrating atoms from the bulk to the surface. This leads to an increase in surface area to volume ratio, and hence the enhanced liquid absorption capacities and increased retention levels of functional groups, ions, particulates, or agents are obtained. High contact surface area between nanofibers and skin provides delivery of cosmetic agents to the deeper skin parts. All these mean advancement in the activities of materials including nanofibers instead of micro ones. With the aid of nanofiber production methods, especially by electrospinning, mats with controllable pore sizes and fiber diameters can be obtained. Also, the novel approaches that have been shown to cosmetics led to consumption of more conscious cosmetic products including therapeutic products and products for skin health and renewal (such as facial masks for skin cleansing, skin healing, and skin therapy).



FNM's nanofiber-based beauty face masks (NanoCare[®]) have several advantages as follow:

- Nanofibers are able to hold several pre-chosen substances to meet the demands of skin.
- Nanofibers are able to release more active substances per square centimeter than any material currently in use.
- Beauty face mask based on nanofiber has fast absorption against common beauty face mask
- Beauty face masks based on nanofiber are dry sheets that are cleaner and using this kind of mask is easier.

The percentage of drug release in FNM's nanofiber-based face mask over time has been done by spectrophotometry technique ($\lambda_{\max} = 255 \text{ nm}$) and the result is shown in Figure 1.



Percentage of drug release in nanofiber-based face mask over time.