May 30th-31st 2023

Bydgoszcz, Poland E-NNOVATE International Innovation Show



Preparation of Aromatic Masks with Antibacterial Properties

Abstract

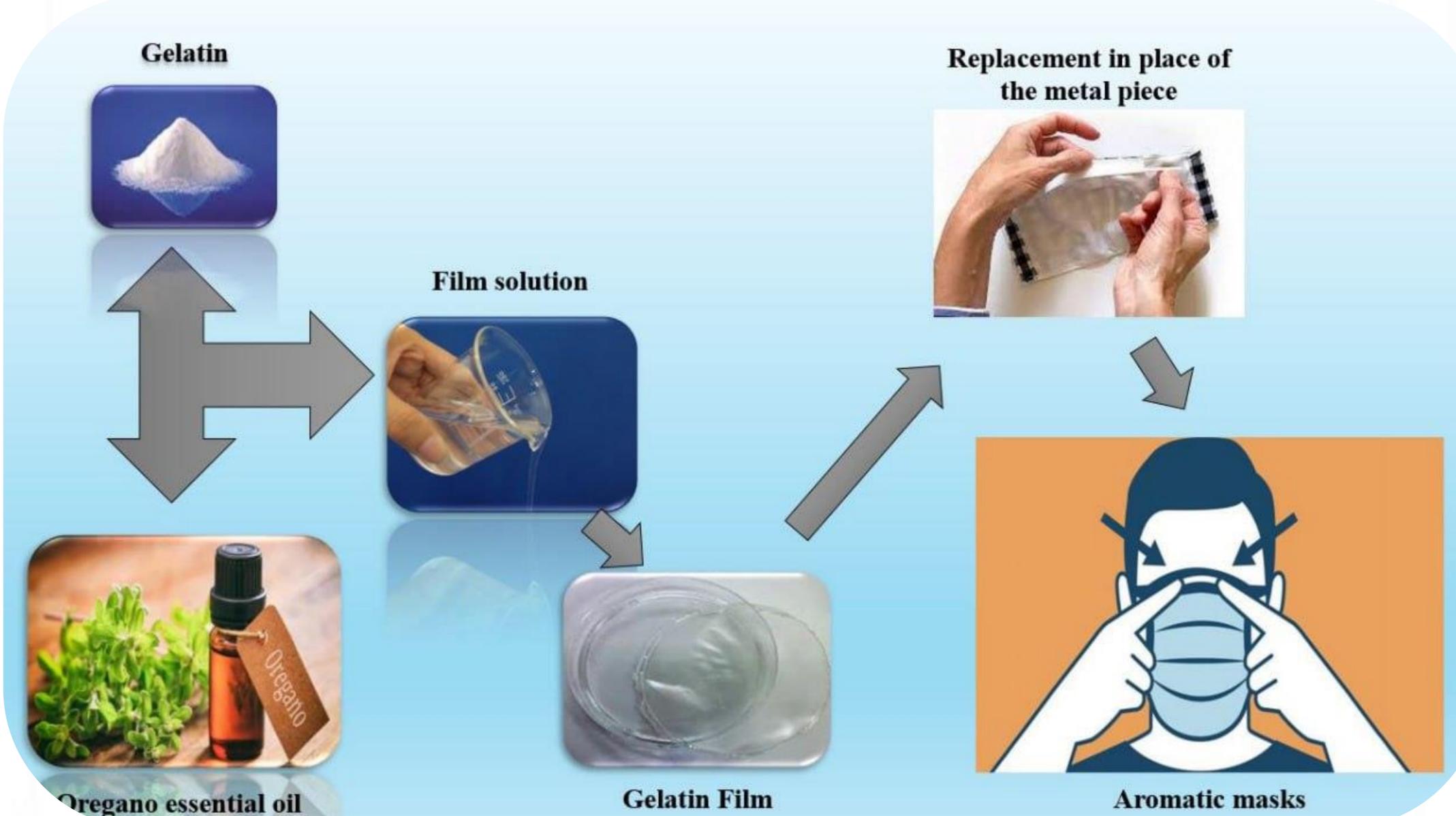
The use of multifunctional products is one of the needs that must be answered more than ever. The production of such a product in the industry is important, because it is economical; In other words, added value can be considered for those goods. Obviously, when cheap and abundant resources are used, this added value will be increased. Also, by using renewable resources, it is possible to take steps towards sustainable development and preserving the environmental resources for future generations.

With the emergence of the Corona virus and its many consequences for the world community, we are witnessing a change in human lifestyle. One of these changes is to use a mask continuously at different times of the day in order to save our lives and those around us. It should be kept in mind that the medical staff use masks more hours due to their job position; And after that, the unpleasant breathing space created by the mask, cause the users to lose concentration and get annoyed. Therefore, due to the increasing consumption of this product in the society and the fatigue of most people from masks, we decided to make this product more user-friendly by making changes in the production process.

For this goal, biodegradable gelatin films containing various plant extracts such as Cinnamon, Oregano, Coffee, Peppermint, Lavender, Eucalyptus, Lemon, etc..., are prepared with casting technique, and these fragrant films will be replaced with the metal piece in the nose part of common masks. By removing these metals, some advantages will be achieved. At first, we decrease the usage of non-degradable materials in masks, secondly, we can reduce the possibility of skin allergy.

Advantages of using aromatic masks:

- * Non-medicinal and preventive action
- * Variety of products with different aromas and properties according to tastes
- * Making the breathing space fragrant and disinfecting it
- * Keeping the extract stable in the structure of the used films and controlling its release
- * Removing metal and preventing skin allergy
- * Being biodegradable



Gelatin Film







- Using biodegradable, cheap and lightweight materials
 - Use of antibacterial plant extract

• Removing metal from the nasal part of the mask and reducing the risk of skin sensitivity

Production of a multifunctional mask

•Hospitals and health centers

Industrial centers

The whole community

GEIN tough

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