

Flax as a bio-based biomedical textile material

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Flax as a bio-based biomedical textile material

Propositions associated with the thesis

Sophie A. A. X. Michel

1. Among investigations for biocompatible and implantable cellulose-based materials, research on the potential utility of plant fibers has been negligible. Amidst all plant strands, we believe that flax fibers represent the most interesting material for biomedical applications. (*This thesis, Chapter 1*).
2. The presence of endotoxins on flax is logical, as bacterial fermentation (retting) plays a key role in the production of flax. (*This thesis, Chapter 2*).
3. Application of a biocompatible pDA coating can be easily done on PP mesh substrates, but fails when flax meshes are used. (*This thesis, Chapter 3*).
4. It is well known that the ideal prosthetic graft should promote cell adhesion and proliferation [...]. Data prove that flax can easily support cell adhesion, provided that this cell adhesion is performed under dynamic conditions. (*This thesis, Chapter 4*).
5. Antimicrobial linen-like textiles were manufactured by embedding silver into surface coatings for flax fibers. It is anticipated that such products will be suitable for temporary use at the body's surface, such as for wound dressings, and especially in the case of infections. In this field, there is a clear need for materials that combine hydrophilicity and antimicrobial features. (*This thesis, Chapter 5*).

6. Formerly, when religion was strong and science weak, men mistook magic for medicine; now, when science is strong and religion weak, men mistake medicine for magic. (*Thomas Szasz*).
7. The more original a discovery, the more obvious it seems afterwards. (*Arthur Koestler*).
8. I don't think necessity is the mother of invention – invention in my opinion, arises directly from idleness, possibly also from laziness. To save oneself trouble. (*Agatha Christie*).
9. In all things of nature there is something of the marvelous. (*Aristotle*).
10. Ce qui se conçoit bien s'énonce clairement, et les mots pour le dire arrivent aisément.
Whatever is well conceived is clearly said...and words to say it flow with ease. (*Nicolas Boileau*).
11. Opera is when a guy gets stabbed in the back and, instead of bleeding, he sings. (*Robert Benchley*).