



Conference Abstract

9th Holy Qur'an and Science Conference, Mini Conference (Virtual) - 2022

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Mississauga ON Canada.



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Conference Abstract

SLIPPERY SURFACES PREVENT BIOFOULING

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Abstract

Biofouling is a critical problem in health sector, marine industries and is a cause of severe economic burden. Hospital acquired infections, pandemics and fouling of marine equipment are some of the drawbacks of biofouling that are being experienced worldwide. Among various strategies to address this problem, direct killing of biofilms is the mostly commonly applied approach and sanitization techniques are utilized to disinfect different surfaces to prevent the transfer of microbes from one surface to another. Physical and chemical methods of surface modifications to prepare slippery surfaces have recently been evaluated to reduce the adsorption of microbes. This study describes the development of vitamin B5 analogous polymers coated smooth surfaces. The hydrophilic surfaces prepared are tested for the attachment of bacteria and proteins. Our results indicate that polymer coated smooth surfaces showed minimal attachment of bacteria and protein post-modification.

Keywords: Biofouling, Infections, Surfaces, Bacteria

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Competing Interest

The authors declare no competing interests.

Additional information is available at the end of the article.

Declaration: The abstract is reviewed and accepted by the Conference Organization Committee of 9th The Holy Quran & Science Conference; 2022. The presenter was permitted to share his research after final approval of the committee. The scientific research information was presented at aforesaid event held virtually on December 31, 2022 in Canada. Hence, the journal is publishing this abstract on behalf of the Conference Organization Committee.



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