



# Leading, Innovative Anti-Microbial Coating



## The Problem

The presence of microbial contamination of surfaces poses a serious problem from the point of view of health protection. There is a growing market demand to improve effectivity, safety, endurance and cost of anti-microbial coating.



## The Solution

We propose a novel bio-inspired nanocapsule that can firmly attach to any surface and kill encapsulated bacteria.



## The Commercial Benefit

Our leading, innovative anti-microbial coating reduces costs and has better performance compared to current microbial coatings. This coating excels in its binding to the surface and in its slow and controlled release of the bacteria killer. The coating is environmentally friendly and is less expensive to manufacture than present materials.



## Market Potential

Antimicrobial Coatings Market is projected to reach USD 4.19 Billion by 2021, at a CAGR of 12.1% from 2016 to 2021. Medical is the biggest end-use application of antimicrobial coatings. Antimicrobial coatings are widely used in the medical and healthcare industry. Antimicrobial coatings are mostly used for applications such as, catheters, medical devices, medical electronics, and trays among others.



## Target Markets/Industries

- Paints, bandages, catheters, toys and many other industries
- Medical Device Implants,
- Food Production Surfaces,
- Personal Hygiene,
- Tissue Culture Plastic,
- Antibacterial Cloths,
- Wound-Healing Bandages



## Intellectual Property

Granted Patent (US 9,770,418)



## Team: Primary Inventor

### Prof. Shai Rahimpour

- Prof. Rahimpour is a senior lecturer at the Department of Chemistry of Bar-Ilan University
- Prof. Shai Rahimpour is a returning scientist from the Scripps Research Institute in California.
- Prof. Rahimpour received his PhD from The Weizmann Institute of Science, and conducted his postdoctoral research in The Weizmann Institute of Science.
- For the last ten years, Prof. Shai Rahimpour is a member in the editorial board of ARKIVOC Journal.



## Future Research

Will be discussed on demand.



## The Opportunity

We are looking for investors that are willing to support our research and commercialize this new invention.



## Keywords

- Anti-Microbial coating catheters
- Microbial contamination
- Endurance and bio-inspired nanocapsule
- Encapsulate bacteria leaching
- Non-toxicity irritation polypropylene
- Polystyrene antibacterial