

LigarTM

**Arsenic and
Lead Removal
from
Contaminated
Water**



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- **Who am I?**
- **Who are Ligar?**
- **What do we do?**

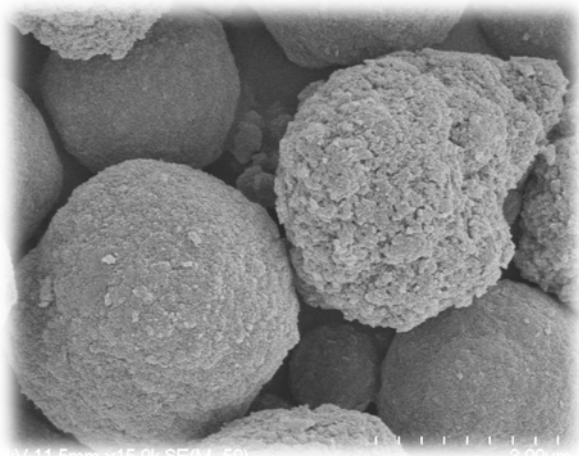
Introduction

- Listed in '10 Chemicals of Public Health Concern' (WHO)
- Acute Effects
- Chronic Effects
- Notable Cases



Arsenic, Lead: BAD

- Mimic Enzyme/Substrate Interactions
- Lock and Key Model
- Target Specific Molecules
- Ignore Non-target Molecules
- Multiple Mediums/Substrates

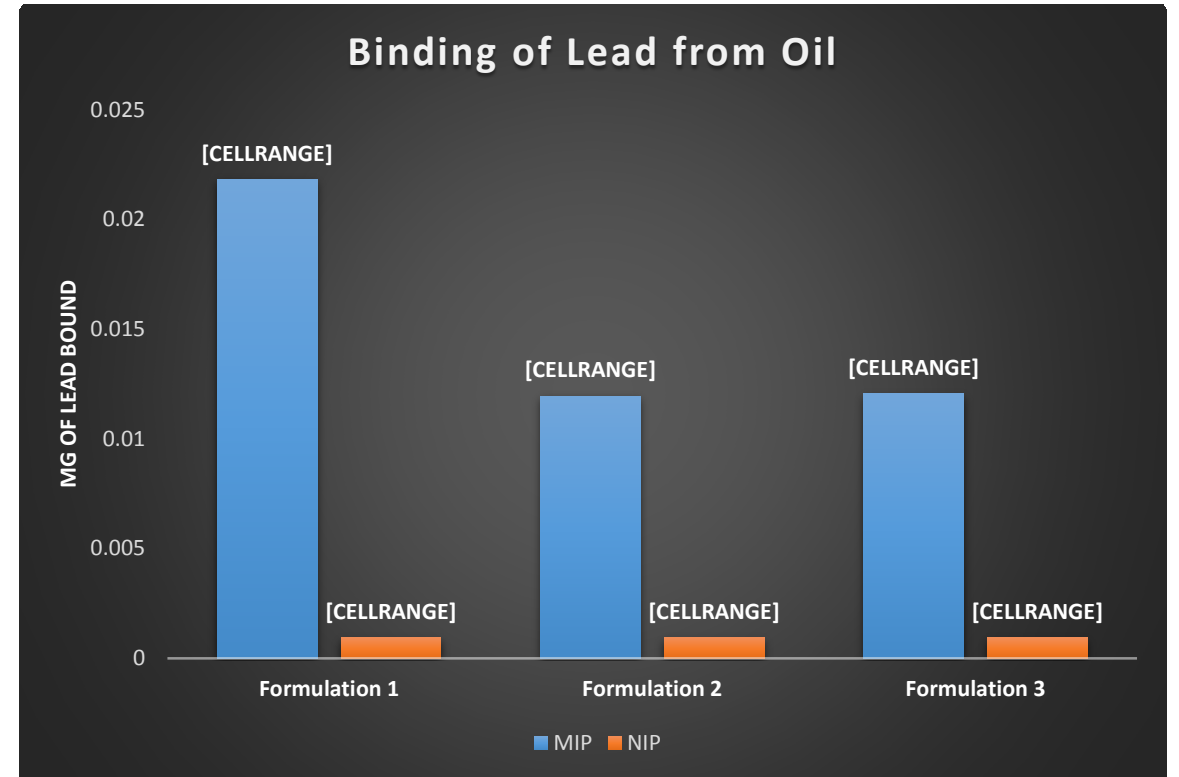
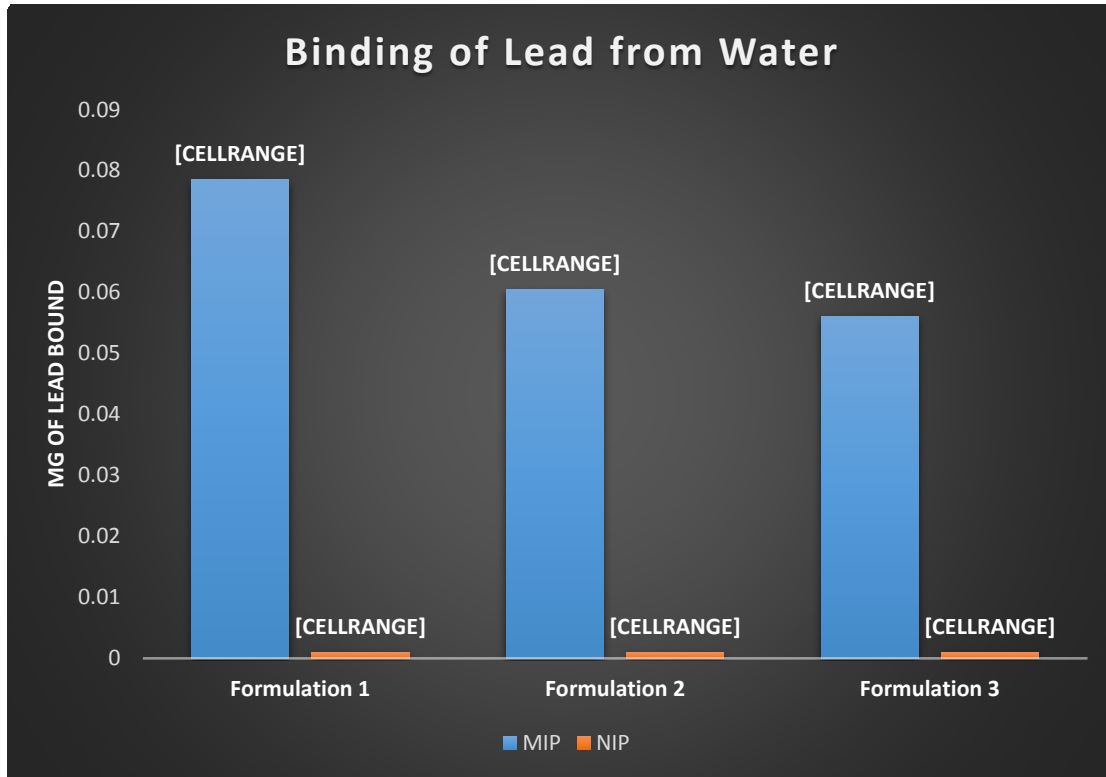


MIPs: GOOD

- Adsorbents
- Activated Carbon/Alumina
- Ion Exchange
- Filtration Systems
- Fibres
- Reverse Osmosis

Existing Technologies

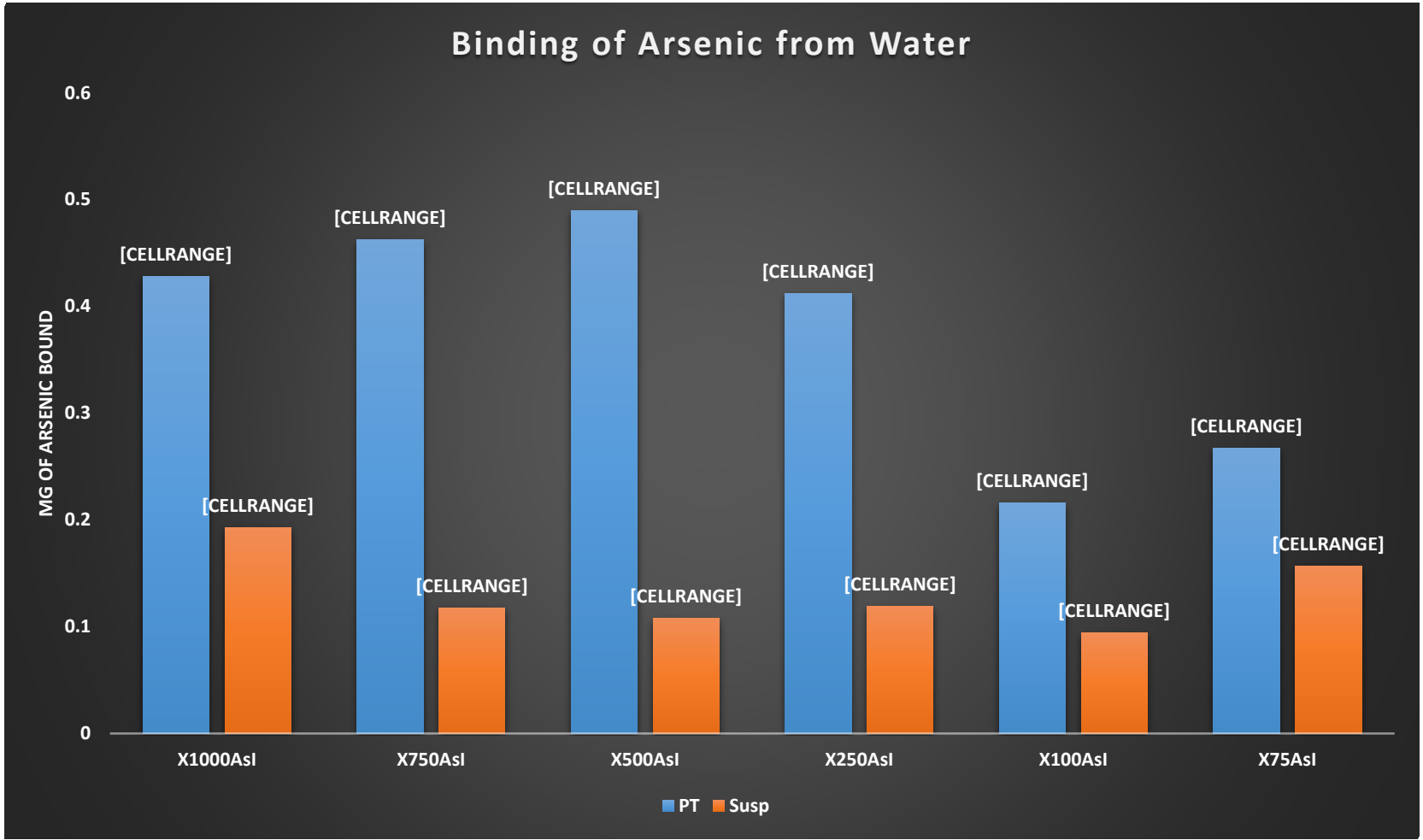
- Tested in Waters and Oil Extracts



Lead

- Formulation Optimisation
- Tested in Waters
- Testing and Modelling in Waters, Geothermal Waters and Waste Water Discharges
- Multiple In-house Projects Concerning Arsenic

Arsenic



Arsenic

- Removal of Arsenic/Lead Possible
- Higher Viscosity Reduces Binding Efficacy
- Minimal Contact and Cycling Times In Water
- Higher Masses of Target Treatable

Conclusions

- Optimise and Maximise Large Scale Synthesis
- Develop Practical and Safe Large Scale Processing
- On-site Pilot Trials Within 12 months

Moving Forward

The logo for Ligar, featuring the word "Ligar" in a white, lowercase, sans-serif font with a trademark symbol (TM) to the upper right. The text is set against a dark grey rectangular background that has a subtle, wavy, light-to-dark gradient. This logo is centered within a larger orange rectangular area.

Ligar™

www.ligarpolymers.com