

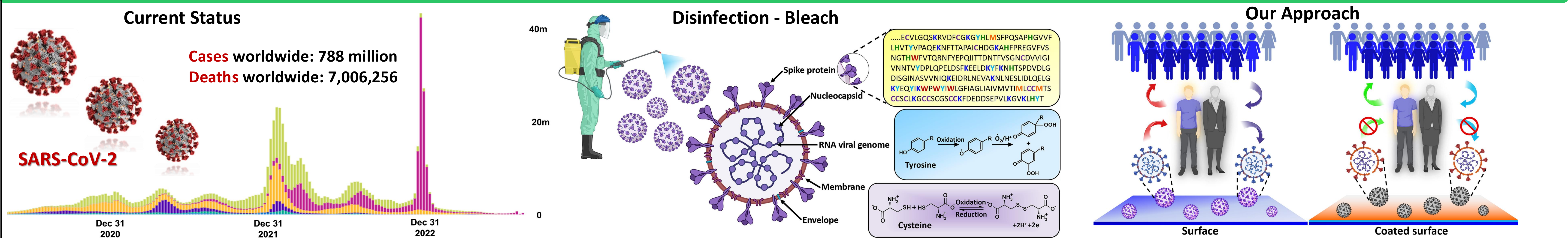
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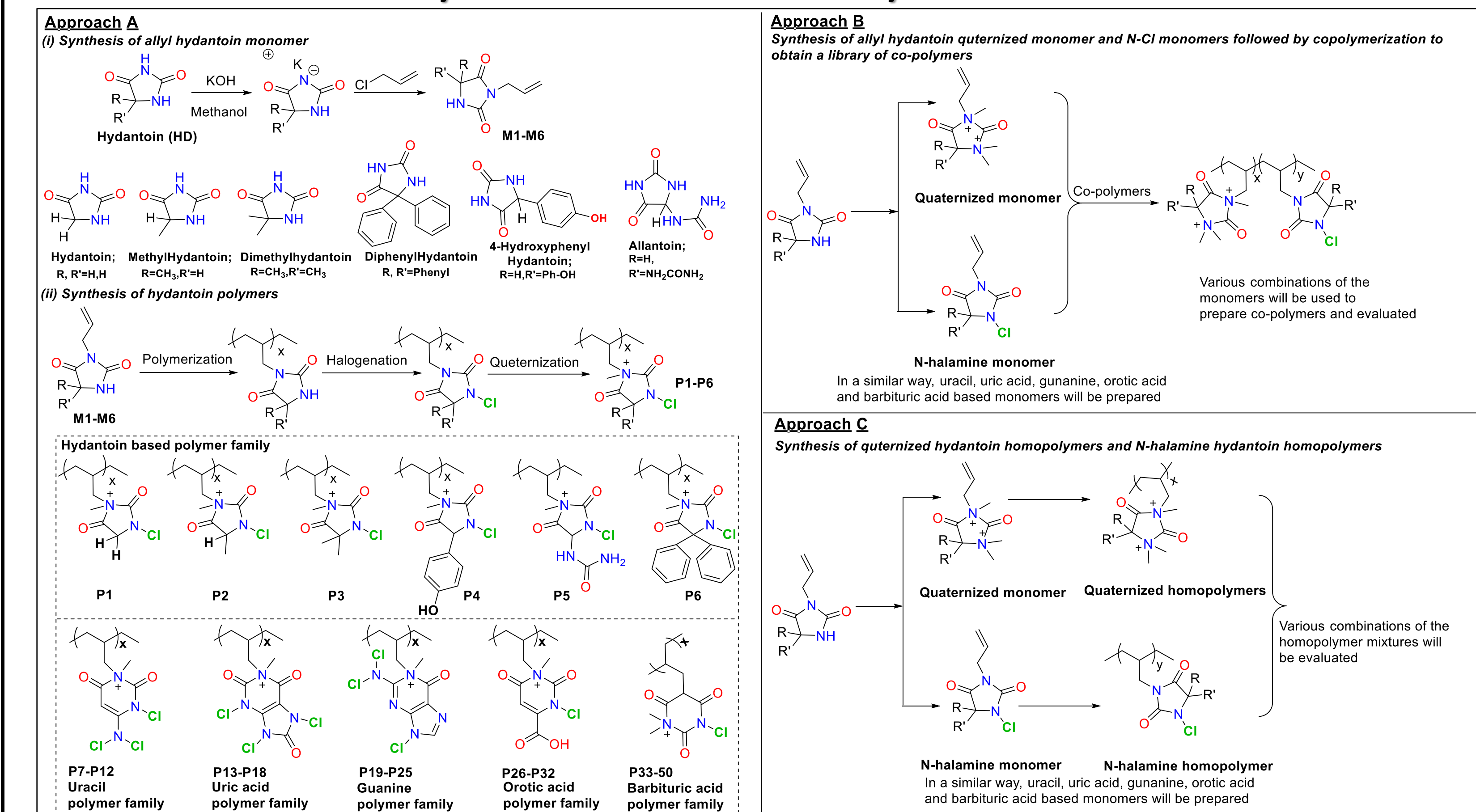
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Introduction & Objectives

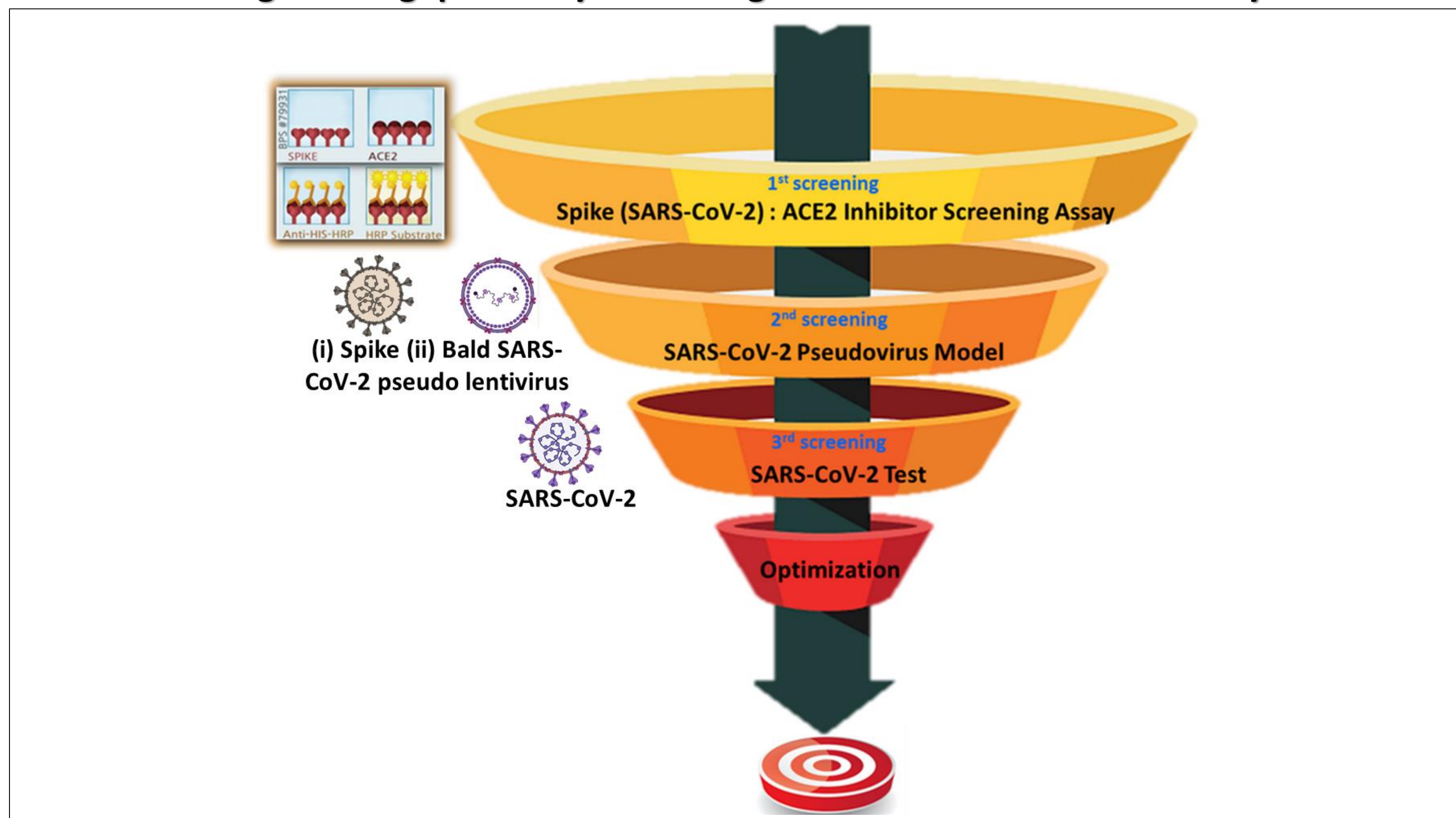


Research Outline

Synthesis of Monomers & Polymers



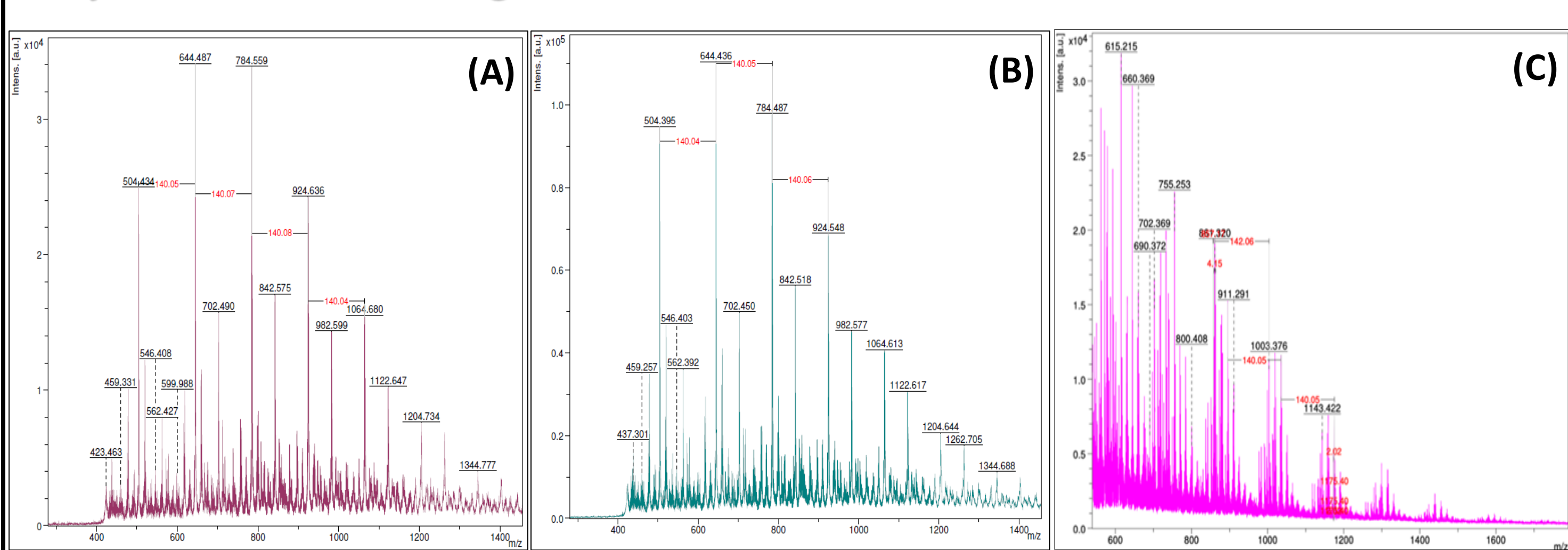
High Throughput Assay for Testing Antiviral Materials and toxicity



➤ **Approach B and C will be followed by the leads of the first 50 polymers prepared by Approach A**

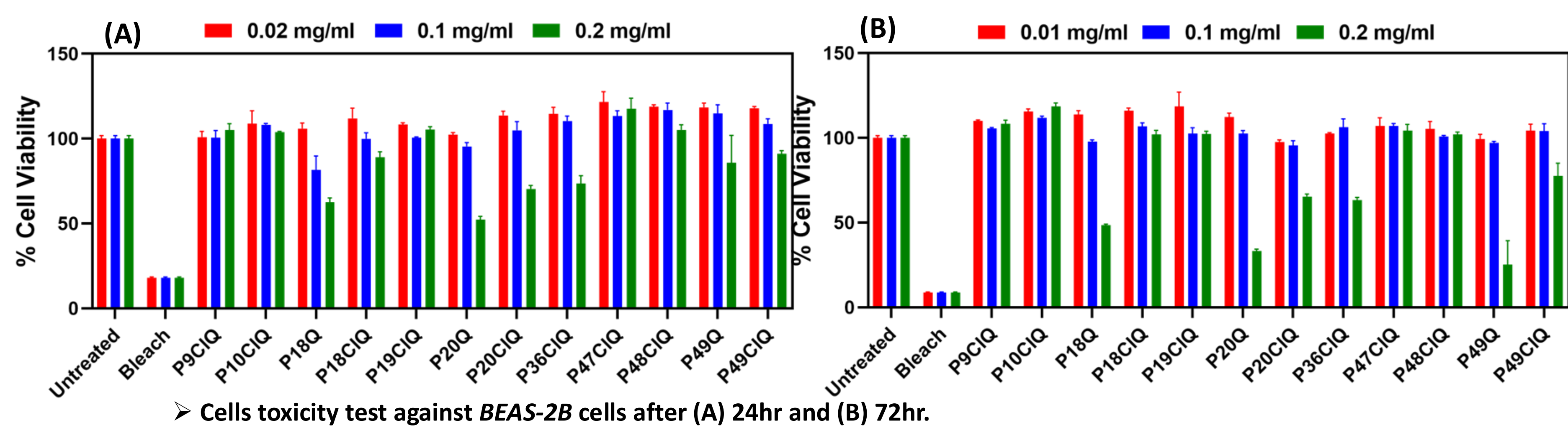
Results & Discussion

Polymer's molecular weight conformation



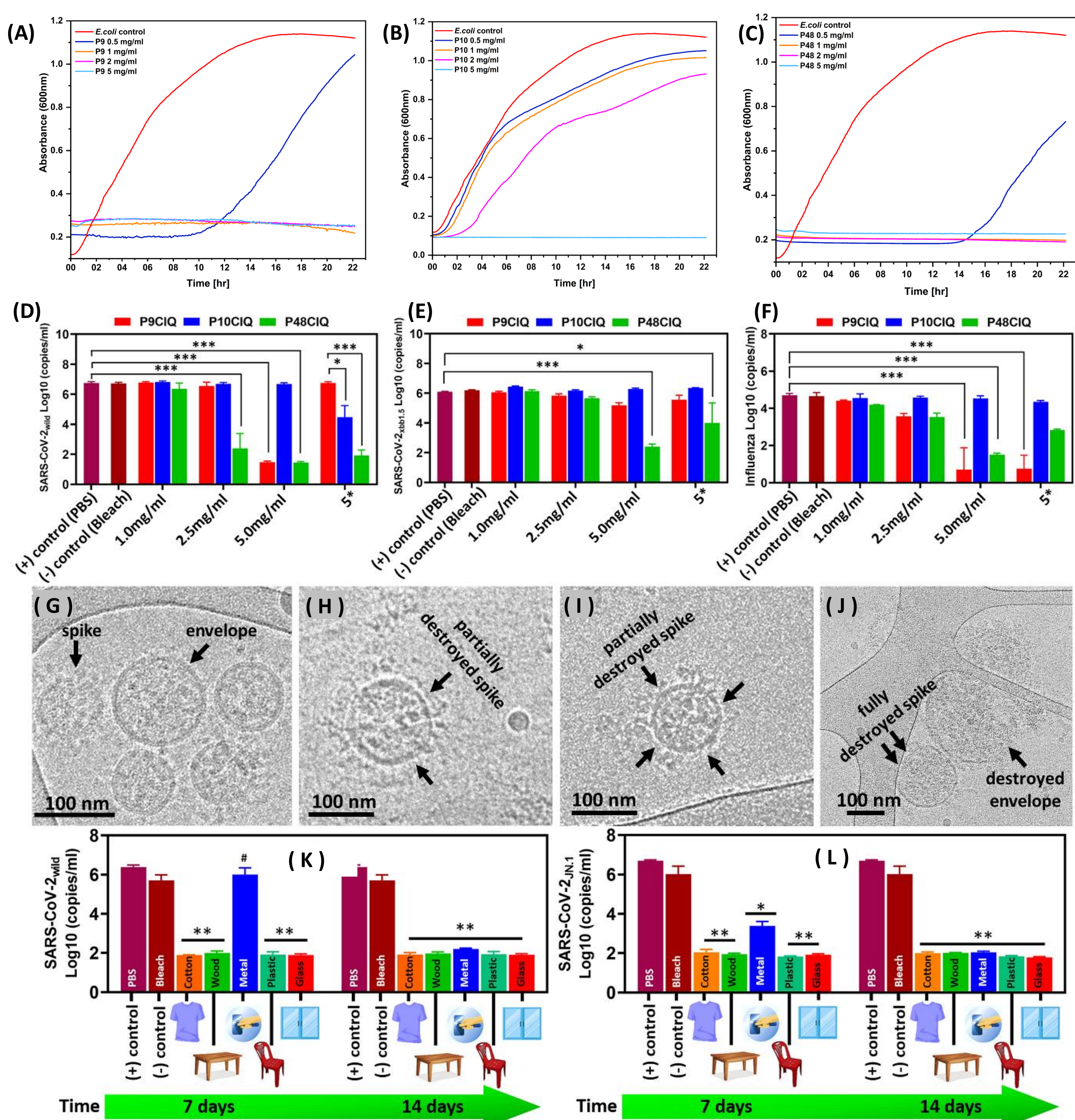
➤ MALDI-TOF results of AIBN systems at 70°C with (A) 0.1 wt.%, (B) 1 wt.% and (C) 0.1 wt.% APS at 70°C.

Safety and toxicity



➤ Cells toxicity test against *BEAS-2B* cells after (A) 24hr and (B) 72hr.

Antimicrobial activity



➤ **Antimicrobial activity figure.** (A,B,C) present antimicrobial activity of P9,P10 and P48 against *E.coli* bacteria. (D,E,F) present antiviral activity each for P9,P10 and P48 against covid-19 wild type, omicron and sessional influenza, respectively. (G,H,I,J) present cryo-tem images of covid-19 wild type virus and incubated with P48 for 0.5,1 and 4 hours accordingly. (K,L) present stability and surface activity of P48 on different surfaces for 1 and 2 weeks.

Acknowledgements

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