



PROSPECTS

Incorporation

✓ Graphene

✓ Bioactive glass

✓ DNA

√ 4D-(bio)printing

Fabrication

✓ 3D-(bio)printing

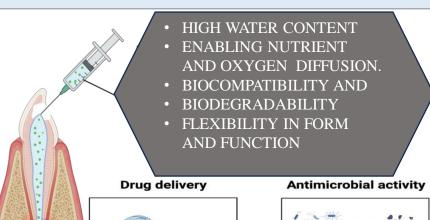
✓ Decellularized ECM

CHALLENGES

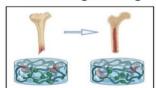


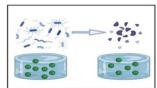
GEL-ICIOUS DENTISTRY INJECTING HYDROGELS TO LEAD THE WAY

HYDROGELS ARE INJECTABLE SCAFFOLDS THAT OFFER A PROMISING APPROACH FOR THE REGENERATION OF DENTAL TISSUES AFFECTED BY DISEASES LIKE PERIODONTITIS, DENTAL CARIES, PULP NECROSIS, AND ORAL CANCERS. THEIR UNIQUE PROPERTIES ALLOW THEM TO ADDRESS BOTH STRUCTURAL AND BIOLOGICAL CHALLENGES IN THE ORAL ENVIRONMENT



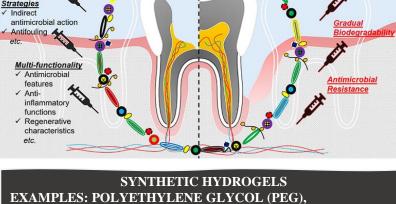
Tissue engineering





Biosensor





SYNTHETIC HYDROGELS
EXAMPLES: POLYETHYLENE GLYCOL (PEG),
POLYLACTIC ACID (PLA), AND GELATIN METHACRYLATE
(GEIMA).

