From Biomedical glasses to antimicrobial peptides and coatings: A journey of biomaterials research

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In this talk, I will give an overview of the research activities in my lab. I will talk about my research in developing biomedical glasses for dental cements focusing on the study of their microstructure and crystallisation behaviour. Recent developments include the formulation of antimicrobial borate glasses and an antimicrobial ceramic powder for 3D printing. Currently, my work focuses on the development of antimicrobial surfaces and I will explain how I started working with antimicrobial peptides and how we can immobilise them on metallic and ceramic surfaces to create antimicrobial medical surfaces.