

Dr Rudi Marquez
School of Chemistry
Glasgow University

Title: Adventures at the Interface Between Chemistry and Biology

Abstract:

There has never been a more exciting time at the interface between chemistry and biology. Research in our group is focused on the application of chemical methods using a combination of structural biology, molecular modeling, synthetic chemistry and biomaterials to develop new approaches to take on biological problems in regenerative medicine, parasitology and infection. As part of our work, we have rationally designed and synthesized small chemical units able to mimic protein-protein interactions at the cell surface that are capable of kick starting the wound healing cascade. We are also currently targeting the non-mevalonate and CoA biosynthetic pathways for the development of broad-spectrum anti-parasitic agents. In this lecture I will explain the evolutionary process currently taking place in our group for the development of new chemical biology probes and therapeutic leads.