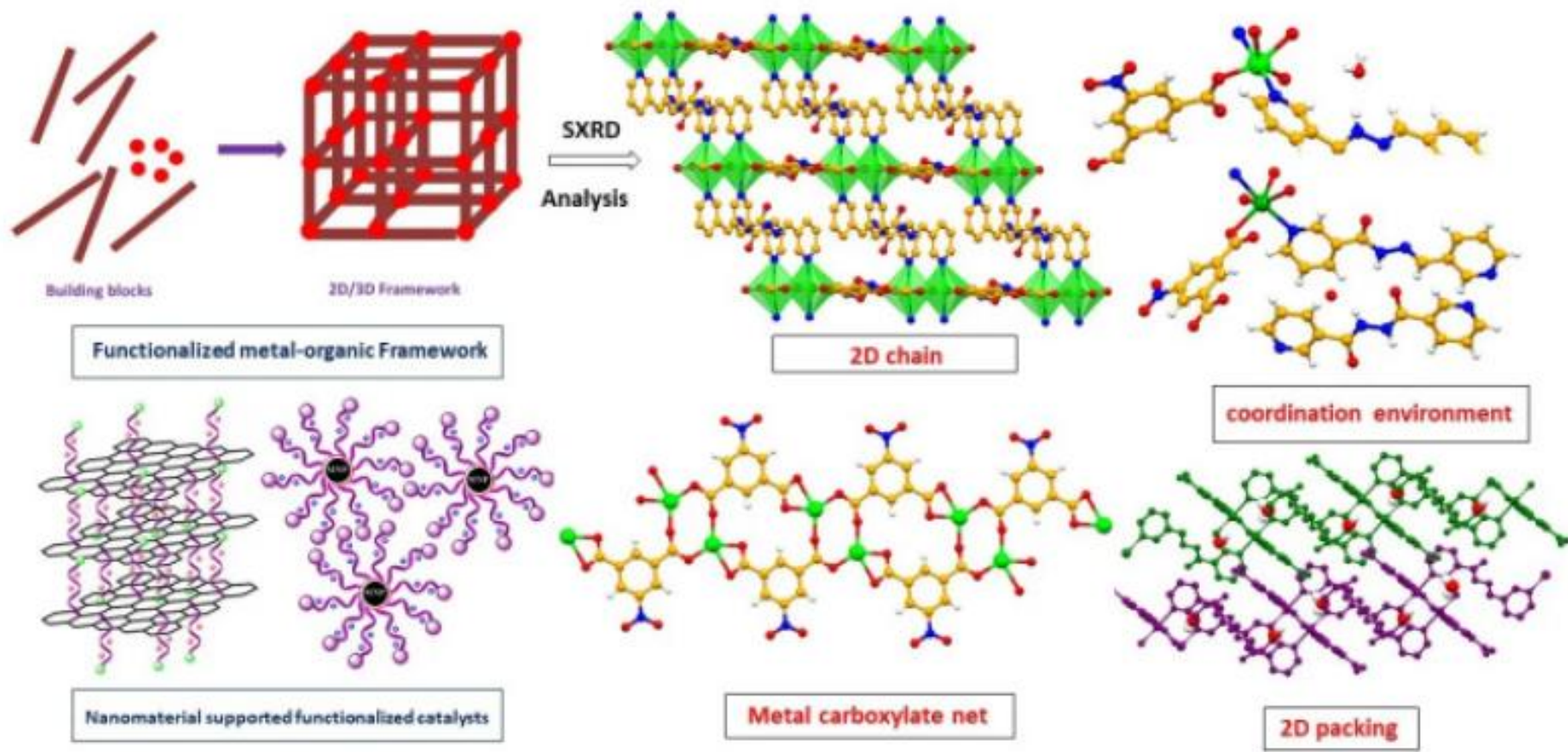


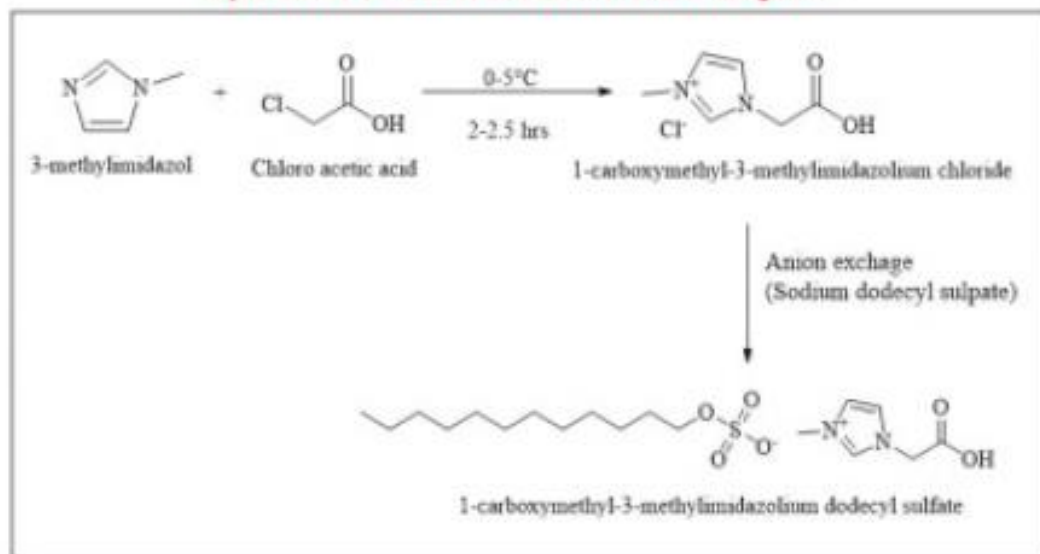
**Department of Chemical Sciences,
P D Patel Institute of Applied Sciences,
Charotar University of Science and Technology**

Research Areas



Design and Development of Advance Functional Materials

Synthesis of Surface Active Ionic Liquids

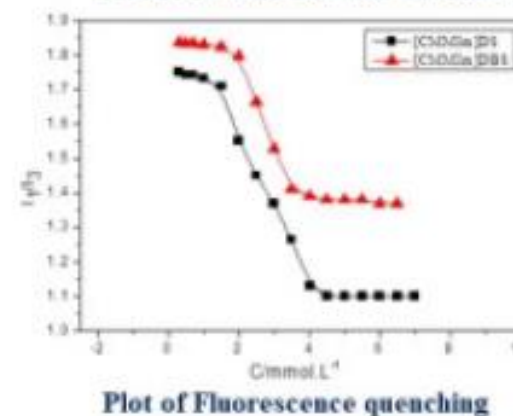
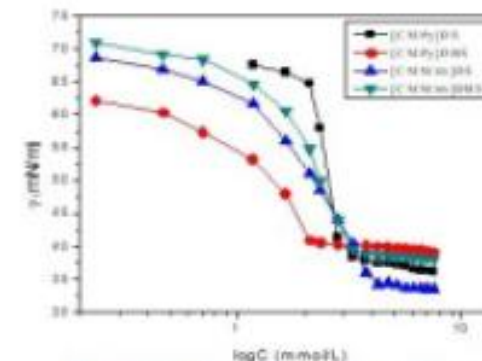


Highlight: The carboxy functionalized SAILs are expected to step forward for green surface-active agents

Determination of Physical Parameters

Critical Micellar Concentration (CMC), Aggregation Number
Thermodynamics of Micellization, Surface Active parameters

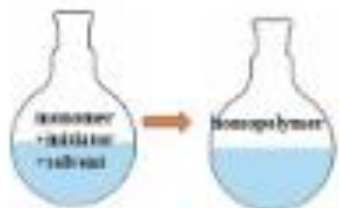
Characterization SAILs



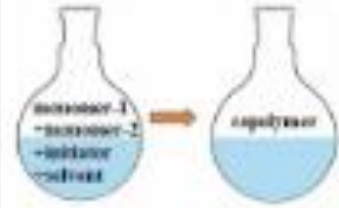
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Design and Development of Surface Active Ionic Liquids

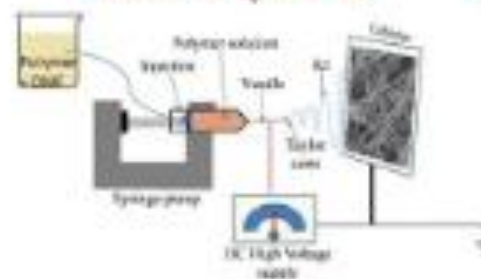
Synthesis of homopolymer



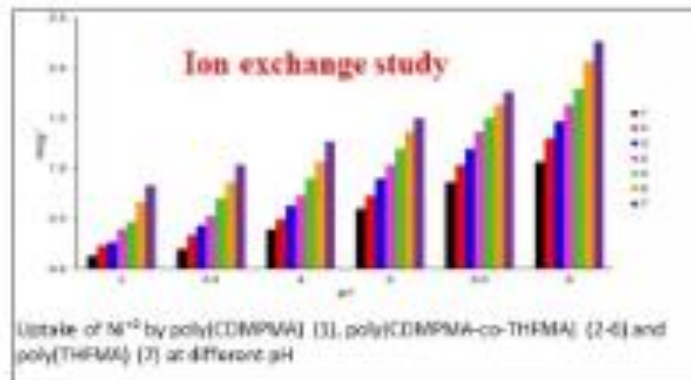
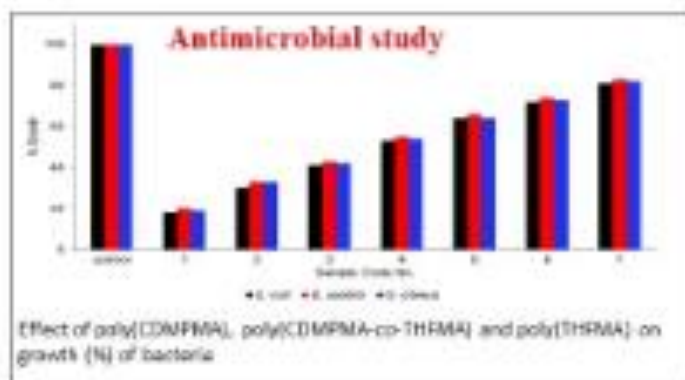
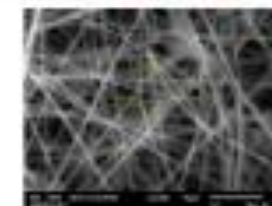
Synthesis of copolymer



Nanofiber synthesis

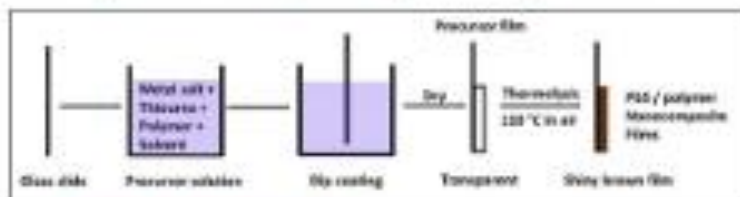


Surface morphology study

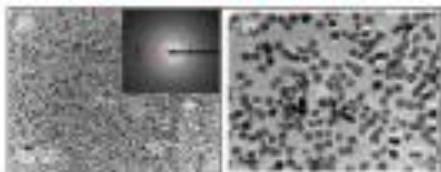


Development of Acrylate Polymer, Nanocomposites and Nanofibres

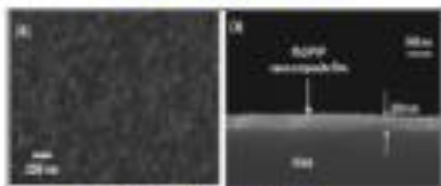
Development of single step in-situ protocol for NCs



Morphological study

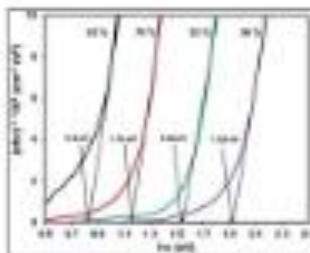


TEM of PbS/PVP NC

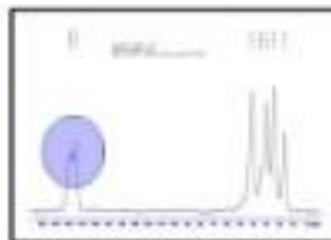


SEM of PbS/PVP NC

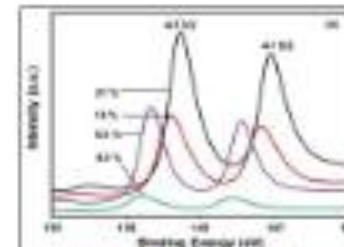
Optical Study



Interaction Study

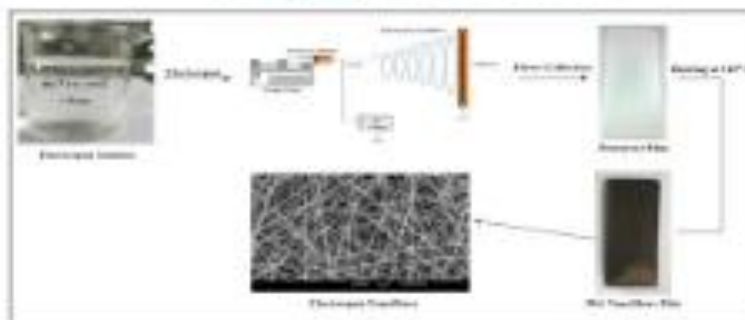


¹³C NMR of PbS/PVP NC



XPS of PbS/PVP NC

Metal/Polymer Nanofibers



Nanocomposites and Nanofibers