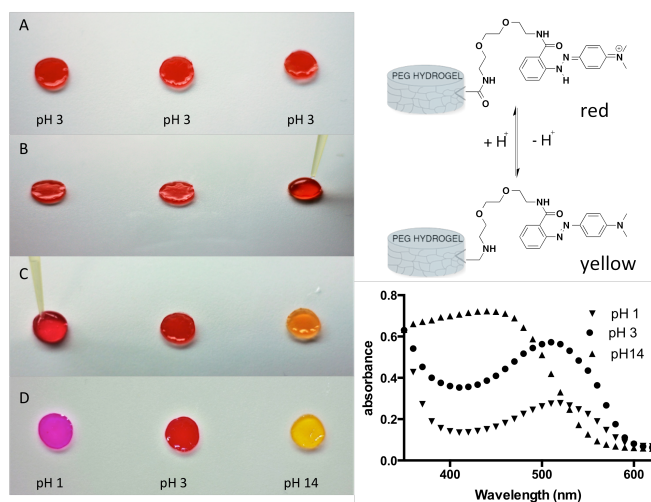
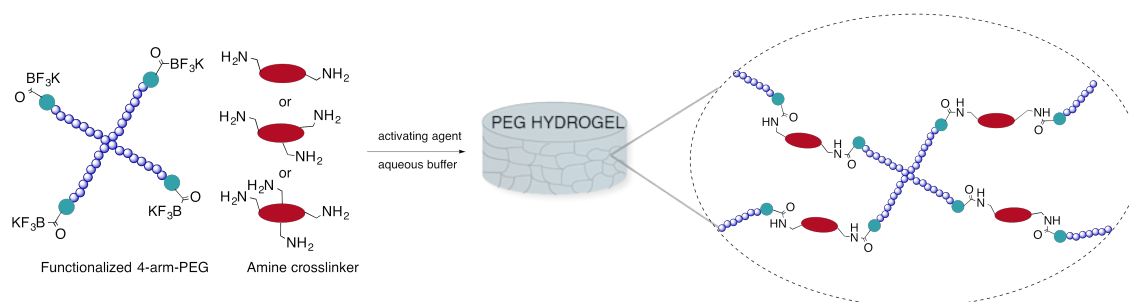


Hydrogel preparation using polyethylene glycol potassium acyltrifluoroborates (PEG-KAT) and amine containing molecules as chemical-cross linkers.

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A method for the formation of chemically cross-linked hydrogels using polyethylene glycol potassium acyltrifluoroborate (PEG-KAT) with a wide range of commercially available di-, tri- or tetra-primary amine-containing molecules has been established. This protocol utilizes a chemoselective reaction that proceeds rapidly under a variety of mild conditions in acidic aqueous buffer, creating highly defined and multifunctional materials.



A broad range of amines are applicable in this procedure, from simple aliphatic diamines to complex natural products as Polymyxin B or Gramicidin S. Dyes such as Sulforhodamine B and pH switchable azo compounds could be covalently immobilized in the hydrogel network.