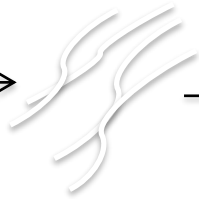


PAN Powder



Pure PAN fibers



Activated PAN fibers

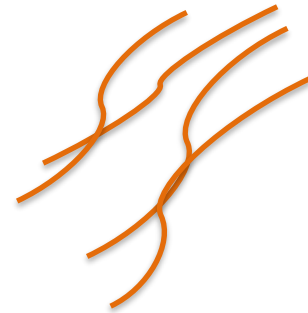


pH = 8

“Chemical actuation”

pH = 2

Elongation



Contraction

