

# SPECIFIC POLYMERS

*Your R&D partners in the field  
of polymers and materials*



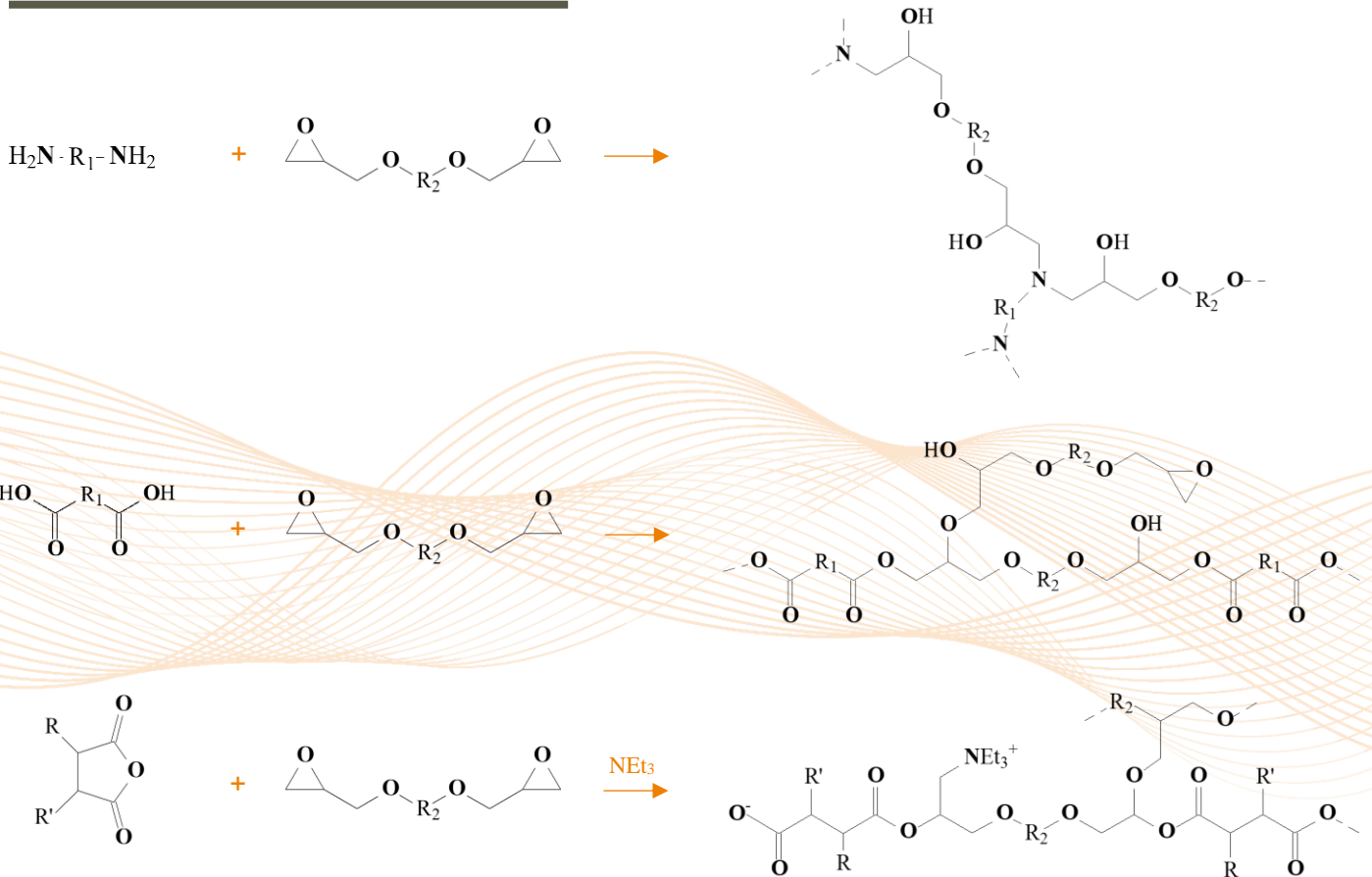
**Materials  
& Coatings**



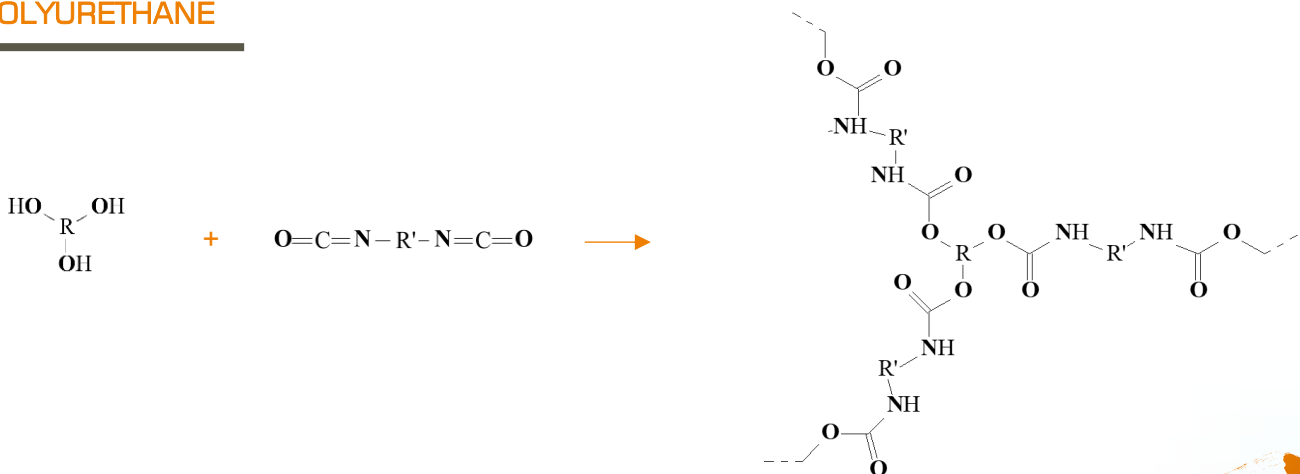
# THERMOSET MATERIALS

The thermosets present the advantages to be thermally stable, chemically resistant and to show superior strength while thermoplastics are recyclable and exhibit high impact resistance. These last years, our work has been mostly dedicated to the development of new thermosets materials and coatings as the versatility of the monomers (chemical nature, functionality, composition of the formulation...) enables a fine tuning of the final properties.

## EPOXY-AMINE | ACIDE | ANHYDRIDE



## POLYURETHANE

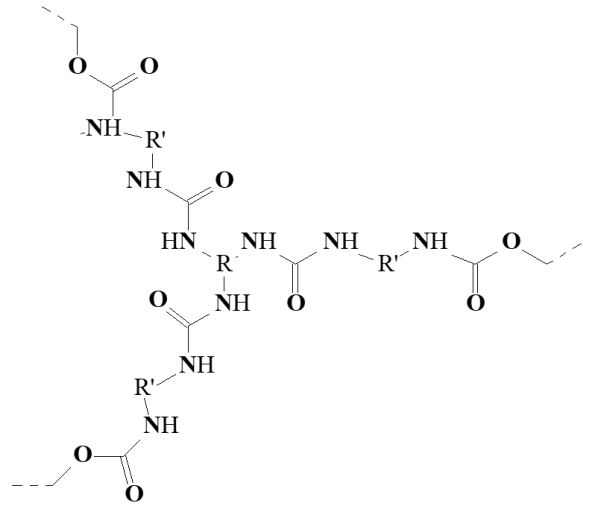
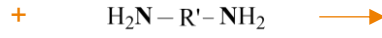
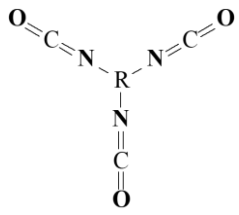


### SPECIFIC POLYMERS

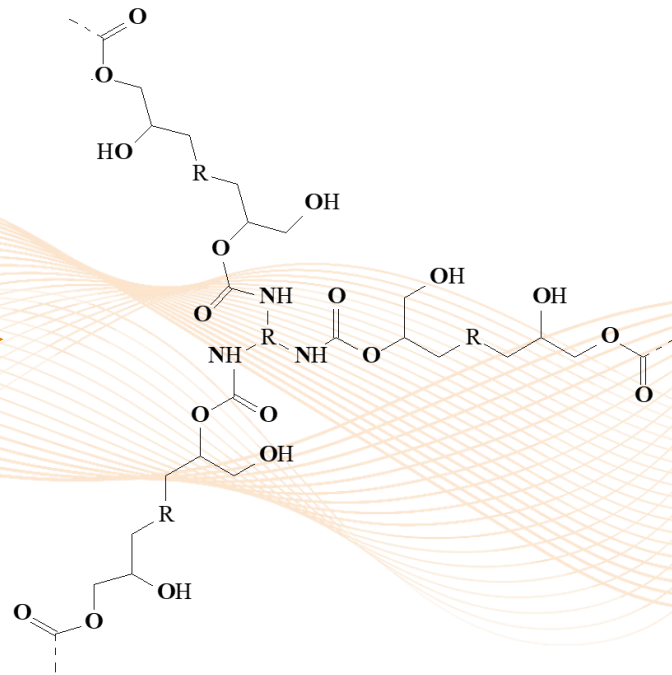
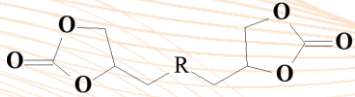




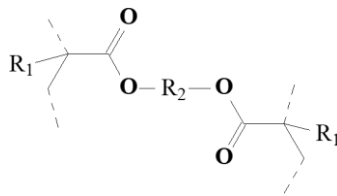
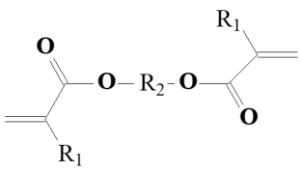
## POLYUREA



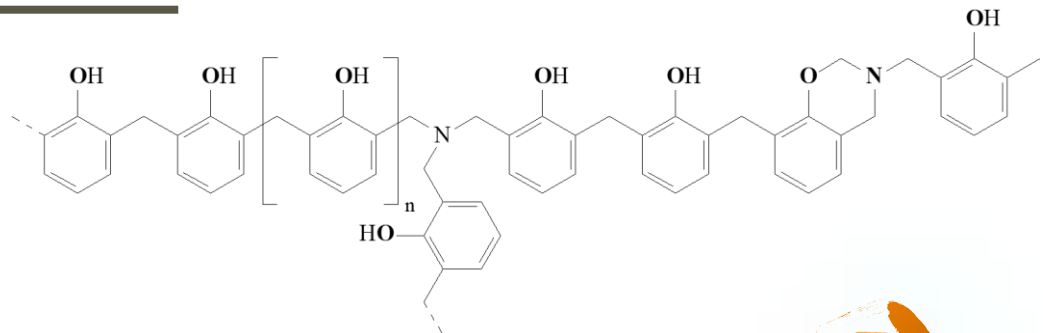
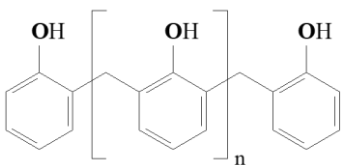
## NON-ISOCYANATE POLYURETHANE - AMINE | CYCLOCARBONATE



## ACRYLATE



## PHENOLIC RESIN (NOVOLAC & RESOL)

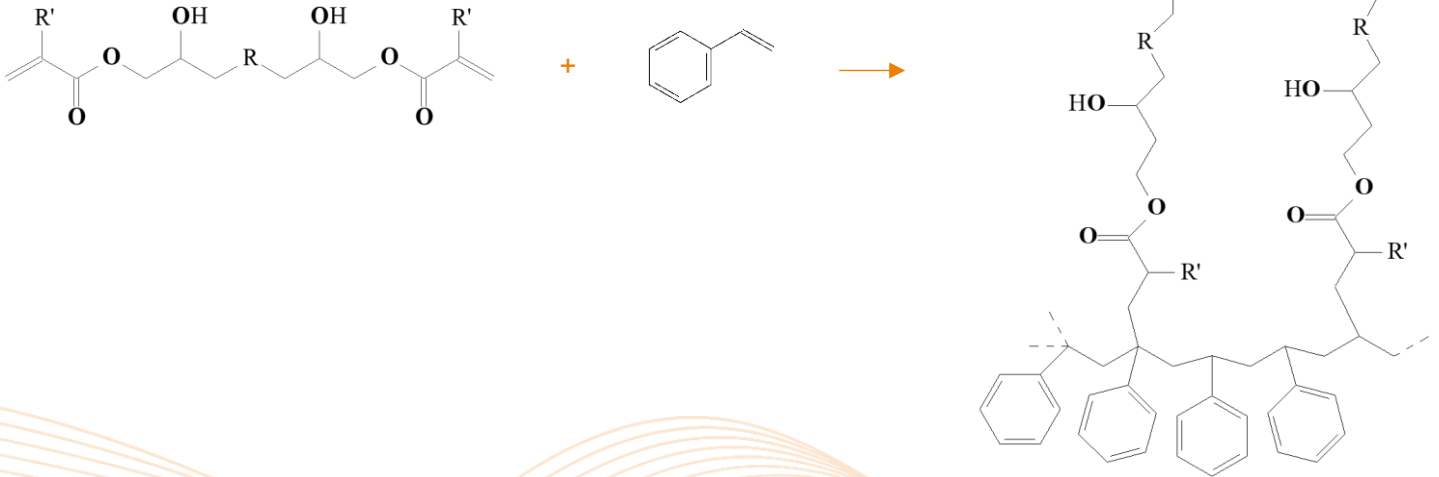


## SPECIFIC POLYMERS

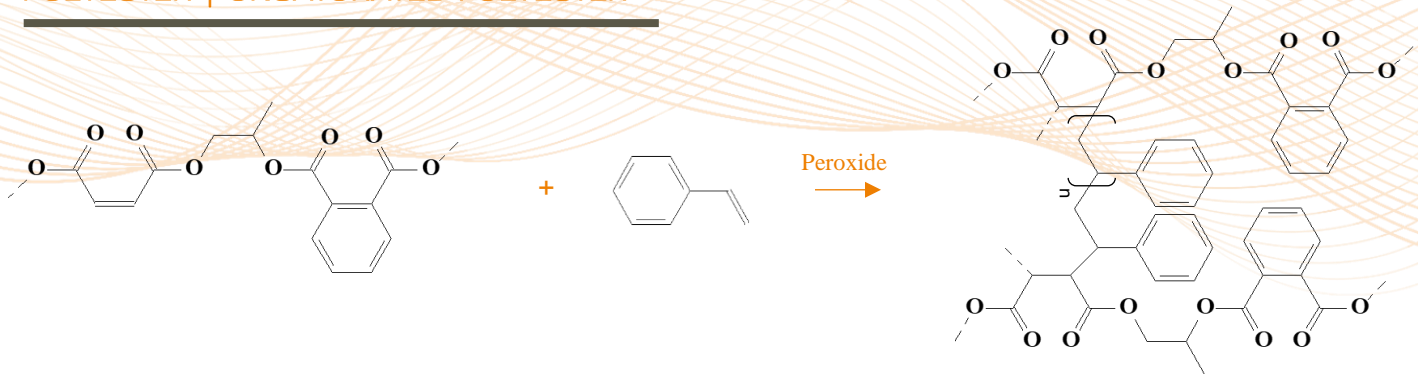




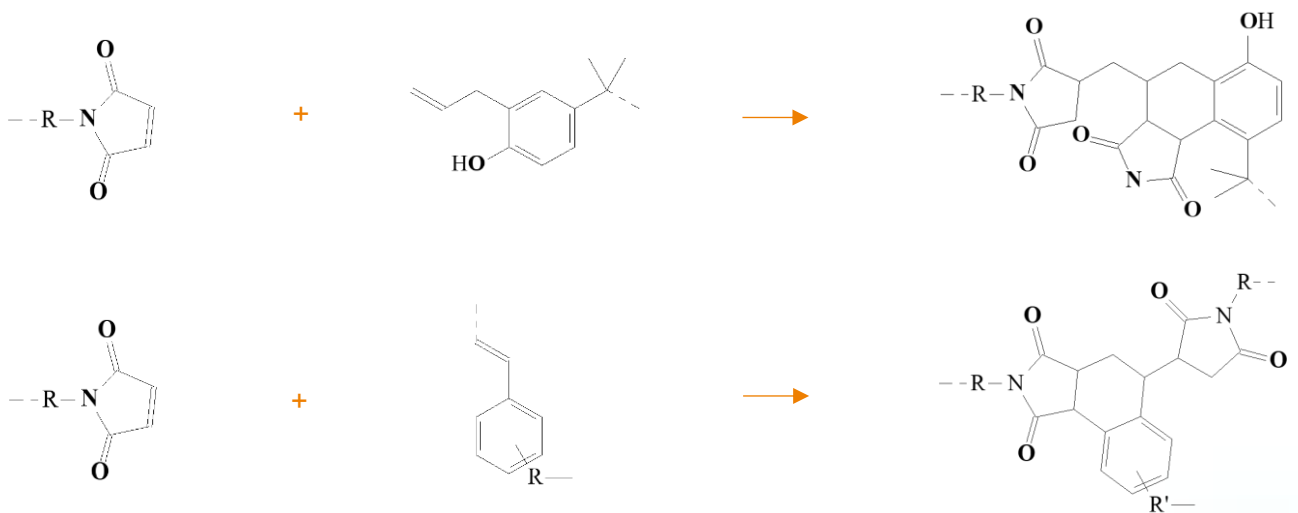
## VINYL ESTER



## POLYESTER | UNSATURATED POLYESTER



## BISMALEIMIDE



## SPECIFIC POLYMERS



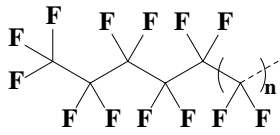




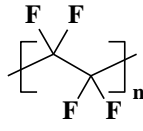
# FUNCTIONAL COATINGS

To incorporate new properties to our materials, a large class of polymers are considered and formulated in SPECIFIC POLYMERS. To cite just a few examples, we are working with:

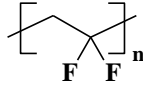
## FLUOROPOLYMERS FOR LUBRICATION AND WEATHERABILITY



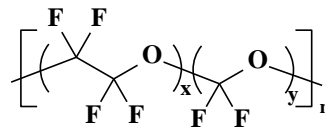
Functional perfluoroalkyl



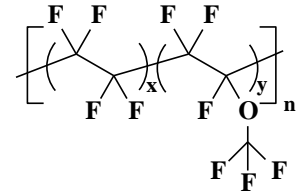
PTFE – PolyTetraFluoroEthylene



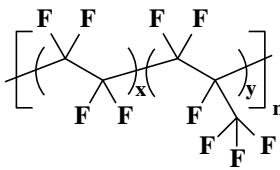
PVDF – PolyVinylideneFluoride



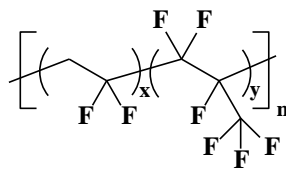
PFPE – PerFluoroPolyEther



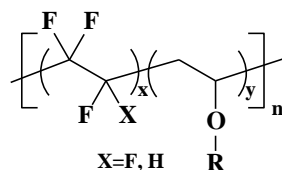
PFA – PerFluoroAlkoxy



FEP - Fluorinated Ethylene Propylene

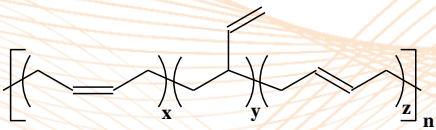


P(VDF-HFP)

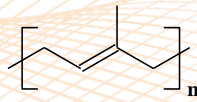


FEVE – AD poly(Fluoro Ethylene-co-Vinyl Ether)

## RUBBERS FOR IMPACT RESISTANCE AND ELASTICITY

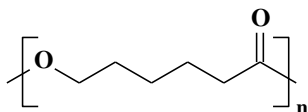


Polybutadiene



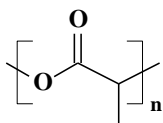
Polyisoprene

## POLYCAPROLACTONE FOR FLEXIBILITY AND HYDROPHOBICITY WHILE PROVIDING BIOCOMPATIBILITY

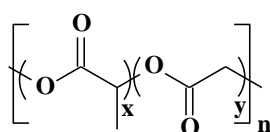


Polycaprolactone

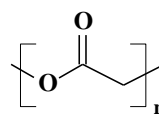
## POLYLACTIC ACID OR POLYLACTID ACID-CO-GLYCOLIDE FOR BIODEGRADABILITY



PLA (Polylactic acid)



PLGA (Poly(lactide-co-glycolide))



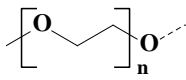
PGA (Polyglycolide)

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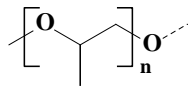




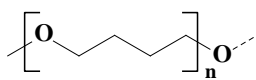
## POLYETHERS FOR HYDROPHILICITY



Poly(ethylene oxide) PEO

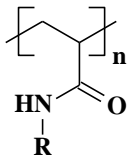


Poly(propylene oxide) PPO

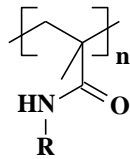


PolyTHF

## POLYACRYLAMIDE OR POLYDIACETYLENE FOR STIMULI RESPONSIVE BEHAVIOR WITH PH OR LIGHT

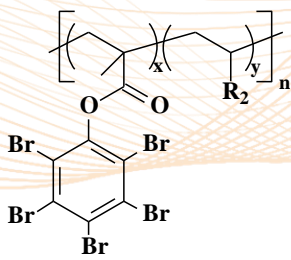


Polyacrylamide

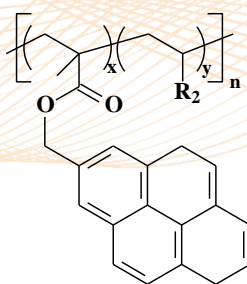


Polymethacrylamide

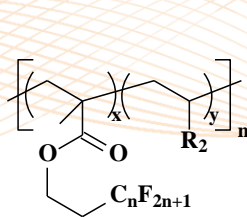
## FLUORINATED AND NLO POLYMERS FOR LOW OR HIGH REFRACTIVE INDEX



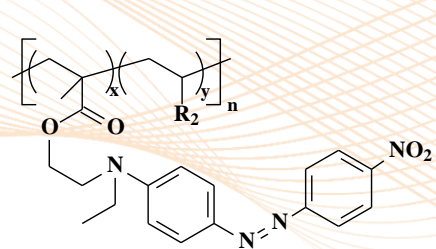
HRI  
Pentabromophenyl  
(co)polymers



Fluorescent  
(co)polymers

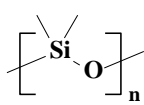


LRI fluorinated  
(co)polymers

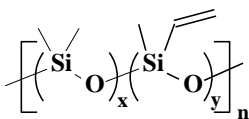


NLO  
(co)polymers

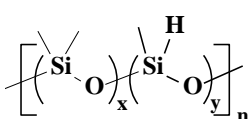
## SILICONES FOR HYDROPHOBICITY AND TOUGHNESS



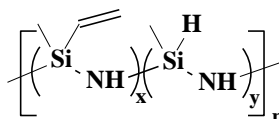
PDMS -  
PolyDiMethylSiloxane



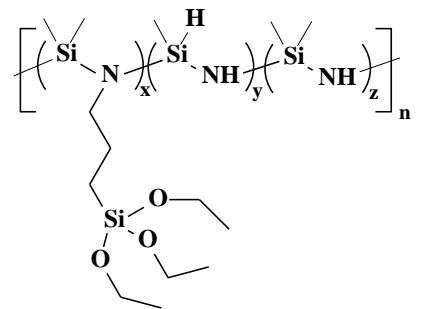
Poly(DMS-co-VMS)  
*Poly(DiMethylSiloxane-co-VinylMethylSiloxane)*



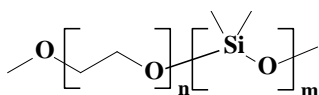
Poly(DMS-co-MHS)  
*Poly(DiMethylSiloxane-co-MethylHydroSiloxane)*



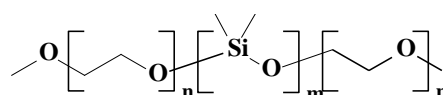
Organic PolySilaZane (OPSZ)  
*Vinylmethylsilazane-co-Methylhydrosilazane*



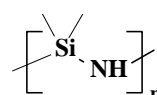
Organic PolySilaZane (OPSZ)  
*Propyltriethoxysilyl-co-Methylhydrosilazane*



PEO-block-PDMS



PEO-block-PDMS-block-PEO



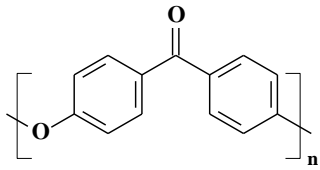
Perhydropolysilazane (PHPS)

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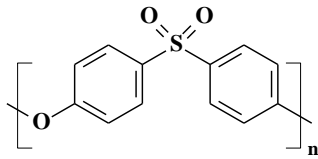




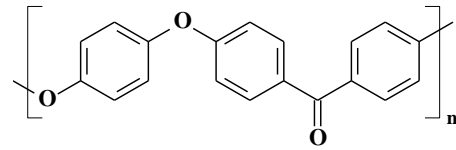
## PEAK, POLYIMIDE, POLYETHERIMIDE AND POLYETHERSULFONE FOR THERMAL STABILITY



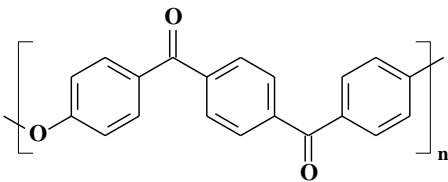
PolyEtherKetone -  
PEK



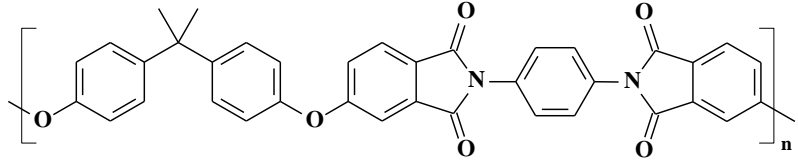
PolyEtherSulfone -  
PES



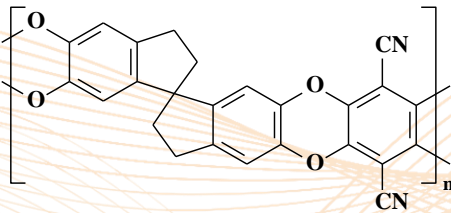
PolyEtherEtherKetone -  
PEEK



PolyEtherKetoneKetone -  
PEKK

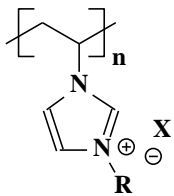


PolyEtherImide -  
PEI

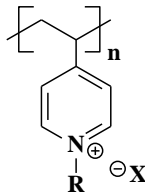


Polymer of Intrinsic  
Microporosity - PIM

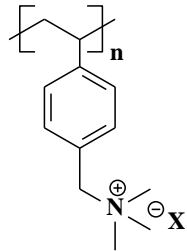
## CATIONIC POLYMERS FOR ANTIMICROBIAL ACTIVITY



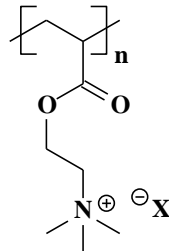
Poly(vinyl  
imidazolium)



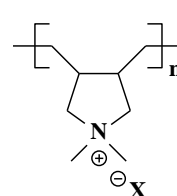
Poly(4-vinyl  
pyridinium)



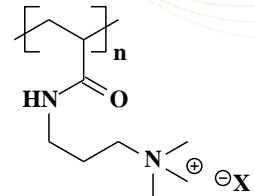
poly(vinylbenzyl  
trimethylammonium)



Poly((2-dimethyl  
ammonium) ethyl  
acrylate)



Poly(diallyl  
dimethyl  
ammonium)



Poly(3-Acrylamid  
opropyltrimethyl  
ammonium)

### SPECIFIC POLYMERS

