



## Institute of Polymer Chemistry (ICP)

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## **Introduction (portrait)**

- Institute established Oct 2007
- 1 full professor, 1 secretary
- 2 university assistants
- 5 PhD students, plus 2 external
- 1 diploma student
- 1 technician
- 2 lab assistants

## **Service for Companies**

- Research Projects (PhD- and Diploma-Theses)
- Polymer characterization with GPC, DSC, TGA, BET-Areometer, TMA, DMA, FT-IR- and UV-spectroscopy, AFM

## **Educational activities (courses)**

- Polymer Chemistry
- Functional Polymers
- Bionics – Biomimetic Materials
- Molecularly Imprinted Polymers
- New Polymers – New Applications
- Chemical Interactions in Polymers
- Formulation of Polymers
- Polyolefins

## **Research activities**

- Development of functional polymers
- Industrial aspects of polymers
- Polymer surface modification / functional coatings
- Bionics - Biomimetic materials
- Polymer characterization
- Fundamental research – modelling kinetics



## Selected Research Projects

### **Research project with Borealis (Linz) – diploma thesis**

Topic: Deaeration of talc for low VOC PP compounds

### **Research project with Borealis (Linz) – diploma thesis**

Topic: Scavengers and Chemical Bonding for Defined Volatile Components in Polyolefins

### **Research project with Borealis/AMI (Linz) – diploma thesis**

Topic: New phenolic, thermoplastic copolymers

### **Research project with BASF (Ludwigshafen, D) – PhD thesis**

Topic: Triggered release of active agents from polymer matrices

### **Research project with Mondi (Ulmerfeld, A) – diploma thesis**

Topic: Polymer coatings for humidity sensing devices

### **Research project with University Erlangen (Germany) – part of PhD thesis**

Topic: Supported Ionic Liquid Phase (SILP) Technology based on Molecularly Imprinted Polymers

### **Research project with Kekelit (Linz) and TCKT (Wels, A) – diploma thesis**

Topic: New polyurethanes with reduced gas permeability for insulating pipes