

Division of Frontier Engineering	Research field	Polymer Physics	Lab. ID FE12
Laboratory web site	http://polymphy.w3.kanazawa-u.ac.jp/english		
Research subjects			
Commodity polymers such as polyethylene and polypropylene are widely used as materials in our daily life. Polyethylene and polypropylene have complex structures which consist of crystal and amorphous regions. Although mechanical properties such as hardness and strength depends on these structures, the relation between the properties and structures is not well understood. Therefore polymer processing still largely depends on experience and intuition. In Polymer Physics laboratory, we study the relation between various structures ranging from molecular to macroscopic scales, and various material properties. We use experimental approaches such as mechanical, thermal, structural, and spectral analysis and also simulation approaches.			
Master/Doctor course: Education policy, curriculum, typical activity in the laboratory			
Each student is expeted to conduct his/her own research autonomously. Some topics are based on joint researches with private companies. For active students, we will give many opportunities to give talks/posters at academic meetings and to write publications. Usually, all the graduates school students have several chances to give talks at meetings. Every staff member is respectful to students' opinions based on their experiments, and love to have academic discussion with them. Students are trained their skills for logical thinking, solving problems, and presentations, via weekly progress and journal meetings. Many alumni work actively at first-class companies.			
Daily life in the laboratory, etc.			
We have a variety of good characters and respect each other. (M2) I feel it easy to talk to staffs, and discuss with other students frequently. (M1) We can get knowledge of various non-academic things. For example, I learned about information of companies from the alumni. (M2) We can extend our knowledge because each students have their own themes. (B4) I studied how to write logical texts, which will be useful for job hunting. (M2) Experiments before academic meetings are hard, but we will do such jobs autonomously. (M1) I play hard as well as I do my research hard. (M1) We have advantages on taking scholarships because we have opportunities to give talks at meetings. (M2)			
Message or comments by the laboratory faculty staffs			
We provide opportunities for students to learn various skills useful to build their carriers after graduation. Students are required to conduct their researches at a high level, enough to give talks at academic meetings, and to write papers. All the academic staffs speak English. We welcome active and willing students from abroad, who are interested in basic researches on polymeric materials, as well as joint researches with companies from all over Japan.			
Laboratory mail address	polymphys@ml.kanazawa-u.ac.jp		