

Division of Mechanical Science and Engineering	Research field	Mechanism Design	Lab. ID ME11
Laboratory web site	<a href="http://mechs.ms.t.kanazawa-u.ac.jp">http://mechs.ms.t.kanazawa-u.ac.jp</a> [in Japanese]		
Research subjects			
<p>Our laboratory is composed of three research groups: textile machinery group [Machine], textile kansei engineering group [Kansei], and nano-scale computational simulation group [Nano].</p> <p>[Machine] We develop technological elements in order to match the needs for high performance textile machinery. We also research mechanical properties of fiber assemblies those are main fields of textile machinery.</p> <p>[Kansei] The visual judgement by skilled workers is required to produce excellent engineering products. However, it is quite difficult to quantify their judgment criterions. Therefore, for visual judgement by unskilled workers, our goal is to develop a new method to obtain objective and quantitative criteria by elucidating roles of each visual information in visual judgements.</p> <p>[Nano] The strength of solid materials is studied through atomic- and nano-scale phenomena. Because it is not easy to elucidate the nano-scale phenomena only by a theoretical/experiment approach, we adopt the atomic-scale computer simulation approach. Our goal is to propose a new guiding principle for the design of materials with excellent mechanical properties by discovering "beautiful, reasonable atomic collective behavior" from the</p>			
Master/Doctor course: Education policy, curriculum, typical activity in the laboratory			
<p>[Machine] We have a joint seminar with another research group every week. We think that it is important to discuss other topics related to your subject. We also have one-on-one meeting a week in order to promote your subject.</p> <p>[Kansei] We hold three kinds of meetings every week, a joint seminar with other research group, our group seminar, and an one-on-one meeting.</p> <p>[Nano] Original research subjects are given to each graduate student. Almost every week, students are required to report their studies to the group leader and discuss with him. Reviews of selected papers in English is given by students by turns every two weeks to obtain the latest knowledge required to promote their research activities. Almost every student attends domestic conferences held in various places in Japan and sometimes wins a prize for his excellent presentation.</p>			
Daily life in the laboratory, etc.			
<p>Personal working desk with a personal computer is available for every student.</p> <p>[Machine] All relevant students of undergraduate, Master, Doctor share the laboratory rooms, and everyday free discussion on textile engineering or related topics are strongly encouraged.</p> <p>[Kansei] I was able to solve the questions of the study by my ideas and ingenuity. Own ideas are reflected directly in the results of the study. (Graduates)</p> <p>[Nano] Our group have a large number of high performance workstations, so every student can freely perform computer simulations according to your original idea.</p>			
Message or comments by the laboratory faculty staffs			
<p>[Machine] Almost Master graduates take occupation as engineers in Japanese famous manufacturer. Very few MC graduates entered the Doctor course. Doctoral course graduates got some research occupation such as teachers in technical colleges or polytechnic college, researchers in research institutes in local governments.</p> <p>[Kansei] We think it is very important ability for you to discuss with reasonable considerations and ideas. Let's develop new objective evaluation method together!</p> <p>[Nano] It is a great pleasure for us to find new ideas and phenomena not yet discovered. We want to share the pleasure with you. But, unfortunately, we do not know the shortcut to success. Only we can do is to face the research subjects in sincerity and use our brains as much as possible. Let's investigate "beautiful, reasonable atomic collective behavior" while being excited together!</p>			
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