

Division of Frontier Engineering	Research field	Microparticle System	Lab. ID FE13
Laboratory web site	http://aerosol.w3.kanazawa-u.ac.jp/		
Research subjects			
Aerosol is a system composed of small liquid or solid particles suspended in gas. In our laboratory, formation, measurement and control of aerosol particles are investigated to apply these aerosol technologies to various fields such as material science, energy and environments and human health. Development of energy utilization technology is also our main topic. In particular, high density adsorption heat pump composed of fine particle accumulated metal surface is studied. Control technologies of fine particles were also under development such as centrifugal and inertial separator, nanofiber, PM2.5 measurement device and ventilation of mist and fume. For the nanomaterial production, laser ablation and supercritical fluid techniques are also investigated to fabricate nanodevices for energy conversion and storage. New types of aerosol charger and microplasma ionizer are also under development for measurement of aerosol particles.			
Master/Doctor course: Education policy, curriculum, typical activity in the laboratory			
Each master course students have their own (original) research subject. Many subjects are related to collaborative works with companies and national institutes. PhD candidates will organize research team with master students and bachelor students as well as studying their own subject. All students are divided to approximately six research teams and team meeting is held every weak. The student is recommended to present their research results at international conference.			
Daily life in the laboratory, etc.			
Many foreign students (mainly from Asia) are joining to our laboratory. We also have many collaborative researches with companies. The students have frequent chances to join recreation and party for training communication skills.			
Message or comments by the laboratory faculty staffs			
Our laboratory was established in 1968 and it has more than 40years history. Currently 5 professors and 2 staff and many (more than 50) students are studying in this laboratory. Main research topics are aerosol formation, measurement, filtration, environment, heat pump, biomass etc. We are working hard under the slogan of “enjoy studying!”. We have much international collaboration as well as collaborative research with companies. Let us study together in our global laboratory!			
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