

## Lectures in Dept. Functional Molecular Science

Field	Subject Code	Subject	Credit	Content of subject	Lecturer		Lecture Schedule
	11080195	Functional Biomolecular Science	2	1. Bases and applications of solution and solid-state NMR spectroscopy in structural analyses of biomolecules 2. Overview of metalloproteins, Molecular mechanism of metalloproteins, Overview of spectroscopy for studying metalloproteins	Prof.	Koichi Kato	2014 school year
					Assoc.Prof.	Hiroshi Fujii	
					Assoc.Prof.	Katsuyuki Nishimura	
	11080171	Complex Catalysis	2	Molecular structures and functions of complex catalysts, in particular transition metal complexes, will be overviewed to understand catalytic molecular transformations.	Prof.	Yasuhiro Uozumi	2013 school year Intensive Course in 2nd semester
					Assoc.Prof.	Hidehiro Sakurai	
	11080194	Quantum dynamics	2	Lecture on principles of direct observation and control of ultrafast quantum dynamics of matter (in femto- and attosecond time scale) by using light and recent experimental trials in the relevant field.	Prof.	Kenji Ohmori	2014 school year
	11080100	Photo-physics	2	Laser technologies, photo-electronics, photo-material science, basic knowledges of optics and electromagnetic radiation from relativistic electron beams (synchrotron radiation, free electron lasers) will be described.	Prof.	Masahiro Katoh	2014 school year
					Assoc.Prof.	Takunori Taira	
					Assoc.Prof.	Takao Fuji	
	11080101	Molecular Functional Materials	2	In this lecture, one of the following topics will be delivered : Solid state physics and fundamental knowledge of electronic properties measurement and device physics for molecular solids.	Prof.	Masahiro Hiramoto	2013 school year 1st semester
					Assoc.Prof.	Toshikazu Nakamura	
	11080196	Exercise on Functional Molecular Science I	4	Discussion, experimental instructions, and/or theoretical studies for the student to perform the individual fundamental and applied research in the field of functional molecular science. This program is provided by appropriate teaching stuffs based on the research subject.			every year
	11080104	Exercise on Functional Molecular Science II	4		every year		
	11080105	Exercise on Functional Molecular Science III	4		every year		
	11080106	Exercise on Functional Molecular Science IV	4		every year		
	11080107	Exercise on Functional Molecular Science V	4		every year		
	11080197	Seminar on Functional Molecular Science I	4	Small size seminar to gain scientific knowledge, competence for scientific consideration, discussion, and research performance, and original scientific conceptions in the field of fundamental and applied functional molecular science. This program is provided by appropriate teaching stuffs molecular science. This program is provided by appropriate teaching stuffs based on the research subject of the individual student.			every year
	11080110	Seminar on Functional Molecular Science II	4		every year		
	11080111	Seminar on Functional Molecular Science III	4		every year		
	11080112	Seminar on Functional Molecular Science IV	4		every year		
	11080113	Seminar on Functional Molecular Science V	4		every year		
	11080115	English for scientific research	2		The principal aim of this course is to improve academic reading, academic writing, listening, and speaking in English for scientific research.		