

# SUMMER SCHOOL NANOSCIENCES



Jul, 24 - Aug, 5 2017

## Fundamental and Applications Emphasizing in Nanomedicine

### PROGRAM OVERVIEW

Nanosciences study in-depth knowledge regarding to the properties of the materials in the nanorange. The properties of these materials depend on the size and shape of the nanoparticles and their ordering in 2-D and 3-D structures.

The application of nanomaterials is in a wide range of fields such as device technology, medicine and chemical synthesis (catalysis). In this summer school, although the program is focused on the application of these nanosciences in nanomedicine nevertheless some other related topics will also be discussed. The course will cover both fundamental and application perspectives, started by the basic knowledge in general then the applications more specifically in the field of health and medicine.

This summer school is offered to participants not only from Indonesia but also other countries, in addition to the class courses, there will be fun activities to learn the culture and tradition of participants worldwide.

### REQUIREMENTS

Advanced bachelor and master students in the following fields of study :

*Pharmacy, Chemistry, Physics or Materials science and other discipline related to Nanosciences;*

### OBJECTIVES

The aim of this course is to show the participants the interdisciplinarity between different scientific fields that constitute the science of the nanoworld.

### HOW TO APPLY

- Application Dates : 1 June – 7 July, 2017
- Available for 20 Indonesian Students & 20 Foreign Students
- Application form can be downloaded at : <http://nrcn.itb.ac.id/>
- USD 200 for foreign students \*including course materials, lunch, coffee break and supporting accommodation
- IDR 1.000,000 for Indonesian students \*including course materials, lunch and coffee break
- Participants will be given 2 ECTS and Certificate of Attendance
- There will be registration waive for selected participants (upon request)

#### 1<sup>ST</sup> WEEK – NANOMATERIAL IN GENERAL (24 JULY - 29 JULY)

Prof. Hermawan Kresno Dipojono – RCNN ITB	Nano world: myth & real Modelling and simulation in atomic scale
Prof. Bambang Sunendar – RCNN ITB	Nanomaterial in general
Prof. Dr. Datuk Halimaton – NanoMITe, UTM	Recent Trend in Nanotechnology
Prof. Dr. Wilson Dino - Osaka University	Surface as a foundation towards realizing designer materials
Dr. Sabina Quader – iCONM, Japan	Nanocarrier system for cancer therapy
Dr. Brian Yulianto – RCNN ITB	Recent Trend on Development of Nano Materials for Sensors and Solar Cells
Dr. Rino Rakhmata Mukti – RCNN ITB	Recent advances in the synthesis of nanostructured material
Practical course and group presentation (RCNN Laboratory)	

#### 2<sup>ND</sup> WEEK – NANOMEDICINE (31 JULY – 5 AUGUST)

Prof. Dr. Giorgia Pastorin – NUS, Singapore	Challenges in nanomedicine
Dr. Veinardi Suendo – RCNN ITB	Spectroscopy techniques to understand nanomaterial design and function
Dr. Heni Rachmawati – RCNN ITB	Introduction to Nanomedicine
Dr. Damar Rastri Adhika – RCNN ITB	Characterization in Nanosciences
Dr. Ernawati Giri Rachman – RCNN ITB	The expression systems for generating virus like particles
Dr. M. Kemal Agusta – RCNN ITB	Modelling on computation
Dr. Fadjat Fathurrahman – RCNN ITB	
Dr. Adhitya Gandaryus Saputro – RCNN ITB	
Visitation to pharmaceutical companies (Dexa Medica)	
Cultural exchange and Bandung sight seeing (The Lodge Maribaya & East-West Seed)	
Closing and certificate awarding by Head of RCNN ITB (Prof. Hermawan Kresno Dipojono)	



PUSAT PENELITIAN NANOSAINS DAN NANOTEKNOLOGI  
Research Center for Nanosciences and Nanotechnology  
"Advanced Interdisciplinary Technology for Better Future"



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