

Form B-5

Date (日付) 17/07/2013

**Activity Report -Science Dialogue Program-**  
(サイエンス・ダイアログ事業 実施報告書)

- Fellow's name (講師氏名): BISHNU PRASAD BASTAKOTI (ID No. P 13204)

- Participating school (学校名): FUNABASHI SENIOR HIGH SCHOOL

- Date (実施日時): 10/07/2013

- Lecture title (講演題目): **A small size with huge potential: Nanoparticles**

(in Japanese)

- Lecture summary (講演概要): Please summary your lecture 200-500 words.

*The lecture was divided in three parts. The first part contained a brief introduction about myself. After completion of my Masters' level from Tribhuvan University, Kathmandu, Nepal I joined Saga University, Japan where I persuded PhD and now I am a postdoctoral reseacher (JSPS Fellow) at National Institute of Material Science, Tsukuba, Japan.*

*Second part of my lecture included a brief introduction of my country, Nepal. It is a small but naturally beautiful famous for trekking, mountain climbing, jungle safari and so on.*

*In the third part I briefly presented the the recent development of nanotechnology and my contribution to the field. Nanotechnology is the creation of functional materials, through the understanding and control of matter at dimensions in the nanometer scale length (1-100 nanometers) where new functionalities and properties of matter are observed. The properties of nanomaterials are completely different than its counter bulk materials. This is typically because nanoparticles have a greater surface area per weight than larger particles which cause them to be more reactive to some other molecules. Depending on own desires the morphology of nanoparticles can be easily tuned. The tuning of shape and size of nanomaterials or nanoarchitectonics is very important for application point of view. Recently nanoparticles are widely used for emerging applications in different fields such as bio-application, energy source and catalyst. The highly biocompatible materials such as calcium phosphate, calcium carbonate are used as nanovehicles for several drugs and transition metal oxides and carbon nanomaterials are used as power source.*

- Language used (使用言語): English

- Lecture format (講演形式):

◆Lecture time (講演時間) 80 min (分), Q&A time (質疑応答時間) 30 min (分)

◆Lecture style (ex.: used projector, conducted experiments)

(講演方法 (例: プロジェクター使用による講演、実験・実習の有無など))

Power Point Slide

◆Interpretation (ex.: assistance by accompanied person, provided Japanese explanation by yourself) (通訳 (例: 同行者によるサポート、講師本人による日本語説明))

Accompanied Person

◆Name and title of accompanied person (同行者 職・氏名)

PROF. YUSUKE YAMAUCHI

◆Other note worthy information (その他特筆すべき事項):

- Impressions and opinions from accompanied person (同行者の方から、本事業に対する意見・感想等がありましたら、お願いいたします。):

*His presentation is very impressive. He explained top-level results very carefully to high school students. They enjoyed listening to his lecture.*