

Form 3

Date (日付) 26/01/2011

(Date/Month/Year:日/月/年)

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 (参加外国人研究者氏名): Anita Swami _____ (ID No. P09251)

Participating school (参加機関(受入学校名)): Yokohama Frontier Science Highschool

Date (実施日時): 27-28/10/2010 (Date/Month/Year:日/月/年) Time: from 9:00 to 17:00

Lecture title (講演題目): (in English) Introduction to Nanoscience and Nanotechnology

(in Japanese)

Lecture summary (講演概要): The nano size range is usually defined as smaller than 100 nm. But why is nanoscience so special? The key point is that, **at nanoscales, materials have strikingly different properties**. As a result, nanoscience and technologies are attracting considerable **investment** from governments and industry hoping to drive economic development. So what exactly is nanoscience? And why the excitement? In a nutshell, nanoscience is the science of the extremely tiny. Nano (from the Greek for 'dwarf') is the prefix for units of 10^{-9} . So one nanometre is a billionth of a metre or a millionth of a millimetre. Nanoscience is concerned with understanding the things at nanoscale. Nanotechnologies have the endless potential to touch almost every aspect of our lives. It promises everything from the mundane (better paints, self-cleaning windows) to the bizarre (tiny submarines that will glide through our veins destroying bacteria). Thus **nanotechnologies aim to create novel structures, devices and systems** for a variety of different industries.

I introduced the concept of Nanoscience and Nanotechnology along with few demonstrations in my lecture

Language used (使用言語): English

Lecture format (講演形式):

Lecture time (講演時間) 60 min (分), Q&A time (質疑応答時間) 60 min (分)

Lecture style (examples: used projector, **conducted experiments**)

(講演方法 (例: プロジェクター使用による講演、プレ実験など))

Interpreter (example: **assistance by** host or **colleague**, provided Japanese explanation by yourself)

(通訳 (例: 受入研究者によるサポート、外国人研究者本人による日本語説明))

Name and title of assistant (協力者 職・氏名) (example: host or colleague)

Mr. Takenori Goda__

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

Impressions and opinions of assistant (協力者から本事業に対する意見・感想等がございましたら、お願いいたします。):