

Form 3

Date (日付) 19/11/2010

(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): Qingmin Ji (ID No. P09502)

Participating school (参加機関(受入学校名)): Takasaki high school

Date (実施日時): 13-14/11/2010 Time: from 11:00 to 17:00 and 9:00 to 11:00

Lecture title (講演題目): (in English) The Compartment Films Composed by Hollow Mesoporous Capsules for Stimuli-free Releasing and Controllable Gas Sensing

(in Japanese) 多孔性カプセルによって構成されるコンパートメントフィルムの作製と機能

Lecture summary (講演概要): Mesoporous capsules with hollow inner space was synthesized and subjected to layer-by-layer (LbL) assembly with counterionic polyelectrolytes. We studied the adsorption and release behaviors of the capsules films using quartz crystal microbalance (QCM). It was revealed that encapsulated molecules were released from the silica capsules films in an auto-modulated stepped mode. And the carbon capsule films were shown as smart sensor films with controllable selectivity on gases sorption.

Language used (使用言語): English

Lecture format (講演形式):

Lecture time (講演時間) 50 min (分), Q&A time (質疑応答時間) 100 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))

Use Projector

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))

Japanese explanation by myself

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

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。):