

(For JSPS Fellow)

Form B-5

Date (日付)

13/07/2017 (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 (講師氏名): AWOUAFACK Maurice Ducret (ID No. P16411 )
- Participating school (学校名): Hikone-Higashi High School
- Date (実施日時): 11/07/2017 (Date/Month/Year: 日/月/年)
- Lecture title (講演題目): Phytochemical and biological studies of some Cameroonian medicinal plants
- Name and title of your company (同行者 職・氏名)  
教授・森田洋行 Professor MORITA Hiroyuki
- Lecture format (講演形式):
  - ◆Lecture time (講演時間) 75 min (分), Q&A time (質疑応答時間) 15 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 presentation by using a projector
- Lecture summary (講演概要): Please summary your lecture 200-500 words.

Natural products chemistry is part of the research field in the process of drugs discovery from natural resources such as plants, fungi, sponges, etc. The aim of this research field is to isolate secondary metabolites (compounds) by using chromatographic techniques from natural resources and to characterize their structures by using spectroscopic techniques [nuclear magnetic resonance (NMR) Ultra Violet (UV), Infra-Red (IR), mass spectrometry (MS), etc.]. Medicinal plants are collected based on their ethnopharmacological and ethnomedicinal uses. The extract from plant material, fractions, and isolated compounds are screening for their bioactivities such as antimicrobial, antioxidant, anti-inflammatory, antimalarial, antiproliferative, antidiabetic, etc. Several Cameroonian medicinal plants have been used so far in natural products chemistry to obtain compounds with antimicrobial activities, antioxidants activities, cytotoxicity, etc. In this lecture, some examples are used to show how the research was carried out from the collection of plants, extraction, fractionation, isolation, and structure determination of compounds (secondary metabolites). The activities (mainly antimicrobial and antioxidant) of the compounds, extracts, and fractions were also presented. An introduction was done during the lecture to present Cameroon in general followed by a self-introduction including my education,

some work experiences and achievements, and my motivation as a researcher in the field of natural products chemistry.

Keywords: Cameroon, Medicinal Plants, Natural Products Chemistry, Secondary metabolites (Flavonoids, terpenoids), Bioactivities.

- Overall advice or comments to future participants in the program (今後の講師へのアドバイス):

From my opinion, lecturing at high schools organised by the JSPS Science Dialogue program is a good program to stimulate young students from their earlier stage of science to enable them to make a suitable choice on what they would study at the university. Even if sometime the topic of the lecture could be higher than their level of study or the English language using for the presentation that could also makes students not understand well the lecture.

- Other noteworthy information (その他特筆すべき事項):

- Impressions and opinions from a company (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。)

本事業は、本邦の高校生が英語に接しながら、研究の一旦を垣間見ることができるだけでなく、JSPS 外国人ポスドクにとっても母国を紹介する良い機会です。これからもこの事業を続けてくださるようお願いいたします。