

## ACTIVITY REPORT FOR 2012

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NATIONALITY: CAMEROONIAN  
 PERIOD OF STUDY: 3 YEARS (April 2012 to March 2015)

### Introduction

Basic requirements for the completion of a doctorate course in Tokyo Institute of Technology include amongst others; a total of 24 credits (4 credits per semester), research work and thesis write up/presentation. Based on this, a total of 4 courses were registered in 2012 for the 2 semesters for a total score of 8 credits and a work schedule was prepared. A summary of our activities for 2012 and future (2013/2014) work plan are presented on the tables below;

Table 1: Work schedule for 2012

YEAR	SEMESTER	WORK PLANNED	EVALUATION OF WORK COVERAGE	OBSERVATIONS/REMARKS
2012/2013	1 (April 2012 to Sept. 2012)	<b>A- April 2012 – June 2012</b> - Acquaintance with environment - General reading and search for materials - Japanese language course - Basic laboratory instructions and use - Analytical techniques - Seminars and conferences - Literature review	100% coverage	- Very good. - Through with YOKOYAMA laboratory seminars for the semester. - Attended Japan Geoscience Union meeting
		<b>B- July 2012– September 2012</b> - Literature review - Analysis of major +trace elements in 8 OKVG samples (preliminary results) - Seminars and conferences - Preparation of Literature review for publication (review paper)	100% coverage	- Very good - Completed analyses of major and trace elements - Will attend and present in SATREPS domestic meeting and GSJ2012 meeting in September
	2 (Oct. 2012 to March 2013)	<b>C- October 2012 – December 2012</b> - Materials and Methods - Seminars and conferences - Submission of review paper for publication - 1 <sup>st</sup> Field work (sampling) (19 Nov.2012 to 14 Jan. 2013)	98% coverage	- Very good - Field work started on the 19 <sup>th</sup> of November 2012 - 2 papers in progress and will soon be ready for submission - In addition, learned how to prepare thin sections
		<b>D- January 2013 – March 2013</b> - End 1 <sup>st</sup> field work - Separation of samples for various analyses - Preparation of thin sections and mineral analysis - Preparation of samples for chemical analyses - Seminars and conferences	On target	- Came back to Japan after 2 months of field work in the OKVG, CVL - Presently preparing samples for analyses - Submitted abstracts for IAVCEI 2013 and JpGU 2013 conferences.

The following presentations were made in seminars and conference

Table 2: Oral Presentations

Date	Seminar, meeting, conference	Theme	Remark (s)
2012/04/26	YOKOYAMA Lab. seminar	Research proposal	successful
2012/06/21	YOKOYAMA Lab. seminar	LITERATURE REVIEW: 1)The Cameroon Volcanic line 2) Geochemistry Of Major, Trace Elements And Isotopes; Their Significance In Petrogenesis Of Volcanic Rocks	successful
2012/09/4	Inter-lab camp at Sekigahara	Petrogenesis of lavas of the OKVG, CVL: constraints for isotopes, major and trace elements	successful
2012/09/10	Geochemical Society of Japan 2012- Kyushu	Geochemical study of the Oku Volcanic Group lavas, Cameroon Volcanic Line, west Cameroon: Preliminary results from eight mafic lavas	successful
2012/09/19	SATREPS 2012 domestic meeting, Tokai Uni. Japan	Petrogenesis of lavas of the Oku Volcanic Group (CVL): Constraints from major, trace elements and radiogenic isotopes (preliminary results)	successful
2012/10/16	YOKOYAMA Lab. seminar	Estimation of lithosphere depth along the CVL and magma source; constraints from Major, trace elements and isotopic ratios	successful
May 2013	JpGU 2013, Makuhari Messe	Geochemical characterization of lavas from the Oku Volcanic Group, Cameroon Volcanic line, West Africa	Abst. Submitted
July 2013	IAVCEI 2013 conference, Kagoshima	Petrogenetic processes generating magma beneath the Nyos maar volcano (Cameroon Volcanic Line, West Africa): Constraints from trace elements and radiogenic isotopic systematics	Abst. Submitted

\*Number of papers in preparation for submission: O2

## 2) FIELD WORK

A comprehensive field expedition was carried out in the OKVG from November 19<sup>th</sup> 2012 to January 2013. The team comprised of Asobo, Pr. Yokoyama (TIT), Dr. Aka Festus (IRJM-Yaoundé) and workers. Assistance was given by Mr. Yoichi Yoshida (SATREPS coordinator, Yaounde). The main objective of this trip was to collect representative rock samples from the entire OKVG for analyses of major, trace elements and isotopes. A total of 108 rock samples including 4 basement rocks were collected. Some of the samples (50) were transported as extra luggage by Asobo while others will be sent by Mr. Yoichi Yoshida via air or water. Presently, we are preparing the samples for petrographic and chemical analyses.

### 3) Future work plan

Table 3: Tentative work schedule for 2013

Year	SEMESTER	WORK PLANNED	EVALUATION OF WORK COVERAGE	OBSERVATIONS/REMARKS
2013/2014	3 (April 2013 to Sept. 2013)	<b>E- <u>April 2013 – June 2013</u></b> -Preparation of samples for chemical analyses -Laboratory analysis of major and trace elements -Seminars and conferences -2 <sup>nd</sup> article write up (draft)		
		<b>F- <u>July 2013 – September 2013</u></b> -Laboratory analysis of isotopes -Seminars and conferences -3 <sup>rd</sup> article write up (draft)		
	4 (Oct. 2013 to March 2014)	<b>G- <u>October 2013 – December 2013</u></b> -Interpretation of preliminary results -2 <sup>nd</sup> Field work -Seminars and conferences -K/Ar analysis for Geochronology (if possible)		
		<b>H- <u>January 2014 – March 2014</u></b> -4 <sup>th</sup> article write up (Draft) -Corrections and submission of 2 <sup>st</sup> and 3 <sup>rd</sup> articles for publication -Seminars and conferences		

Number of papers in preparation for submission

### CONCLUSION

The 2012/2013 academic year was very successful with the attainment of over 99 % of our initial objectives set at the beginning of the academic year. Interestingly, the interaction with students and academic staffs has been very cordial. Most importantly, laboratory lectures were focused not only on how to carry out analyses but also on management and maintenance of analytical apparatus. No major difficulty was encountered and we look forward to putting much effort to have better results from our 2012 field expedition.