


# Let's learn and visit sake factories from the perspective of chemistry and engineering!

酒の文化を科学の観点から  
楽しもう！





PROJECT PURPOSE:  
Project to increase  
the number of  
International students

外国人留学生を増やすための  
プロジェクト



GOAL:

To disseminate to students of partner schools through HP that they have opportunity to experience Japanese culture from a scientific aspect by studying abroad at Doshisha University

Project to increase the number of International students

# Project Schedule for carrying out the project (Plan, Carrying out, Report)

## プロジェクト実施スケジュール（企画、実施、報告）



**July 20-30**

Selection of Factories to Visit



**November 15-25**

Promotion to Students



**August 11 & 25**

Meeting with Selected Factories



**November 30**

- Lecture and Factory Tour of Kitagawa Honke
- Questionnaire Distribution



**September 20-30**

Drafting of Questionnaire



**December 12**

Interim presentation



**February 9**

Lecture and Factory Tour of Takara Shuzo



## Summary of Tour to Kitagawa Honke Sake Brewery

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# LECTURE CONTENT:

- History of Fushimi
- Method of Sake Production
- Difference between Sake, Wine and Beer
- Important Factors to Consider in Sake Production
  - Rice
  - Water
  - Fermentation Yeast





## FACTORY TOUR & SAKE TASTING

- Tour of sake and yeast production line

# KITAGAWA HONKE SAKE BREWERY TOUR FEEDBACK

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4.2/5

Over-all  
Satisfaction  
Rating

## Over-all satisfaction comments:

The lecture was easy to understand and the tour was very informative!

4.8/5

Logistics  
Satisfaction  
Rating

## Logistics Feedback:

Especially tasting sake was fun.

60%

Of participants  
found the event  
contents very  
relevant

## Relevancy Feedback:

Everything was Important and made up the whole experience.



# *Takarasyuzo Shirakabegura Factory*

## Summary



Video of sake  
production  
process and  
Shirakabegura



Factory tour



Tasting

# Factory tour

We learned about tools used in the past, such as

**Koshiki** - made of cedar wood, used to steam rice

**Kai bou** – used to mix of liquids and solids in tank





# Factory Tour

**Rice polishing** — We learned about the degree of polishing required

- 90% : Cooked rice for eating
- 70% : Regular sake, Junmai sake
- 60% : Ginjo sake
- 50% : Dai-ginjo sake
- 35% : Dai-ginjo sake for Japan Sake Award
- 20% : Limited Junmai Dai-ginjo sake

# Factory tour — Experience

We experienced **making Koji** and **Fermentation progress**

**Making Koji**—We sprinkled spores of koji mold on steamed rice



# Factory tour — Experience

## Fermentation progress in main mash

We looked at yeast with a microscope and observe the state of yeast by dyeing, then tried tasting each yeasts

5 days after

10 days after

15 days after

25 days after

# Tasting!



We tried tasting sake made in Shirakabegura



Daiginjo sake— made with 39% polished rice, just pressed.

Ginjo sake

Mio sake —sparkling nihonsyu

# What is the difference between two factories?

## Kitagawa Honke

- Traditional methods account for a large percentage of making sake process.

## Takarasyuzo

- Many cutting edge automatic machines are used in Shirakabegura.

# Abilities Improved in this Project

- By coordinating as a group and contacting companies, we were able to improve our communication skills.
- We had a deeper understanding of different cultures, as students from different countries were in our group and our participants were international students.
- We thought about the contents of the plan by ourselves, faced problems and solved them. As a result, we acquired independence, planning ability and flexibility.





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