Author(s)	究基盤施設 外部共用におけるサービス業務について の事例研究 小野田, 敬
Citation	
Issue Date	2019-03
Туре	Thesis or Dissertation
Text version	ETD
URL	http://hdl.handle.net/10119/15783
Rights	
Description	Supervisor:伊藤 泰信,知識科学研究科,博士



Research Infrastructures as Innovation Hubs in Public Research Establishments

: The Case Studies on Service Activities in Shared Facilities

## Takashi Onoda

Japanese public research establishments have played a crucial role in "innovation hubs," an industry-academia collaboration, under the national innovation system in the 5th Science and Technology Basic Plan enacted in 2015. Innovation hubs have made clear that research infrastructures (RIs) in public research establishments should function with shared corefacilities for collaborations between industry and academia.

Generally, research technicians who do not mainly participate in knowledge productions engage shared activities. Prior research has highlighted problems of shared activities how RIs promote relationships with industrial users. However, little attention has been paid that processes of how shared activities connect with their knowledge productions in RIs. It has been almost entirely focused on people who have PhDs and aim to contribute to their academic communities and are thereby losing incentives for shared activities.

This thesis will criticize the dichotomy between scientists and research technicians that prevents the encouragement of shared activities in RI. It will further specify strategies for promoting shared activities as innovation hubs in public research establishments to encourage inventions in academia and innovations in industries.

The thesis will focus on 11 RIs, including Nuclear Magnetic Resonance facilities, Synchrotron Radiation facilities, and a Neutron source facility, one of which is in Switzerland. This thesis uses ethnography surveys that include observation analysis for three years.

This study attempts to understand the mental conflicts of scientists and coordinators in shared activities. It further signifies as to why their activities cannot rise to their incentives by focusing on different value systems and research incentives between academia and industry.

It also shows the co-creational and win-win model of shared facilities for facility staff who relate their service activities with their own knowledge production. The model suggests shared activities are recognized not only as just individual service activities in RIs but also as interrelated activities with their knowledge production.

This analysis presents significant implications for promoting innovation hubs in public research establishments. Further studies are required in order to compare these findings with other RIs.

Keywords: National Innovation System, Research Infrastructure, Ethnography, Service Activities in Academia, Industry-academia Collaboration