京都大学教育研究振興財団助成事業
成　果　報　告　書

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公益財団法人京都大学教育研究振興財団
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開催場所	St. Malo, France	
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成果の概要	**タイトルは「成果の概要／報告者名」として、A4版2000字程度・和文で作成し、添付して下さい。「成果の概要」以外に添付する資料　■ 無　□ 有（　　）**	
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当財団の助成について	（今回の助成に対する感想、今後の助成に望むこと等お書き下さい。助成事業の参考にさせていただきます。） 今回の発表を通して研究に大きな進歩ができました。 貴重な機会をご支援いただいた貴財団に心より感謝申し上げます。 発表内容を基本的にして今年12月に雑誌に論文を提出予定です。	

The 5th International conference on Sodium Batteries (ICNaB) 2018

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Fig. Le Nouveau Monde, ICNaB 2018 board at the entrance, beautiful view of the Conference Hall.

The last ICNaB 2017 took place at Tokyo, Japan. After attending the conference last years, I were able to obtain the valuable comments from the conference, and were able to publish my paper to advanced sustainable system. I was fortunate that I am selected for this foundation this year to attend ICNaB 2018. This time the conference was held at St malo, France from 13-15 November 2018. It is one of the largest conferences in the area of sodium batteries which can be understood by the number of invited talks and poster presentations. There were over 16 invited talks and 70 poster presentations by the prominent researchers from all over the world. Researchers from all around the world: Germany, USA, France, Australia, China, Hongkon, Spain, English, Japan and many more countries came to this event. Several famous companies like Faradion, Biologic, Total, Natron Energy, etc also shared the latest technologies they are working on.

In this academic meeting, a wide range of topics like novel analytic methods, electrolytes, cathodes, anodes, binders for sodium batteries were discussed. Although, many talks were about cathodes and anodes yet electrolytes are getting attention of the researchers owing to their vital role in improving battery performance and safety and vast design capability. Among the major types of electrolytes, ionic liquids are widely investigated due to the high

safety and good performance in all the battery systems. From this conference, many findings suggest ionic liquids as the promising candidate for the future electrolytes for batteries.

In my presentation, I reported tthat the uniform composite of NVP contained the CNFs framework in interior its particles (NVPC@CNFs) are obtained utilizing the combination of sonication and sol-gel method, and the electrochemical measurement is studied using a high mass loading electrode. NVPC@CNFs using Na[FSA]-[C2C1im][FSA] (C2C1im = 1-ethyl-3-methylimidazolium, FSA = bis(fluorosulfonyl)amide) ionic liquid (IL) electrolyte exhibits superior reversible charge-discharge performance, rate capability and cyclability at wide temperature range.

I felt that this conference was very helpful in many perspectives. I presented a poster and got a lot of questions which increased my knowledge on my topic. In the poster sessions was a really nice atmosphere for discussing the ideas in a better flow. Moreover, interacting with other researchers provided me a glimpse of the research progress in other areas also. After 3 days of listening to the talks, meeting prominent professors and researchers, I felt more confident and motivated to do better research in the future.