Contribution ID : **23**                                                                                     Type : **Poster**

# Recent highlights from the cold-neutron triple-axis spectrometer SIKA

*Thursday, 12 November 2020 17:11 (1)*

In this presentation, we will show the Taiwanese built cold-neutron triple-axis spectrometer SIKA at ACNS which was funded by the Ministry of Science and Technology (MoST), Taiwan. We are now running the user program since 2015 with over 20 papers published since then. The cold-neutron triple-axis spectrometer SIKA excels at measuring well-defined regions in S(Q, ω) space with very low background allowing for parametric studies (eg varying temperature or magnetic field) to be conducted efficiently. Also, triple-axis spectrometers have the advantage of accommodating a wide variety of sample environments and operating with polarized neutrons for both inelastic and elastic scattering experiments. Triple axis spectrometers have been one of the most versatile neutron scattering instruments for many areas of neutron science. The cold neutrons available at SIKA allow us to investigate physical phenomena with high energy and momentum resolution. With other inelastic scattering instruments PELICAN, EMU, and TAIPAN in ACNS, ACNS can cover a large area of S(Q, ω) space of your research.

We will outline the components, capabilities, sample environment, software, and statistics of SIKA. We will present some of our recent scientific highlights from SIKA since the last AANSS2018. Finally, we will present the current instrument developments on SIKA to accommodate 3He Polarization analysis. Polarized neutrons can help users to study the properties of materials from proteins to quantum magnets in greater detail.

## Speakers Gender

Male

## Level of Expertise

Experienced Research

## Do you wish to take part in the poster slam

No

**Primary author(s) :**  YANO, Shinichiro (NSRRC);  DENG, Guochu (Australian Nuclear Science and Technology Organization);  Mr PENG, Hanz (NSRRC);  WU, Chun-Ming (NSRRC);  RULE, Kirrily (ANSTO)

**Presenter(s) :**  YANO, Shinichiro (NSRRC)

**Session Classification :**  Poster Session

**Track Classification :**  Neutron Instruments & Techniques