

## DEGRADING THE ILLICIT PRECURSOR CHEMICAL SUPPLY CHAIN NETWORK OPERATING IN MYANMAR REGION

Rigaku worked in conjunction with a U.S. federal law enforcement agency in developing a counter-narcotics, technology-based interdiction training pilot program to assist Myanmar's primary counter-drug law enforcement agency. Rigaku's focus was to enhance their ability in using interdiction technology to identify and degrade the illicit precursor chemical supply chemical (PCSC) networks used by Transnational Organized Criminal (TOC) groups and their proxies operating in Myanmar to mass produce narcotics with a specific focus on methamphetamine.

The TOC actors operating in Myanmar and the surrounding region work in concert with PCSC criminal groups based in Asia to coordinate cross-border smuggling of multi-ton quantities of precursor chemicals required for the production of methamphetamine and heroin. Myanmar's primary narcotics threat is directly linked to the explosive importation of illicit precursor chemicals required for methamphetamine production. Rigaku supported the interdiction training strategy to target and degrade PCSC networks operating in Myanmar's eastern Shan State.

Rigaku initiated the technical counterdrug interdiction training program in line with the U.S government's strategy to combat significant TOC groups operating in countries that have been identified as the epicenter of transnational organized crime, terrorism, and drug production. A critical element in Rigaku's law enforcement

training assistance strategy was to assist organizations like U.S. federal agencies, and foreign law enforcement agencies with the implementation of a technical enforcement training program to degrade narcotic trafficking activity. Rigaku's training assistance was developed to directly target Myanmar's criminal PCSC networks. Additionally, Rigaku supported the acquisition and training initiative with the Rigaku ResQ CQL 1064 nm Raman spectrometer to identify mislabeled and clandestine shipments of precursor chemicals being smuggled into Myanmar.



### CENTER OF GRAVITY: PRODUCERS OF ILLICIT NARCOTICS

Rigaku is committed to supporting law enforcement agencies in their long-term counter-narcotic strategy to identify and degrade the critical capabilities of TOC actors to successfully operate PCSC and narcotics transportation networks. TOC actors depend on both maritime and land-based drug transportation networks to coordinate the global shipment of multi-ton quantities of precursor chemicals and narcotics. Identifying essential precursor chemicals used in the illicit production of drugs is the first step in degrading the PCSC networks operating in many countries where drugs are produced.



## OPERATION DESCRIPTION



Rigaku's support for the Myanmar counter-narcotics training program commenced during October FY2018 and played a critical role in assisting them with developing a counterdrug interdiction strategy. Rigaku developed the training strategy to enhance these agencies' ability to use advanced counterdrug detection equipment to identify precursor chemicals, narcotics, and explosives.

## PROJECT COMPONENTS TO THE PROGRAM

Rigaku Analytical Devices partnered with U.S. federal law enforcement in Myanmar to develop an interdiction training program using the Rigaku ResQ CQL 1064 nm Raman spectrometer. The partnership included:

- the purchase of three ResQ CQL 1064 nm Raman drug analyzers
- one week drug identification class hosted by Florida International University's National Forensic Science Technology Center
- two day Rigaku Raman instructional course in Myanmar that included practical exercises

The Rigaku ResQ CQL 1064 nm analyzer has a computer memory with approximately 13,000 different drugs, precursor chemicals, and explosive identifiers. The ResQ CQL 1064 nm was a force multiplier which provided Myanmar counter-drug units the enhanced ability to quickly search numerous vehicles used to transport precursor chemicals and mislabeled containerized chemical consignments resulting in a significant number of illicit chemicals used in the production of narcotics.

## OPERATION CONCLUSION

Myanmar's counter-drug agency successfully integrated the use of the ResQ CQL 1064 nm Raman analyzer into their regional narcotics and precursor chemical interdiction operation, resulting in several significant precursor chemical and methamphetamine seizures. Because of the success of this pilot program, Rigaku is planning to continue its support for law enforcement agencies in Asia to target TOC actors, their proxies, and the PCSC networks.

## RIGAKU RESQ CQL IDENTIFICATIONS DURING OPERATION (partial list)

PRE-PRECURSOR CHEMICALS	PRIMARY PRECURSOR CHEMICALS	FINISHED PRODUCT
Acetic Anydride	Caffeine	Heroin
Ammonium Nitrate	Hydrochloric Acid	Ketamine
1-Phenyl-2-Propanone	Sulphuric Acid	Ice
Methylamine	Acetone	Yaba Tablets
Mixture of Methylamine Sulfuric Chloride	Sodium Cyanide	Ecstasy
	Tartaric Acid	Cannabis
	Acetic Acid	
	Sodium Ethoxide	
	Benzyl Cyanide	
	Ethyl Benzoate	



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