



**Asia-Pacific
Economic Cooperation**

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Session: 5.3

Veterinary Drug Multi-residues in Chicken Proficiency Testing Program in China

Submitted by: China



**Food Safety Cooperation Forum Partnership
Training Institute Network Proficiency Testing
Workshop**

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Veterinary Drug Multi-residues in Chicken Proficiency Testing Program

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Content



Lab introduction



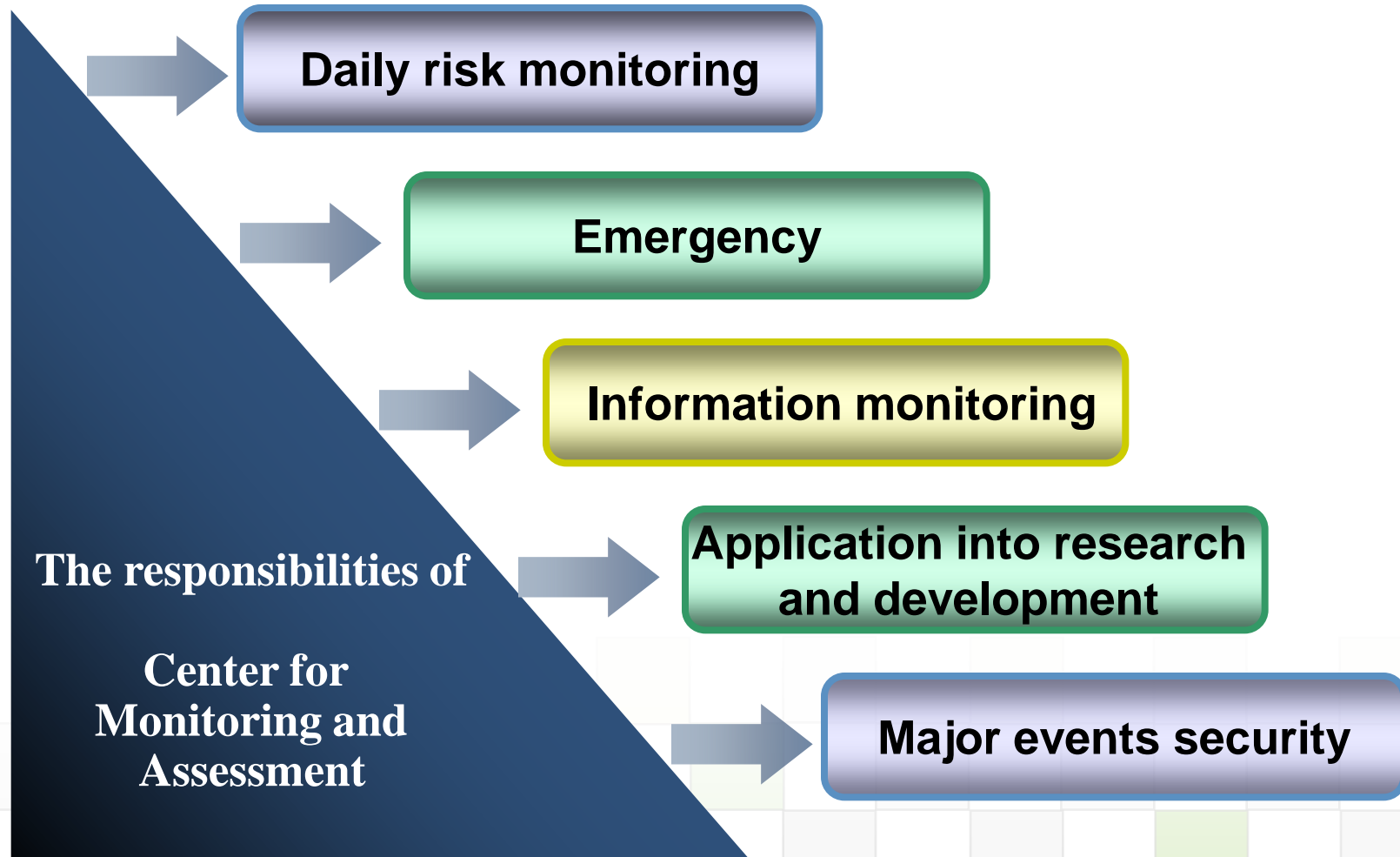
Experimental method



Results



Lab introduction



Lab introduction

**Detection
capability**

Hundreds of analytes

- Residues of pesticide and veterinary drug
- Food additives
- Heavy metal
- Biotoxins

- Foodborne pathogenic bacteria
- Transgenosis

Lab introduction-PT program

- **Lab Code:** APEC FSCF-MYP-023
- **Analytes :** Sulfamethoxazole(SMZ)
Sulfadimidine(SDM)
Sulfaquinoxaline(SQX)
ciprofloxacin
- **Team members:** *Zhang Lihua, Miao Tingting, Shao Ruiting,
Zhao Junping, Feng nan*

Experimental method

Experiment

**Sample
preservation**

**pretreatment
method**

**Instrument
method**

Separate sample: 0.50g freeze dried sample, stored in -20°C ;

Pretreatment Method

Recovery
sample

Extraction

Cleaning

Concentrate

- Add 1.50g distilled water into 0.50g freeze dried sample;

- String for 15 min.

- **sulfonamides**

Ethyl acetate 15mL;
Ultrasonic,20min;
Centrifugation;
Repeat extraction;
Rotary evaporation to **5 mL**.

- **ciprofloxacin**

EDTA-McIlvaine;
Ultrasonic,20min;
Centrifugation;
Repeat extraction.

- **sulfonamides**

DIKMA **NH₂** solid-phase extraction,
500 mg/6cc ;
Elution:1.5% acetic acid alcohol

- **ciprofloxacin**

OASIS **HLB** solid-phase extraction,
150 mg/6cc;
5% Methanol ;
elution:5mL Methanol

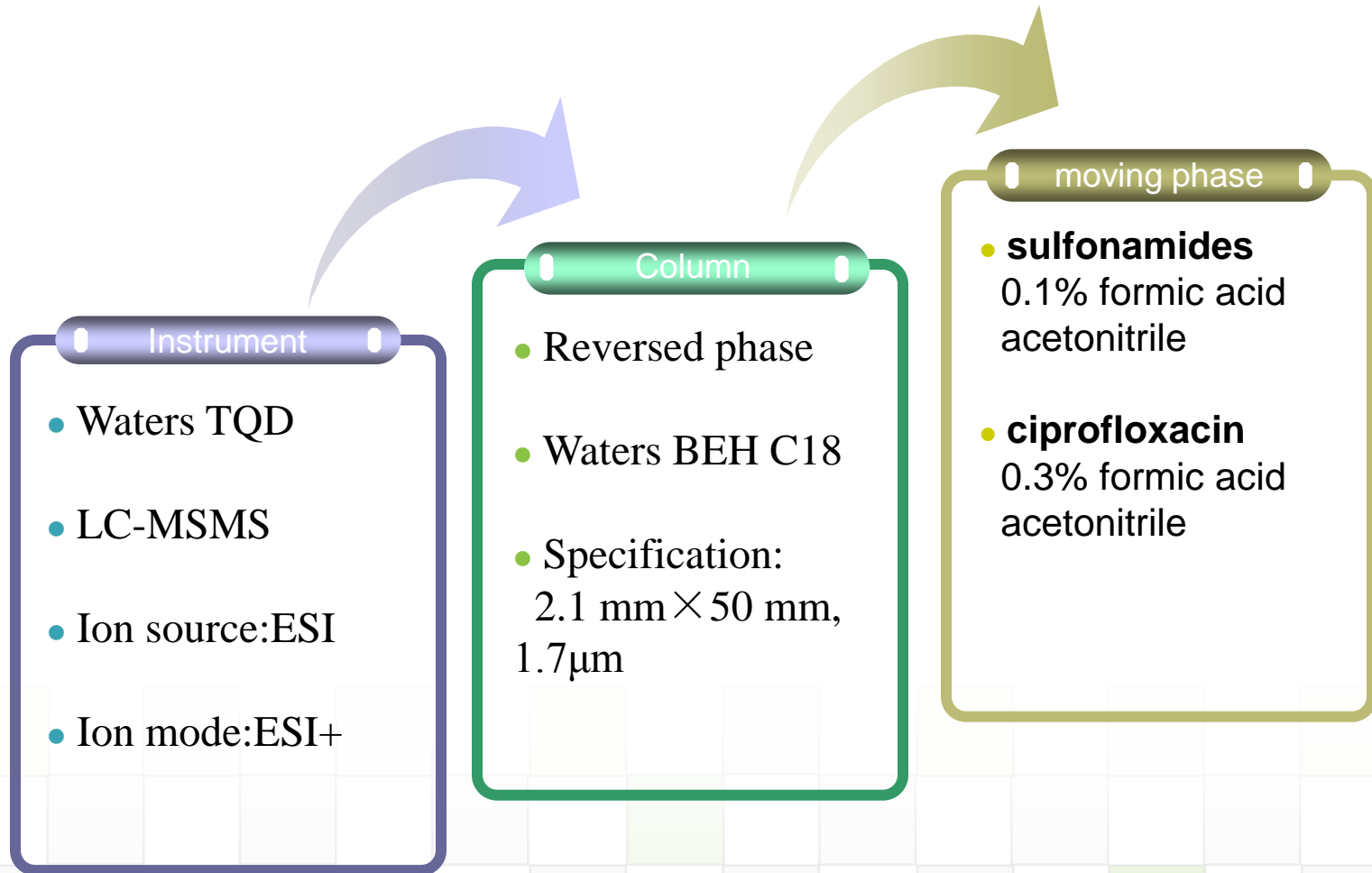
- **sulfonamides**

Nitrogen blow dried
Heat 40 °C;
Constant volume
1.0mL
(0.1% FA:acetonitrile ,9:1)

- **ciprofloxacin**

Nitrogen blow dried
Heat 40 °C;
Constant volume
1.0mL
(0.3% FA:acetonitrile ,9:1)

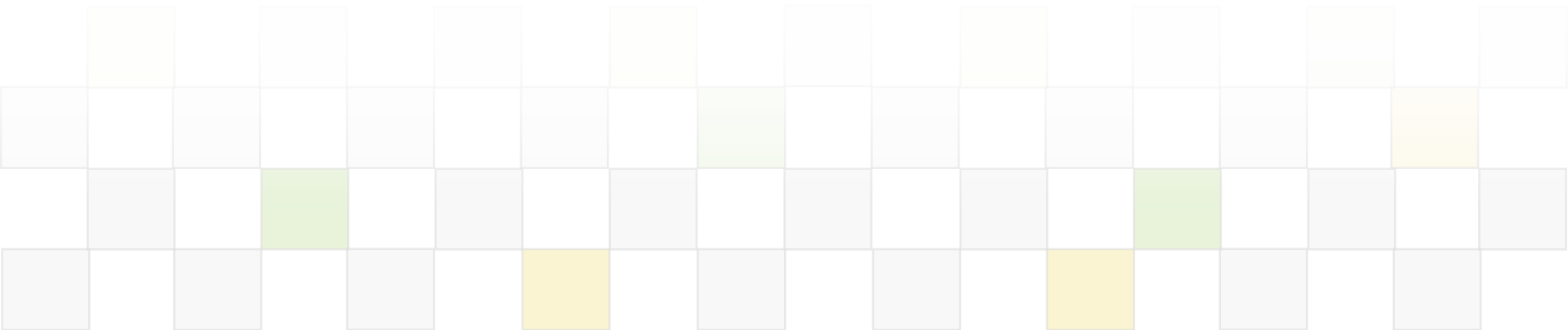
Instrument Method



UPLC condition

- **Sulfonamides**
- A : 0.1% FA B : Acetonitrile Flow rate:0.3mL/min

- **Ciprofloxacin:**
- A : 0.3% FA B : Acetonitrile Flow rate:0.3mL/min



Results

Analytes	Sample No.	Testing results in duplicate ($\mu\text{g}/\text{kg}$)		Mean value ($\mu\text{g}/\text{kg}$)
		1	2	
Sulfamethoxazole (SMZ)	13-C394	113.634	105.628	109.6
	13-D911	32.358	32.248	32.3
Sulfadimidine (SDM)	13-C394	98.763	94.774	96.8
	13-D911	37.622	39.415	38.5
Sulfaquinolone (SQX)	13-C394	155.902	160.940	158.4
	13-D911	999.800	1010.626	1005.2
ciprofloxacin	13-C394	483.165	500.997	492.1
	13-D911	102.276	95.974	99.1



Thank You!

You can find any slide here

