

# ICISC 2019

## Call for Participants

*The 22<sup>nd</sup> Annual International Conference on Information Security and Cryptology*

*December 4(Wed)~6(Fri), 2019, Seoul, Korea*

<http://www.icisc.org>

KOREANA Hotel, Seoul, Korea (<http://www.koreanahotel.com>)

### TOPICS of INTEREST INCLUDE, but are not limited to

- |                                           |                                   |
|-------------------------------------------|-----------------------------------|
| -Access Control & Audit                   | -Authentication and Authorization |
| -Biometrics                               | -Block and Stream Ciphers         |
| -Cloud Computing Security                 | -Copyright Protection             |
| -Cryptanalysis                            | -Cryptographic Protocol           |
| -Digital Forensics                        | -Digital Signature                |
| -Distributed Systems Security             | -Efficient Implementation         |
| -Electronic Commerce                      | -Hash Function                    |
| -Homomorphic Encryption                   | -Identity Management              |
| -ID-based Cryptography                    | -Information Hiding               |
| -Intrusion Detection and Prevention       | -Key Management                   |
| -Mobile Security                          | -Privacy Enhancement              |
| -Public Key Cryptography                  | -Secure Multiparty Computation    |
| -Side Channel Attacks and Countermeasures | -Social Network Security          |
| -Software Security                        | -Smart Device Security            |

### Important Dates

Conference Date : December 4(Wed) ~ 6(Fri), 2019

Submission Deadline : September 16(Mon), 2019 (UCT 22:00)

Notification Due : October 28(Mon), 2019

Proceedings version deadline : November 7 (Thu), 2019

Early Registration : ~~Before Nov.25, 2019~~ **Before Nov.27, 2019**

### Committee

#### General Chair

Hyun Sook Cho (National Security Research Institute, Korea)

Kyung-Hyune Rhee (Pukyong National University, Korea)

#### Organizing Chair

Changhoon Lee (Seoul National University of Science and Technology, Korea)

#### Program Chair

Jae Hong Seo (Hanyang University, Korea)

## ICISC 2019 Program

Wednesday, (2019-12-04)	
8:30 – 9:20	<b>Registration</b>
9:20 – 9:30	<b>Opening Remarks</b>
9:30 – 10:45	<p><b>Session 1: Block Ciphers and Authenticated Encryption</b> (Session Chair: TBA )</p> <p><a href="#">A Revised Version of Block Cipher CHAM</a> Dongyoung Roh, Bonwook Koo, Younghoon Jung, Il Woong Jeong, Dong-Geon Lee, Daesung Kwon, and Woo-Hwan Kim (The Affiliated Institute of ETRI)</p> <p><a href="#">Systematic Construction of Nonlinear Product Attacks on Block Ciphers</a> Nicolas T. Courtois (University College London), Matteo Abbondati (Independent Maths teacher based in London), Hamy Ratoanina (University College London), and Marek Grajek (Independent cryptography and crypto history expert)</p> <p><a href="#">Authenticated Encryption Based on Lesamnta-LW Hashing Mode</a> Shoichi Hirose (University of Fukui), Hidenori Kuwakado (Kansai University), and Hirotaka Yoshida (National Institute of Advanced Industrial Science and Technology)</p>
10:45 – 11:15	<b>Coffee Break</b>
11:15 – 12:15	<p><b>Invited Talk 1</b> (Session Chair: TBA )</p> <p><a href="#">Practical Applications of Homomorphic Encryption</a> Miran Kim (University of Texas)</p>
12:15 – 14:00	<b>Lunch</b>
14:00 – 15:15	<p><b>Session 2: Block Ciphers Implementation</b> (Session Chair: TBA )</p> <p><a href="#">All the HIGHT You Need on Cortex-M4</a> Hwajeong Seo (Hansung University) and Zhe Liu (Nanjing University of Aeronautics and Astronautics )</p> <p><a href="#">Fast AES implementation using ARMv8 ASIMD without Cryptography Extension</a> Hayato Fujii (University of Campinas), Felix Carvalho, Rodrigues (University of Campinas), and Julio Lopez (University of Campinas)</p> <p><a href="#">FACE-LIGHT: Fast AES-CTR Mode Encryption for Low-end Microcontrollers</a> Kyungho Kim (Hansung University), Seung Ju Choi (Hansung University), Hyeokdong Kwon (Hansung University), Zhe Liu (Nanjing University of Aeronautics and Astronautics), and Hwajeong Seo (Hansung University)</p>
15:15 – 15:45	<b>Coffee Break</b>
15:45 – 17:00	<p><b>Session 3: Secure Outsourcing and Cloud Security</b> (Session Chair: TBA )</p> <p><a href="#">Sum it Up: Verifiable Additive Homomorphic Secret Sharing</a> Georgia Tsaloli and Aikaterini Mitrokotsa (Chalmers University of Technology)</p> <p><a href="#">There Is Always an Exception: Controlling Partial Information Leakage in Secure Computation</a></p>

	<p>Máté Horváth, Levente Buttyán, Gábor Székely and Dóra Neubrandt (CrySyS Lab, BME)</p> <p><a href="#">An Automated Security Analysis Framework and Implementation for MTD techniques on Cloud</a></p> <p>Hooman Alavizadeh (Massey University), Hootan Alavizadeh (Imam Reza International University), Dong Seong Kim (The University of Queensland), Julian Jang-Jaccard (Massey University), and Masood Niazi Torshiz (Islamic Azad University)</p>
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<b>Thursday, (2019-12-05)</b>	
9:30 – 10:45	<p><b>Session 4: Post-Quantum Cryptography 1</b> (Session Chair: TBA )</p> <p><a href="#">Security Analysis of Group Action Inverse Problem with Auxiliary Inputs with Application to CSIDH Parameters</a> Taechan Kim (NTT)</p> <p><a href="#">Secure Key Encapsulation Mechanism with Compact Ciphertext and Public Key from Generalized Srivastava Code</a> Jayashree Dey and Ratna Dutta (Indian Institute of Technology Kharagpur)</p> <p><a href="#">Improvement of binary and non binary Statistical Decoding Algorithm</a> Pierre-Louis Cayrel (Laboratoire Hubert Curien), Cheikh Thiécoumba Gueye (Université Cheikh Anta Diop), Junaid Ahmad Khan (Dongguk University), Jean Belo Klamti (Université Cheikh Anta Diop), and Edoardo Persichetti (Dakota State University)</p>
10:45 – 11:15	<b>Coffee Break</b>
11:15 – 12:15	<p><b>Invited Talk 2</b> (Session Chair: TBA )</p> <p><a href="#">Information Security in Quantum Time</a> Lily Chen (NIST)</p>
12:15 – 14:00	<b>Lunch</b>
14:00 – 15:00	<p><b>Invited Talk 3</b> (Session Chair: TBA )</p> <p><a href="#">Secure and Verifiable Computation</a> Huaxiong Wang (Nanyang Technological University)</p>
15:00 – 15:20	<b>Coffee Break</b>
15:20 – 16:20	<p><b>Invited Talk 4</b> (Session Chair: TBA )</p> <p><a href="#">Lattice-Based Zero-Knowledge Proofs: Shorter and Faster Constructions and Applications</a> Ron Steinfeld (Monash University)</p>
16:20 – 16:40	<b>Coffee Break</b>
16:40 – 17:30	<p><b>Session 5: Post-Quantum Cryptography 2</b> (Session Chair: TBA )</p> <p><a href="#">LizarMong: Excellent Key Encapsulation Mechanism based on RLWE and RLWR</a> Chi-Gon Jung (Seoul National University), JongHyeok Lee (Kookmin University), Youngjin Ju (Hanyang University), Yong-Been Kwon (Hansung University), Seong-Woo Kim (Seoul National University), and Yunheung Paek (Seoul National University)</p> <p><a href="#">Efficient Identity-Based Encryption from LWR</a> Jung Hee Cheon (Seoul National University, Republic of Korea), Haejin Cho (LG Electronics, Republic of Korea), Jaewook Jung (LG</p>

	Electronics, Republic of Korea), Joohee Lee (Seoul National University, Republic of Korea), and Keewoo Lee (Seoul National University, Republic of Korea)
18:30 – 20:30	<b>Banquet</b>
<b>Friday, (2019-12-06)</b>	
9:30– 10:30	<b>Session 6: Speeding Up Public Key Cryptography</b> (Session Chair: TBA ) <b>Faster Bootstrapping of FHE over the Integers</b> Jung Hee Cheon (Seoul National University), Kyoohyung Han (Coinplug Inc.), and Duhyeong Kim (Seoul National University) <b>Complete Addition Law for Montgomery Curves</b> Jaeheon Kim (The Affiliated Institute of ETRI), Je Hong Park (The Affiliated Institute of ETRI), Dong-Chan Kim (Kookmin University), and Woo-Hwan Kim (The Affiliated Institute of ETRI)
10:30 – 11:00	<b>Coffee Break</b>
11:00 – 11:50	<b>Session 7: Side-Channel Attack</b> (Session Chair: TBA ) <b>Improved CRT-RSA Secret Key Recovery Method from Sliding Window Leakage</b> Kento Oonishi (The University of Tokyo), Xiaoxuan Huang (The University of Tokyo), and Noboru Kunihiro (University of Tsukuba) <b>Differential random fault attacks on certain CAESAR stream ciphers</b> Kenneth Koon-Ho Wong, Harry Bartlett, Leonie Simpson and Ed Dawson (Queensland University of Technology)
	<b>Farewell</b>

## Registration

### Conference Registration Fee

	Early Registration (On/Before Nov.25, 2019)	Late Registration (After Nov.25, 2019)
General Participant	\$500 (600,000 won)	\$600 (700,000 won)
Full-time Student	\$300 (350,000 won)	\$400 (500,000 won)

### 한국인등록자 사전등록 방법 (※ 국내 거주 외국인 포함)

▶ 학회 홈페이지([www.kiisc.or.kr](http://www.kiisc.or.kr)) -> 학술행사 -> 학회행사 -> **사전등록시 성명/소속 영문으로 기재**

#### ▶ 사전등록 송금처

- 예금주: 한국정보보호학회

- 계좌번호: (국민은행) 754-01-0008-146

▶ 사전등록시 등록비는 위의 계좌로 송금하시고 입금자가 대리일 경우 통보바랍니다.

학생의 경우 [kiisc@kiisc.or.kr](mailto:kiisc@kiisc.or.kr)로 학생증 사본 송부바랍니다.

#### \* 반드시 영문 성함 / 소속으로 등록 바랍니다.

▶ 신용카드 결제 시 세금계산서 발급이 불가합니다.(부가가치세법 시행령 제57조)

#### ▶ 사전등록 마감일: 2019년 11월 27일(수)

▶ 계산서 신청 시, 익일 안으로 등록하신 이메일로 청구용계산서가 발행됩니다. 영수용계산서가 필요하신 경우 사전에 학회로 연락바랍니다.

## International Participants Registration instruction and Registration Payment Method

▶ Offline registration : Please fill out the REGISTRATION form below and send it to us via fax +82-2-564-9226. Payment can be made with credit cards (Visa or Master Card only) or wire transfer payable in US dollars (\$) to ICISC 2019 (Koreans can pay in Korean currency (W))

▶ Online (E-mail) registration : Please fill out the REGISTRATION form below and send it to [kiisc@kiisc.or.kr](mailto:kiisc@kiisc.or.kr). Payment can be made with credit cards (Visa or Master Card only) or wire transfer payable in US dollars (\$) to ICISC 2019 (Koreans can pay in Korean currency (W)).

▶ Early Registration Due : 2019/11/25 (Mon.)

▶ Credit card : Please fill out the Registration form

▶ Wire Transfer

beneficiary' name : KIISC

beneficiary's account number : 754-01-0008-146

beneficiary's bank : Kookmin Bank

the branch name : Yeoksamyek Branch

SWIFT code : CZNBKRSE

beneficiary' address : Seongji Heights 3-Cha Bldg., Room 909

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## Hosted by

Korea Institute of Information Security & Cryptology (KIISC), Korea