



# **SUMMARY REPORT**

## **CKC 2023**

**Canada-Korea Conference on Science & Technology**

**July 17-21, 2023**

**The Westin Ottawa Hotel**

**Ottawa, Ontario, Canada**

# CKC 2023

## CANADA-KOREA CONFERENCE ON SCIENCE & TECHNOLOGY

Contents	
AKCSE hosts 13 <sup>th</sup> Canada Korea Conference (CKC) on Science and Technology . . . . .	2
Remarkable Experiences at CKC 2023 . . . . .	4
CKC Welcomes AKCSE Family & Delegates. . . . .	5
Future of Sustainable Energy Summit . . . . .	6
AI and Quantum Technology Forum. . . . .	8
R&D Brainstorming Sessions, Forums, Workshops and Special Sessions . . . . .	10
Equity, Diversity and Inclusion (EDI): Woman in Science and Engineering at CKC 2023 . . . .	14
Bridging Korean Government Funding Agencies and Korean-Canadian Scientists and Engineers .	16
Young Generation (YG) and Young Professional (YP) Conference . . . . .	18
Technical Session . . . . .	20
Research Showcase . . . . .	21
Award and Scholarship Ceremony . . . . .	22
Organizers of CKC 2023 . . . . .	24
Canada Korea Conference (CKC): Grows steadily year after year . . . . .	26
Thank you for your support & participation . . . . .	28
CKC 2024 – Southern Alberta Region Canada (BANFF). . . . .	29



## AKCSE hosts 13<sup>th</sup> Canada Korea Conference (CKC) on Science and Technology

The Association of Korean-Canadian Scientists and Engineers (AKCSE) was established in 1986 as a non-profit professional organization and has grown to nearly 3,000 registered members with 11 Local Chapters, 17 University Chapters, 8 Young Professional Societies, and 4 Professional Societies across Canada. With a theme “Accelerate Transition to a Sustainable Future”, AKCSE successfully hosted 13<sup>th</sup> CKC in Ottawa over 310 participants with 22 Sponsoring Organizations.

### CKC 2023 OVERVIEW

- Date July 17(Mon) - 21 (Fri), 2023
- Venue The Westin Ottawa Hotel, Ottawa, Ontario, Canada
- Theme Accelerate Transition to a Sustainable Future
- Co-organizers Korean Federation of Science and Technology Societies (KOFST)  
Association of Korean-Canadian Scientists and Engineers (AKCSE)



### CKC 2023 KEY EVENTS

- 7<sup>th</sup> STI Forum: Future of Sustainable Energy Summit
- Future of Sustainable Energy Summit
- AI and Quantum Technology Forum
- Canada-Korea Battery Value Chain R&D Workshop
- Korean Government Research Institutes R&D Brainstorming Forum
- Recruiting Sessions: NST recruitment & information & KRICT Recruiting
- Young Generation & Young Professional Conference
- Funding Agency: KEIT, IITP and KIAT Programs
- KOFWST Session: Unconscious Bias and EDI in STEM
- KWSE Korea - AKCSE Canada Technical Session



### CKC 2023 BY THE NUMBERS

About 312 Participants  
70 YG and YP Participants  
3 Young Generation and Young Professional Programs  
14 Special Sessions, 3 Technical Sessions, 1 Research Showcase  
5 Forums and 3 Workshops  
29 Research Presentations, 7 Research Proposal Presentations  
22 Sponsoring Organizations





Remarkable Experiences at CKC 2023

CKC is the most important activity of the AKCSE. Since 2011, the annual conference has been an excellent opportunity for presenting our latest research, innovative proposals, and networking. CKC 2023 was a great success comprising technical programs, special sessions, and the Young Generation and Young Professional programs.

OPENING CEREMONY



PLENARY SPEAKERS

- **Canada’s Approach in Accelerating the Clean Energy Transition – Driving innovation, collaboration and progress.**  
*Mr. Daniel Dufour, Director General, Innovation Branch, Natural Resources Canada*
- **Overview of Korean GRIs for Future Energy**  
*Dr. Chaejun Song, Head, International Cooperation Team, National Research Council of Science & Technology*
- **Recent Developments on the Bilateral Science, Technology and Innovation (STI) Collaboration and Discussion on New Opportunities in Emerging Sectors**  
*Dr. Lakshmi Krishnan, Vice-President, Life Sciences, National Research Council, Canada*
- **NRC: AI Capabilities and Applications in Coastal and Marine Ecosystems, Life Sciences, Advanced Manufacturing and More**  
*Dr. Sevgui Erman, Executive Director, Digital Technologies Research Centre, National Research Council of Canada*
- **The Future of Quantum Computing**  
*Mr. Rafal Janik, Chief Operating Officer, Xanadu*

CKC Welcomes AKCSE Family & Delegates

CKC 2023 was an excellent opportunity for exchanging our latest research and technologies for a sustainable future. Research collaboration sessions provided overview and potential of Korea-Canada ST&I collaboration landscape and its challenges.

WELCOME RECEPTION



BANQUET





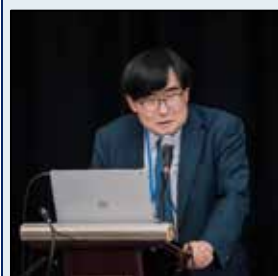
## Future of Sustainable Energy Summit

Korea and Canada are on a path to success through greater collaboration in Science, cooperation has been in effect since May 2017. In both countries, sustainable energy is Summit creates an ideal platform for R&D collaboration in the fields of sustainable energy

### FUTURE OF SUSTAINABLE ENERGY SUMMIT (PLENARY I AND STI FORUM)



This session was convened with the aim of discussing the strategies of both countries to effectively address climate change and establish sustainable energy approaches, working towards the objective of achieving carbon neutrality in both Korea and Canada. The initial segment involved prominent individuals responsible for science policy in Korea and Canada, namely: 1. Daniel Dufour, Director General of the Innovation Branch at Natural Resources Canada (Title: Canada's Approach in Accelerating the Clean Energy Transition – Driving Innovation, Collaboration and Progress), 2. Chaejun Song, Team Leader of NST (Title: Overview of Korean GRIs for Future Energy), and 3. Lakshmi Krishnan, Vice President of the National Research Council Canada (Title: Recent Developments on the Bilateral Science, Technology and Innovation Collaboration and Discussion on New Opportunities in Emerging Sectors). Representatives from both nations delivered keynote presentations on major policies, research trajectories, and international collaborations geared towards attaining the sustainable and clean energy. Subsequently, during the STI forum that ensued, 4 presidents and 2 vice presidents from six institutions in Korea (i.e., KIAT, IITP, ETRI, KIMS, KIST, and KERI) participated in a panel discussion. They provided insights into the present status of research and development, along with strategies unique to each institution that contribute to Korea's aspiration of carbon neutrality. Furthermore, plans for collaborative research between Korea and Canada were deliberated upon.



### Future of Sustainable Energy Session: Small Modular Reactor



Small Modular Reactors (SMRs) are being discussed as a nuclear power technology that can achieve carbon neutrality instead of existing fossil fuels such as oil and coal. In this session, experts from 3 institutions in Korea (Korea Atomic Energy Research Institute, KAIST, Hyundai Engineering) and 2 institutions in Canada (Natural Resources of Canada, Canadian Nuclear Safety Commission) were invited to discuss the development status of 'SMART' and mutual cooperation for its export to Canada.

Technology and Innovation (ST&I). ST&I Agreement that sets the framework for substantial expected to continue to grow rapidly in the coming years. The Future of Sustainable Energy between the two countries.

### Future of Sustainable Energy Session: Hydrogen/Fuel Cell & CCUS

During this session, researchers from prominent research institutes in both Korea and Canada (specifically, KIER, Toronto Metropolitan University, NRC, and the University of Calgary) showcased their studies on the prospective landscape of sustainable energy. Delving into specific research subjects, participants included representatives from government-funded research institutions, universities, industries, as well as experts from government departments concerned with carbon neutrality. They collectively disseminated information concerning the most recent status of research and development, elucidated strategic approaches, and engaged in conversations about potential collaboration avenues between researchers and institutions in the two nations. The event provided an opportunity to enhance comprehension of the latest technological trends encompassing hydrogen/fuel cells and CCUS, facilitated through open discussions between session presenters and the attending audience.



### Future of Sustainable Energy Session: Secondary Battery

As the world transitions towards a greener and sustainable energy landscape, lithium-ion batteries have emerged as a pivotal technology to support this transformation. The ongoing global push for clean energy solutions has resulted in increased demand for advanced lithium battery technology, which powers electric vehicles, renewable energy storage systems, and portable electronics. South Korea and Canada have demonstrated a profound commitment to sustainable energy initiatives, making them ideal partners for fostering lithium battery advancements. NRC, KIER, Hydro Quebec, UCalgary, KIMM, KIMS, KIGAM, and MakeSens have presented some of key issues and advancements in lithium-ion secondary batteries and discussed possible collaborations among researchers from both Canada and Korea.





## AI and Quantum Technology Forum

AI and quantum computing are the most promising future technologies to solve various issues that no traditional technology can solve in any feasible amount of time and resources. Experts from both countries gather to discuss insights and visions of AI and quantum computing technologies.

### AI and Quantum Technology Forum (Plenary II)

Plenary Sessions II-1: Title: AI Capabilities and Applications in Coastal and Marine Ecosystems, Life Sciences, Advanced Manufacturing and more Dr. Sevgi Erman's planetary speech highlighted NRC's research programs, technical and advisory services in computer vision, natural language processing, artificial intelligence, cybersecurity and quantum computing technologies.



Plenary Sessions II-2: Title: The Future of Quantum Computing Mr. Rafal Janik's planetary speech highlighted Xanadu's commercializing deep tech projects. He discussed a fully functional-tolerant quantum computer which will be useful and available to people everywhere.



## AI Forum



The CKC 2023 has several flagship programs including AI Forum. We had time to share research results under the theme of AI and technology in several sectors. Specifically, the current research results of Korea government's AI applications and directions for international joint research, establishment of a network of Korean and Canadian researchers were discussed. After presenting the research results, free discussion time was held.



## Quantum Technology Forum

Quantum technologies such as quantum computers, quantum communication, and quantum sensors are expected to be game changers that will revolutionize future industries. In this session, experts from 2 institutions in Korea (Busan Metropolitan City, KAIST) and 2 institutions in Canada (University of Waterloo, Québec Quantique) were invited to review the current status of quantum technology development in both countries and discuss ways to cooperate to create a global research ecosystem.





### R&D Brainstorming Sessions,

For providing a friendly platform, the CKC has hosted R&D Brainstorming Sessions, Special This is one of the CKC's intrinsic functions. In particular, CKC 2023 was highly meaningful

#### KERI R&D Program Session

KERI R&D forum is jointly held by KERI and AKCSE to present the researches by KERI-Waterloo AI Research Hub and the preliminary results of the research projects conducted by AKCSE. In the first part, researchers from KERI and University of Waterloo presented AI-related manufacturing, and in the second part, midterm report and the preliminary activities of the AKCSE-KERI project were presented by 3 AKCSE members.



#### KHNP-CRI R&D Program Session

The KHNP-CRI session introduced various R&D projects performed by the Korea Hydro and Nuclear Power's Central Research Institute such as the current status of i-SMR R&D and nuclear decommissioning projects. For the i-SMR, there was a discussion regarding the VDR examination plan at CNSC. The KHNP also provided the current status and detail information about decommissioning projects of the Kori Nuclear Power Plant and the Wolsong Nuclear Power Plant. Hatch, which is a Canadian consulting firm in the nuclear power field, presented about Canada's nuclear decommissioning practices and nuclear waste management systems. Overall, there were active discussions and knowledge sharing regarding South Korea and Canada's nuclear decommissioning technologies. Moreover, participants in this session agreed that continuous collaborations and communications are required to establish the infrastructure for nuclear power exports and to encourage the nuclear power industry.



### Forums, Workshops and Special Sessions

Sessions, and Forums for participants and delegates from Korea and Canada. as a number of successful events hosted during the CKC 2023 shown below.

#### Canada-Korea Battery Value Chain R&D Workshop

The Canada-Korea Battery Value Chain Workshop took place at the Westin Ottawa Hotel on July 19, 2023 and was a closed door, by-invitation only event for 2 Canadian (NRCan and NRC) and 6 South Korean (NST, KIER, KIGAM, KIMM, KIMS, KRICT) government organizations. There were 50 participants in total. Welcoming remarks were delivered by Dr. Chaejun Song, Head of International Cooperation at NST, Daniel Dufour, Director General of Innovation at NRCan, Dr. Jennifer Littlejohns, Program Director for Advanced Clean Energy at NRC, and Dr. Seonghwan Kim, President of the AKCSE. The workshop focused on introductions and overview presentations of each organization's key mandates and R&D activities along the battery value chain.



#### NST Recruitment & Information Session

The National Research Council of Science and Technology (NST) held a recruitment and information session for undergraduate and graduate student participants of the conference. Three Korean government-funded research institutes presented at the session: Electronics and Telecommunications Research Institute (ETRI), Korea Institute of Fusion Energy (KFE), and Korea Institute of Materials Science (KIMS). Each institution promoted the benefits of researching in Korea by showcasing its history, achievements, and work environment, then announced career opportunities, such as internships and postdoctoral fellowship positions.





### KIMS R&D session

The Korea Institute of Materials Science (KIMS) R&D session is to promote participation of Korean-Canadian scientists and engineers in the planning of collaborating R&D projects with researchers at KIMS. Especially, participants shared their R&D progress and discuss technical findings. 4 projects from the AKCSE members/KIMS were selected and granted by KIMS. Two technical presentations (thick electrode design and dry processes for next-generation batteries/layered polymer composite with graded cellular structures for EMI shielding) from KIMS were presented. Two research works (electromagnetic sintering of solid electrolyte/effective design of thin EMI shielding materials using conductive polymer composites and foams) were presented by the AKCSE members. Presenters and the session participants shared and discussed about research findings and their next plans of the projects. Especially, the president of KIMS, Dr. Jung-Hwan Lee, updated the current status of Extreme Materials Research Institute to the participants. It is expected that next KIMS R&D session at CKC2024 provides the AKCSE members to share and discuss their final results of the projects and opportunity to open more collaboration with KIMS.



### KRICT Recruiting Session

The Korea Research Institute of Chemical Technology (KRICT) Recruiting session is to introduce about the KRICT, its research areas and achievements, recruitment plans and process, and the compensation package. In addition, the KRICT School and its master's and doctoral programs as well as work environment of the KRICT were introduced to the attendees. There was also a networking event.



### KITECH-AKCSE International Joint Research Proposal Presentation



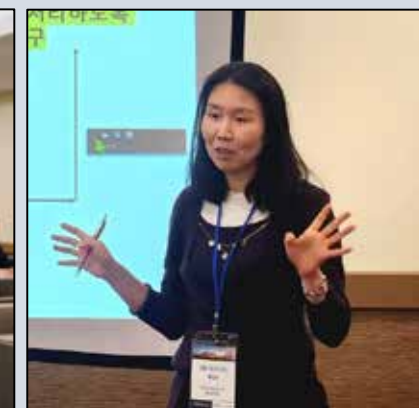
The Korea Institute of Industrial Technology (KITECH) and AKCSE joint session showcased cutting-edge research progress in artificial intelligence (AI) and its applications in 3D printing and automated mobile platforms. Researchers from Queens University and the Ontario Tech University in Canada, along with KITECH researchers, presented collaborative efforts leveraging innovative technologies.

Additionally, the University of Saskatchewan researcher presented intriguing findings on spectroscopic and computational investigations of solid electrolyte batteries, while both the University of Toronto and KITECH researchers unveiled novel nanocomposites with diverse applications. This collaborative opportunity fostered fruitful discussions between the organizations in Korea and Canada, setting the stage for future joint research endeavors aimed at developing pioneering technologies.



### KIMM-AKCSE Joint Session for the Collaborative Research Project

Four collaborative research projects between the Korea Institute of Machinery and Materials (KIMM) and AKCSE were proposed and assessed in this session. Each project was presented for 10 minutes and discussed for 10 minutes. AKCSE-KIMM funded projects are selected after the assessment by KIMM.





## EQUITY, DIVERSITY AND INCLUSION (EDI):

Embracing more fully ideas of inclusiveness and diversity among the AKCSE members, process related to equity, diversity and inclusion (EDI) focused objectives. women participate fully in Canada's technology and engineering workforce. every accounting for nearly 35%. Although we have seen a year-on-year increase in the number in the arena of S&T innovation. The efforts by the AKCSE to deal with the EDI concept to AKCSE co-organized programs with Korea's two leading organizations of women scientists

### KOFWST (KOREA FEDERATION OF WOMEN'S SCIENCE & TECHNOLOGY ASSOCIATIONS)

The theme of this year was 'Unconscious Bias and EDI in STEM', aiming to provide a platform for scientists and experts actively engaged in science and technology to communicate and share their experiences regarding unconscious bias. Specifically, by examining the current state of EDI policies and strategies, the session navigated practical approaches to mitigate the negative impact of unconscious biases and promote an inclusive culture. The session was divided into two parts: (1) The first focused on a survey specifically designed for AKCSE members regarding unconscious bias and its impact on academic and career advancement for young individuals in STEM. Results indicated a significant bias among members in various STEM areas in many aspects, but there was a willingness to reduce it with proper training. (2) The second part addressed the challenges of implementing EDI practices in academic settings and workplaces, drawing from both junior and established faculty members' experiences. Beginning with a statement from Dr. Oh, the President of KOFWST, about Korean women in STEM, two young professionals from Canada and three academic members discussed their experiences with EDI challenges. Overall, while our EDI training efforts are commendable, we need to put more emphasis on the actual implementation of EDI policies.



### GISTeR (KOREA CENTER OF GENDERED INNOVATIONS FOR SCIENCE AND TECHNOLOGY RESEARCH)



During the inaugural GISTeR Session, three presenters and three panelists came together to discuss the theme of; Advancing Science and Technology through EDI Integration: A Bridging Role in Canadian and Korean Funding Policies. Despite the increasing recognition of the importance of integrating gender and sex analysis into scientific research to reduce bias in data and knowledge production, full acceptance and implementation within the research community remains challenging.

## WOMEN IN SCIENCE AND ENGINEERING AT CKC 2023

we try to build respect into all its relationships through a dialogue and understanding To help achieve gender balance in the AKCSE, we seek to address various issues – ensuring As a result, the participation of woman scientists and engineers has been increasing of women working in science and technology (S&T) areas, they are still under-represented the organizational principle resulted in several events planned and organized at CKC2023. and engineers and one center for gendered innovations (i.e., KOFWST, KWSE, and GISTeR).

### KWSE (THE ASSOCIATION OF KOREA WOMAN SCIENTISTS & ENGINEERS)

The theme for this year was "Academic-industry research collaborations: opportunities and challenges." Such collaborations are instrumental in addressing complex issues and driving economic growth through joint endeavors. Both the Korean and Canadian systems have recognized the significance of these collaborations and have implemented frameworks to enhance academic-industry linkages, facilitate technology transfers, and promote commercialization. This session began with an introduction to KWSE by Dr. Ju, the President of KWSE. Following that, a total of three speakers delved into the current academic-industry collaboration systems in both countries, examining the challenges and opportunities surrounding tech transfer for commercialization.



The session provided a platform to explore the EDI policies of both Korea and Canada, fostering the development of sex and gender studies through an integrated intersectional approach. Additionally, it facilitated valuable exchanges of experiences between Canada and Korea in the pursuit of promoting equality, diversity, and inclusion in scientific research.





## BRIDGING KOREAN GOVERNMENT FUNDING AGENCIES

The AKCSE and its annual CKC offers unique and exclusive opportunities for both the Korean Government Funding Agency and Korean-Canadian Scientists and Engineers to promote and foster innovative STI research collaborations. Advancement of Technology KIAT), and Institute of Information and Communications

### IITP International Joint Research Program Session

A total of 15 people attended the ceremony to sign a Memorandum of Understanding (MOU) to strengthen cooperation between the IITP and the AKCSE. The MOU was signed in 2017, but it was necessary to renew it as the name of IITP has been changed. In the second session of the ICT Global Collaboration Meeting, a meeting of leading Korean-Canadian researchers was held to discuss ways to strengthen cooperation between Korea and Canada with a total of 16 participants. Trends in Canadian ICT research, proposals for cooperation with IITP, and the Mitacs Talent Training Program in Canada were introduced.



### KIAT-AKCSE K-TAG AGM Program

During the KIAT session, the spotlight was on introducing the KIAT Global R&D program to the members of K-TAG in Canada. Alongside this introduction, the ongoing endeavors of K-TAG Canada were highlighted, and a particularly inspiring success story from a K-TAG member engaged in the KIAT consulting project was showcased. The session provided an invaluable platform for the exchange of ideas and opinions, with the overarching aim of nurturing and enhancing the collaborative endeavors between the two countries for fruitful outcomes.



## AND KOREAN-CANADIAN SCIENTISTS AND ENGINEERS

Government Funding Agency and Korean-Canadian Scientists and Engineers to promote and In 2023, Korea Evaluation Institute of Industrial Technology (KEIT), Korea Institute for Planning and Evaluation (IITP), joined the CKC to organize their institutional events with AKCSE.

### KEIT Global Technology Strategy Forum

In this forum, Canadian research organizations such as MITACS, Fonds de recherche du Québec, MILA, PRIMA, etc. participated to discuss international collaboration. Additionally, Dr. Jeong Chan-Hyuk from KEIT introduced the Global R&D Support Center and presented KEIT's direction for international cooperation. They also encouraged active participation from overseas institutions in support of the global R&D plan on MCE (Material, Component and Equipment).



### KEIT SESSIONS

In this meeting, four project groups with topics (Chemical Processes, Knowledge Services, Medical Devices & Healthcare, Batteries) were gathered and each group was presented and discussed. The program directors joined and discussed the proposed technology with Canadian researchers for 20 minutes each. They assessed the possibility of the technology improvement.



## YOUNG GENERATION (YG) AND YOUNG PROFESSIONAL (YP)

The Young Generation (YG) and Young Professional (YP) Conference is an international professionals, and leaders across Canada and Korea and provide an important platform for the most important session of the CKC as these young scientists and engineers are the bright

### YGP PROJECT SHOWCASE



The Project Showcase was a program organized to connect YGP members in academia and industry. Previous CKCs did not provide members in academia and industry to share their professional careers/projects in the same session. This session aimed to provide a bridge between academia and industry for YGP members and to open networking opportunities between the two groups. This involved a 15-minute presentation on the presenters' current professional projects, a brief overview of their profession, career development and how their current professional activities contribute to the development of their field. There were prizes awarded to 1st, 2nd, and 3rd based on an audience vote for the following three categories

1. Best Presentation Skills
2. Best Organization of Content
3. Best Articulation of Professional Responsibilities



### YGP LEADERSHIP

The Leadership Workshop is a skill-building workshop for YGP Chapter Representatives, aimed chapter leaders. This year's workshop focused on furthering collaboration between each introduce affiliated YGP chapters and the YG-YP joint event that each region held during the improve and expand chapter influence, such as by developing a greater variety of events and



## CONFERENCE

conference held annually at the CKC, to bring together student researchers, young industry them to build network, share knowledge and develop leadership. The YG and YP Conference is future of the AKCSE.

### YGP SKILLSHARE WORKSHOP

The Skill Share Workshop aims to provide YGP members with soft skills that can only be learned through personal experience and exposure. After last year's successful workshop launch and with a thorough feedback review, it was decided to be held this year with far more engaging topics and activities. Each presenter gave a 10-15 minute presentation on skills gained from personal industry/academic experience, and at the end of each presentation, a 15-20 minute short activity was led by the presenter that encouraged the audience to reflect and apply the skill discussed. The topics discussed in the Skill Share Workshop this year were: Critical Thinking, Active Listening, Online Portfolio Building, Resume Writing/Career Development.



### WORKSHOP

to develop chapters further and ensure a smooth transition between outgoing and incoming region's YG and YP chapters. Representatives of each region gave a 5-7 minute presentation to first half of 2023. After the presentations, YGP chapter representatives discussed ways to ensuring continued collaboration between YG-YP chapters after changing leadership.





## TECHNICAL SESSIONS

**Technical Sessions:** There were three parallel-track technical sessions at the conference to promote research discussions and collaborations in the areas of 1) Material, Physics, Chemistry and Nano Technology, Mechanical, Civil Engineering, 2) Information & Communication Technology, and 3) Biological Sciences and Health. 13 Presentations were made to promote research discussions and international collaboration. They introduced each other's research and expand their networks among Korean and Canadian Scientists.



## RESEARCH SHOWCASE



Research showcase has been a flagship program at CKC for many years where we highlight our research strength and key areas of research leadership in Canada. At CKC2023, the program included 7 distinguished speakers who present on diverse topics that spans from Anti-microbial Technologies to Polymeric Materials. The session opened with remarks by Chief Trade Commissioner, Global Affairs Canada, Sara Wilshaw on the topic of “Strengthening science, technology and innovation collaboration with Korea in the context of Canada’s new Indo-Pacific Strategy”. Six technical presentations featuring prominent researchers from institutions across Canada, including NRC, the Universities of Saskatchewan, Alberta, and Toronto, were held to showcase cutting-edge research.





## Award and Scholarship Ceremony

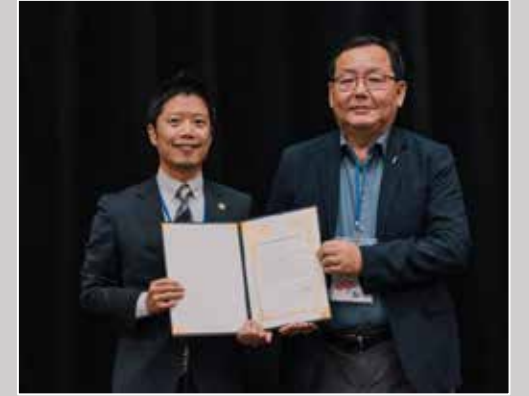
AKCSE scholarship committee and CKC award committee hold Award and Scholarship Ceremony. This year, in particular, a number of awards and scholarships were given to Excellent Young



- Commendation from the Minister of Science and ICT (MSIT), Korea
- KOFST Engineer of the Year Award
- KOFST Scientist of the Year Award
- 2023 AKCSE Best Service Award
- 2023 AKCSE Early Achievement Award
- AKCSE WiSE Award
- 2023 AKCSE Best Young Professional Member Award
- 2023 AKCSE Best Student Member Award
- 2023 AKCSE Best Chapter Award
- AKCSE Best CKC Volunteer Award
- AKCSE Canada-Korea Collaboration Award
- SK Scholarship in Life Sciences
- Goryeo Medical Foundation Scholarship in Life Sciences
- Green Cross Scholarship
- CS WIND Scholarship
- KOGAS Canada Energy Ltd. Scholarship
- Hana Bank Canada Scholarship
- Min Dong Yun Scholarship
- KONA Scholarship
- KCSSF Scholarship



ceremony at each CKC. This year, the ceremony was held during the formal Banquet. Professionals and Young Generations.



See You All Again Next Year in Banff at the CKC 2024

**CKC2024 in Banff Centre for Arts and Creativity, June 16-20, 2024**

*Theme: Accelerate international collaboration by unlocking the power of science and technology*





Organizers of CKC 2023

Organizing Committee

Conference Co-Chair: AKCSE President



Seonghwan Kim  
University of Calgary  
[president@akcse.org](mailto:president@akcse.org)

Conference Co-Chair: KOFST President



Tai Sik Lee  
KOFST  
[taisik.lee@kofst.or.kr](mailto:taisik.lee@kofst.or.kr)

AKCSE Vice President

Gov. Affairs & Public Relations



Keun Su Kim  
National Research Council Canada  
[vice.president@akcse.org](mailto:vice.president@akcse.org)

Next Generation & E.D.I.



Regina Lee  
York University  
[reginal@yorku.ca](mailto:reginal@yorku.ca)

Funding & Finance



Hyo-Jick Choi  
University of Alberta  
[treasurer@akcse.org](mailto:treasurer@akcse.org)

Technical Session Chair



Yong Hoon Kim  
University of Windsor  
[kim523@uwindsor.ca](mailto:kim523@uwindsor.ca)

CKC Operations



Jeong-Ae An  
AKCSE Administrative Manager  
[Info@akcse.org](mailto:Info@akcse.org)



Aram Cho  
AKCSE Executive Assistant  
[ckc@akcse.org](mailto:ckc@akcse.org)

Local Committee

National Capital Region (NCR) Chapter

Chair



Dae Hyup Kang  
exp  
[dkang0219@gmail.com](mailto:dkang0219@gmail.com)

YGPN Program Organizing Committee

Chair / YGPN President



Nia Kang  
McGill University  
[nia.kang@gmail.com](mailto:nia.kang@gmail.com)

Vice Chair / YGPN Vice President



MinYoung Yoo  
Simon Fraser University  
[mya94@sfu.ca](mailto:mya94@sfu.ca)

Program Development



Lead  
JooYoon Hong  
Neobi Technology  
[jooyoonhong98@gmail.com](mailto:jooyoonhong98@gmail.com)



Alex Moon  
Queen's University  
[19akwm@queensu.ca](mailto:19akwm@queensu.ca)



Johnny Lee  
University of Alberta  
[jslee@ualberta.ca](mailto:jslee@ualberta.ca)



Hannah Cho  
McGill University  
[hannah.cho2@mail.mcgill.ca](mailto:hannah.cho2@mail.mcgill.ca)

Memeber



Lead  
Jisoo Kang  
TC Energy  
[jisookang95@gmail.com](mailto:jisookang95@gmail.com)



Jonathan Kim  
Western university  
[jonathankim.work@gmail.com](mailto:jonathankim.work@gmail.com)



## Canada-Korea Conference (CKC):

Since the 1<sup>st</sup> CKC was held in 2011 with around 120 participants, CKC now becomes as a unique conference for scientists and engineers



**2020 Canada-Korea Conference on Science and Technology**  
September 2-5 | Online and In-person  
Kananaskis, Ottawa, Toronto & Halifax, Canada | Sejong & Seoul, Korea



**2021 Canada-Korea Conference on Science and Technology**  
"New Opportunities in the New Normal"  
September 1-4, Online in Korea & In-person, Halifax, Nova Scotia



## Grows steadily year after year.

the number of programs and participants has increased every year. from Canada and Korea for networking and exchange of knowledge and information.



**2022 Canada-Korea Conference on Science and Technology**  
"Sustainable net-zero future through global collaboration"  
July 4-8, Niagara Falls Marriott on the Falls, Niagara Falls, Ontario



**2023 Canada-Korea Conference on Science and Technology**  
"Accelerate Transition to a Sustainable Future"  
July 17-21, Ottawa, Ontario, Canada





THANK YOU FOR YOUR SUPPORT & PARTICIPATION!

**KERI** KOREA ELECTROTECHNOLOGY  
RESEARCH INSTITUTE

**부산정보산업진흥원**  
Busan IT Industry Promotion Agency

**부산광역시**  
BUSAN METROPOLITAN CITY

**Keit** 한국산업기술평가관리원

**ETRI** 한국전자통신연구원  
Electronics and Telecommunications  
Research Institute

**IITP** 정보통신기획평가원  
Institute of Information & Communications  
Technology Planning & Evaluation

**KAERI** 한국원자력연구원  
Korea Atomic Energy Research Institute

**KHNP** 한국수력원자력주  
중 앙 연 구 원

beyond leading technology

**kiat**

**KIMM** 한국기계연구원  
KOREA INSTITUTE OF MACHINERY & MATERIALS

**KIMS** 한국재료연구원  
Korea Institute of Materials Science

**KITECH** 한국생산기술연구원

**KRICT**  
Korea Research Institute of Chemical Technology

**nst** 국가과학기술연구회  
National Research Council of Science & Technology

**Canada** National Research  
Council Canada Conseil national de  
recherches Canada

**KIGAM** 한국지질자원연구원  
Korea Institute of Geoscience and Mineral Resources

**KISTEP**  
한국과학기술기획평가원  
Korea Institute of S&T Evaluation and Planning

**KIER** 한국에너지기술연구원  
KOREA INSTITUTE OF ENERGY RESEARCH

**KIST** 한국과학기술연구원  
Korea Institute of Science and Technology

**KOFWST** 한국여성과학기술단체총연합회  
Since 2003 Korea Federation of Women's Science & Technology Associations

**KWSE** 대한여성과학기술인회  
The Association of  
Korean Woman Scientists & Engineers

**OVERSEAS KOREANS FOUNDATION**  
재외동포재단

**주캐나다 대한민국 대사관**

## CKC 2024 – SOUTHERN ALBERTA REGION CANADA (BANFF)



**June 16 (Sun) - 20 (Thu), 2024**

E-mail: [ckc@akcse.org](mailto:ckc@akcse.org), [info@akcse.org](mailto:info@akcse.org)

Homepage: [akcse.ca/CKC2024](http://akcse.ca/CKC2024)

**Date:** June 16 (Sun) - 20 (Thu), 2024

**Venue:** Banff Centre for Arts and Creativity, Banff, Alberta, Canada

### Main Program (Tentative):

- Day 1 (6/16, Sun) Registration, Welcome Reception
- Day 2 (6/17, Mon) Opening Ceremony, Plenary Session I, ST&I Forum, Technical Sessions
- Day 3 (6/18, Tue) Plenary Session II, KGRI and Funding Agency Sessions
- Day 4 (6/19, Wed) Research Showcase, Farewell Dinner and Award Ceremony
- Day 5 (6/20, Thu) Off-site Technical Program





# CKC 2023 SUMMARY REPORT

SEPTEMBER 2023

**PUBLISHED BY AKCSE**

THE ASSOCIATION OF KOREAN-CANADIAN SCIENTISTS AND ENGINEERS



Address: 1133 Leslie Street, Suite #206, North York, ON M3C 2J6, Canada

Phone: +1(416) 449-5204, Email: [ckc@akcse.org](mailto:ckc@akcse.org); [info@akcse.org](mailto:info@akcse.org)

CKC 2023 website: <https://www.akcse.ca/ckc2023>