



# **The 51<sup>st</sup> KSEAUK Annual Conference**



**Venue: Clayton Hotel Ballsbridge  
(Dublin, D04 P3C3, Ireland)  
Date: 1-2 November 2025**

# 제 51 회 재영과협

## 정기 학술대회

1-2 November 2025

### 인사말

안녕하십니까. 재영한인과학기술자협회 회장 진성호입니다.  
재영한인과학기술자협회가 2025 년 11 월 1-2 일 창립 51 회  
정기 학술대회를 Dublin Clayton Hotel 에서 개최합니다.

저희 협회는 영국내 한인 과학기술자들의 네트워크 형성과 상호  
교류협력을 통해 과학기술 분야에서의 성장과 발전을  
이루어내고자 노력하고 있습니다. 특별히 아일랜드에서 개최되는  
이번 학회를 통해 서로의 경험과 전문성을 나누고, 함께  
성장하는 기회를 가질 수 있으리라고 믿습니다.

함께하는 모든 분들의 성원과 참여에 감사드리며, 앞으로도  
재영한인과학기술자협회가 더욱 발전하고 성장하는 모습을  
보여드릴 수 있도록 노력하겠습니다.

감사합니다.

재영한인과학기술자협회 회장 진성호



### 후원기관



Programme

| 시간 (11 월 1 일, 토요일) | 일정                                                       | 장소                |
|--------------------|----------------------------------------------------------|-------------------|
| 12:00-13:20        | 등록 및 점심                                                  | Reception         |
| 13:20-14:30        | 개회사 및 초청강연<br>KEIT-김기철 소장<br>KERC-이대명 센터장<br>KIAT-탁영지 소장 | Thomas Prior Hall |
| 14:30-14:50        | 패널 토론                                                    | Thomas Prior Hall |
| 14:50-15:00        | Outstanding Research Award 시상식                           | Thomas Prior Hall |
| 15:00-15:30        | 휴식 (coffee break)                                        | Thomas Prior Hall |
| 15:30-18:45        | 학술 세션                                                    | 아래 표 참조           |
| 18:45-19:00        | 휴식                                                       | Thomas Prior Hall |
| 19:00-22:00        | 저녁 만찬                                                    | Thomas Prior Hall |
|                    |                                                          |                   |
| 시간 (11 월 2 일, 일요일) | 일정                                                       |                   |
| 09:00-10:30        | 재영과협 발전을 위한<br>회원간의 대화                                   | 1880 Suite        |

Sessions & Rooms

| Time        | Ailesbury            | 1880 Suite   | Merrion 4      | Merrion 2 or 3                                  |
|-------------|----------------------|--------------|----------------|-------------------------------------------------|
| 15:30-17:00 | Biological Science 1 | ACE          | Marine & Ocean | Design & Construction                           |
| 17:00-17:15 | Break                |              |                |                                                 |
| 17:15-18:45 | Biological Science 2 | Data Science | Basic Science  | Materials, Mechanical Engineering & Energy (융합) |

## 제 51 회 재영과협 학술대회 학술세션

### BS

**Moderator:**  
**Saejune Park**

**(Outstanding Research Awards Awardee)** Flow instabilities and laminar-turbulent transition in rotating fluids

**Junho Park**  
Coventry  
University

**(Outstanding Research Awards Awardee)** CageVoyager: Constructing Self-Assembly Reaction Networks for Metallo-Organic Cages

**Dong Han Shin**  
**University of Oxford**

Disks around young free-floating planetary-mass objects: Ultradeep Spitzer imaging of IC348

**Holly Hanbee Seo**  
University of St Andrews

### Materials, Mechanical Engineering, Energy 융합세션

**Moderator:**  
**Kyungil Kong**

Enhancing Recycling of Valuable Materials from Spent Lithium-ion Batteries Using Electrostatic and Magnetic Separations (17:15 - 17:35)

**Hyeyeon Lee**  
Heriot-Watt  
University

Decipher integrin-mediated mechanotransduction of tissue-engineered extracellular matrix scaffolds (17:35 - 17:55)

**Seungkuk Ahn**  
UCD

Interphase effect on FRP composites (17:55 - 18:15)

**Kyungil Kong**  
University of  
Bristol

Smart digital manufacturing technologies: Case studies with energy and medical devices (18:15 - 18:35)

**Jaemin Lee**  
University of  
Leeds

Breaking the Ice: Connecting Materials, Mechanics, and Energy (18:35 - 18:45)

**Kyungil Kong**  
University of  
Bristol

## Bio 1

**Moderator:**  
**Seung Seo Lee**

Ice breaker: Flash talks

*Resolving Health Inequality through Digital Innovation: Insights from the United Kingdom and the Republic of Korea, You Tae Jeon (NHS)*

*Advancing Digital Learning Resources in Anatomy Education: Current Landscape and Future Directions, Daheen Lee (Primal Pictures)*

+ Everyone else

Keynote: *Exploiting Ferroptosis and Iron Metabolism to Overcome Cancer Metastasis and Therapy Resistance*

**(Outstanding Research Awards)** Extracellular matrix hydrogels from demineralised and decellularised human bone tissue for bone regeneration applications

**(Outstanding Research Awards)** Improving Treatment for Tuberculosis: Evidence-Based Strategies from Empirical Use to Novel Formulations

**Ejung Moon**  
University of Oxford

**Yanghee Kim**  
University of Southampton

**Chaelin Kim**  
London School of Hygiene & Tropical Medicine

## Bio 2

**Moderator:**  
**Youngchan Kim**

Characterising MRPL44(L156R) Transgenic Mouse Model: Insights into Mitochondrial Disorder Pathogenesis and Sex-Dependent Responses

Engineering T Cells: From Immune Synapse to Safe and Scalable Therapies

Orchestrating Metabolism: A LysR-type Regulator TtdR's Role in Ethylene Glycol Utilization and PHB accumulation in *P. umsongensis* GO16

A mechanistic framework for predicting tablet disintegration

**Seung Seo Lee**

Discussion of KSEAUK BIO's future projects and collaboration with KULSA

**Hamin Lee**  
City St. George's, University of London

**Jae-Eun Lee**  
Yellowstone Biosciences

**Jounghyun Um**  
University College Dublin

**Jongmin Lee**  
University of Cambridge

**Seung Seo Lee**  
University of Southampton

## Marine & Ocean

**Moderator:**  
**Sung Il Ahn**

**(Outstanding Research Awards Awardee)** Hydrogen Dispersion and Safety Assessment of Vent Mast Releases on LH2 carrier in LH2CRAFT Project

**Hayoung Jang**  
University of Strathclyde

**(Outstanding Research Awards Awardee)** Collision-accidental safety design of a 25,800 TEU containership propelled by small modular reactors

**Hyeong Jin Kim**  
University College London

Imaging and Spectroscopic Analysis of Non-Premixed Hydrogen Combustion with Simulated Flue Gas Recirculation

**Seongho Jin**  
University of Lincoln

Human reliability assessment framework based on SPAR-H method into Emergency response drill on ship

**Sung Il Ahn**  
ABS

## Design & Construction

**Moderator:**  
**Wonil Son**

Effective Design Delivery Strategies for Large-Scale BIM Architectural Projects through Value Engineering: A Case Study of Al Thumama World Cup Stadium

**Donghwi Kim**  
MArch

Various Brick Facade Building with the Prefab

**Wonil Son**  
MArch ARB  
RIBA

Dublin Metro Link : New Transportation Era

**Hyosik Pyo**  
WilkinsoEyre

## ACE

**Moderator:**  
**Hansung Kim**

**(Outstanding Research Awards Awardee)** Towards Automated Large-Scale Facilities at Rutherford Appleton Laboratory

**Jaehoon Cha**  
STFC

AI-Based Workflow Orchestration in Modern Automation Environments: A Framework Using n8n and Prompt Engineering

**Young Saeng Park**  
University of Warwick

Introduction of Global Collaborative Research for Advanced Zero-shot Surveillance Systems

**Hyungcheol Noh**

Innodep,  
Queen Mary  
University of  
London

Towards Generalisable Perception through Vision and Language

**Changjae Oh**

Queen Mary  
University of  
London

Real-Time 3D Human Pose Estimation from a 2D Image

**Hansung KIM**

University of  
Southampton

Germanium-SWIR Sensors and Infrared-AITM for Real-Time Material Identification

**Jaehyung Lee**

Stratio Inc

## Data Science

**Moderator:**  
**Youngseok Choi**

Increasing Consumer Appreciation Towards Artificial Intelligence.

**Ilyung Cheong**

Trinity College  
Dublin

Not Everyone Feels the Same: Engagement Profiles and User Reactions to Reddit's Great Ban

**Habin Lee**

Brunel  
University of  
London

Scheduling multiple flexible maintenance activities

**Eun-Seok Kim**

Queen Mary  
University of  
London

The Interaction Effect of Micro- and Meso-level Crowdings on Visitor Behaviour: A Trade Show Case

**Changwon Park**

Brunel  
University  
London