UCANS 12

12th International Meeting of the Union for Compact Accelerator-driven Neutron Source







Introduction

- The Next Host City
- Schedule & Program of the UCANS12
- Proceedings: special issue in NET (KNS)



Discover Daejeon

- Location & Accessibility
- Conference Venues
- Accommodations



- KAERI HANARO
- IBS RAON
- KFE KSTAR





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Introduction >>>

Overview of the Next Host City DAEJEON

Korea

 Combination of traditional culture with digital technology to advance new forms of humanities

Daejeon

- Daejeon is a city that is always progressing, keeping alive cultural traditions while playing host to new scientific developments
- Daejeon is home to 26 government-funded research institutes and 400 private R&D centers, including KAERI, which has pioneered advancements in nuclear energy, such as the HANARO reactor and SMART reactor design.



Introduction

Schedule of the UCANS12

•					
Title	12th International Meeting of the Union for Compact Accelerator-driven Neutron Source				
Date	August 24 – 28, 2026 (Suggestion)				
Venue	Daejeon Convention Center (DCC)				
City	Daejeon Metropolitan City, Korea				
Organizer	UCANS, Korean Nuclear Society (KNS)				



Tentative Program of the UCANS12

Time	August 24, Monday	August 25, Tuesday	August 26, Wednesday	August 27, Thursday	August 28, Friday
09:00 - 10:00		Cooriem 2	Cooring 6	Cooriem 0	Coorien 11
10:00 – 11:00		Session 3	Session 6	Session 8	Session 11
11:00 – 12:00	Registration	Coffee Break	Coffee Break	Coffee Break	Closing Ceremony
12:00 – 13:00		Session 4	Session 7	Session 9	
13:00 - 14:00	Opening Ceremony & Session 1	Lunch	Lunch	Lunch	
14:00 – 15:00		Coorien F		Cassian 10	
15:00 – 16:00		Session 5		Session 10	
16:00 – 17:00	Coffee Break	Coffee Break	Technical Tour	Coffee Break	
10.00 - 17.00	Session 2	Poster Session 1		Poster Session 2	
17:00 – 18:00	20001011 2	T Gotol Goodlell T		,	
18:00 – 19:00	Welcome Reception	UCANS Board Meeting			
19:00 – 20:00		SPC dinner	Conference Banquet		
20:00 – 21:00		or o diffile			

Introduction

Proceedings: special issue in NET (KNS)

Editor-in-Chief



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Nuclear Engineering and Technology

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Journal Insights

Aims & scope

Nuclear Engineering and Technology (NET), an international journal of the Korean Nuclear Society (KNS), publishes peer-reviewed papers on original research, ideas and developments in all areas of the field of nuclear science and technology. NET monthly publishes original articles, reviews, and ...

View full aims & scope

ISSN

Print ISSN: 1738-5733 | Online ISSN: 2234-358X

Subject areas

Nuclear Energy and Engineering

Impact

4.8 CiteScore ① 2.6

Impact Factor (i)

Special Issue on the International Congress on Advances in Nuclear Power Plants (ICAPP2023)

Edited by Prof Jaejoo Ha - Former President of Korean Nuclear Society, South Korea Last update 13 August 2024

International Symposium on Future I&C for Nuclear Power Plants (ISOFIC2017)

Edited by Hyun Gook Kana Last update May 2018

Special issue on the water reactor fuel performance meeting 2017 (WRFPM 2017)

Last update March 2018





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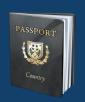
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Location & Accessibility







111 Countries under Visa Exemption Agreement

Non-stop airport limousine buses to Daejeon (2.5 hours)

A Capital City of Science and Technology in Korea

Korea's Silicon Valley

21 Universities



26
Major National
R&D Institutes



2,600+
Hi-tech
Companies



\$6.8billion
Total R&D
Investment



Daedeok Innopolis

The Center of South Korea's Technological Innovation Cluster

Daejeon is home to Daedeok Innopolis. Established in 1973 as the first government-funded research park, Daedeok Innopolis is a unique technology cluster where more than 70 world-class research institutes.

















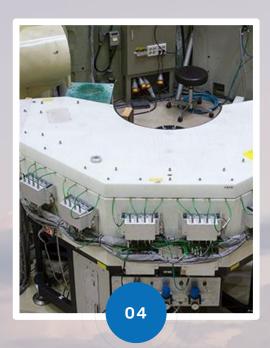


Conference Venue Deajeon Convention Center (DCC)









High Speed Internet Service

(Free WiFi, 10Gbps)

Nature Friendly Environment Professional
Facilities
for International
Events

Perfect Location for Technical Tour



Discover Daejeon

Conference Venue

: Conference Hall, DCC

Location

Daejeon Convention Center 3F Conference Hall

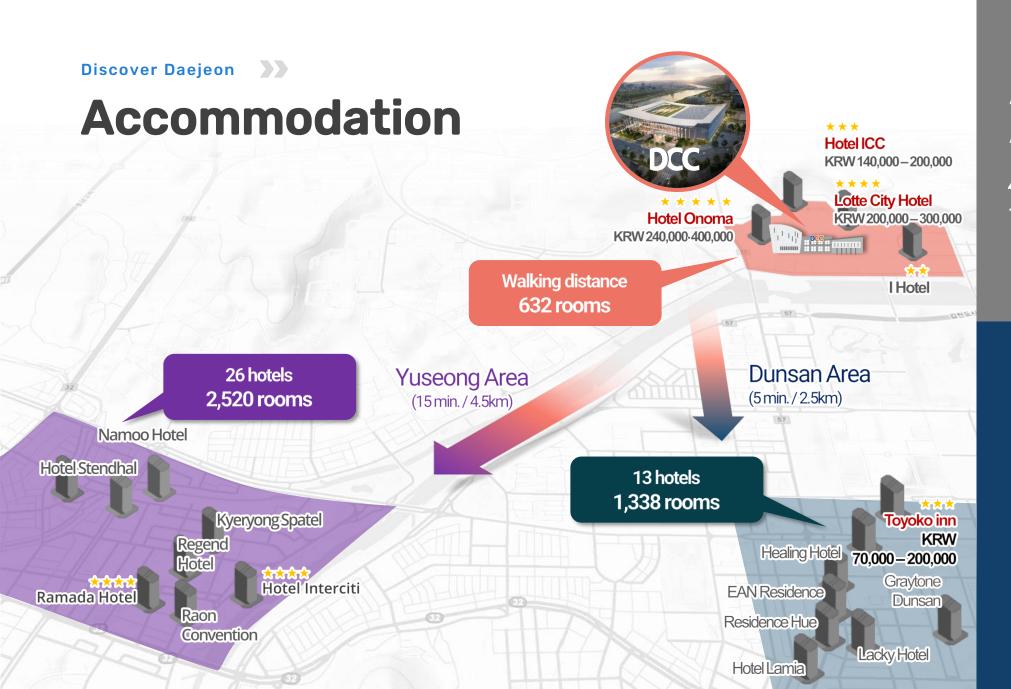
An Ideal Space

273 seats, making it an ideal size for UCANS

Exclusive for Conference

Exclusive 3th-floor hall, ensuring a private and undisturbed event

Discover Daejeon **Conference Venue** : 3F, DCC Grand Ballroom(201 ~ 202) Exhibition hall 206~211 203~20 $(109 \sim 112)$ 105 ~ 108 101 ~ 104 3F Conference room (101 ~ 108) Small meeting room (206 ~ 211) Medium meeting room (203 ~ 205) Lobby **Conference Hall** Lobby Conference Hall Opening Ceremony Registration 컨퍼런스홀 Oral Session Poster Session Closing Ceremony Coffee Break **Exhibition** Grand Ballroom



Abundant Accommodations

4,500+ Rooms within 15 minutes by car



Comfortable Accommodations

Comfortable accommodations with various price ranges from 5 star to business hotels increase participants' satisfaction





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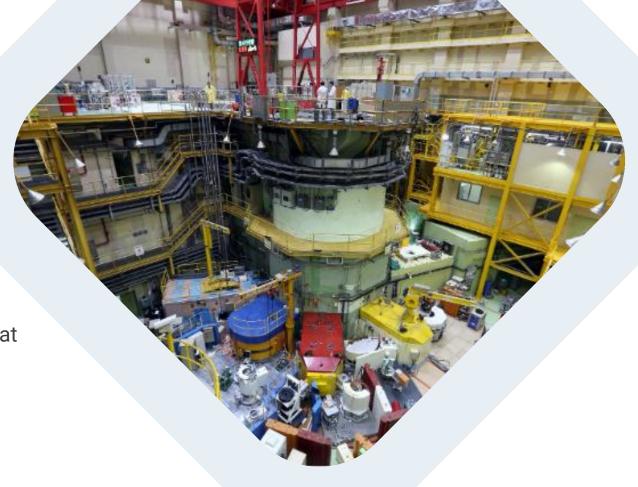
HANARO@KAERI

Reactor construction completed in 1995 including other related facilities

Open-tank-in-pool type multipurpose research reactor that generates up to 30MW of thermal power

Areas of Application

- Basic science
- Physics, chemistry, biology, earth/space science
- Industrial application
- R&D of new materials and cutting-edge components
- Study of nuclear materials
- Structural materials for nuclear applications, nuclear fuel, etc.
- Production of isotope (for medical and industrial use) and radiopharmaceuticals
- Analysis of microelements and cultural heritage & production of high-power semiconductor devices



Technical Tour

RAON@IBS

Institute for Rare Isotope Science is a large-scale research facility used for advanced basic science research. It accelerates heavy ions from proton to uranium and creates rare isotopes

Information on RAON

- High energy (200 MeV/u), high current (400 kW) rare isotope accelerator
- Considering its acceleration energy, power, and RI beam energy, RAON will be one of the most advanced accelerators in the world compared to current and planned accelerators expected to be built by early 2020

Reach area and use of institute for rare isotope science

- Discover the origin of materials and understand beginning and expansion of the universe (origin of elements and evolution of stars)
- The accelerator will be used in multiple fields, including material and biomedical science, atomic and molecular science, and nuclear science





KSTAR@KFE

KSTAR project develops core technologies by operating KSTAR - the superconducting fusion research device built in 2007 - to run for 300 seconds at 100 million degrees and solves challenging problems in fusion physics with high-temperature plasma experiments

KSTAR System Specification

Final target performance: Toroidal magnetic field_3.5 Tesla, Plasma pulse duration of 300 seconds, superconducting operating temperature_4K (269 degrees below zero).

KSTAR Key Features

- Highly efficient tokamak
- middle size & mega-ampere class
- · Steady-state & ITER relevant device
- Nb3Sn superconducting magnet
- active cooled in-vessel components
- long-pulse non-inductive heating and current drive
- · Steady-state & ITER relevant device
- passive stabilizer
- in-vessel control coils
- strong shaping







THANK YOU

We look forward to welcoming you to **UCANS12** and providing you with a memorable and inspiring conference experience. See you in Daejeon!