

Challenges for a Better World

**FIRST MOVER, UNIST**



## Challenges for a Better World: UNIST's Ongoing Journey

- 2022, September ● The opening of Grad School of Carbon Neutral Institute
- 2021, September ● The opening of Grad School of Semiconductor Materials & Eng.
- 2020, September ● The opening of Grad School of Artificial Intelligence
- 2019, November ● The inauguration of Dr. Yong Hoon Lee, as the 4th President of UNIST
- 2018, February ● The completion of UNIST Industry–University Convergence Campus
- 2015, September ● The official launch of UNIST, as government-funded S&T research institute
- 2014, December ○ The official launch of 3 IBS on-campus research groups
- 2013, February ○ The 1st Commencement Ceremony
- 2009, March ○ The opening of UNIST & 1st Matriculation Ceremony
- 2007, November ○ The inauguration of Dr. Moo Je Cho, as the 1st President of UNIST

2007, September

▶ **The foundation of UNIST** ○





# A University that Excels at ‘Things that Must Be Done’ **UNIST** will Change the World!



The remarkable growth of UNIST to this day was made possible by its focus on ‘Doing well.’ This strategy is what allowed it to overcome the limitations of a newly founded university and become an innovative, research-centered institute. Now it is time that we move beyond ‘doing well’ to excelling at the **‘things that must be done.’**

We live in an era where the presence of technology is overwhelming. To provide a foundation for new industrial development, research institutes like UNIST should train talented people as leaders of technological innovation. Excelling education and conducting R&D beyond the speed of technological innovation are, for UNIST, some of the ‘things that must be done.’

To this end, UNIST is concentrating on educational innovation, AI-centered convergence research, and smart urbanization of Ulsan city. These key initiatives promise to attract talented faculty and secure funds to continue developing research and education infrastructure.

‘First in Change,’ the slogan of UNIST, denotes its willingness to **pioneer innovation**, not to simply follow the latest trends. UNIST will continue on its trajectory toward a world-class university that generates knowledge and technology that will change the world.

*Yonghoon Lee*

## First Mover, UNIST

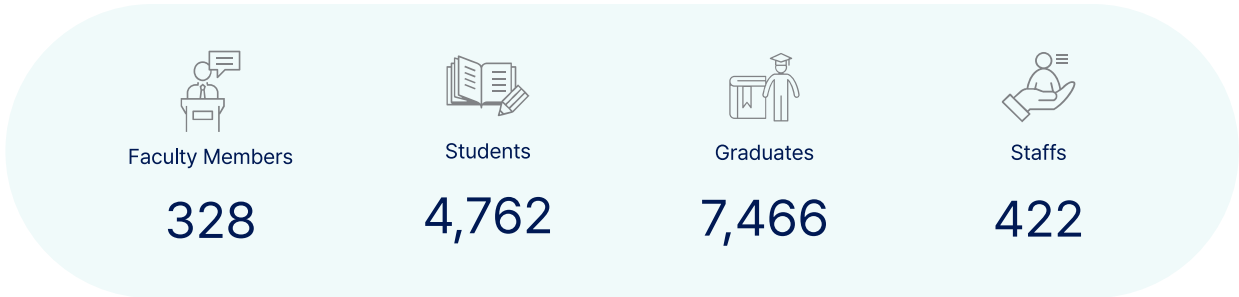
- Innovate DNA of Manufacturing Sector with AI**  
 UNIST as 'AI Hub' for the re-emergence of companies in the southeastern region of the nation.
- Carbon Neutrality to Save the Earth**  
 Carbon Neutrality by 2050.
- Semiconductor Vision, Presented by UNIST**  
 Turning Fine Chemical Co. into Advanced Semiconductor Co., System Memory Semiconductor Research.
- Innovation Hub for Bio-Health**  
 Strengthening Biomedical Industry, Fostering Medical Convergence Talents that Connect IT, BT, and NT.

## Nurturing BTS in S&T

- Exploring Fun**  
 'One Day Lecture Series' on Latest Innovations.  
 Department-Specific AI Convergence Courses.
  - Equipped with Problem Solving Skills**  
 Project-Based Learning via 'Vertical Learning Model'.  
 Hands-On Learning via 6-Month Co-op Program.
  - Challenging Freely**  
 Forming Subject-Specific Study Groups.  
 Providing Support to Participate in Global Challenge.
  - Creative & Innovative Talents**  
 Specialization of \*UIRP.  
 Systematic Education for Prospective Entrepreneurs.
- \* Undergraduate Interdisciplinary Research Project

## Community at a Glance

\* As of May 2022



\* Marked in navy blue are Grad Schools

<b>College of Engineering</b>		Mechanical Eng.	Materials Sci. & Eng.	Nuclear Eng.	
		Urban & Environ. Eng.	Energy & Chemical Eng.	Semiconductor Materials & Devices Eng.	
<b>College of Information and Biotechnology</b>		Design	Biological Sci.	Artificial Intelligence	Computer Eng.
		Industrial Eng.	Biomedical Eng.	Electrical Eng.	
<b>College of Natural Sciences</b>		Physics	Chemistry	<b>School of Business Administration</b>	
		Mathematical Sci.			
<b>Special Graduate Schools</b>		Technology & Innovation Management	<b>School of Liberal Arts</b>		
		Interdisciplinary Management			

## Research Achievements

22 Publications in Top 3 SCI Journals ('21-'22)



2021	2021	2021	2021	For the past 10 years
No. of Annual Publications	No. of Publications per Full-Time Faculty Member	Citations per Publication	*SCI Journal (%)	No. of Average Citations per Publication
1,511	4.15	4.57	93.25	28.05

\* SCI: Science Citation Index

(No.1 Nationwide, '11~'20)

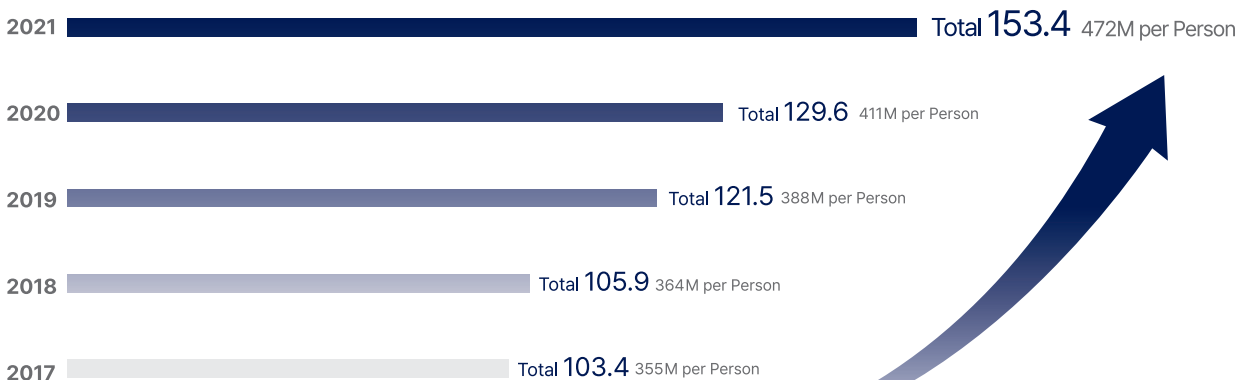
## UNIST Startups

\* Currency : KRW



## Research Funding

\* As of May 2022, Unit : Billion/Million KRW



## World University Rankings



### THE World University Rankings

2022 Young University	No. <b>1</b> Nationwide	No.11 Worldwide
2022 World University	No. <b>5</b> Nationwide	No.178 Worldwide
2022 Asia	No. <b>4</b> Nationwide	No.20 Worldwide



### Institutions-Academic

2021 Young University	No. <b>3</b> Nationwide	No.9 Worldwide
2021 Academic Institutions	No. <b>5</b> Nationwide	No.147 Worldwide
2021 Asia-Pacific	No. <b>4</b> Nationwide	No.60 Worldwide



### QS World University Rankings

No. <b>8</b> Nationwide	No.197 Worldwide
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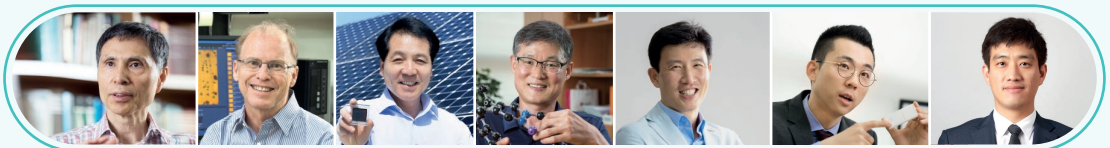


### CWTS Leiden Ranking

No. <b>1</b> Nationwide	6 Consecutive Years
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## Highly Cited Researcher

Clarivate™ **8** World's Top 1% Influential Researchers



<b>Kwang Soo Kim</b> Crossfield	<b>Rodney S. Ruoff</b> Chemistry / Material science	<b>Sang Il Seok</b> Crossfield	<b>Jong-Beom Baek</b> Crossfield	<b>Jaephil Cho</b> Material science	<b>Hyun-Wook Lee</b> Crossfield	<b>Seung Woo Cho</b> Crossfield
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## Major Research Group & Centers

**3** On-Campus Research Centers

" Secured KRW **3,000** billion in Research Grants for up to 10 Years "

Center for  
Soft Living and Matter



**Steve Granick**  
Dept. of Chemistry

Center for Multidimensional  
Carbon Materials



**Rodney S. Ruoff**  
Dept. of Chemistry

Center for  
Genomic Integrity



**Kyungjae Myung**  
Dept. of Biomedical Eng.



**울산과학기술원**  
ULSAN NATIONAL INSTITUTE OF  
SCIENCE AND TECHNOLOGY

82+52-217-0114

50 UNIST-gil, Ulsan 44919, Republic of Korea

