

## UNIST ranked top 10 in Korea

ASIA-PACIFIC RANK				NATIONAL RANK				CORRECTED COUNT							
SOUTH KOREA TOP TEN				2012				2011				2008-12			
South Korea has 21 Institutions in the Asia-Pacific top 200				ARTICLES				ARTICLES				ARTICLES			
INSTITUTION				CORRECTED COUNT				CORRECTED COUNT				CORRECTED COUNT			
21	Yonsei University	1	5.46	14	9	1.29	9	6	4.78	41					
24	Seoul National University	2	4.60	28	1	11.27	12	3	30.84	98					
27	Korea Advanced Institute of Science & Technology (KAIST)	3	4.03	15	2	3.74	15	2	17.32	48					
33	Sungkyunkwan University	4	3.67	10	8	1.36	4	4	9.68	30					
43	Hanyang University	5	2.62	11	7	1.44	6	8	5.59	22					
45	Korea University	6	2.43	6	5	2.71	12	5	8.28	34					
93	Chungju Institute of Science & Technology	7	2.12	9	13	0.50	2	9	8.20	13					
98	Pohang University of Science & Technology	8	1.95	5	9	3.78	8	3	18.11	34					
61	Samsung	9	1.85	6	4	2.86	5	7	7.79	19					
68	Ulsan National Institute of Science & Technology	10	1.67	4	-	-	-	15	1.67	4					

UNIST (Ulsan National Institute of Science and Technology) ranked top 10 in Korea at 'Nature Publishing Index 2012 Asia-Pacific' according to the Nature Publishing Index (NPI), which was released on March 21, 2013. Nature Publishing

Group is one of the most famous scientific journals alongside 'Cell' and 'Science'. The evaluation can be used as an indicator of basic science research and to judge research competence unlike any other original university evaluation. The rank is based on the

number of research articles that were published in Nature and its 17 sister journals for a year. However, the corrected count is an important standard for a rank. Since the rank depends on the number of professors, Korea's top 10 is meaningful to UNIST because UNIST has a small number of professors. Compared to Yonsei University that has 4823 professors, UNIST has 152 professors. Moo-je Cho, president of UNIST, says "Considering that the number of professors has a crucial impact on evaluation, it is very meaningful that UNIST is Korea's top 10. UNIST has achieved this result since its opening 4 years ago. Along with KAIST, POSTECH, and GIST, UNIST has shown aspect of science and technology specialized university."

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## UNIST Graduate awarded on International Conference on Environmental Pollution, Restoration and Management (ICEPRM)



Hey-Ok Kwon, Holding an Award, Hanoi, Vietnam

Environmental pollution has become a global issue for the past few decades. Most of it is caused by industrial development and human activities. As environmental pollution

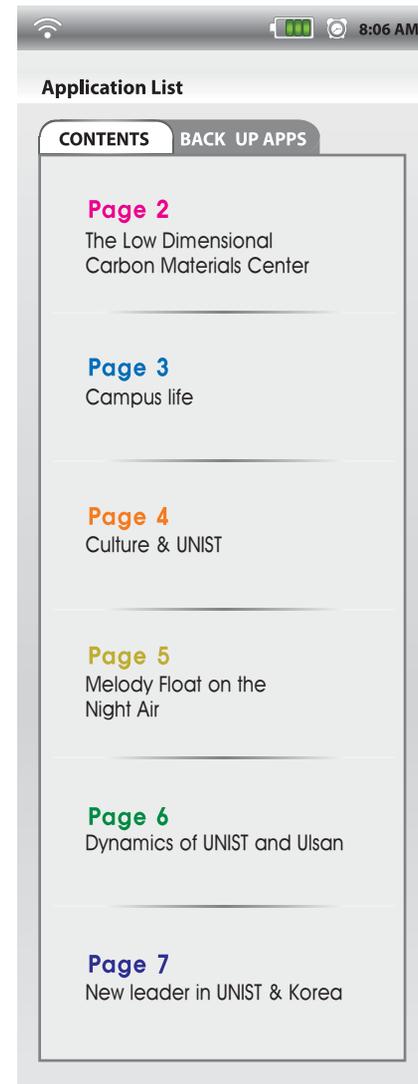
Ulsan National Ins-titute of Science and Technology (UNIST), presented her research result regarding environmental pollution in Ulsan, Korea, at the Second International Conference on Environmental Pollution, Restoration, and Management,

lems, especially in Asian countries, continue to rise, the need for the global education and proper management of environmental resources becomes imperative.

Graduate, Hye-Ok Kwon, School of Urban and Environmental Engineering,

March 4-8, 2013, Hanoi, Vietnam. Among 190 other presenters, she received an award for the best presentation. (Title: Investigation on Emission Sources and Risk Assessment of Polycyclic Aromatic Hydrocarbons in the Industrial city of Ulsan, South Korea). This conference is organized by the Hanoi University of Science, Viet Nam, Loyola University Chicago, and SETAC Asia Pacific Geographic Unit.

In this study, they collected various samples (soil: 25 sites, river: 18 sites, air: 20 sites) to investigate emission sources and to access the risk of polycyclic aromatic hydrocarbon (PAHs) around the Ulsan area. The levels, patterns, and diagnostic ratios of PAHs suggested that vehicles and industrial complexes were major sources of PAHs in



Ulsan. The results of risk assessment indicated that industrial areas had higher potential risk than rural/urban areas. This study provided the foundation of managing and controlling carcinogens because Kwon and her research team evaluated the distribution of PAHs and their effect on human health.

"We would like to continue our research in the industrial city of Ulsan to promote ecological awareness" said Hye-Ok Kwan

Public Relations Team

## Global leader special invitation symposium



Celebrating the 7th Ulsan Chemistry Day, the 'Global leader special invitation symposium' was held on March 21st, 2013 in UNIST. The symposium was composed of a pre-event and invitation symposium which included three professor's lectures. Moo je Cho, the UNIST president, as well as several guests delivered congratulatory messages in the pre-event. Especially Han-Young Kang, the President of the Korean Chemical Society in 2013, emphasized 'why chemistry is important'. The Reasons are that petroleum products occupy approximately 20% of Korea's export industry and chemistry is the base of all studies.

The ultimate themes of the three lectures were 'the life as a scientist' as well as 'the present and

future of pioneering convergence chemistry'. The topic of first lecture was 'Magical Power of Transition Metals: Past, Present, and Future' by Prof. Ei-ichi Negishi who received the Nobel chemical prize in chemistry in 2010 and is a professor of Purdue University. Secondly, Euijoon Yoon, president of the Advanced Institutes of Convergence Technology, spoke about 'Ultimate Lamp: LED'. Thirdly, Kyung Byung Yoon, head of the Korea Center for Artificial



Photosynthesis, gave a speech about the life as a scientist and the present and, future of artificial photosynthesis.

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## New Community Site for UNISTARS-GAMAKNET

Gamaknet will be the official place for communication



New Community Site for UNISTARS-GAMAKNET will be the official place for communication.

The UNIST student community site 'GAMAKNET' will open in April. Unlike the student community site in Nate, Gamaknet will be the first official student community site which is recognized by UNIST. Although new community site opens, the student community site in Nate will not be closed.

The word, Gamaknet, as all students guessed, is from Gamak-gol, the name of a place where UNIST is located. As opposed to the Nate student club, Gamaknet doesn't belong to another site, therefore there are no restrictions from it. UNIST student can use this site by signing up to be a member of it. In addition, Gamaknet will be controlled by the student union.

The most distinctive feature which Gamaknet

shows is that it is an All-in-One site; students can get information in 1 site, not only the information from students but also from UNIST. There will be menus for independent student organizations and student clubs, so all student organizations and clubs can use this to post announcements. In addition, other student activities such as group study and a second-hand market will be more activated than before.

The vice president of the UNIST 3<sup>rd</sup> Student union Yoo-ra Cho emphasized the quality of the community site. "We will make Gamaknet high quality so that every single student of UNIST will use this site. In addition, I want Gamaknet to be a positive site where every student can communicate with each other."

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## 2013 Learning workshop for UNISTARs

How we can approach Physics & Chemistry easily

On March 11<sup>th</sup> and 13<sup>th</sup>, there was a 2013 Learning workshop for UNISTARs in TMB206. On March 11th, Physics workshop whose subject was 'Who's Afraid of Physics?' was held by chair professor of DGS, Haiwoong Lee and on March 13<sup>th</sup>, chemistry workshop named 'Dreaming the future' was held by chair professor of DGS, Kook-joe Shin. Objective of this workshop was helping the UNISTARs to approach physics and chemistry easily in the context of research or study. So to achieve this objective, two students (who got good grade on each general physics and chemistry) also participated in this workshop and made a short lecture which is about their study experiences and tips. Also, there was workshop made by English for international students and DGS provided some food and planner to all about 30 participated UNISTARs.

The contents of two students are similar each other. They presented that how students can get good grade and take advantage of off or online class. Both of them emphasized that students should study by themselves and focus on pre-class. Especially, Jun-woo Kim who was student presenter of physics workshop said that for listening the class effectively, stu-

dents have to understand pre-class perfectly. Other student presenter said that ask your friends openly, if you take enough time to think solution and use video clip which professor provides because lecture note was too hard to understand. Professor Shin and Lee's presentation were also similar. Although both professor didn't mention how students can get grade directly, they emphasized cooperation of students. Especially, professor Lee said that 'we must cooperate each other even with staff of UNIST. It is important to make conversation between scientists and engineers.' Professor Lee also mentioned that he made inverted learning for making connection between students and professor.

Some students were satisfied the workshop but some of them were not. For example, sophomore student, You-jin Kim who participated in chemistry workshop said 'the contents of workshop were very good but it was not what I expected.' So, for better next workshop, DGS also made questionnaire asking some questions like 'Who speaker do you want to meet? Or what topic do you want to discuss in next workshop?' So we can expect better and more helpful workshop.

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## The Low Dimensional Carbon Materials Center to be built in UNIST



A ground-breaking ceremony for the Low Dimensional Carbon Materials Center took a place at UNIST on the 7<sup>th</sup> Ulsan Chemistry Day, March 22, 2013. This Center would be ready for the global network as an international research center.

The Low Dimensional Carbon Materials Center will feature a 5-story building with one basement floor for the 5,700m<sup>2</sup> with a 24.5 billion won investment and it will be completed by 2014. The Mayor of Ulsan, Park Maeng-woo, the president of the Ulsan Technopark (Ulsan TP), Shin Dong-shik, the president of the Korean Chemical Society,

Kang Han-Young, the president of UNIST, Moo Je Cho and other UNIST officials participated in the ceremony.

Ulsan Metropolitan City and the Ulsan TP Fine Chemical Industry Center organized special invited lectures from global leaders under the theme of "A Half Century of a Scientist" and "The present and Future of Advanced Interdisciplinary Chemistry". The dedicated speakers are a 2010 Nobel prize winner in chemistry, Prof. Ei-ichi Negishi, Purdue University, Prof. Yoon Euijoon, Seoul National University, and Prof. Yoon Kyungbyung, Sogang University.

The commemorative tree planting in Nobel Garden and other various events have also been scheduled. UNIST has provided the commemorative planting for each Nobel laureate visiting UNIST. Prof. Ei-ichi Negishi is the 4<sup>th</sup> Nobel laureate visiting UNIST following Sir. Tim Hunt, Prof. Konstantin S. Novoselov, and Sir John B. Gurdon.

Research on low dimensional carbon materials is a very important national project and plays a key role in attracting great researchers to the Ulsan area and promoting Ulsan as a global research base. We can expect developments in new growth engines like automobiles and fine chemistry with already attained technology related to graphene based on partial commercialization.

Along with its honorary director and 2010 Noble Prize Winner in physics, Prof. Konstantin S. Novoselov, UNIST professors including the director of the Low Dimensional Carbon Materials Center, Prof. Jong-Beom Baek are boosting the research on graphene with the development of the Low Dimensional Carbon Materials Center.

UNIST has made every effort in the devel-

opment of technology related to high quality, mass production of graphene and polymer composite materials as it focuses not only on graphene itself but also on the applications of composite materials. It produces excellent research output through designating the research topic in next-generation energy and advanced materials as a strategic technology, inviting outstanding scholars and carrying out grand-scale national projects

The low dimensional carbon materials, including graphene, are the source materials in next-generation and the research on these materials has received much interest. To secure the competitive edge in this field we need more active research investments.

In the greetings, "The application of low dimensional carbon materials are quite various from electrode material of secondary battery to automobile body materials. Because of these materials' broad applications, they have a huge impact on chemical industry, automobile, aviation, and electronics industry. The Low Dimensional Carbon Materials Center of UNIST is taking its first step forward with today's ceremony, I am sure that it will take the responsibility to make new growth engines for the future of the chemistry industry of Ulsan by generating excellent research output," said the president Moo Je Cho.

*\*Graphene: a substance composed of pure carbon, with atoms arranged in a regular hexagonal pattern similar to graphite, but in a one-atom thick sheet*

Public Relations Team

## English Commons Lounge-Fun, Cozy and Welcoming

Did you know that there are more than 100 international students in UNIST? It is quite common to notice that many of the Korean students are not very interactive with the international students who are part of our UNIST community.

Since March 2012, UNIST has established a commons area called the 'English Commons Lounge'. (Also called 'English Commons' in short) In this spring term of 2013, the English Commons has been moved to room 205 in dormitory building 306.

On the bright lime green walls of the English commons there are various posters and pictures, and tables that fill this place with an upbeat atmosphere. Currently nineteen friendly international students are working at the English Commons. Their job is to welcome, socialize, and introduce this area to the Korean students who enter this place with anticipation of meeting new international friends. They also provide assistance to instructors and managers who work there.

The common misunderstandings many students have for the English Commons is that the place belongs to the UIISO or the UIC, and that the place is for the international students only. "Many people think that English Commons belongs to UIISO or UIC but it actually is not. Also, this place is not

only for the international students but for the Korean students." Says Joseph Hewitt, coordinator in the English Commons.

"English commons is a fun place! It's for people to use and practice English, make international friends and to achieve global consciousness. UNIST is an English only university and I know that students use English in class, but hardly outside the classroom. English Commons helps students to use English in the form of communication rather than just for academic purposes" added Joseph Hewitt, admitting that many Korean students misunderstand the purpose of this place.

The English Commons Lounge is open from 1pm to 9pm, Monday to Friday. Fun and various events such as the Living and Learning Program, Tea Time Debate, Beach Body Group Exercise, Movie Night, Latin Night, Mafia Night, Comics Workshop, and Board game nights happen in the English Commons.

What Joseph Hewitt wants to say lastly to the hesitant Korean students is "Don't be afraid! It's fun to come here!" The doors of English Commons are literally wide open. It eagerly welcomes both Korean students and international students to actively interact, socialize and build friendships. So why don't you pay a visit sometime?

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## Renovated UNIST Leadership Programs

The 2013 Leadership Program has been remarkably changed. In the 2012 Leadership Program, groups of UNIST freshmen orientation were standard of leadership group. Each group was divided into two groups and orientation leaders were in charge of Leadership Program activities. Students participating in the Leadership Program had to acquire certain points thorough MT, dining together, athletic competition, and culture activities to pass the Leadership Program.

However, these activities required by the Leadership Programs could not satisfy students taste and lead students' voluntary activities. It is hard to do Leadership Programs with many people in a short time. In fact, from 2013 the Leadership Programs changed. Students can choose Leadership Programs which they want to do during the courses register session and the members in each program decreased. Students can complete leadership programs in not only the 1st term but also summer vacation. Besides, Students have to participate in a career special lecture at least once and submit a career preference test sheet. Students can take the career preference test in Work net and Saramin. However, some students said that 2013 Leadership program has some problems. 2012 Leadership program gave all students to register Leadership program.

However, some student cannot resist 2013 Leadership program owing to lack of seat even students can participate in free choice activities. It can bother undergraduate students' schedules because students must spare a time for Leadership programs.

The 2013 leadership programs are Boating, Saving a life / Practice first aid activity, Skin-scuba diving, Reading and discussion, history trip, role play, experience army life, and free topic activities. There are several attention points. Students who chose the Saving must prepare their individual swim suits, swimming caps and goggle to practice rescue in the water. If students are not good at swimming, they have to practice additionally in the gymnasium. Students who chose Reading and discussion have to return their books to the students support team. UNIST will give the books to welfare facilities in Ulsan.

Students who want to complete Leadership Programs have to do at least 10 hours of social volunteering activities. Only 4 hours can be accepted in a day and it must be from November 14<sup>th</sup> 2012 to May 10<sup>th</sup> 2013. Students have to submit their voluntary activity certifications by May tenth and check their activities are recorded in VMS and 1365.

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## United in Diversity with more Fun, Laughter and Excitement



Leaving home and studying abroad can be a frightening experience for anyone. A warm and friendly party can always help foreign students to make new friends and feel welcomed in their new home.

In welcoming the twenty three new undergraduate, graduate, and exchange international students from Bangladesh, Spain, the Philippines, Ghana, India, Indonesia, Kazakhstan, Nepal, Nigeria, Paraguay, Turkey, Vietnam, United States and the Netherlands, UNIST International Students Organization (UIISO) and the Student Union organized a welcoming party to receive them with open arms as part of the UNIST community. On a chilly spring evening, Friday the 8<sup>th</sup> of March, excited international

students and Korean students in nice suits, ties, dresses, and heels arrived at the 2<sup>nd</sup> floor auditorium of the main administration building.

"Though the name suggests that the event is organized to welcome the international students arriving in UNIST, in fact that is just a part of the overall theme of this event. As I also mentioned in my welcome speech, we have set the theme of this party as the founding objective of this organization - to bring unity in the diverse communities of UNIST and to facilitate cross cultural awareness in the campus." said Ahmed Mukhtar, the president of UIISO, as he described the purpose of this meaningful party that has been held six times over the

last two and a half years.

The party began with a presentation that introduced UIISO and the new international students. The guitar club Unplugged performed several delightful musical pieces and several international students also performed beautifully by singing, playing the guitar, and playing their traditional instruments.

The party was successful - more than 200 students attended and some students even had to leave because there were no vacant seats. People from different cultures and different backgrounds mingled, exchanged greetings, and asked various questions to each other. The cultural barrier was broken, and everybody enjoyed a good amount of

delectable pizza, chicken, and some champagne too.

"Even though I am not much of an English speaker, this party was very fun. I was very impressed by how the party was organized overall. I made lots of new friends from different countries and I definitely would like to go again next year." said Sun-young Hwang from NBC who attended the party.

Ahmed Mukhtar is very satisfied with the outcome of this event. "This particular party has been the one of the most successful events UIISO has held so far and has achieved its set objective. Mentioning this, I also believe that as time goes by and the number of international students grows to a substantial level, the improvement will be seen in such UIISO events."

One of the main goals of UNIST is to produce global leaders. A global leader is not just someone who knows a lot about the world and can speak English fluently. A global leader is someone who is able to respect different cultures. A global leader is someone who can promote unity amongst differences and diversity. Events like the UIISO welcome party provide a wonderful platform for both international and Korean student groups to learn about each other's cultures and enhance understanding with each other.

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# Communicate with unfamiliar places!

# UNIST first term Culture Programs Gayageum For you & performance of Javo Island



On April 11th, humanities lecture named 'Classic music well fitted to us' was held in U-ju culture and art center by Jong-eun Lee who is UNIST professor of Music and Creativity. This humanities lecture has been held in U-ju culture and art center and Ulsan science center for two months by DGS (Division of General Studies) and NRF (National Research Foundation of Korea). 'The classic music well fitted to us' was 3<sup>rd</sup> lecture and next one will be also held on April 25<sup>th</sup>. Not only UNIST professor, but SNU (Seoul National University) and Ulsan university professor had held the humanities lectures for Ulsan people. The goal of these lecture is to improve humanities acknowledge of Ulsan residents and communication between professors and residents.

The lecture 'Classic music well fitted to us' was started questioning 'what is classic music?' After questioning that, professor Lee said that we don't have to define what is music exactly, the feeling we have when heard music

is definition of music. Then, professor Lee explained some etiquettes in concert hall and music type on different ages. Also, Lee really played her violin when she needed examples. Especially, professor Lee induced people to find their preferred classic type by understanding the classic music characteristics in different age.

One of the people who attended in lecture said "It was more fun than I expected. Especially, because I am a teacher, I maybe can teach some information which I got in lecture to my students." Overall, people were happy about lecture and expected next lecture. On April 25<sup>th</sup>, Ju-yeon Kwon of UNIST will make lecture named 'wearing clothes, wearing science' and on May 14<sup>th</sup> Beoung-su Kim of UNIST will held lecture about carbon. The final lecture of this humanities lecture will be held by Guk-jo Shin of UNIST DGS head professor on May 30<sup>th</sup>.

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UNIST has been holding variety of culture programs to raise student's culture and dignity since they establishment. As culture programs held regularly, students can experience culture life in UNIST. Sand arts show, popera, magic show and other various performances catch a popularity for students. Culture program is not only popular for UNIST students but also local residents.

March 21, Sookmyung Gayageum Orchestra held the concert at UNIST. This is the culture programs that have been held Every months in UNIST since 2009. The concept of performance is "Gayageum for you."

Sookmyung Gayageum orchestra started as first Korean gayageum orchestra in 1999. Since then opening new way of modern gayageum music, they try to expand the range of Gayageum songs and accept other genres. Sookmyung Gayageum orchestra consists of 18 gayageum players who learned at graduated school of traditional culture and arts, music director and conductor. Their purpose is spread the modernity

and beautiful of gayageum music. The concert, they performed 25lines gayaguem ensemble, the four seasons : spring by vivaldi, let it be by beatles and canon variation etc. With 25lines gayaguems play, original gayageum performed with sing songs. During the performance, explanation of each songs proceeded simultaneously. As performance proceed, audiences' concentration and interest also increased.

Next culture programs, Javo Island held the concert at April 18<sup>th</sup>. Javo Island is mixed duet group since 2004. Javo Island means that they want to play the music feel like they travel the island. Until now they have performance about hundred and participated in various music programs.

UNIST culture programs give unistars many cultural things. Now, they have various culture programs. Forwardly, a more developed performance is coming. This time, not only Unistars, but local residents will also enjoy the culture programs.

Jin Woo-young

# Don't stop make it pop-lipdub

Lip-dub is blending word of lip-sink and dubbing. People shown in the video do lip-sink and after the record it is covered with original music. This is a kind of music video, usually it is used for promotion. In Youtube website, there are many lip-dub videos from all over the world and among them one of the most famous recordings is made by UQAM(Universite du Quebec a Montreal) students. It is viewed by 10,561,597 people from whole in the world and it helps to have its name up to world-students.

The UNISTATION which is the broadcasting station of UNIST is going to record a lip-dub video. At the instigation of UNISTAION, a lot of clubs such as U-turn, BB, GUM HYANG, PEAK, Melting point, SHAMU, MACH, GYEONG BOK DONG, EA, Earth Cops, CZARDAS, Photo Memorial, UNICH, Ensemble, UNIS, BIYEON, Unplugged, Joker expressed that they are going to join for making video. About the reasons for making lip-dub video, the head of UNISTATION, Suk Yoon said "One of the university station's main purposes is creating culture of campus, and we thought campus culture is directly related to the promotion and image of school, but it is not only about study and research capabilities. Therefore, we decided to make lip-dub video for our

school." The goal of this project was very clear, "Making public relation video with entire students." First of all, they send a project proposal which is including the meaning and intention to student-organizations such as Student Union, Club Union, USDC(UNIST Student Dormitory Council), UISO(UNIST International Student Organization) and 7 department student unions. It was quite easy due to help of students, and immediately they started making continuity. It was pretty hard to have meeting every day until dawn but they were full of passion with thinking prouidness after recording video. The song will be Tiktok of Keshha, because the overall theme is party. She said "the most important meaning of this recording is the fact that whole students focused on one goal for our school and we manage it quite successfully on our own." The recording goes on April 21, and before the summer vacation it will be opened to students and public on Youtube website.

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# Melody Float on the Night Air

Harmony played by Pohang Municipal Symphorry Orchestra and Jong-eun Lee



Pohang municipal symphony orchestra performed with Prof. Jong-eun Lee (UNIST) at Pohang University of Science and Technology(POSTECH) auditorium in March 27<sup>th</sup>. Started with C. Weber's "Aufforderung Zum Tanz", the concert showed P. Tchaikovsky's "Concerto for Violin and Orchestra in D major op.35" and L. Deleib's Suite "Sylvia"

Composed in 1819, German musician Weber made "Aufforderung Zum Tanz (Invitation to the dance)" for his wife. It was first composed as a piano solo, however L. Berlioz arranged for the violin. The piece describes the splendor of the ball well. It tells a story of a couple at a ball, starting with a young man politely asking a girl for a dance. They take several turns around the room and they part politely.

Famous Russian musician P. Tchaikovsky's "Concerto for Violin and Orchestra" is one of the popular violin concertos known by its fancy mournful melody. Tchaikovsky composed the piece in Clarens, a Swiss resort on the shores of Lake Geneva, where Tchaikovsky went for the recover from the depression caused by his disastrous marriage to A. Miliukova. He was a homosexual and his duty forced him to get married to her. Tchaikovsky used lots of Russian theme and it is well-known with L. Beethoven, J. Mendelssohn, and J. Brahms's concertos. The piece is in three movements; Allegro moderato (D major), Andante (G minor) and Allegro vivacissimo (D major).

A French composer L. Deleibs's "Sylvia, ou La nymphe de Diane(Sylvia, Diane's

nymph)" is a ballet and notable for its mythological utopian setting. It tells a love story of chaste huntress nymph, Sylvia and shepherd boy, Aminta. Aminta loves Sylvia but she turn down him, because she was a nymph and he was a human. Sylvia shot an arrow to him but the Greek god of love Eros shot back the arrow to her. Sylvia fell in love with Aminta. They confirmed their love overcoming adversity. This piece consists of Prelude et Les Chaseeresses, Intermezzo et Valse Lente, Pizzicati, and Marche et Cortege de Bacchaus.

Maestro Jong-jin Lee conducted this concert graduated from Julliard went the graduate school at Illinois State University and

Seoul National University. At present he is a permanent conductor and artistic director at Chungbuk Sympony Orchestra. Jong-eun Lee who performed Tchaikovsky's Concerto for Violin and Orchestra also graduated from Julliard and she is an assistant professor at UNIST.

Many students from UNIST came to this concert and enjoyed the music. Dae-woo Kim(School of Technology Management) stated that "It was an opportunity to see a new side of Prof. Lee as a violinist. I was so delighted to hear the music from the lecture."

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## Go outside the campus!



There is information about outside activities for hesitating UNIST students because of the trimester system of UNIST and our location. Dong-ju Park is a sophomore majoring in financial accounting and international management/marketing. Actually, he did a lot of outside activities and recently received an encouragement prize in the 2012 Campus Patent Strategy Universiade.

The activities he has done are Young-Samsung supporters, KTnG imagination marketing school, Campus Patent Strategy Universiade, national presentation competition for the university students, ETC (institute of talent donation for single mothers in Ulsan) journalist, and the bank of Korea currency competition, etc. In addition to the things mentioned above, there are a lot of other outside activities you can find through cafes and blogs of portal sites such as 'Spec-up' in the NAVER portal site.

Before he decided to take part in the KTnG activity, he hesitated due to burdensome things because he had to go to Busan every weekend. However, he judged that it was worth investing and he went to Busan every Friday from April to June. Also, the curriculum of UNIST is different from other universities so it was so hard for him to adjust the curriculum. However, he solved the time problem by communicating with his team-

mate. As a result, his team got first prize in Busan. He was so passionate about the activities that he spent more than 1 million won in the first term just for the transportation. Since it took a lot of money and time, he actually recommended other activities that require an adequate number of team meetings, once every 1 or 2 month. One of his recommendation is Young-Samsung campus reporter for students majoring an engineering because outside activity itself gives a broadened sight and enables them to meet diverse people. Patent Strategy Universiade is good for students in the technology management track since preparation time helps relative studies and gives a full credit for midterm of technology management course. KTnG imagination marketing school is proper for students in the marketing track.

Many techno-management students are worried about their future. He gave advice about it. "Students of the techno-management school should not entirely depend on the school. Above all, don't be under other's control. You have to do other things as well as study by yourself." Also he said it is more important to gain something through activity than to fill one sentence in a resume.

Lastly, he said "Go outside the campus."

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## What is Love?

Do you know the famous biologist "Darwin"? Darwin said that we've evolved for survival and reproduction. We can explain mental phenomena like hunger, happy, pain, or love by Darwin's idea. For example, what if we cannot feel pain when we get hurt? Even, although our fingers are chopped, if we cannot feel pain, we leave if without any treatment. So, who can feel pain have more chance to survive than the other who cannot feel pain.

Love? Of course, it is also result of survive and reproduction. Why we've try to success in life and look good to opposite sex? There are many reasons to it but, main reason is to carry on a family line. And 'Love' enables us to carry on a family line. So, naturally our body takes action to survive and reproduce. That action is hormone. In other words, hormone makes love. Based on hormone, we can define love as three steps.

First step for 'Love' is secreting dopamine. We usually call this step as "I'm getting on some..." Actually, to love someone, we should have step for dopamine, because dopamine makes brain secrete energy and extreme excitement for live. When our brain makes dopamine, we are overwhelmed with happiness and laugh out at everything. Also, many people who fall in love experience that because of their lover, they cannot sleep at all recalling lover's face. This experience is also

due to dopamine.

Second step for 'Love' is phenylethylamine. Phenylethylamine acts like stimulant which makes us have extreme heart beats. We can stay all night without being tired by phenylethylamine. Some people can have insomnia at this step, it is also due to phenylethylamine. Maybe, this step is peak in the whole love story.

Third step for 'Love' is oxytocin. Many people are getting tired to 'Love' because we are gradually getting used to hormone. We call this step as a period of lassitude. Maybe, people take one or two years to reach this period. The possibility of breaking up is very high at this period. However, do not worry. Excitement or shivering is not all about love. Easy or comfort is also love. At this step, we make oxytocin which make us be peace and easy.

There are many explanations about Love. For example, according to wikipedia, Love is an emotion of a strong affection and personal attachment. Love is also said to be a virtue representing all of human kindness, compassion, and affection. However, according to scientists, especially biologist who believes 'Darwin', 'Love' is not that complicated. It is simple outcome of hormones and just for surviving and reproduction.

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# Dynamics of UNIST and Ulsan

From Ulsan to UNIST, from UNIST to Ulsan...

Ulsan National Institute of Science and Technology (UNIST) is the University of natural sciences and engineering that was built to turn out outstanding individuals in advanced disciplinary convergence. Ulsan is a big city which has 1.15 million citizens and takes 20% of Korea's export. Also, the average income per person is higher than any other big cities. But there were only 3 universities including Ulsan University and other 2 colleges. It was not enough to accept many Ulsan students. Moreover, Ulsan had no national university. Student's parents have many difficulties to support their children because their children went to other cities to enter university and it takes so much money in many places. Therefore UNIST had been built and education infra has been built in Ulsan.

As a result, Ulsan has helped our school very much in various ways since foundation of UNIST. Ulsan and Ulsu-gun supports UNIST with 200 billion of development fund for 10 to 15 years. Using this money, UNIST offers all students full

scholarship. Also, KTX station was built almost the same period with the foundation of UNIST and it has comfortable accessibility to UNIST. Consequently, it became easier for other city's brilliant students to come to our school.

UNIST also has done many things to Ulsan. To know about the impact of our school on the nearby society, Seo Young Kim, a member of UNI, the official student ambassador of UNIST was interviewed. "UNIST has a very high potential as a global leader, due to the fact that although it is a science-based university, it has 100% English lectures." She also mentioned the economical impacts of our school "Due to the influx of superb students from the outside, and the concentration of many high-tech research facilities, there have been many research-related requests from companies and industries, which give economical impacts on the nearby society." She concluded, "Geographically, UNIST gives a synergy effect, thanks to the students and the research facility concentration. This

will bring about a positive impact economically, socially, and environmentally on the nearby society."

Also Ulsan residents were interviewed how they feel about UNIST. Sae Hyun Kim, a freshman at UNIST, who is also a resident of Ulsan, told us how he feels. "Before UNIST was built, there was almost no interchange of localities. However, now there are a lot of different students from all over the world in the area. That is a good phenomenon." He also said, "There used to be only Ulsan University in the nearby area as a university, but as UNIST came in, there was an influx of students of great talent. Now, UNIST is the face of Ulsan." However, he did mention some of the negative aspects. "Some radical thinkers and old people in Ulsan think that the money spent on UNIST should go to Ulsan. They think that UNIST is snatching the entire budget going to Ulsan."

In addition Ulsan resident, a parent of a high school student, told us how she feels. "As a parent, I feel that UNIST is a great

motivation factor and a goal for Ulsan students. Now that there is a prestigious university in the area, students from Ulsan and Busan have a goal to study for." She also mentioned the economical effects in Gu-young-li. "To be frank, Gu-young-li wasn't much of an active area. However, due to UNIST, now it has become livelier. In addition, many UNIST students are working as teachers for many Ulsan students. To have such superb teachers in this area is good for our children."

UNIST offers education infra, produces outstanding individuals and contributes to industry development in Ulsan. Ulsan supports UNIST with huge money. UNIST and Ulsan they work like crocodile and crocodile bird. By its relationship Ulsan and UNIST develop in positive direction to all.

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## Ulsan is in the Whale

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April 25 to 28, the Whale Festival will be held at Ulsan Taehwa river and a traditional Whale village, Nam-gu, Jangsengpo. This year, the theme of the whale festival is 'Ulsan is in the Whale'. This expresses the dynamism of Ulsan through the whale which is the representative symbol of Ulsan. The slogan, 'login to whale', is determined and this means that the festival shows everything through the main concept of the

festival, the whale.

The Ulsan whale festival began in 1995 to promote tourism resources associated with the whale by highlighting the cultural values and symbolism. The Ulsan whale festival is also known as the Jangsengpo Whale Festival because it is opened at Ulsan Jangsengpo which was in the past a whaling base. The festival has been progressed during the past three years and selected as a

promising festival of Korea. Therefore, it is positioned as a representative festival of Ulsan.

Although compared to last year the festival programs have been reduced from 5 events to 27 programs, this year's permanent exhibition program experience program is further enriched. Opening ceremonies are goyuje, which are ancestral rites, and held at stage of Jangsengpo, and subject performance which is a live musical on the water at the Taehwa river. Representative programs such as the whale ocean travel cruise ship, prehistoric whale fishing reenactment, real prehistoric experience zone and 'Dancing whales' performance parade & contest are ready. Major programs which are the subject of exhibit hall 'Welcome whales', meet whales and alcohol square 'Alcohol whale', whale madangguk, whale ship race, and on the water multimedia show 'Whale odyssey' are ready. Also, the

Republic of Korea Folk festival and 'Russia Day' closing ceremony which celebrate a whale fishing base opened 120 years ago will be held. Participation Experience programs which are dongbyeolppommaegi, civil troupe contest, hope bicycle miracle show, whale cultural experience contest for foreigners, Taehwa river water leisure experience, and Taehwa river and Jangsengpo Fringe performances will be held. Liaison programs which are whale literary, whale museum special exhibition, special event of whale ecology experience, and whale conference will be held.

The organizers said that visitors can enjoy the 'whale sea journey' as comfortable as possible by whale ocean travel cruise ship which is introduced this year and representative programs including prehistoric experience enhance the experience by expanding the scale.

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## The death of solitary people

A 65-year-old woman surnamed Park was found dead in an apartment where she had lived alone in Asan, South Chungcheong Province, on a freezing day in February. Just two hours earlier, police had discovered a 55-year-old man who had also been living in solitude, lying dead in a neighboring apartment. Recently, we can see these news frequently. According to the statistics of the Seoul Metropolitan Government, deaths without friends and families are increasing. The Solitary death means that when people are close to death, there is no one around

them and corpse is found after 24 hours. This Solitary death is social issues from the past until now. In the past, Solitary death just applied to old people who live alone. However recently it can apply to all people including old age, middle age and even young age. Then what is the reason about this across generation Solitary death?

The first reason is changing social atmosphere. Nowadays people don't know their neighborhood, don't meet and talk with their neighborhood and don't know their neighborhood occur something wrong, sick and even

the death. Therefore, when their neighborhood died lonely, the corpse is found when the badly smell pervaded surrounding area or water electricity meterman come. The second reason is social disconnection. If people lost their job, they lose social relationship and suffer economic deprivation. They are disconnected with society and have no money. Time spending at home is more and more increase, and then they are cut off from social completely. Also, because they don't have money, they suffer malnutrition and don't do social activity like circle, meeting. Therefore,

they die alone without contacting any person until their death.

To solve this Solitary death social problem, the example of Japan which get into an aging society can be solution. For example, Japan have automatic notification to the agency if there is not water usage during a certain period. Also, Japan have morning call system to people who have Solitary death possibility. If we adopt Japan's Solitary death solution system, the rate of Solitary death may be reduced.

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# New leaders mark their beginnings in 2013

Both new Korean government and the student council in UNIST launched in 2013 with great expectations.



On 20<sup>th</sup> December, 2012, Geun - hye Park was elected as the 18<sup>th</sup> president of Korea. The inaugural ceremony was held on 25<sup>th</sup> February, 2013, at the National Assembly Building, to officially appoint her as the president. After several hours of pre-events, she gave her speech speaking of her aspirations with the hearty acclamations from the audience. By the way, in last March, the inaugural ceremony was also held in UNIST to celebrate and name Sung-hwan Kim, the senior student in UNIST, as the student body president of UNIST with his student council named Infinite-Beat.

Geun-hye Park pledged the 10 main commitments for the welfare of the nation; lessening burden on households, childcare responsible for government, curtailing educational expenses, welfare policy depending on life cycle, augmenting new markets and

occupations through the creative economy, taking care of current occupations, enhancing the quality of life of workers, nation relieving project, democratization of economy, and balanced regional development. The president emphasized the importance of reconstructing the middle class with communication. Similarly, Sung-hwan Kim regards communication as the most important factor leaders have to keep in mind. He said, "Students, student council, and the university itself have to believe in each other to pursue the same goal together, to be a better and well-known university, as the members of the UNIST. Before I became the student president, the empowered right of students was seriously in need. Therefore, I tried to communicate with students as much as possible so that I could improve the circumstances such as welcoming party cooperated by stu-

dent council and UISO or making the student council fee public."

Likewise, both Geun-hye Park and Sung-hwan Kim seem to focus on acquainting with people. Their pledge leads many to expect about the future of the nation and UNIST. Especially, Kim's decision will affect UNIST students directly and students also hope to cooperate with the council for UNIST's bet-

ter status and development. Lastly, Kim mentioned, "Compared to other universities with history, UNIST is improving yet out of bond still with lack of infrastructure and status. That's why communication is the key to pursue our goal, to be better always, with frontier spirit."

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## Epilogue

### Son Jun-seo(Chief-director) :

I strongly recommend you guys to carefully read 'Dynamics of UNIST and Ulsan'. The fact that our university might be the goal for Ulsan students, as said by parents, sounded fresh. And there, I feel a certain responsibility of UNIST students. Finally, I appreciate helpful vice-director through the hard publishing schedule and all of our valuable members.

### Kim Si-in(Vice-director) :

Making the newspaper is not easy but I think these efforts will make 'UNIST Journal' that shows UNIST as a representative of the UNIST someday. I want UNISTARs to take more interest.

### Choi Go-eun(Head of Campus) :

I was surprised that there are so many steps in making this. This was my first time actually do this, I hope I can do it better next time.

### Lee Hae-min(Campus) :

This was my first time writing an article and it was very enjoyable. I would like to expand the extent of my journalism next time and write about more intriguing events in our campus.

### Jin Woo-young(Campus) :

happy to publish 6th newspaper. for last 2 years many incidents happened and our newspaper develop more and more. please love our newspaper continuously.

### Bae Woong-jae(Campus) :

U-journal will make it!

### Lee Yun-jae(Campus) :

Thanks for reading this paper! Its really refreshing experience to draw cartoon in English :)

### Lee Dong-eun(Campus) :



Thanks for a job well done!

### Jo Ho-jin(Head of Culture&Academy) :

To me, making U-Journal newspaper is hard time, but so proud of this newspaper. Also it is first newspaper as a head of culture&academy, so I have much more attachment to this newspaper.

### Lee Hwa-kyoung(Culture&Academy) :

It was vague to write articles in first time but now it is expected to be issued as a public newspaper. I think it must be precious experience!!

### Lee Do-yeon(Culture&Academy) :

It was good experience to write in a school newspaper, U-journal. It was especially good to write about good news of UNIST. I really look forward to see my article in the newspaper!

### Kim Hyeon-jin(Culture&Academy) :

Lucky for me, I took charge of covering lipdub which is unusual for cub reporter. It was quite hard for me to do interview and research for the first time but also i could feel responsibility for doing this job and it was cool. I hope i can do better than this next time and thanks for all the people who have helped me.

### Park Yong-jae(Head of Society) :

for me, it was good opportunities to understand and communicate with ulsan residents and unistar.

### Lee Won-suk(Society) :

As a freshmen of UNIST, it was a pleasure working with u-journal. It was a great experience as working as a journalist.

### Lee Ji-won(Society) :

It was my first time participating in publishing university newspaper and I devoted myself writing every single sentence since I know how important newspaper is to people in UNIST. Not only myself but other journalists in UNIST journal must have given their best also for anyone who reads our newspaper. Hope it'll help our university in every aspects.

### Lee Joon-hee(Society) :

It was my first time to write article in UNIST Journal so I was nervous that I can do it well. I appreciate to chief director and others to help me write article easily.

## Safety insensitivity, is it ok?

Lackadaisical attitudes caused recent conflagrations in major cities.

Several massive fires broke out recently in big cities such as Insa-dong, Seoul, Pohang, and Ulsan. The amount of damages in Insa-dong was approximately four hundred billion and seventy two million won. One in Po-hang swept downtowns and even caused heavy casualties as well as students in UNIST were terrified by fire in Ulju-gun since it occurred in the neck of the wood.

It turned out the incident in Insa-dong was precipitated by a gas explosion in traditional restaurant and middle school student's meaningless playing with fire started the calamity in Pohang. The account of forest fire in Ulju-gun is still wrapped in mystery with the slight possibility of arson. Twenty five houses were burnt and the fire was spread over the mountains with strong wind. It took three days for extinguishing fire as well as the operation for recovering earth is still on the job. Not only these cases but the most events regarding fire happen by someone's inattention such as short circuit, littering cigarette butts, or unchecking equipment.

Kim Chang-hyun, the head of the fire

department in Beomseo-eup, said "People don't think their blunder can be a trigger for massive blaze. Then, when a fire breaks out, they don't know how to deal with it and just scream for help. That is called safety insensitivity. Mostly, that's how incidents usually start."

People should remind their careless behavior can always be the starting point of damage to others. Therefore, they need to be "awake" to aware the danger or risk by what they've done so that we can reduce the chance of the horrible events.

He also mentioned, "Generally, fire breaks out the most between November and February. However, in the spring, actually this time of the year, it occurs a lot since someone is off one's guard. You must remind anywhere can be a spot under your inattention. For UNIST students, I would like to advice not to smoke on random places in campus due to the locational characteristics of UNIST, sited in very mountainous and blustery area.

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# Biodiversity: Should It Be Important to You?

Prof. Bradley Tatar(Division of General Studies)

Many UNIST students tell us that preserving nature is an important task for our society. However, just like any other citizens in Korea or other modern countries, UNISTARS do not have a clear idea exactly how to save "nature" or to protect the environment. Some ideas about things we can do include recycling our rubbish, or perhaps purchasing a "hybrid" car instead of a conventional vehicle.

However, the situation is more urgent than ever. Currently, our planet is going through the most rapid period of "mass extinction" as tens of thousands of animal and plant species have become extinct since the start of the industrial revolution. By the middle of the 21<sup>st</sup> century, 50% of all species are likely to be extinct, according to Michael Novacek in his book *Terra: Our 100 Million Year Old Ecosystem and the Threats that Now Put it at Risk*. The causes of extinctions are numerous. Global warming is destroying ancient communities from the Arctic to the equator, and pollution takes its toll. However, the harvesting of plant and animal species by humans devastates many species.

You have heard of people eating tiger steaks for virility, right? In the oceans, 100 million sharks are killed each year according to official reports, partly because of the demand for shark fin soup. However, scientists warn that if illegal and unreported shark hunting is included, the real figure might be closer to 273 million (The Guardian, Saturday March 2, 2013, "Sharks at risk of extinction from overfishing say scientists"). This is just one example of how humans are gobbling up every species on the planet.

What humans are also gobbling up is space. We use our machines to reshape the planet's surface to create apartment buildings and department stores, eventually filling up the planet with our built structures. Harvard University biologist E.O. Wilson claims that human use of the planet's surface actually steals 20 - 40% of the sun's energy which would otherwise have been absorbed by plants (May 13, 2007, "Is humanity suicidal?"). Most of the natural habitats our planet depends upon are rapidly disappearing, and the species which live in these habitats are disappearing, too. This planetary trans-

formation means that outside of zoos and nature reserves, most creatures cannot survive on their own.

This is our last chance to ask the question, exactly what do we have to do to save nature? Exactly how many foxes, how many squirrels, how many sparrows and how many whales do we want to save? Why are these questions so far away from our thoughts, when this is the last chance to find an answer?

Right now, scientific experts are arguing about this very issue in San Diego, California. Scientists from Korea and Japan have joined together to request an implementation review for the western north Pacific common minke whale (*Balaenoptera acutorostrata*). Korean and Japanese scientists argue that there are enough minke whales to hunt, but must produce evidence about exactly how many whales exist in the ocean and if they can be hunted. The evidence is used for computer simulations which tell whether or not it is "safe" to hunt the minkes.

Why does it matter to you and to me if

someone else will kill a whale and eat its meat? The answer is biodiversity. According to this idea, our planet needs not just whales, but many tens of thousands of species, all of them living and interacting together in ecological systems. Saving the whales is not enough, but it is a good way to begin. It should be a question which is not for "experts" only. We should all become experts on our planet's biodiversity, and start making decisions about how many species can be saved.



# Enjoy your impossible chance!!

YongKyung OH(School of Electrical and Computer Engineering, Junior)



When I was elementary student, there were a lot of friends who had fantastic dreams. President, famous Singer, Scientist, lawyer and so on. One of my friends wanted to be a singer. He is not singer now, but he is a member of band in his college. In my case, I wanted to be a scientist like Einstein and I'm studying physics and debating physics in my academic circle.

But, many of my friends and you confront the reality of society. As you know, dreaming can't make your lunch. In order to alive in harsh society, you must earn money by work, tutoring, getting scholarship and so on. It's too sad thing. Isn't it?

There is a saying that it "If you want to something, doing after

going to college". I think everyone heard that, one or more time in your middle school and high school life. So, I want to ask you, the UNISTAR, "Are you doing something that you really wanted?"

Of course many of you say "yes" (If not, it's really sad news...). After entering college, many of you achieve one by one what you delayed due to the school's academic pressure. In the college life, there are good spaces to meet the needs, circles or clubs exactly, and many of good people. I think circle is very good place that your impossible dreams can be true indirectly. It is because it is a place where you can have a circle of various fields; it is possible to put together a lot of time with good people; to gain memories of college days.

However, looking at the reality of UNIST's circle, there are some barriers. First one is associated with the atmosphere of UNIST. Everyone have no rest time. Last summer I went to UCLA and I was very impressed that they have enough afford and enjoy it. UCLA has many athlete utilities and circles. From students to professors, many people workout at the gym. Not only they workout with dumb-

bells and barbells, but also they enjoy racquet ball, rock climbing, and dance. Of course many boys and girls do ballgames like soccer, basketball, baseball, football and so on.

UNISTAR don't have time to rest and always do their tasks. But we need to take a rest and do enjoyable things more in order to increase our happiness. Remind this. "Onestepbackward, Twostepsforward."

Second barrier is fear about new things. Many UNISTARS are hesitating to join to circles due to worry about new things and new people. When circle's recruiting season, there are so many tests and auditions to meet the new faces. What is the important factor of circle activity? Skills? Experiences? No, you just need passion and will to do the circle's activity. As you know, we are just newbie in the view of society. Many circle's activities are really professional and fantastic. But it's just conclusion of the activity, not prepared material. Just go for it, and make amazing results and experiences.

Third barrier is psychological barrier of individuals. Sometimes you want to, sometimes you want to be, but it is a psychological barrier due

to the pressure of the test and quiz and challenge in front of you. Of course, there is no doubt that there is a need to stick to academic and belonged to the student. I understand that you study really hard because of your goal and future happiness. But, you only have 4 years to undergo your impossible dream indirectly. It is only time that you can undergo your impossible dreams and prepare your real dream simultaneously.

Che Guevara said "Betherealist,

Demand the impossible". I think we just focus on the reality, not the dream that you postponed. Your college life is more precious. Your ability and possibility is greater than you expected. Try to make your impossible come true. I expect that UNIST campus becomes more energetic and vibrant by doing your circle activity. I promise you that circle activity is the most important, valuable, and meaningful chance in your life. Please don't miss it.

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