# WISET Fellow Mentoring Program from KISTI: History and Future Using Complementary Online and Offline System Based on Effective Matching Process

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# 1. Introduction

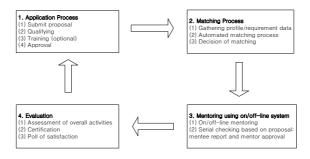
Senior scientist and engineers in KISTI have been participating in the WISET Fellow Mentoring program since 2009. The WISET Fellow Mentoring program aims at supporting female university students, majoring in science and engineering, by mentoring from careered (mainly women) scientists and engineers in Korea. Mentees participating in the WISET mentoring program can get help from mentors about how to become successful professional scientists and engineers as women after graduation. The WISET mentoring program has been operated by KAI-WISET (the Korea Advanced Institute of Women in Science, Engineering and Technology) and funded by Korean government from 2001. Here we describe the history and future of the WISET Fellow Mentoring program from KISTI.

# 2. WISET Fellow Mentoring program from KISTI: history

The WISET Fellow Mentoring program from KISTI started in 2009. The fellow or chief mentor, representative of KISTI mentors, was Dr. Sun-Hwa Hahn (formal vice-president of KISTI). In year 2009, 5 mentors of KISTI and 15 mentees are engaged in the mentoring program. Indeed, one of the mentors in KISTI awarded the new mentor prize by WISET in the beginning year. Dr. Sun-Hwa Hahn, as the fellow mentor of KISTI, successfully operated the WISET Fellow Mentoring program from KISTI until 2011.

### 3. WISET Fellow Mentoring program from KISTI: Complementary Online and Offline System Based on Effective Matching Process

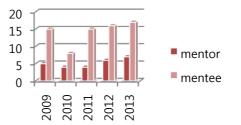
The WISET Fellow Mentoring Program from KISIT has performed effectively using both on-line and off-line system. Online system is composed of exchanging e-mails, communicating through webboard, sending text messages via cell-phones (SMS), meeting using SNS via smart devices such as tablet, pad, smartphones, etc. Offline system is composed of face-to-face meeting of mentors and mentees, mentees' visit to mentor's lab, mentees' participating with their mentor in an academic conference or a technical seminar, etc. Online system and offline system are effectively joined together through mentoring portal of WISET. In order to maximize the satisfaction of mentor and mentee, we designed an automated matching process in the beginning of the mentoring program. Figure 1 shows the overall process of the mentoring program using complementary online and offline system based on effective matching process.



# Figure 1. The Overall Process of the Mentoring program using complementary online and offline system based on effective matching process. [6]

From 2012, the fellow mentor of KISTI changes to Dr. Sul-Ah Ahn. The WISET Fellow Mentoring program starts in spring every year by connecting mainly female professional scientists or engineers in the fellow institute (mentors) with female undergraduate students or students (mentees) studying science or technology in Korean universities. Last year, 7 mentors of KISTI and 17 undergraduate and graduate students are linked (See Figure 2 for annual participation to WISET Fellow Mentoring program from KISTI). Matching mentors and mentees are made by

online mentoring tool in the WISET website[7]. In the WISET website, online mentoring is executed by exchanging questions and answers between mentors and mentees. In addition, mentors of KISTI have operated webcafe pages for mentoring, KISTI mentoring [8], in WISET website. Mentors of KISTI as well as their mentees registered as members of KISTI mentoring webcafe, communicating freely with one another regardless of whether or not they are matched mentor-and-mentee. The date of the Kick-Off meeting was decided by gathering opinions of mentors and mentees through the webcafe pages. On July 24<sup>th</sup> in 2013, the Kick-Off meeting for mentees matched with mentors of KISTI was held successfully at KISTI with high participation rate. All of the 7 mentors of KISTI, including 3 male mentors and fellow mentor Dr. Sul-Ah Ahn participated. Over 17 mentees matched with mentors of KISTI, 10 mentees participated from both near and distant cities.



#### Figure 1. Annual participation of mentors and mentees to WISET Fellow Mentoring program from KISTI

### 4. Summary

Researchers in KISTI have been participating in the WISET Fellow Mentoring program since 2009 [1]. We describe the history and future of WISET Fellow Mentoring program from KISTI. We have communicated with mentees more freely and effectively using complementary online and offline system. In addition, we designed a automated matching process in order to help mentors and mentees to begin mentoring with satisfaction [2-6]. In the future, we plan to use our automated matching process for matching candidate mentors and mentees in order to obtain more satisfaction in mentoring.

## 5. Acknowledgement.

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### 6. References

- Sul-Ah Ahn, Hyeyoung Cho, "WISET Fellow Mentoring Program from KISTI: Structure and Activities Using Complementary Online and Offline System", Proceedings of International Conference on Convergence Content 2012, 2012, pp. 409-410.
- [2] Sul-Ah Ahn, Hyeyoung Cho, YongJu Shin, Yungyo Cho, Ji Young Park, Bu-Young Ahn, Youngim Jung, "WISET fellow mentoring program from KISTI: history and future using effective matching process", Abstracts of the 2013 International Conference of Woman Scientist and Engineers on Bio, Information, Environment/Energy and Nano Technology, 2013, pp. 326.
- [3] Hyeyoung Cho, Sul-Ah Ahn, "A study of automated matching process for mentoring program", Abstracts of the 2013 International Conference of Woman Scientist and Engineers on Bio, Information, Environment/Energy and Nano Technology, 2013, pp. 324.
- [4] Hyeyoung Cho, Sul-Ah Ahn, "An Effective Design of Automated Matching Process for Mentoring Program", Proceedings of the 3<sup>rd</sup> International Conference on Convergence Technology 2013, 2013, pp. 203-204.
- [5] Hyeyoung Cho, Sul-Ah Ahn, "An Effective Mentoring System based on Automated Matching Process", Journal of Next Generation Information Technology, 2013, Vol. 4, No. 9, pp. 63-68.
- [6] Sul-Ah Ahn, Hyeyoung Cho, "Mentoring Process based on Complementary Online-Offline System using Automated Matching", Proceedings of the Ninth International Conference on Innovative Computing, Information and Control (ICICIC2014), 2014, to be published.
- [7] Heisook Lee, and Sunsook Noh, "Educational Use of E-mentoring to Encourage Women into Science and Engineering", Lecture Notes in Computer Science Volume 2713, Springer, Berlin and Heidelberg, 2003, pp. 75-84.
- [8] http://www.wiset.re.kr/cafeMain/2012kisti, http://www.wiset.re.kr/cafeMain/kisti.