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JSPE Magazine Quarterly

The Japan Society of Professional Engineers

Special Feature

- **In memory of the late Noriko Shikano**

- Contents -

Generational Change in Nature

Regardless of the clamor of coronas and conflicts, generational changes in nature are steadily taking place. We, too, are reminded of the need for a steady mechanism and effort to pass on technology to the next generation in order to leave a prosperous society to the next generation.

1 Special Feature: In memory of the late Noriko Shikano

Ms. Noriko Shikano, who had been active in the launch of JSPE and the introduction of PE/FE exams in Japan, passed away on Monday, October 18, 2021. I think that there are many JSPE members who have been indebted in various situations, including applying for the PE / FE exam.

In this JSPE magazine, we will collect and share comments received from everyone, and we will reflect on the contribution of the late Noriko Shikano and carry out a plan to pray for the repose of your souls.

Year End Party at Tokyo, 2010

Opening of Kamiyacho Office, Tokyo, 2001

Meet with Oregon Gov. Kulongoski at Tokyo, 2003

JSPE Annual General Meeting, 10th Anniversary Ceremony 2010

Great Contribution Award, 2011

JSPE annual meeting, 2014

The message received from the members is listed below (in alphabetical order of name).

Thank you very much for taking the exam. I pray for the repose of my soul.	PE-0200 Tomohiro Iwasaki
I did not have the opportunity to meet Ms. Shikano, but I would like to express my heartfelt gratitude as a person who was instrumental in realizing the domestic examination for PE and entrusted with the benefits. In addition, Ms. Shikano has appeared on ethical dreamer radio, and I listened to it the other day. He talked passionately about "one step of courage" and reaffirmed the pioneering spirit required of PE and the importance of public welfare. My engineering activities are more than a decade away, but I would like to carry on Ms. Shikano's thoughts as much as possible. I would like to once again express my heartfelt respect and condolences to Ms. Shikano.	PE-0304 Takayuki Ohnoki
I offer my condolences. When I did test proctor, I spoke to him gently. Thank you very much so far.	FE-0169 Yoshiaki Kakeno
It was more than a quarter of a century ago, but I remember that the first time I visited the office of the Japan Industrial Technology Promotion Association (JTTAS) in Kojimachi 4-chome in order to apply for fe examinations that had just started in Japan in 1996 was the first time I was indebted to Ms. Shikano. I would like to express my deepest gratitude for your continued efforts for nearly 30 years to continue conducting the Professional Engineer Examination in Japan and for inspiring Japanese engineers, and extend my heartfelt prayers.	PE-0151 Takeya Kawamura
Ms. Shikano, I am very grateful for your support until I passed the PE exam about 20 years ago. It was a long time since then. When I met him at the Board of Directors and the General Assembly, I was always treated with a smile and the surroundings became brighter. We who remained later feel sad, but the only comfort is that before we die, we were told that it was fun, nothing to remember. I pray for the repose of your soul.	PE-0081 Hideki Kanno
The first time I was indebted to Ms. Shikano was when I applied for the FE exam, and it was Ms. Shikano who answered the telephone inquiry. After joining JSPE, I learned that Ms. Shikano had been very much contributed to the start of PE/FE exams in Japan, the establishment of JPEC and JSPE, and his activities. I would like to once again thank Ms. Shikano and pray for the repose of my soul.	PE-0214 Tsutomu Koguchi
Thank you very much for everything from the time of the examination to the activities of JSPE. I would like to express my deep gratitude.	FE-0075 Tsukasa Satake
Ms. Shikano was very polite and helpful when we visited JPEC to consult about PE examinations. I would like to express my condolences and pray for the repose of my soul.	PE-0294 Katsuhiro Seino

I have been involved in various tasks so far, but I always remembered my position as an engineer because of Ms. Shikano's encouragement. Following Ms. Shikano's will, we will continue to work to improve the foot of engineers.	PE-0026 Koichi Sekiguchi
Ms. Shikano, I remember many things such as the polite and caringness of Japanese culture, and while it is modest after thinking deeply, I have a wonderful ambition that has grown up in this country, such as the words that made a point. Engineers who pride themselves on supporting industry in this country, along with the ethics of PE, are still firmly in our hearts. We will continue to cherish it as one of our treasures. I'm sure you've met Professor Imai by now, and you've been talking about it afterwards. I think that the topic is endless, but please tell me that the juniors are also doing their best. Gassho	PE-0002 Kazuo Takemasa
Noriko Shikano, I am surprised to learn about your death. Looking back, I remembered that when I tried to take the PE/FE exam and visited the office of Akasaka, the predecessor of JSPE in the late 1990s, he explained carefully. Thanks to that, I was able to pass FE/PE safely. I would like to express my heartfelt gratitude for your success for JSPE and my heartfelt prayers for your repose of your soul.	PE-0070 Masahiko Tada
He is the one who took care of me 20 years ago. Ms. Shikano, I am very grateful for your efforts to spread FE and PE. When I visited the Kamiyacho office for the first time with little information on the examination, I remember the time of Ms. Shikano who greeted me with a homey atmosphere. Thank you very much.	PE-0077 Shigenobu Tanami
Ms. Shikano was the window for me to acquire U.S. PE. If you recall, when we took the entrance examination at yokosuka U.S. Military Base in 1996, Ms. Shikano led us in front of the gate from early morning. In addition, when we worked together as JSPE directors, we served as a bridge between oregon officials and other organizations inside and outside the country. It is no exaggeration to say that we were truly "external sales representatives" because the number of stakeholders has increased, starting with Ms. Shikano. The loss of Ms. Shikano as one of the greatest contributors to JSPE's founding period is a great loss to us, but I would like you to keep an eye on the remaining members to maintain and develop JSPE in the future. Gassho	PE-0025 Masahiko Tsuchiya
I was surprised at the sudden news of my death. I still can't believe it. I saw Merkel's article on Facebook last September. It must have been respected. I met for the first time at a PE examination briefing session just under 30 years ago. I was just surprised to see zero experience abroad, having been interacting with people from overseas, lightly transcending language barriers. It will be active in the footwork well in heaven. I pray for the repose of your soul.	PE-0039 Hirokazu Dejima
He has always had a presence as one of the creators of JSPE. I was very surprised at the news of my death because I was full of vitality. The activities at JSPE supported by Ms. Shikano have become a memory, and I feel the change of time. I sincerely pray for the repose of my soul.	PE-9084 Makoto Nishikawa

In response to the news of Noriko Shikano's death. I don't remember when I got to know Ms. Shikano, but maybe I was indebted to you from the time I applied for the FE/PE exam. She was easy to talk to with her unsorting personality and valued her connection with others. He was kind to people and had a lot of friends without any entill. He was interested in everything and had fun talking about things, and when he sometimes got a phone call, he always became a long phone and told me various current situations. I feel like I'll have a phone call tomorrow, but I'm really sad to hear that he's gone. It was good if something was able to be returned? Even in heaven, make friends. I pray for the repose of my soul.	PE-0044 Yasuyuki Nomoto
Ms. Shikano, thank you very much for taking care of me. At that time, when JTTAS was still conducting tests, there was little information about PE, but I was able to respond with you with a friendly approach. Thanks to that, I was able to meet people involved in THE CRE AND JSPE. I think jspe is now only due to Ms. Shikano's efforts. Thank you very much for a long time.	PE-0095 Hiroaki Matsuoka
I am just surprised to hear from JSPE about the passing of Noriku Shikano the other day. When applying for the PE/FE exam, we received a warm encouragement with a polite explanation of the point that I do not understand at all. In addition, I can not express my gratitude in words for your support in the subsequent registration. I sincerely pray for the repose of my soul.	PE-0301 Koichi Murata
I visited the JPEC office and went to apply for the FE exam, partly because of my boss's introduction. At that time, Ms. Shikano kindly taught me the procedure of the examination. I always ask the office and I remember hearing various stories with tea sweets. I remember that I was also working hard at JSPE's engineers salon to liven up the meeting. I have been able to carry out this project this time, and many people who yearn for Ms. Shikano have received, and I feel that she was truly the mother of PE in Japan. I would like to once again express my heartfelt condolences to Ms. Shikano.	PE-0179 Ryo Moriyama
Thank you very much for taking the PE exam. After that, every time I visited the office, Ms. Shikano was impressive and cheerful and positive. And many PE members were introduced to me. I was given a ballpoint pen when I passed PE, and I still have it now. Anyway, he was an active person. I pray for the repose of your soul.	PE-0160 Tsuyoshi Kadono
Without Ms. Shikano's advice, I would not have been able to even take an exam, let alone acquire PE. Thank you very much. Rest in peace.	PE-0148 Akira Yamazaki
I remember that around 1995, while I went to various related meetings to collect information to aim for the PE exam after passing the FE exam, I often met him and was kind to me and taught me various information. At that time, the site for the PE examination was set up at yokosuka base of the U.S. military, and it was a reassuring feeling that the examinees were guided and guided there. After that, every time I met at various events, I was talked to me kindly, including those at that time, and I remember fondly that I was like a JSPE mother. I sincerely pray for the repose of my soul.	PE-0079 Yoshiteru Yamamura

2 PE registration and renewal, FE/PE exam reports

Members who have newly pe registered or passed the FE/PE exam by March 2022 are as follows: Congratulations to everyone.

* Fall 2018 (Vol. The text of the experience record is posted on the web from 43).
https://www.jspe.org/member/magazine/magazine-index/

* Some browsers may not be able to open the file properly. If you have any problems, please reopen the file in a different browser or copy and paste the URL.

(Verified browsers: Google Chrome, Microsoft Edge, Internet Explorer)

* The latest test information, the path to passing and registration are very valuable information, so if you are a member who can provide information, please inform the Public Relations Subcommittee (public.2007@jspe.org).

PE registration

Membership number identity	Registered state field	Registration date	Experience record posting URL
PE-0314 Katsushi Minami	Texas	2021/11	https://www.jspe.org/member/wp-content/uploads/sites/2/2022/03/2021_TX_mechanical.pdf
PE-0315 Keita Fujii	Kentucky	2021/12	https://www.jspe.org/wp-content/uploads/2022/03/2021_KY_mechanical.pdf

FE exam

Membership number identity	field	Examination date	Experience record posting URL
FE-0424 Shinya Takeuchi	Electrical and Computer	2021/11	https://www.jspe.org/member/wp-content/uploads/sites/2/2022/03/202111_FE.pdf
FE-0425 Shunsuke Teraoka	Civil	2021/6	https://www.jspe.org/member/wp-content/uploads/sites/2/2022/03/202106_FE.pdf

3 Ethics

Winter 2022

On Ethics: You Be the Judge
Eye in the Sky

An engineer's drone, while recording a bridge inspection, also records a confrontation with gunfire.

Situation

Engineer Choi is a consulting engineer who performs structural inspections using mechanical drones. The scope of Engineer Choi's services is solely to identify the physical conditions of the bridge and make recommendations regarding bridge repairs. Engineer Choi deploys a drone to perform a series of bridge inspections as part of his contract for inspection services with the state Department of Transportation. During one of Engineer Choi's drone inspections for the state DOT, the drone unexpectedly records an encounter between a law enforcement officer and a motorist that results in the exchange of gunfire. Following his review of the drone recording, Engineer Choi relays it to the state DOT, noting the gunfire event. The state DOT advises Engineer Choi that it does not plan to share the information with state or local law enforcement unless so requested by state or local authorities.

What Do You Think?

What are Engineer Choi's ethical obligations under the circumstances?

PE マガジン 2022 年 Winter

倫理： あなたが審判
空からの目

PE がドローンによる橋の点検記録中に偶然に銃激戦を記録した

状況

PE Choi はコンサルティングエンジニアとしてドローンによる構造物の検査を実施している。
PE Choi は橋の外見的状況を確認し、橋の修理に関する推奨を行うサービスを行っている。

PE Choiは州の運輸局との契約で数の橋の検査をドローンを使って行っている。

彼は州の運輸局依頼でドローン検査中偶然、警察官と自動車運転者の銃撃戦を記録した。

PE Choi は銃撃戦の記録について運輸局に報告した。

運輸局担当者は PE Choi に、州もしくは地方行政機関による依頼が無い限り、にその情報を共有することはしないと、忠告した。

あなたはどう考えるか？

この状況下で PE Choi の技術者倫理上の責務とは？

What the Board of Ethical Review Said

When performing professional engineering services, professional engineers sometimes encounter unexpected circumstances that may raise ethical questions or concerns. From time to time, the NSPE Board of Ethical Review has addressed these situations.

For example, in BER Case No. 82-5, in which an engineer employed by a large defense industry firm documented and reported to his employer excessive costs and time delays by subcontractors, the BER ruled that the engineer did not have an ethical obligation to continue his efforts to secure a change in the policy after his employer rejected his reports, or to report his concerns to a proper authority, but had an ethical right to do so as a matter of personal conscience. In that case, the BER noted that the case did not involve a danger to the public health or safety, but instead related to a claim of unsatisfactory plans and the unjustified expenditure of public funds.

In BER Case No. 88-6, an engineer was employed as the city engineer/director of public works, was responsible for disposal of plants and beds associated with poultry processing facilities, and reported to a city administrator. After noticing problems with overflow capacity, which must be reported to the state water pollution control authorities, the engineer failed to fulfill her ethical obligations by informing the city administrator and certain members of the

NSPE 倫理審査委員会の見解

PEがエンジニアリングサービスを行う際に、予想もしない状況に遭遇し、技術者倫理を問われる機会が時々ある。

NSPE 倫理審査委員会はこのような状況での技術者倫理について検討する機会がある。

事例 BER Case 82-5 では、大手防衛産業に雇用されている PE が外注業者のコストおよび納期遅延に関する書類を作成し、報告する業務に携わっている、ケースについて紹介している。

倫理審査委員会は、この PE の雇用者が彼のレポートを拒否した後でも方針の変更を推し進める、もしくは適切な行政機関に懸念を報告する努力を継続する倫理的責務をその PE が持たなかったと判決した。しかし個人的道義上そうする倫理的権利を持ったと判決した。

しかしこの事例では、公共の健康または安全を脅かすことは無いが不満足な計画と公共の資産の不正な無駄使いに関係していることに、ﾐ倫理審査委員会は注目した。

事例 BER Case 88-6 では、あるエンジニアが公共事業の市のエンジニアおよび監督官として雇用されたケースを紹介している。その PE は食物の加工施設に関連した野菜および苗床の廃棄に関しての責任を持ち、レポートを市の管理者に提出した。その PE は市の審議会のメンバーのみならず直属の管理者によっても法が無視され続けることに気がついており、州の水汚染管理局に報告されるべきであった野菜および苗床の廃棄処理能力を超えた問題に気づいた後、その PE は関連する市管理官や関係する市の審議会の一定のメンバーたちに報告する倫理的義務を全うする事を怠った。

city council of her concern, even though she was aware of the ongoing disregard for the law by her immediate supervisor, as well as by members of the city council.

In other related cases, the BER reached different conclusions based on the specific circumstances. In one case (Case 10-5), the BER determined that a potential safety issue did not pose an imminent danger; therefore, the engineer did not have an obligation to report this issue beyond his superiors. In another (Case 12-11), the BER held that the engineer should immediately notify verbally (and in writing if necessary) his immediate supervisor of the safety hazards on a project involving the inspection and repair of highway on and off ramps.

倫理委員会は状況により異なる結論に至った他の関連事例を紹介する。
Case 10-5 では、潜在的安全性が差し迫って損なわれる事が無かったので、PE は上司を飛び越えたメンバーに報告する義務はなかったと倫理委員会は結論づけた。

Case 12-11 では、高速道路の出入り口の検査および修理の業務の直属の安全管理者に PE は速やかに口頭（もしくは必要であれば書面で）伝えるべきであった、と倫理委員会は判決した。

Conclusion

In the present case, while the events and circumstances observed by Engineer Choi and his drone recording device did not directly relate to his role as a professional engineer or within the scope of Engineer Choi's services as a professional engineer, the issues involved occurred during the performance of Engineer Choi's professional services and are a matter of significant public interest and concern. Under the facts, Engineer Choi took appropriate steps to bring this matter to the attention of the state Department of Transportation,

結論

今回の事例は、PE Choi および彼のドローン記録装置が観測した出来事および状況は直接彼の PE としての業務とは関係が無い、または彼の契約外である。しかしこの事例は彼の PE 業務遂行中に遭遇した問題であり、重要な公共の利害と関心事である。

この状況下で、PE Choi は、州の交通局、PE Choi のクライエントおよび適切な行政機関の注意を引くような適切なステップを踏んだ。

Engineer Choi's client, and an appropriate authority. While the BER believes Engineer Choi fulfilled his ethical responsibility under

この問題は公共の健康と安全に関係し重要な公共の利害と関心事であるので、倫理委員会は、PE Choi が NSPE の倫理規範に基づき、彼の倫理責務を果た

the NSPE Code of Ethics, since this is a matter of significant public interest and concern and relates to the public health and safety, the BER is of the view that Engineer Choi should also, consistent with the NSPE Code of Ethics, properly bring the existence of the drone recording to the attention of appropriate local or state law enforcement authorities for further review and investigation, and also advise the state DOT.

したと考える一方、地方または州の警察がさらなる調査を進めるためドローンの記録を提出し、さらに州の運輸局にも連絡すべきであると考える。

NSPE Code References

II.1., II.1.f., II.3.a., II.4., and III.3.a.
For more information, see Case No. 18-11.
More You Be the Judge Articles
Eye in the Sky (January, 2022)
Conflicted Loyalties? (October, 2021)
The Ethics of Extending, Receiving Credit (July, 2021)
The Ethics of Extending, Receiving Credit (July, 2021)
Elected Officials Make Questionable Decision (April, 2021)
Digital Dilemmas (January, 2021)

参考 NSPE Code

II.1., II.1.f., II.3.a., II.4., and III.3.a.
さらなる情報は Case No. 18-11 参照
“あなたが審判“の記事
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<JSPE Ethics reviewer comments on this article >

This article is an interesting and up-to-date case study on the subject of drones. The Ethics Committee considers public safety, health and welfare to be of paramount importance and advocates that PE uphold this safety as an engineering ethic.

4 How we know PE

JSPE members are going to become PE from now on and play an active part as PE, but what was good about knowing PE and actually becoming a PE? We received frank comments from current members. * If you are a member who can provide a frank thought, please contact the Public Relations Subcommittee (public.2007@jspe.org).

Shunsuke Teraoka FE-0425 	< How did you learn about PE> In my first year at the company, I didn't know pe existed. At that time, there was a PE registrant in a senior of the company. I had the opportunity to have the seniors teach me pe/fe exams, PE systems, my own experiences, etc., and it was an opportunity to get to know PE. Why are you aiming for < PE> I wanted to work overseas, so I thought that acquiring PE would prove a certain level of technical capabilities. I feel that it is very valuable to be able to learn specialized fields in English and to be able to systematically relearn while actually studying for qualification exams. In addition, after joining JSPE, I saw articles such as PE registration and passing experience, and my motivation to aim for PE further increased.

5 Contact from JSPE-1: Introduction to NCEES Topics

Yu Suzuki (PE-0145, Electrical)

This time, from the February issue of NCEES web organization magazine "Licensure Exchange", we will introduce topics that may be especially useful to PE and PE candidates in Japan.

https://ncees.org/wp-content/uploads/1_February-2022-LEx.pdf

Twin Miller, P.E., who was head of trial

NCEEST who has served as the head of trial developmentim Miller, P.E.in the retirement of theEO David CoxHe looks back on the history of trial development. MillerHis leadership spanned more than 15 years, during which time he (computer-based testing) has been resolute. The world is C from the "paper and pencil" testBTAlthough it was a transition period to, it seems that there was a lot of hardship because 33 types of tests were covered. In the early days, we had a lot of difficulties, such as rushing to introduce a $50 change fee because candidates changed their exam schedule frequently, and then bringing CBT forward to give test takers a variety of opportunities, but we worked with our staff to get through it.

Miller said of the trial development volunteers, "What impressed me the most was their dedication to giving back to their profession." "Many people take time off to create exam questions... They throw away their ego at the door and just help me create the best exam possible." It is a comment that reminds me that engineers are wonderful occupations that support the world in an invisible place.

Well, I will introduce this article this time.

1. No waiting for the state board to eliminate licensing barriers (pp. 3-4 “State regulatory boards should choose to make improvements in licensing”)
2. NCEES Committee and Leadership's 2022 "Greater Nata" Initiative (pp.6-7" NCEES committees and leadership get to work on big-swing initiatives for 2022”)
3. Licensees play a part in licensed program operations (p.8 "Creative licensees to be part of an effective enforcement program")

1. We can't wait to clear the license barrier on the state board.

The debate about enabling licenses across states has been going on for a long time, but it seems that there is no effective progress. Atty Mamola of the Nevada Board, P.E. "COVID-19 has proven that it can provide professional services remotely," he says. "Licensing is essentially a barrier to engineering and surveying... Licenses are required, but they must be easier to operate in multiple jurisdictions."

Each state may be able to improve by acting voluntarily.

Mamola suggests the following actions to take in each state:

(1) Reconfirmation of the licensing process

Processes that were once enacted for a reason but are no longer working should be removed. For example, there may be overlap between the information you provide when you apply for a license and when you actually obtain it after approval. If NCEES has a given record (education, work history, etc.), it may not need to be approved again by the state board.

PATTY MAMOLA, P.E.
NEVADA STATE BOARD OF PROFESSIONAL ENGINEERS AND LAND SURVEYORS
EXECUTIVE DIRECTOR

Atty Mamola of the Board of Nvidia, P.E. says COVID-19 has proved that tinkering can also provide professional services remotely.

(2) License applicants in other statesverificationIn the "NCEES E3systemIntroduction of "

Verification using paper takes a lot of time. **The introduction** of the **NCEES E3 system significantly reduces the processing time for one state to complete the verification of licenses in another state.** In order to use electronic verification using this system, it is necessary to update the laws and regulations requiring paper verification.

(3) Application by NCEES Records

The NCEES record is a single document of the validated credentials. Each state board can access it via a single interface. **This ensures that the applicant** only **submits the credentials once, assuming that their experience and reference are updated regularly, rather than filing them** individually **with** each **state.**

(4) Model law and model rules (Model Law and Model Rules)

By bringing state laws and regulations closer to model and model rules, licensing laws are unified in each state. In the first place, the purpose of the establishment of NCEES in 1920 is to develop a unified licensing law so that licenses can be used in each state in common. When model laws and rules are updated, states are obligated to work on changes to their own regulations.

It seems more difficult than you might imagine to unify different circumstances for each state and make licenses common to each state. For us Japanese PE, if the license is unified, there is no need for registration such as "00 state PE", and you may be able to call PE at the time of passing the exam, There is a possibility that the license you currently have will be able to use in other states without procedures. I hope that this initiative will come to fruition.

2. NCEES Committee and Leadership's 2022 Big Swing Initiative

NCEES New Plasident, Brian Robertson, P.E. expressed its determination to make a big deal of money following the previous one. "At the zone meeting (NCEES is divided into zones by region, and its representatives meeting), we will hear a full report from all committees, but some 'big swings' I would like to share a preliminary update on the topic."

(1) Spring cleaning

BRIAN ROBERTSON, P.E.
NCEES PRESIDENT

NewNCE President Brian Robertson, P.E. expresses his determination to "make a big deal of great use for the realization of the initiative."

Each Standing Committee says **We review document libraries such as opinion and white papers.**Delete anything you don't need.Manyit has been confirmed to remain useful, and in some cases it will be edited and revised through discussion。 For instanceFuture educational requirements for engineering licenses Reviewed individuallyAnd、In additionConsensus discussion between chairpersons. It is actively done.

(2) Split PS (Professional Surveyor) test

The Exam Committee for PS is discussing the PS testing department to make recommendations to the Council for discussions at zone meetings and specific actions at annual meetings. Determine the number of modules and the length of the exam, and present information to the finance committee's work to determine the appropriate fees. Work is expected to continue until the end

of spring.

(3) Engineering licensing model

The Engineering Licensing Model Task Force met in Denver in December and made much progress, including a summary review of several engineering licensing models worldwide and domestic medical and dental models. **In the future, we will consider the work experience between FE and PE exams, and further evolution after obtaining PE.**

(4) Zone Mobility Issues

As you can see in the previous article, there seems to be little progress on this yet.

It is easy to imagine that it is a difficult task to organize the long history of the past and evolve in the NCEES, which is closely related to various laws and regulations, and to evolve with the impact on stakeholders fully considered. These initiatives are closely related to our PE in Japan, so we will continue to monitor trends.

3. Licensees play a part in licensing program operations

BRUCE PITTS, P.L.S.
OKLAHOMA STATE BOARD OF LICENSURE FOR PROFESSIONAL ENGINEERS AND LAND SURVEYORS DIRECTOR OF ENFORCEMENT

"It is in the public interest for licensees to engage each other when a serious event is found," said The Director of Enforcement Bruce Pitts of the Oklahoma State Board, P.L.S.

It can happen at any time,Dealing with them correctly and ethicallyPE/PSResponsibilities ofIt is part of.OklahomaDirector of Legal Enforcement of the State Board Bruce Pitts, P.L.S.is a "Well in fact**of othersCritical errorIt's not easy, even if that's We have to deal with licensees.there is no need for any work.**In order to do so, the law will first be the base, and perhaps **NCEES ModelruleThere are tips** should be He says, ".

240.15 Rules of Professional Conduct

A. Licensee's Obligation to the Public

8. Licensees who have knowledge or reason to believe that any person or firm has violated any rules or laws applying to the practice of engineering or surveying shall report it to the board, may report it to appropriate legal authorities, and shall cooperate with the board and those authorities as requested.

C. Licensee's Obligation to Other Licensees

4. Licensees shall make a reasonable effort to inform another licensee whose work is believed to contain a material discrepancy, error, or omission thatmay impact the health, safety, or welfare of the public, unless such reporting is legally prohibited.

Licensees are **obligated to report to the state board and appropriate legal authorities if they believe that an individual or company violates laws applicable to the conduct of engineering or surveying.** We must also use reasonable efforts to notify you of any significant errors or risks that other licensees may have that could affect the health, safety or welfare of the public.

Most licensees want to know about the error and be given the opportunity to fix the error before it risks the public and reputation. Therefore, first of all, we look forward to the corrective action of the person himself/ herself. But if it is not taken, filing a complaint with the state board is the logical next step.

For PE, which mainly conducts business in Japan, the above does not necessarily apply as it is, but we would like to take ethical and responsible actions knowing that the attitude of not

neglecting fraud leads to public safety and benefit.

6 Member's report-1: Diversity and cooperation in the field of technology (4')

Professional Engineers and Architects

PE-0151 Takeya Kawamura
(Former President, NSPE Member)

1. foreword

The Professional Engineer qualification was popularized in all U.S. states from the beginning to the mid-20th century. Since 1996, pe examinations have been possible in Japan, and the number of Japanese engineers registering PE licenses in U.S. states is increasing every year. However, there has been no move to promote the qualifications and mutual certification of Japanese engineers with connections through the international frameworks of the International Federation of Engineering (IEA) and wa (Washington Agreement). [1)]

In addition, in each U.S. state, there is an Architect qualification separately from PE, and it appears in each state PE law that architects and PE share roles in the design of buildings and building equipment. [2)]

Japan's architect qualifications are based on the Architect Act enacted in 1950 and have a strong public character that is responsible for heavy social responsibility. On the other hand, Japanese architects do not necessarily agree with the ideas of U.S. architects or structural engineers, and are translated into English as Architects and Buildings. [4) 5) 6)]

Although the records of exchanges between U.S. PE qualifications and architect qualifications have not been confirmed, the ethics of U.S. PE are referenced along with professional ethics in the engineering ethics materials published by the Architectural Institute of Japan in 2009. [3)] In February of this year, I was in charge of the online seminar "Engineering Ethics in the United States" hosted by the association (see the end for details).

In this series, we have discussed interdisciplinary cooperation within PE and cooperation between PE and information processing engineers, but this time I would like to consider the similarity between the U.S. PE qualification and the Japanese architect qualification, which has been rarely discussed so far, and the possibility of exchange between the two qualified persons based on it.

2. Definition of each qualification and social role

Table 1 shows the definition of U.S. PE, architects, Japanese professional engineers, and architects, as well as the number of qualified persons at this time. Figs. 1, Table 2-1, and Table 2-2 summarize what kind of social responsibility each qualified person is responsible for designing buildings and social infrastructure.

In the United States, it is a legal system in which not only architects but also PE are responsible for the design of buildings. On the other hand, in Japan, the design responsibility of buildings is unified by architects, and the design responsibility of professional engineers is limited to roads and underground buried infrastructure. (However, small-scale houses such as single-story buildings and families in Japan and the United States may be designed by non-qualified people such as architects, PE, and architects.) Again, building standards and Building Code must be observed.)

Table 1 Definition of each qualification and number of qualified persons

qualification	Definition, number of qualified persons
U.S. PE	Definition: Individuals formally licensed by state boards to conduct engineering practices based on engineering education, training and experience in engineering principles application and data interpretation, and test results (translated from NCEES Model Law 110.20 A) Number of qualified persons: 928,000 simple totals from all states (NCEES Squared 2021)

	Multiple state registrants are counted as duplicates. The real number is estimated to be about 600,000 people.
United States Architect	Definition: Individuals currently licensed by state boards to meet education, experience, exam requirements, and demonstrate architectural practical skills (translated from NCARB Model Law 103 5) Number of qualified players: 122,000 in all states (NCARB by the Numbers 2021)
Japan Professional Engineer	Definition: A person who plans, researches, designs, analyzes, tests, evaluates or provides guidance on matters that require a higher level of professional application in science and technology (Article 2 of the Professional Engineer Act) Number of qualified applicants: 95,000 (Japan Professional Engineers Association 2020 Business Report)
Japanese Architect	Definition: Engineer who designs buildings, supervises construction, etc. (Architect Act Article 1) Number of qualified architects: 74,000 first-class architects, 25,000 second-class architects. Total: 99,000 (Registered by the Ministry of Land, Infrastructure, Transport and Tourism in 2021)

Table 3 shows 25 fields currently being conducted as PE tests in the United States. There are many fields that overlap with the work of Japanese architects (Architecture, Civil Structural, Mechanical HVAC, Naval, Architectural, Structural).

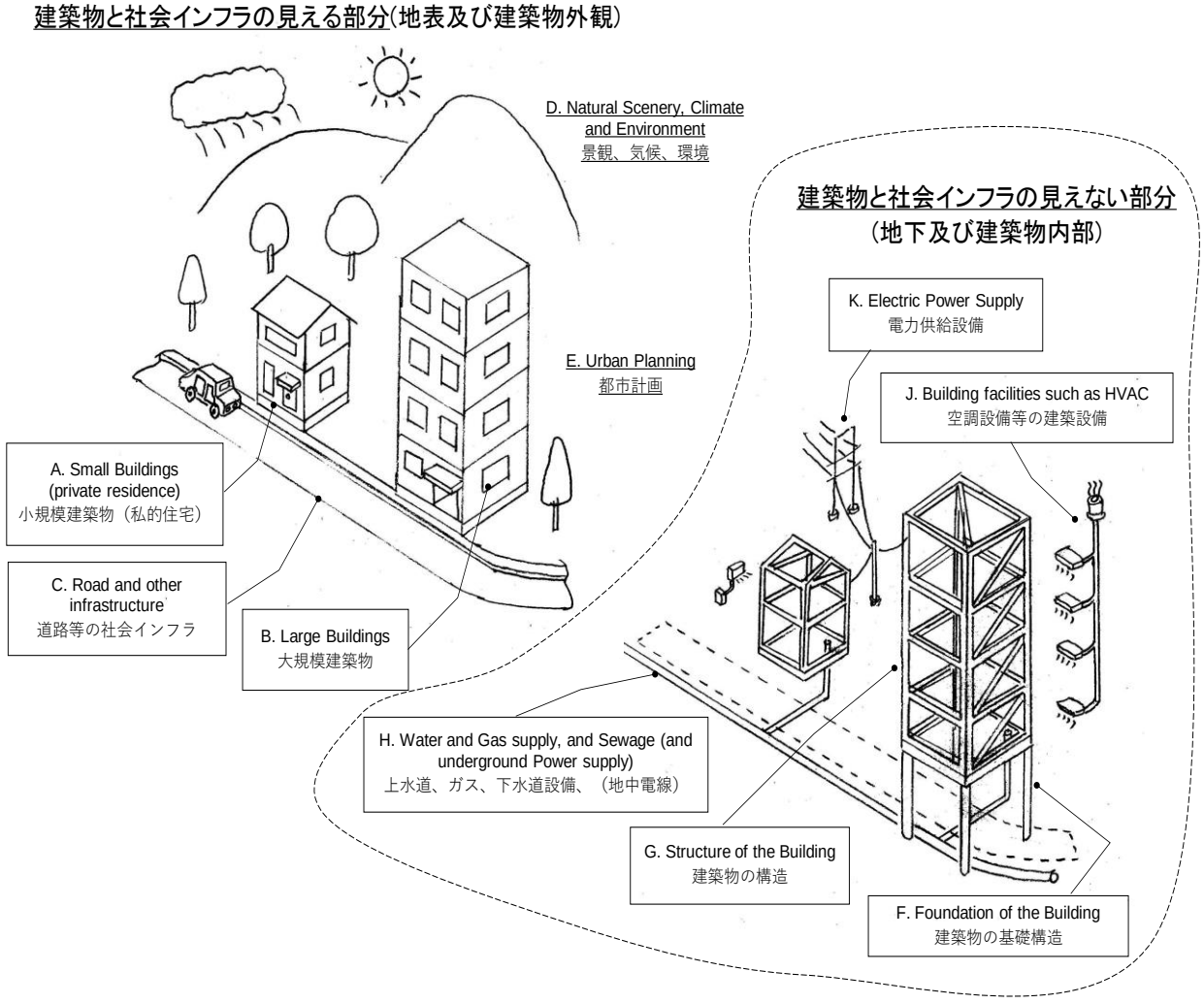

Fig.1 Visible/invisible parts of buildings and social infrastructure

Table 2-1 Division of Roles between Architects and Engineers in the U.S.

United States	Designer Qualifications and Responsibilities			
What to design	P.E. (Mechanical/ Electrical, etc.)	P.E. (Civil engineering/structure, etc.)	Architect	Landscape Architect
A. Small buildings (private houses)		responsibility	responsibility	
B. Large-scale buildings		responsibility	responsibility	
C. Social infrastructure such as roads		responsibility		
D. Landscape, climate and environment			Suggestion	Suggestion
E. city planning			Suggestion	Suggestion
F. Basic structure of buildings		responsibility		
G. Kuzo of buildings		responsibility		
H. Water, gas and sewerage facilities (underground electric wires)		responsibility		
J. Building equipment such as air conditioning equipment	responsibility			
K. Power supply old equipment	advice			

Table 2-2 Division of roles between architects and professional engineers in Japan

Japan	Designer Qualifications and Responsibilities			
What to design	Health and development equipment engineer	Professional engineer (construction/ water supply and sewerage, etc.)	First-class architect ※1	architecture Consultants, etc.
A. Small buildings (private houses)			responsibility	
B. Large-scale buildings			responsibility	
C. Social infrastructure such as roads		responsibility		
D. Landscape, climate and environment			Suggestion *2	Suggestion
E. city planning			Suggestion *2	Suggestion
F. Basic structure of buildings			responsibility	
G. Kuzo of buildings			responsibility	
H. Water, gas and sewerage facilities (underground electric wires)		responsibility		
J. Building equipment such as air conditioning equipment	advice		responsibility	
K. Power supply old equipment		advice		

*1: Including administrative architects, structural design first-class architects, and equipment design first-class architects
*2: Major architects certified by the Federation of Architects

3. Relationships between the organizations that have jurisdiction over each qualification

In the previous section, it was found that U.S. PE and Japanese architects actually have a lot in common from the viewpoint of social role.

Then, what is the relation between the organizations responsible for supervising each qualification and certifying education?

Fig. 2 attempts to visualize whether the organization in control of each qualification is in a formal affiliation relationship or a cooperative relationship with a memorandum of understanding or the like.

There is no affiliation or cooperative relationship between NCES, which is in control of the U.S. PE, and the Ministry of Land, Infrastructure, Transport and Technology /JFABEA, which is in control of Japanese architects. In addition, both Japan and the United States, each organization is divided into the area of "engineer" or "architect". Under such a statement, only AIJ (Architectural Institute of Japan) and JAVE in Japan have a unique position that spans the fields of both "engineer" and "architect".

Table 3 U.S. PE Testing Areas

1. Agricultural & Biological	13. Environmental
2. Architectural Engineering	14. Fire Protection
3. Chemical	15. Industrial
4. Civil: Construction	16. Mechanical: HVAC & Refrigeration
5. Civil: Geotechnical	17. Mechanical: Mechanical Systems & Materials
6. Civil ：Structural	18. Mechanical: Thermal & Fluids Systems
7. Civil: Transportation	19. Metallurgical & Materials
8. Civil: Water Resources & Environmental	20. Mining & Mineral Processing
9. Control Systems	21. Naval Architecture & Marine
10. Electrical & Computer: Computer Engineering	22. Nuclear
11. Electrical & Computer: Electrical & Electronics	23. Petroleum
12. Electrical & Computer: Power	24. Software
	25. Structural

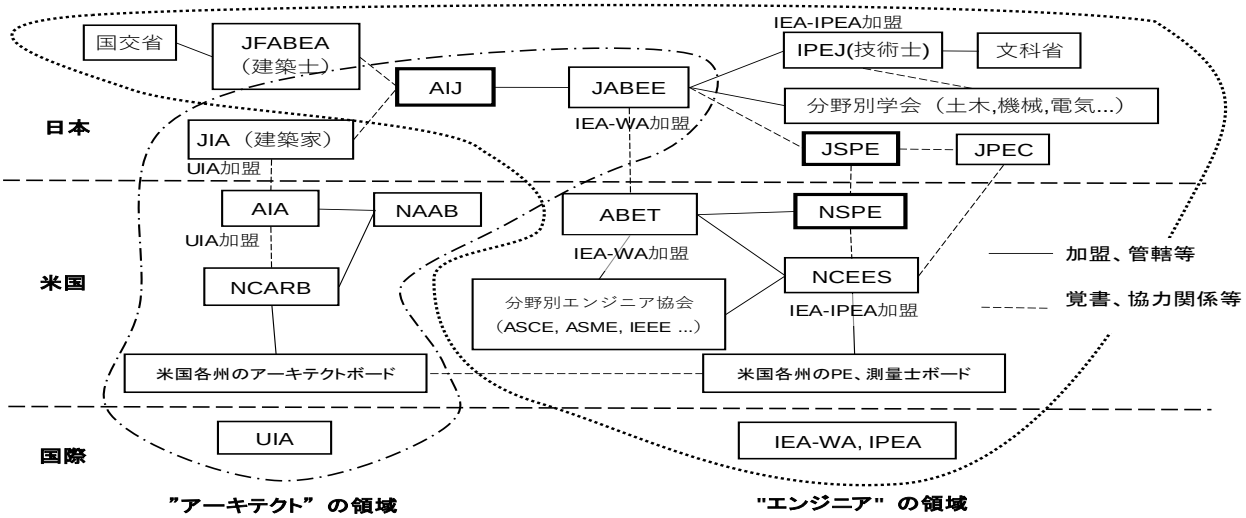

Figure 2 Qualification-related organizations of engineers and architects Related diagram

(Abbreviations for each organization in Fig. 2)

Japanese	USA, International
ARCHITECTURAL INSTITUTE OF JAPAN IPEJ Japan Professional Engineer's Association JABEE Japan Accreditation Board for Engineering Education JFABEA Japan Federation of Architects JIA Japan Institute of Architects JPEC Japan PE and FE Examination Council JSPE Japan Professional Engineers Association	ABET National Engineer Education Certification Board AIA National Association of Architects IEA International Federation of Engineering WA Wa Agreement IPEA International Professional Engineer Agreement NAAB National Architect Education Certification Board NCARB National Council of Architects Registration Boards NCEES National Council of Engineers and Surveyors NATIONAL ASSOCIATION OF PROFESSIONAL ENGINEERS, NSPE UIA International Federation of Architects

4. Code of Ethics and Conflict Risk Management for Each Qualification

If you look at the code of ethics established by professional qualifications and the history of their enactment, you can also read the social positioning of each qualification.

Table 4-1 summarizes the transition of the NSPE Ethical Principles from 1946 to the present. It is generally understood that the number of PE and social responsibility have also increased as industrial and civil engineering construction production continues to grow, although the principle of the first has changed from the obligation of loyalty to the customer to securing safety, health, and welfare to the public.

Table 4-2 summarizes the outline and code of ethics of the Institute of Architects from 1955 to the present, and the Code of Ethics of the Architectural Institute of Japan. In architecture, the engineering and technical aspects are also important, but the idea that the artistic and cultural aspects should be emphasized more is traditional, and it appears in the code of conduct and the Code of Ethics. On the other hand, in the Code of Ethics of the Association of Architects established in 2005,

Table 4-1 Changes in the Principles of ETHICS of NSPE [7) 8)]

1946 Canons of Ethics for Engineers	1981 Code of Ethics for Engineers, Canons	2019 Code of Ethics for Engineers, Fundamental Canons
– Duty of loyalty to the public, employers and customers – the obligation to be aware of public well-being and human interests – Protect the honor of engineers and do not collude with companies with doubts – Be fair and patient with other engineers	1. Public safety, health and well-being are top priorities 2. perform one's services only within one's professional abilities 3. Make public statements only with an objective and honest attitude. 4. Act as a good-faith agent or trustee for your employer or customer 5. Avoid deceptive behavior when receiving business orders	1. Public safety, health and well-being are top priorities 2. perform one's services only within one's professional abilities 3. Make public statements only with an objective and honest attitude. 4. Act as a good-faith agent or trustee for your employer or customer 5. Avoid deceptive behavior 6. Demonstrates its pride and responsibility, ethical and legal behavior in order to enhance the honor, reputation and usefulness of this profession.

and the preservation of dignity are put at the top. Since the 1990s, social issues related to building production have been publicly discussed, and it is generally understood that they are in line with the revision of laws and regulations related to architecture and construction. [12] (2005 is also the year when the case of falsification of structural statements became major social news, but the Architect's Association Code of Ethics was enacted in September, just before November, when the incident was discovered.)

While the current Japanese architect qualification is based on the Architect Act and the Building Standards Act enacted in 1950, the U.S. PE system has been based on the concept of engineers in Europe since before the 18th century, and the belief that technical laws and regulations are made by engineers themselves, the word "compliance" does not appear in the ethical principles. However, NSPE has been working on construction risk management activities as shown in Table 5 for many years.

Table 4-2 Architectural Institute and Architectural Institute outline and code of ethics [9) 10) 11)]

Japan Federation of Architects Code of Conduct (1955)	Architectural Institute of Japan Code of Ethics and Code of Conduct (1999)	Japan Federation of Architects Code of Ethics (2005)
1. Our architecture should be the best art for the well-being of mankind. 2. We architects should be the latest leaders for the development of society. 3. Our Association of Architects should be the best united to improve its membership.	1. Succession of building techniques and reverence of traditional culture 2. Building safe buildings and a high-quality urban environment 3. Creation of a functional and beautiful living environment 4. Preservation of the global environment and sustainable development 5. Sharing and disseminating public interest information based on academic neutrality 6. Respect for Intellectual Property and Inviolability 7. Contribution and contribution to local communities and the international community	1. Compliance with laws and regulations and maintenance of dignity 2. Maintain and improve knowledge and skills 3. Mutual trust and cooperation 4. Confidentiality 5. Accountability 6. Disclosure of information 7. Contributing to local communities

Table 5 Activities related to construction risk management in NSPE [13) et.]

Term Eye	Inside
Engineers Joint Contract Documents Committee® (EJCDC®)	NSPE (PE), ACEC (Construction Contractor) and ASCE (Civil Engineering PE) have established and sold contract terms and conditions. [Prevent conflicts from occurring due to incomplete contracts]
Quality Based Selection (QBS) Recommendations	Competitive bidding for engineering operations should be a quality priority [Prevent conflicts due to low-quality operations]
Board of Ethical Review (BER)	Ethics cases experienced in the process of contracting work are reported to a committee consisting of 10 PE members, and one case per month and 12 committee judgments per year are published on the website. [Prevent conflict from occurring due to unethical behavior]
Liability Insurance Survey and List Publishing	NSPE investigates insurers that sell design defect insurance etc. and updates the list of suppliers every year [Protect engineers from bankruptcy in the event of a dispute]
Encourage Alternative Dispute Resolution (ADR)	NSPE members participate in the construction panel activities established by the American Arbitration Association (AAA) [Reduce the burden of engineers to resolve disputes in the event of a dispute]

Table 6 summarizes the distinction between litigation, which is an official dispute resolution method, and alternative dispute resolution (ADR). In the U.S., where lawsuits are frequent, AAA was established in 1926, and the NSPE began cooperating with the AAA Construction Panel in 1966. [13)]

For example, Tim Austin PE, who was NSPE Chairman in 2015, and Rebecca Bowman PE, now CEO of NSPE, are all registered as AAA's Arbitrator (I confirmed to Austin). Table 7 is a requirement for engineers to be AAA Mediator.

In Japan, the Judicial Support Building Council was established within the Architectural Institute of Japan in 1999, and a new law called the Arbitration Act and the Act on promotion of The ADR Promotion Act (commonly known as the ADR Promotion Act) was enacted relatively recently from 2003 to 2004, and members of the Architectural Institute of Japan participate every year in ADR activities to deal with architectural disputes.

Table 6 Official dispute resolution and alternative dispute resolution

Formal Dispute Resolution (official dispute resolution methodology)	Alternative Dispute Resolution = ADR (Alternative Dispute Resolution Method)	
Litigation	Arbitration	Mediation
Proceed with the resolution of disputes in a solemn way in accordance with the law (lawyer) and the court (judge).	The parties to the conflict shall, in agreement, appoint a neutral third party in the path or region and be subject to the discretion of the neutral.	The parties to the conflict shall, upon agreement, appoint a neutral third party in the path or region, and the parties shall devise a settlement between the neutrals.
Applicable to all disputes	Applicable only to civil disputes	

Table 7 Examples of requirements for engineers to be AAA Mediators
(Source: AAA® Panel of Mediators Criteria)

experience	・ Have at least 10 years of "senior-level" experience in each specialized field. ・ Experience at least 5 Mediation projects within the past 3 years
qualification	Have an educational background or professional license tailored to each specialized field
training	You must have taken at least 24 hours of training on the mediation process on the following items: conflict theory, negotiation, dynamics of the mediation process, issues identification, generating options,caucusing, managing party interaction, ethics, impasse strategies, philosophies of mediation and mediator styles, role of the mediator, simulated mediation role-plays providing performance-based evaluation.

5. Summary

Although the definition, origin, and ethical principles of qualifications differ between the U.S. PE qualification and the Japanese architect qualification, it can be said that there are many similarities in terms of the social role and skills that they have acquired.

In addition, there seems to be one possibility that the ADR method with long experience in the United States will be referred to in Japan in dealing with the increase of the construction and construction dispute, which is a common issue between Japan and the United States.

I'm going to change my story a little bit, but in Japan, we often talk about solving social issues from the four perspectives of "community development", "manufacturing", "kotozukuri", and "human development". How to create and operate a qualification system is from the perspective of "human development".

In Japan, professional engineers and architects are regarded as qualifications for "manufacturing" and "urban development", but I feel that there is a difference that PE and architects in the United States are regarded as qualifications for "town planning" and "kotozukuri". There is an old and new argument that translating Engineering english as an engineer is misleading, but in the U.S. PE law, etc., it is often defined as "solving real problems by applying mathematics and science", and isn't it fair to say that English, English, is translated into Japanese as "kotozukuri"? I also feel.

Architect's Japanese translation seems to be a big mistake as "Machizukuri", and since manufacturing's Japanese translation is "monozukuri", this will allow Japanese and English from three perspectives to correspond one-on-one. I visualized such a thing (delusion) in FIG.

To return, the first step in embodying major social changes such as decarbonized energy conversion and the Fifth Industrial Revolution is to accumulate examples in which those who have U.S. PE qualifications and those who are certified as Japanese architects work together to address actual social issues from the perspectives of "town planning" and "kotozukuri". It seems to be an unsatisputed conclusion, and it thinks about such a thing though it is sorry.

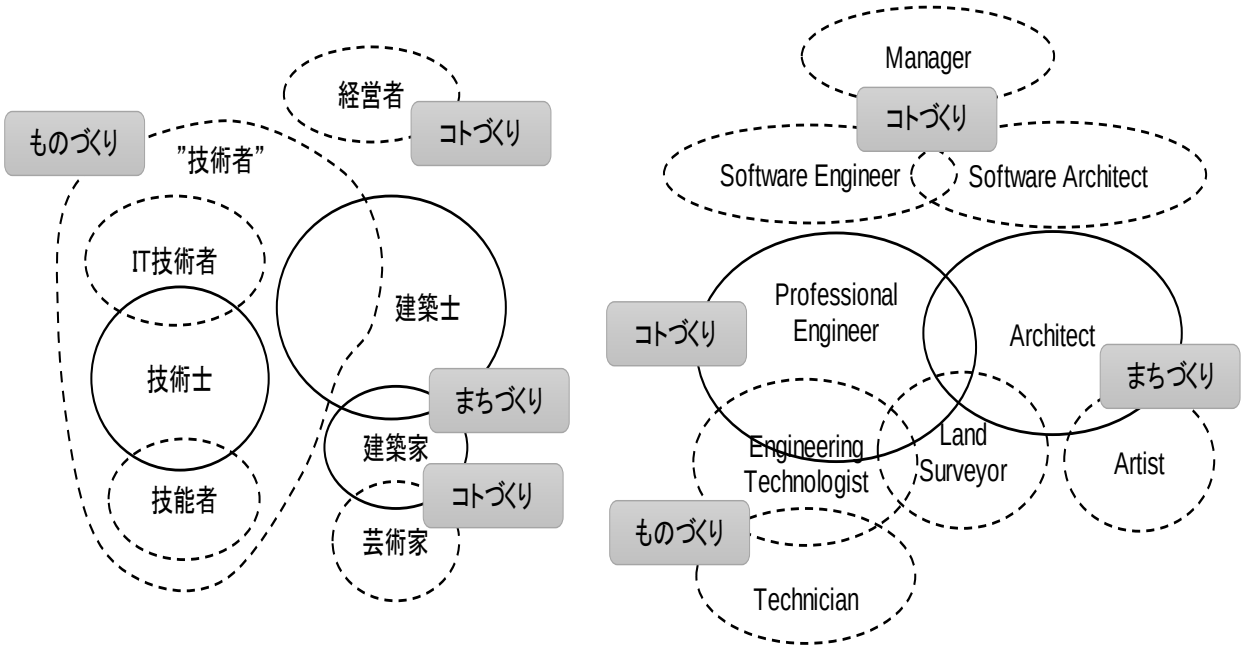

Figure 3 Social positioning image of engineers and architects in Japan (left) and the United States (right)

Reference

1) Professional Engineer System in the U.S., Journal of the Japan Society of Mechanical Engineers, January 2020 https://www.jsme.or.jp/kaisi/1214-18/
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3) Architectural Institute of Japan Engineering Ethics Materials Revised Edition, Architectural Institute of Japan/ Maruzen Publishing, 2014
4) Architect Ikipedia (confirmed February 2022)
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6) History of the Architect Qualification System, Japan Institute of Architects Bulletin 2018 Autumn Issue pp.10-11
7) Illinois Institute of Technology Code of Ethics Database https://ethics.iit.edu/ecodes/
8) NSPE Code of Ethics https://www.nspe.org/resources/ethics/code-ethics
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10) Outline of the Japan Federation of Architects https://www.kenchikushikai.or.jp/about-our-society/koryo_kaika.html
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12) For example, Engineer Licensing and Autonomy, Hidekazu Tanaka, Meidai Technical Ethics Journal of 2010
13) Building for Professional Growth – History of NSPE 1934-1984, Paul Robbins, 1984

(Supplement)

This article is a revised revision based on the following seminar materials distributed by the author to the members of the Association at the request of the Architectural Institute of Japan Ethics Committee through JABEE. I would like to take this opportunity to express my gratitude to THE JAVE and the architectural institute officials who gave me this valuable opportunity.

Date: February 1, 2022 4pm-5pm Zoom and Youtube Online

Participants: 69 (36 people who responded to the questionnaire, 11 members (25 non-members), 29 companies worked, and several people related to architecture firm management and universities.)

Speaker: Engineering Ethics in the U.S.: Differences between Japan and the U.S. on Architecture/Engineering Systems and The Widespread ADR Dispute Resolution Methodology in the U.S.

I have heard that an architectural ethics webinar will be held on May 9 (Mon. 17:30-18:30) under the theme of "Learning ethics to our predecessors." Since it is possible to participate in the general public, if you are interested, please apply from architectural institute of Japan website event and public offering list https://www.aij.or.jp/event/list.html.

March 18, 2022

7 Member's report-2: Survey on New Technology Development Trends in the U.S. (4)

Why can't only Japan company respond to sudden changes in the business environment?

PE-0002 Kazuo Takemasa

summary

Hitachi Gr, one of Japan's leading companies and is regarded as the representative of the current "making of things", has announced that it will break away from making things and shift the axis of its business to specialized IT-related businesses. On April 1, 2021, the company decided to acquire U.S. IT company Global Inc. for $9.6 billion. The main business is software development and consulting business. Panasonic Holding also announced that it would seek 1,000 early retirees from the company to make things, while acquiring U.S. software company Blue Yonda for 770 billion yen. It seems that there is an aim to shift the axis of future business from making to IT and software.

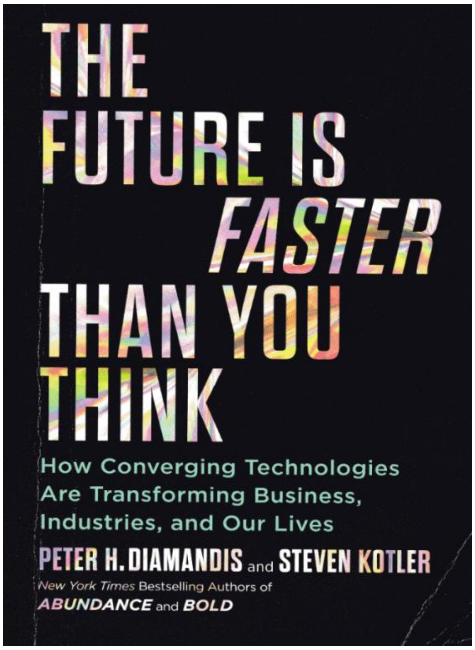
In the U.S., the social structure is changing at an alarming rate due to IT tool AI and other tools. In developed countries, what is required for social life in the future and what do you aim for? Discussions are active through SNS. The values of the people seem to be diversifying and changing so that even if they are discussed, no conclusion can be reached. As a specific symptom, political instability and confusion have also occurred. This time, as one of the PEs living in Japan, I would like to summarize the situation in which our Japanese society is located in response to the tremendously fast social changes that are taking place in the United States and Japanese society.

1. Accelerating changes in the global business environment

The spread of smart phones to daily life and the spread of web conferences corresponding to corona evils have already been popularized in the general society in Japan. Conventionally, the means of communication with people has changed in comparison with the speed of light by jumping over the speed comparison of the Linear Shinkansen if the change is a walking movement. Moreover, this is already an event of the past completion form. It is only the beginning of the change which will happen in each industry and each business field in the future. It is no wonder that business managers and government policy managers in major domestic industries are puzzled. Many books have been published from the United States that specifically predict the speed of social change. Peter. H.Diamond. Steven Kotler co-authored "The Future is Faster than You Think" (1). It has the subtitle How converging technologies are transforming business, industries, and our lives.

In metaphysical assets such as houses, furniture, automobiles, and air conditioners, and metaphysical assets such as education, health, and entertainment, communication with communication means has been entering the everyday society of the present and the near future while maintaining an acceleration beyond expectations. And, it is going to fundamentally change the social operation method built up to this day. In particular, it is thought that software will deprive the professional full-time employees who have relied on knowledge.

In the text of the above-mentioned book, all rebirth of Everything is titled "Rebirth of Everything" and depicts the near future image of the following social activities. In the near future, the category items that will be preying on this major change include Shopping, Advertising, Entertainment, Education, Healthcare, Insurance, and Finance. , Real Estate,Food,Longevity(Longevity health) are listed. Specific examples are given in each field, but specific examples of very high possibilities are listed. A lot of work of the professional person who is called present white collar is likely to be removed from the society.



In Tom. Nichols's "The Death of Expertise" (2), which was introduced in the previous issue of JSPE Magazine, Wikipedia's knowledge often requires reference books and dictionaries in the general public, and people who have expertise as a profession it was pointed out that the occupation of the

In the automobile industry which is a good thing making of Japan, the air conditioning industry, and the industrial machinery industry, etc., the original function of the product such as running, cooling, and making, etc. will already lose added value as known knowledge, become commoditized in the society, and continue the value decrease. From now on, we will develop software of AI technology for automating human or manipulated parts such as autonomous driving that can obtain added value Development resources will be concentrated. Can Japanese companies keep up with this change? In general, Japanese engineers are weakest and weakest in the theory of dealing with invisible concepts. He has always been good at routine work represented by rice planting, and is definitely good at doing repetitive tasks of the same work beautifully at the same time.

2. Initiatives and Current Issues for Industrial Transformation of Japanese-Type Companies

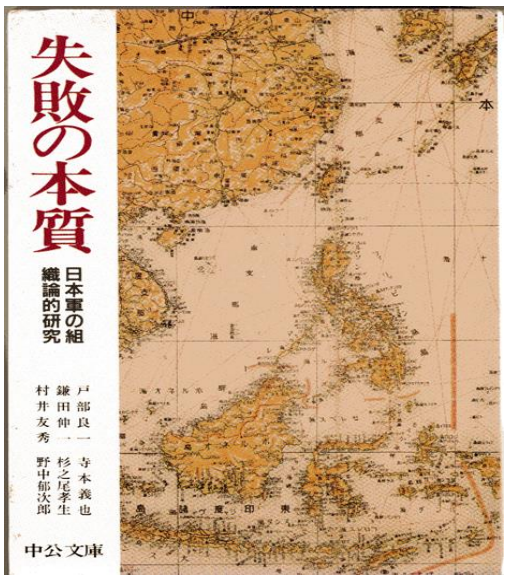
Panasonic announced that it would acquire a U.S. software company, which was a way to abandon its low-value-added "making", quickly acquire overseas software companies, and enclose foreign engineers who are good at the field. Then, it is expected that the technology group which was originally responsible for the process of making things becomes unnecessary, and a further reduction policy of restructuring plan "Early retirement recruitment" will be adopted.

For this purpose, it is hoeldings (holding company system) that is rapidly expanding into Japanese society. It is a method of separating each part of the company internally and cutting down unnecessary functions for each subsidiary. For each division function, subsidiaries have long katakana company names such as "appliance" or "financial service" or "human resource". It is expected that the survival of these subsidiary units will be threatened by the information technology revolution in the near future. As an aside, in Western societies, labor unions are unions by one function, not by company. Human resources can be absorbed by other companies if they have the necessary functions in society. The social safety net which attaches importance to the people individual works. In Japan, the unions of large corporations are intra-company unions, and there is no safety net as a social system. Moreover, the labor union and the people do not notice that the trade union and the people are peacefully blurred, and the industry of Japan is driven there, and it does not think. The result is given the retirement surcharge by the dismissal and is discharged to the society.

In this way, **Japanese society is a system that can be operated when companies can operate well in a booming economy (continue to win in battle), but when forced to break the recession or change the corporate industry (once the battle loses), there is no strategy or system to recover from it, so the safety net and mechanism of society are surprisingly fragile, and employees and the people are sacrificed.**

The Japanese Army and Navy in World War II were the case of a misguided response to the sudden change in social conditions. It was a japanese foolish achievement which had put out a huge sacrifice so that the comparison in the history of Japan was not able to be done. It is rare in this society, but the work of the cause investigation was done. It is summarized in "The Essence of Failure" (4), which describes the contents of the remorse meeting in the form of a roundtable discussion by former Japanese military officers. It is **a point to point out that it is a structure which**

repeats the failure in the similar form afterwards even if the group action becomes dementia when the Japanese becomes a group, and it fails in a Japanese society when the content might be military forces or the company to have made this book famous. Moreover, it is a point that it continues also in the government, enterprise, and industry in today's information technology age.



This book published from the reflection of the Pacific War makes us foresee that the decrease in the number of people based on the mental theory will step on the same rut as the end of the Pacific War as a result of sticking to whether today's private enterprise sticks to the same measures as other companies in the same industry. As a result, the young employees who have a high sense of belonging to the company who say "our company" etc., become a person subject to turnover (war dead). At a time when the social environment changes rapidly and companies have to change their forms, there is no other way but to wonder at engineers and corporate employees who do nothing in light of the american society that is ahead. So what do we need to do? The information nspe disseminates the figures without hiding the exact inconvenientness of the technical and industrial issues facing many U.S. countries. Therefore, pe is easy to grasp the facts, it is easy to examine the next action, and it is easy to directly connect to the next individual's action. (If possible, I would like to introduce it in the next issue)

In Japanese society, there is a lack of organizational forms within companies that allow each department to formulate responses and respond to changes in the corporate business type of industrial society based on scientific situation analysis, and there is no mechanism in the first place. As a result, according to the Nikkei Shimbun, the market capitalization of Japanese stocks was 37% of the world's in 1987 (when Japanese companies were healthy). It has now dropped to only 6%. Of the world's top 500 companies, 200 were Japanese companies, down to 33.

Japan was said to be Japan as No.1 (4)! In the heyday, the government made a serious blunder, and move the "heavy, thick, long, and large" industries overseas! Specialize in the development of "high value-added products"! became a slogan. The targets for the semiconductor, bio, pharmaceutical, financial and software industries have been set. These are industries that native English-speaking nations are good at, and they are not industries that Japanese companies can easily handle with their good matching, enthusiasm, and collaborative attitudes. It is necessary to disclose information and teams to publish this fiasco, evaluate it, identify points of reflection, create measures to prevent recurrence, and formulates response plans.

Always, one of the causes of failure in the countermeasure work is "What is causing, what fails, and why can't we respond?" One of the biggest drawbacks is that it is replaced by a place where people discuss who fails and who should change to whom. As a result, you completely neglect the work you really need. Today's challenge happened to happen. No matter who thinks, the failure of Japanese companies again is inevitable and self-evident in response to the major changes that are taking place in this industrial state.

3. What is needed now is to build a form of industrial field that Japanese people are good at, not personnel control

In order for companies to switch industries, management is required to have the ability to create new businesses by utilizing surplus human resources and surplus machinery and equipment facilities. Through their relationships with overseas companies, PE is also well aware of their weaknesses. Therefore, activities that should foster a good industry based on Japanese characteristics are required based on the opinions of hands-on engineers. However, in many cases, people within corporate organizations who have no experience in nurturing industries often take

on management positions from a short-term perspective. This kind of person first calls it restructuring and seeks a desired retirement. As a result, the company will dabbled in drugs that will speed up bankruptcy and disappearance. The reason for this is that one type of "dismissal" of hopeful retirement recruitment has too large a rate of disappearance of corporate vitality.

① Hope retirement is easier to raise your hand because the more talented people you are at the company, the more you can get a job in the general public.

② Talented people reemploy other companies, and the business know-how of the original company is likely to leak to competitors in large quantities

③ On the other hand, the morale of the workplace where the talent is pulled out decreases more than the number of people.

④ In the company, regardless of the number of people, I can not concentrate on my work with peace of mind because I am sure that the desired retirement will occur again.

⑤ Doubts and doubts always remain in other policy instructions as trust in the top is greatly shaken

The fundamental resource that operates a company is human beings. If we have lost trust from that person, we cannot do any subsequent reforms. Konosuke Matsushita, who founded Matsushita Electric Industrial Co., Ltd., has been told that when Matsushita Electric Industrial Co., Ltd. was hit by a recession, management offered to dismiss employees, and refused it severely. He may have seen that the policy was pain-fighting drugs for companies, and that it would not be able to grow into a new industrial field and destroy the entire company. After all, it might be able to be said that it is a rare manager after the war.

4. What you want to think about when society faces rapid change

Social change in American society has been changing ahead of other countries. Countries that follow the social change have changed late over the years to decades. Of course, society has almost changed in Japan, following its trajectory. For example, in American society, online sales represented by Amazon have rapidly expanded, and shopping malls have declined due to the impact. Some department stores, which were weakened under the influence of large supermarkets and others, managed to survive, have also started bankruptcy. It is thought that the home delivery service such as Uba is rapidly expanding, and shopping is becoming work which wastes individual time from entertainment for the consumer.

In Japan, shopping has become a nuclear family yet a family entertainment in rural areas, and social change has not occurred as much as in the United States. However, the number of people who are watching social change in the United States and feel that "what will be the case" is increasing. In Japan, online sales are steadily expanding year by year. The retail stores in existing shopping streets should not be affected. However, the daily life of the Japanese society will surely exist in the future. And, the need exists there, too. Pe in the U.S. is required to acquire liberal arts (liberal arts subjects) in addition to technology. Among them is marketing that coordinates social change. It has been said that excellent marketer training is necessary for engineers such as PE for a long time.

5. Do I need a faculty of letters or a faculty of sociology at a university?

What abilities do you need with a good marketer? A young IT engineer felt firsthand the trend of employment demand in Japanese society, or he gave me a candid impression, "The faculty of letters and social sciences may be lost at universities, and the number of job openings is decreasing year by year, so if the number of applicants for admission decreases, the faculty will be lost!" It seems to be a frank impression of the young person who lives in Japan who sees the progress speed of the information society from the United States superficially. In fact, as seen in the allocation of scientific research by the Japanese government and the establishment of digital agencies, it is certainly felt that policymakers will follow the speed of progress in the information

society in the United States without being frantically shaken off. However, it might be a person in charge in the Ministry of Economy, Trade and Industry of The Japanese Government and the Ministry of Education, Culture, Sports, Science and Technology that the marketer is necessary for present Japanese society. We can no longer afford to consider measures to prolong the lives of bloated large companies.　It seems that it is time to build a feasible industrial policy based on the lives of the Japanese people now based on marketing. It is also a movement in line with the japanese government's line.

So how is the U.S. involved in information about the cultures of the world and countries covered by universities' faculty of letters and social sciences?

Recently, the history of humankind has become popular in Europe and the United States, and books have been published one after a long. The United States seems to be very enthusiastically incorporating cultural information of each region and ethnicity into the United States. The is **that the information society is fully aware that progress stops or stagnates due to confusion if the difference of these cultures cannot be overcome** if it says from the conclusion, and it has become the most esoteric problem of the information society.

Therefore, researchers such as the opinions of ardent researchers in sociology and the authority of human group psychology are required for the response team to social change. The basis of these social changes becomes unbalected in the priority allocation section of the present government's KAKENhi. It is feared that a historical tragedy of the system of Japan which dragged the political system at prewar days as it is at the end of the war will continue to happen.

(See Resources)

(1) Peter H Diamond Steven Kotler, The Future is faster than you think, 2019

(2) Tom Nichols, The Death of Expertise」Oxford University press, 2019

(3) Ezra F. Vogel, Japan as Number One: Lesson for America, Harvard University press, 1979

(4) Ryoichi Tobe et/ Others: "The Essence of Failure: An Organized Study of the Japanese Army", Chuko Bunko 1998

8 Member's Report-3: Overseas Project Management in COVID-19

PE-0112 (Civil, Oregon) Yoshiaki Murase

1. Summary

We operated an elevated team in Dhaka, the capital of Bangladesh, to design detailed urban transportation projects, and recently submitted detailed design results and landed at The Airport during The 5th Day of 2022 for the first time in 16 months. I am preparing for the next trip by working from home in Aichi. At the age of 50, I decided to change jobs, changed myself from a domestic manufacturing industry to a consultant, and it has been five years since I became a full-time overseas worker on a single-person assignment. This time, I would like to report on the project management in corona disaster.

2. Business before corona disaster

In Dhaka, the capital of Bangladesh, I was involved in the detailed design of urban transportation, including the country's first subway section aimed at eliminating traffic congestion in the overcrowded city of Dhaka. The detailed design range of the structure is 13 km of the subway section connecting the old town to the airport and the elevated section 13 km connecting the vehicle base through the new maintenance area.

In June 2019, when I was mobilized, I stayed at a hotel in the Baridara district (embassy area) in Dhaka City, and the daily routine of picking up and being picked up by a passenger car secured by the project to the office in the Gurshan district on the other side of the lake began.

At the end of 2019, after the Chinese New Year in February 2020, I began to hear about the pneumonia epidemic in Wuhan on BBC news, and I was looking at it like another thing in Dhaka until the report of lockdown and flight cancellation in each country. When local staff began to feel fear of us foreigners who freely moved in and out, the infection increased explosively when bangladesh's first infection was reported on March 8, 2020. Like rich and poor, the disparity in information and education was large, and in urban areas, local staff began to refuse to commute from the living scenery of people who had nothing to do with the commotion in the international community. While experts outside The Team's management were also evacuated, I handed over guidance to my older brothers who stayed in Dhaka over 60, and after assigning the return flight in priority, I lost all of the return flight routes at the end of the flight via Guangzhou on March 26, 2020. About a dozen Japanese were stranded in the lockdown city of Dhaka in the project.

The project office was also decided to close, and when we gave up the design progress by working from home from the hotel, we were able to arrange a chartered plane for Narita on April 2, 2020 thanks to the efforts of the Japanese Association of Dhaka, the Japan Chamber of Commerce and Industry of Dhaka, and the Embassy. To the client, I submitted a letter to the client to "stop design work with Force Majeure", and all the project management (Pro A) were on their way back home.

3. Working from home in Japan

In early spring 2020, many foreigners evacuated, and after Ramadan, the economic subsidence of hotels, restaurants, rental apartments, etc. in Bangladesh intensified, and the Government of Bangladesh announced on June 16, 2020 that it would continue mega-projects, including urban transportation improvement projects.

In response to the notice, the client does not engage in the response to us who demand that "if you issue an Invitation Letter, it will be a cause to the company", the client will accept requests for telecommuting in Japan. We continued to refuse that if we had to work together and transfer technology together because it was ODA, there would be no progress in design deliverables unless we worked together with assistant engineers and CAD operators in Dhaka, and that we would only waste contract money. If you charge home expenses, you will be given the right to say

"Submit drawings because it's Milestone", so there is no point in declaring "Force Majeure" and suspension.

After all, I decided to temporarily evacuate from the Corona disaster for a month or two, but I was taken time to coordinate with clients and continued to respond at home for half a year. It was used as a driver for sending and being picked up by the family, and I spent a fatherly time that supports PC for children who are not used to home classes.

Local staff in developing countries were not sweet, and if there was a 60% salary payment from their company, it was still conscientious, and some of us foreigners were unemployed and unpaid until we entered the local area. In the time of Obon 2020, when we received imminent e-mail from local staff, we were issued an implementation letter, and after the root turning of the company, we flew to Dhaka again to resume the project from Narita Airport, which became a shuttered area on September 17, 2020.

4. Individual differences in crisis awareness in the project reopening corona disaster

As an arrangement for measures against corona at the JV Lead Consultation, we prohibited public transportation of local staff and resumed the project with our re-entry by picking up and drop-off office vehicles like us foreigners.

When PCR inspections were conducted at airports and medical institutions in Japan for about 30,000 yen, PCR tests were conducted in Dhaka for about 5,000 yen. Pcr tests were conducted up to the driver and the guard, and when an infected person occurred, a PCR test was performed on those who had contact with the same vehicle and the office for commuting pick-up, and the admission to the positive person's office was restricted.

1) Structural Engineer of Indian and Korean Personal Contracts

Since it was known that the person who was supposed to mobilize as a structural engineer who had reported to the client was not mobilized before corona, the procedure for applying for a Changement to the engineer of the individual contract of Indian and Korean started from December 2019, and the retention cost was requested during the project suspension period from April 2, 2020 and the contract was concluded, The application was accepted by the client after the business resumed on September 17, 2020. He said he did not want to travel until he sent invitation letter and vaccinated it at the stage of taking VISA.

From the beginning, I was sent an English long sentence without summarizing the request for terms and conditions, and I escaped in November 2020 after working with the client for about a year, including application documents, questions about the situation in Dhaka and the progress of the project.

Both sides were in their 60s and saved up overseas projects, and when the situation subsided, I was watching how to respond to dhaka, and the Japanese gathered local staff only by stopping for half a year and resumed the project. Is it their thoughts to say? We immediately prepared a re-Replacement application and mobilized Filipino and Japanese experts.

2) Indian engineers from other companies

It is splendid just to respond to the mobilization after the project reopens, but if you think that you have entered Dhaka, you will return home after 10 days of entering Japan. When I had an errand in Dhaka, I didn't show up, and while I was back home, I didn't reply to the e-mail, and if I complained, it was troublesome though not everyone was excused in English that was difficult to hear at length. It is said that Bangladesh seen from India to hear is an unsanitary unbearable business trip destination in an unexpired land. However, the breakfast scenery of their fixed hotel seems to be that they Indian engineers are talking without masks. When talking, there are many places where you should change yourself, such as shifting down the mask and talking, and I think that is a cause of the damage of delta stocks.

3) Support personnel from the company's domestic company

The mobilization time of architectural structural engineers and shimoko structural engineers (support personnel) was adjusted, a one-week difference in travel flights was arranged so that they could be present in Dhaka for one month except for the isolation period, and the internal procedures such as travel permit application became complicated, and the building structure engineer entered Dhaka. Shortly after (end of June 2021), the shimoko structural engineers who were supposed to travel consecutively were stranded by in-house officers calling for the trip to be cancelled.

The in-house officer said, "Vaccination started in Japan, so we will not allow you to travel until you finish the vaccination." Since we, an overseas operating company of the Holdings, responded to about 200 business trips without vaccination, I was so angry that I emailed the company whether the sense of balance as an officer was strange (what I had been making arrangements for months ...) 。

Because the reservation of vaccination rushed in Japan immediately after, it was canceled and the premise of the stop collapsed, so the support personnel were vaccinated in Dhaka in July 2021 and were able to carry out the business.

5. Conclusion

I am very sorry that the destination is a developing country in the Corona disaster, and people who will have a hard time at such a time will say. But is it really so? I was not banned from april 2, 2020 because I could not deprive my family of going to school or work for opportunities for the future during the six months of project suspension.

PCR tests other than those infected are rare in Japan, and in public transportation, there is a possibility that everyone is infected, and although there is a sickbed, the refusal to accept the medical association that asserts that infectious diseases are out of the specialist, I was worried about the tragedy as a Japanese living abroad.

As an answer to inquiries from members before boarding Dhaka, "The office restricts admission of positive people by PCR inspection", "The use of public transportation to the assistant level is prohibited", "We always secure hospital beds invested in the company", etc. were compared as a domestic system and decided to travel instead of forcing them.

In overseas projects, the scale of convening 100 staff members makes it easy to control the status of project members. Although there are safety and health risks that are usually accepted at times when you go abroad, you will be treated as a foreigner who has visited for the development of the country. Sooner or later, there is no safe place anywhere in the world in the pandemic, so I think that we will continue to make the same choice this time when we have fortunately returned home safely.

9 Variables from PEple

9.1 Book

This is a corner where jspe members introduce books in the field of deep relationships.
We look forward to your contributions.

Introduction To Bitcoin and Blockchain: Yukio Noguchi, PHP Research Institute

Recently, words such as "blockchain" and "NFT" have been touted in the media, and relatively recently the currency of El Salvador has become Bitcoin, or will use NFT to support Ukraine ... I also used this buzzword in such a way and used it a lot of cover, but I don't know how it works in the first place. I thought "first from blockchain", and read it as a little old (published in 2018) as the beginning.

However, when I read it, it was not content that satisfies curiosity about blockchain technology itself as an engineer. In particular, as suggested by the title in the first half, the main explanations about what bitcoin is and how to use it were mainly read away.

Rather, in the second half, the explanation of how blockchain technology is trying to change society and how desperately behind Japan as a whole is falling behind it was understandable. Although there are various factors, there are a lot of points such as the national character who dislikes risk, a number of regulations rooted in it, and rigid education. As an example that everyone knows, it is almost the same as the reason why Uber's passenger transportation service is not progressing. In the future, there is an argument that individuals should polish oneself and be excellent instead of relying on the country in the age of individuality, but I felt a sense of crisis that the flow of the world would not be visible at all if I was immersed in Japanese society.

So how will blockchain technology change society? It states that corporate entities and managers will no longer be required, and management will continue autonomously. However, there are problems, and who will bear the innovative technology that will be the basis of its management? Isn't it a corporate entity after all? The question was not solved in this book. It is also said that blockchain itself is already moving to the next stage, as there is a risk of becoming obsolete as a technology. As a person who continues to live in Japan, where it is difficult to get on the currents of the world, I would like to keep my curiosity about new things, technologies, and mechanisms at least.

(PE-0145 Yu Suzuki)

Galapagos: Market Hero, Shogakukan

When walking around Nara Park on a long vacation, I often find interesting books, so I found them at secondhand bookstores that I often visit.

The story is suspenseful, beginning with the death of a missing temporary worker, in which an engineer is at the mercy of society and forced into a very difficult situation economically. Still, it is noticed that the thickness of the steel plate which flows to the line is thin which falls below the safety standard one day though it arrives at the position of the dispatch of the production line of the car while living every day without hespothing. He disappeared while trying to disseminate information on the Internet because he was concerned that a design that neglected the safety of the public would flow to the market. A temporary worker of a colleague notices the transmission, and the story advances by selling him to the company as a result of promoting himself to full-time employee.

The majority of engineers in Japan belong to companies, and labor shortages overlap, and we often see temporary employees in many situations of everyday life. However, it is made to think whether the treatment is the one to treat as man or it is not only imposing the distortion of the society. Moreover, the mind of the temporary worker who tried to raise the voice is always the one not to be forgotten as a working PE for the public even in such a very weak standpoint.

(PE-0253 Nishikubo Tokoh)

9.2 Engineering close to you

It is a corner where you can introduce the impression when you discover engineering in casual things and what you encounter with engineering equipment and methods that growl.

The gondola of Tokyo DisneySea is rowed by the paddle, and when rowing advances, the side of the paddle is set up so that the power put increases and rowing. After rowing, as shown in the photo, the sardines are leveled to reduce the power received from the water and return to the position before rowing. I thought that it was an example of empirically understanding the stress of water applied to human power and the water. (PE-0253 Nishikubo Tokoh)

9.3 Between the Five Senses

Sketches, drawings, drawings, pictures, photos, anything is fine in the corner where you can post "beauty" and what has been captured with your five senses as a square of Ikoi. Please provide what you feel "beauty" apart from engineering such as equipment carefully designed and manufactured that makes you feel functional beauty, artificial objects integrated with nature that feels the beauty of modeling, or nature that is not touched by people at all.

I got off at Sannomiya Station in Kobe where I saw "Oni ni Kinbo" at Jinwaka Park in Chuo-ku, Kobe City, and walked around the city a little toward Shin-Kobe Station in Tohoku, and found a statue of an oni holding a gold bar in a small park called Jinwaka Park. This area was formerly called "Thatch Ward" (now Chuo-ku), and it was a land with a deep history, and the folktale that the demon who stayed in the mountain was at odds with the residents, but the folktale that the demon and the resident came to coexist after there was written.
(See https://nippon1000parks.blogspot.com/2014/07/7211000.html for more information)

The late Kazuhiko Okubo, who founded JSPE's "Onigane Seminar", worked for a long time at Kobe Steel near this park, so perhaps this statue is the prototype of the "Onigane Mark" that continues to this day? I thought that it was the one that I wanted to examine because there might be a figure of the gold bar in the demon in other regions though the imagination swelled.

(PE-0151 Takeya Kawamura)

9.4 JSPE Books

The following list is a book owned by JSPE and will be transferred free of charge to members who can contribute introductory articles about the book. There are some old books, but I think that you can use it by all means because there are many good books. If you are interested in membership, please contact the Public Relations Subcommittee (public.2007@jspe.org). In addition, if you can donate good books that are no longer needed, please report to the Public Relations Subcommittee as well.

JSPE-owned books list

public ation	title	Author/Editor	URL
1987	Managing Technology	F. Betz	https://www.amazon.co.jp/dp/0135508495
1990	Construction Industry Law and Engineer System	Construction Industry Division, Construction Economy Bureau, Ministry of Construction	https://www.amazon.co.jp/dp/4802876998
1990	Thorough verification: Technological competitiveness in Japan and the U.S.	High-Tech Strategy Study Group	https://www.amazon.co.jp/dp/4532062810
1991	Macro project success and failure	P. Morris	https://www.amazon.co.jp/dp/4753654052
1994	International Qualifications: The Road to Professional Engineers	Japan PE Council	https://www.amazon.co.jp/dp/4478800243
1996	Construction Sociology	Tomoya Shibayama	https://www.amazon.co.jp/dp/4381009371
1997	Perspectives of phase process knowledge of technical knowledge	Hiroyuki Yoshikawa	https://www.amazon.co.jp/dp/4130651110
1997	Range of technical knowledge Artificial object environment and knowledge	Hiroyuki Yoshikawa	https://www.amazon.co.jp/dp/4130651137
1997	The Essence of Technical Knowledge Contextuality and Creativity	Hiroyuki Yoshikawa	https://www.amazon.co.jp/dp/4130651129
1998	Becoming an Engineer	Hiroyuki Iino	https://www.amazon.co.jp/dp/4841902414
1999	Global Ethics and Environment	Nicholas Low	https://www.amazon.co.jp/dp/B000FBF9I2
1999	Kimmen Bridge Construction Record Video	-	-
1999	Project Management Innovation - Optimal Use of Human Resources, Process Tools	Yoshiaki Shibatao	https://www.amazon.co.jp/dp/4820116649
1999	Illustration International Standard Project Management - PMBOK and EVMS	Toru Nozawa	https://www.amazon.co.jp/dp/4817103213

2000	Engineer Your Way to Success	Shawn P. McCarthy	https://www.amazon.co.jp/dp/0915409178
2000	Ethics and the Built Environment (Professional Ethics)	Warwick Fox	https://www.amazon.co.jp/dp/0415238781
2000	Engineers are in danger now.	Kazuyoshi Mori	https://www.amazon.co.jp/dp/4837803997
2000	Industrial Technology Strategy	Ministry of International Trade and Industry, Institute of Industrial Technology	https://www.amazon.co.jp/dp/4806526347
2000	Reengineering Yourself and Your Company	H. Eisner	https://www.amazon.co.jp/dp/0890063532
2000	PMBOK Japanese Version	PMI	https://www.amazon.co.jp/dp/1930699204
2000	Global Standard for PE Engineers	PE-NET Study Group	-
2000	Environment and Ethics of Science and Technology	P. Arn Vezirind, Japan Professional Engineers Association, Environmental Subcommittee	https://www.amazon.co.jp/dp/4621047795
2001	Engineers View of Human Error	Trevor Kletz	https://www.amazon.co.jp/dp/B07D18VWZQ
2001	Ethics Tools and Engineers	Raymond Spier	https://www.amazon.co.jp/dp/B001EHDNFC
2001	Advice from fepe successful applicants	PE Education Kato Ore	
2001	Taking Technical Risks: How Innovators, Managers, and Investors Manage Risk in High-Tech Innovations	Lewis M. Branscomb	https://econpapers.repec.org/bookchap/mtptitles/0262524198.htm
2001	Ethics of Science Students: Tokyo University of Fisheries Open Symposium	Etsuo Watanabe	https://www.amazon.co.jp/dp/4425981014
2001	Technology in a maze	H Collins	https://www.amazon.co.jp/dp/4759808728
2001	First Engineering Ethics	Ryobun Saito	https://www.amazon.co.jp/dp/481220108x
2002	PE Exam Commentary - Aim! PE/FE	Takao Tonomitsu Wow Publishing	https://www.amazon.co.jp/dp/4820740881
2002	Introduction to Engineering Ethics	Roland Singer Translated by Nishihara	https://www.amazon.co.jp/dp/4621070088
2002	P2M Project Program Management	PM Accreditation Center	-
2002	PE Exam Commentary - Aim! PE/FE	Takao Tonomitsu Wow Publishing	https://www.amazon.co.jp/dp/4820740881
2002	2nd Edition Ethics of Scienceists	Charles E. Harris Jr. Japan Professional Engineer's Association	https://www.amazon.co.jp/dp/4621049992

2003	Science expeditions to be worried about follow nanotechnology	Takashi Tsujino	https://www.amazon.co.jp/dp/4822281582
2003	American Logic	Tatsuhiko Yoshizaki	https://www.amazon.co.jp/dp/410610007X
2003	Jefferson Arch Construction Record Video	-	https://www.amazon.co.jp/dp/1933233044
2003	Engineer Ethics - Aiming for Trusted Engineers	Ryohei Imamura	https://www.amazon.co.jp/dp/4306023648
2003	Ethics of Civil Engineers - Focusing on Case Study	Subcommittee of Ethics And Education, Civil Engineering Education Committee, Japan Society of Civil Engineers	https://www.amazon.co.jp/dp/4810604497
2003	Technical Risk Assessment	Mark G. Stewart	https://www.amazon.co.jp/dp/462794571X
2003	Engineering Ethics and Legal Engineering	Katsuhiko Shimizu	https://www.amazon.co.jp/dp/4320071530
2003	Japan's technological knowledge nurtured by the climate	Yoshio Osaka	https://www.amazon.co.jp/dp/4925085689
2004	Introduction to Technology Management	Kenzo Fujisue	https://www.amazon.co.jp/dp/4822243877
2004	How to increase the technical capabilities	Atsao Mizushima	https://www.amazon.co.jp/dp/B012WC9VQM
2004	Original technology and product development	Kazuo Takemasa	https://www.amazon.co.jp/dp/4434046721
2004	Become a proud engineer Nagoya University	Kotaro Kuroda	https://www.amazon.co.jp/dp/4815804850
2004	Examples and Considerations of Science and Technology Ethics	NSP Ethics Review Committee, Japan Professional Engineers Association	https://www.amazon.co.jp/dp/4621074458
2004	Examples and Considerations of Science and Technology Ethics	NSP Ethics Review Committee, Japan Professional Engineers Association	https://www.amazon.co.jp/dp/4621047949
2004	Biotechnology - Its Impact on Society	Yukio Karube	https://www.amazon.co.jp/dp/4595543840
2004	Supple Professionals - To You Who Asels Scientists and Engineers	Japan Women Engineers Forum Research Subcommittee	https://www.amazon.co.jp/dp/4883850587
2005	Aspects of Engineering Ethics: Intellectual and Ethical Issues of Engineering	Ryobun Saito	https://www.amazon.co.jp/dp/4888488886
2006	Technical Literacy for Social Education	Hiroshi Sakurai	https://www.amazon.co.jp/dp/4486017323
2006	Building for Professional Growth	Paul H. Robbins	https://www.amazon.co.jp/dp/B072B8ML55
2011	The famous words of scientists who changed the times	Akira Fujishima	https://www.amazon.co.jp/dp/4487805317

2012	Algae Handbook	Nobu Watanabe	https://www.amazon.co.jp/dp/4864690022
2014	First Engineering Ethics	Ryobun Saito	https://www.amazon.co.jp/dp/4812213495
2017	Ethics of Science and Technology	Kanazawa Institute of Technology	https://www.amazon.co.jp/dp/4561256997
2017	Kanazawa Institute of Technology Engineer Ethics Education PR Pamph	-	-
2018	PMI Japan Talent Triangle	PMI Japan Branch	https://www.amazon.co.jp/dp/4828205985
2018	Nickokyo Oriented Ethics Seminar	-	-

10 Board Meeting Topics, HP and SNS News

JSPE Secretariat

Board Topics

The matters discussed at the Ordinary Board of Directors meeting in January and March are as follows: Details of each matter are posted on the member site – JSPE Board meeting minutes. https://www.jspe.org/member/report/

The Board of Directors meeting will be held on May 14, 2022. If you wish to participate in the Board of Directors as an observer, please contact the Secretariat managers@jspe.org.

【January Ordinary Board of Directors】

Matters to be discussed

◇Number of members
◇Decision to hold PE/FE registration consultation in a hybrid format

Matters to be reported

◇Event report
◇Results of introduction of NPO version of Slack, Office365 and start of consideration of the next cloud service
◇Fiscal 2021 2021 Fiscal Year 2021 Forecast Report
◇Rationalization of annual membership fee management business (start of internet banking use of UFJ and abolition of Japan Post comprehensive account)
◇Liaison meeting with JPEC (PE exam and share of examinee trends)
◇Memorial plan for Mr. Shikano, a contributor to the introduction of PE in Japan
◇Syllabus English Translation Support Expected in FY2021
◇Examination of candidates for lecturers for special performances at the 2022 General Assembly

【March Ordinary Board of Directors】

Matters to be discussed

◇Number of members
◇Draft 2022 Activity Plan
◇Draft 2022 system
◇Decision to hold a hybrid meeting of the 2022 General Assembly

Matters to be reported

◇Event report
◇Fiscal 2021 Budget Execution Status
◇2022 Annual Event Plan
◇2021 Spring PE/FE Examination Registration Consultation
◇A part of the state registration experience record is open to the public
◇Apply for volunteer insurance for FISCAL 2022
◇Request for preparation of FY2021 summary of each subcommittee for business report
◇A message to the late Mr. Shikano is published in jspe magazine spring issue
◇Changes to the Articles of Incorporation (Response to Electronic Approval)
◇Posted on the website of PE registration advice activity manual (JSPE-04-14-02)

◇Schedule of lectures at Mie University Department of Mechanical Engineering in 2022
◇Request for presentation on JSPE activities from Shinjuku NPO

Homepage, SNS, member email letter

Thank you for always using the JSPE website and social media. The Public Relations Subcommittee makes every day to provide you with useful updates, such as pe examination registration updates, through its website, but if you have any comments or comments such as it would be convenient if you posted this on the JSPE website or the information posted was helpful, the Public Relations Subcommittee public.2007@jspe.org Please.

11 CPD seminar and engineer's Salon report

JSPE Education Subcommittee

【CPD Seminar】

[The 340th Onikin CPD Seminar/340th Onikin CPD Seminar]

Date: Saturday, January 29, 2022
Participation: (web viewing) 22 (including PE19, PEN2, non-member 1, lecturer)
Title: Strategy and Project Management /Strategy and Project Management
Lecturer: JSPE Member Takaaki Kitabayashi PE,PMP®

The 4th Onigane CPD Seminar was held on Saturday, January 29, 2021. In this seminar, Kitabayashi gave a lecture on "strategy", which is a word we frequently hear in the company, from five perspectives: (1) positioning the strategy, (2) why strategy is important, (3) what strategy is, (4) what strategy is difficult, and (5) what strategy is a good strategy. In particular, the three requirements of management strategy (irrationality, irreversibility, and irreversibility) are important and difficult. A good strategy was initially a response that was "stupid" from the people around me, but when success became clear, it was impressive to invite a response of "I see". In the second half of the seminar, participants actively discussed whether SCP theory (close to monopoly) or RBV theory (imitation difficulties, alternative difficulty) was important in management strategy.

[The 341st Onikin CPD Seminar/341st Onikin CPD Seminar]

Date: Saturday, March 5, 2022
Participation: (web viewing) 25 (including PE23, PEN 1, non-member 1, lecturer)
Title of Lecture: Delivery of Newly Developed Products - Scope and Procurement Management
-Delivery of New Developed Product About Scope/Procurement Management
Lecturer: JSPE Director Mitsuaki Inaba PE, PMP®

The 5th Onigane CPD Seminar was held on Saturday, March 5, 2021. In this seminar, Executive Director Inaba, who is in the development department and is engaged in the development of CO2 recovery and reuse technology, gave a lecture on scope and procurement management at the development stage based on his own experience. In addition, what is necessary to proceed with a project that does not have a specification (scope) in the seminar? group discussions, and from the active discussions of the participants,

- Decide the period and communicate,
- While discussing with the parties concerned, we will match each other's perceptions,
- In the discussion, we will also refer to past cases.
- Grasp the other party's members

And so on, a very good way was proposed.

【Event Report】

【FY2021 Kanto Technical Facility Tour】

Date: Saturday, January 8, 2022
Location: Web (Zoom)
Participation: 8 (5 PE members, 3 PEN members)

We divided into morning and afternoon parts of the Mikawashima Sewage Treatment Plant Pump Station, Tokyo. Although it was stopped operation in 1999, the facility that was built 100 years ago and continued operation for nearly 80 years was preserved, and we were able to catch a glimpse of the ingenuity of engineers at the time of construction. In addition, we were able to hear valuable stories about the contents planned in view of harmony with existing parts when repairing and repairing as important cultural properties. I would like to take this opportunity to thank everyone at Tokyo Sewage Service Co., Ltd. for explaining the details of the facility during the tour.

12 Coming Events

JSPE Education Subcommittee

【CPD Seminar】

Please check the following URL for the latest information on this year's events. https://www.jspe.org/events/

date	time	Event name and content	place	Contact
April 1, 2022	-	JSPE Magazine Spring Issue	E-mail notification to members	Public Relations Subcommittee public.2007@jspe.org
April 16, 2022	13:00-14:40	Technology CPD Seminar (1)	Zoom	Education Subcommittee education.2007@jspe.org
May 14, 2022	9:30-12:00	May Board of Directors	TokyoMixer/Zoom	Secretariat webmaster@jspe.org
June 11, 2022	13:00-18:00	Annual General Meeting	Tokyo Grand Hotel/Zoom	Secretariat webmaster@jspe.org
June 30, 2022	-	NSPE General Assembly	online	Secretariat webmaster@jspe.org
July 1, 2022	-	JSPE Magazine Summer Issue	E-mail notification to members	Public Relations Subcommittee public.2007@jspe.org
July 16, 2022	9:30-12:00	July Board of Directors	TokyoMixer/Zoom	Secretariat webmaster@jspe.org
July 27, 2022	19:00-21:00	Engineers Salon (1)	Kansai TBD, Kanto TBD/Zoom	Education Subcommittee education.2007@jspe.org
August 1-3, 2022	-	PECON	Philadelphia	Secretariat webmaster@jspe.org
August 10, 2022	19:00-21:00	Engineers Salon (2)	Kansai TBD, Kanto TBD/Zoom	Education Subcommittee education.2007@jspe.org
August 21, 2022	9:00-11:00	English Seminar (1)	Zoom	Education Subcommittee education.2007@jspe.org
September 3, 2022	10:00-12:00	Onigane Seminar (1)	Kansai TBD, Kanto TBD/Zoom	Education Subcommittee, Onigane Subcommittee rep@jspe.org
September 10, 2022	9:30-12:00	September Board of Directors Meeting	TOKYO/ TBD/Zoom	Secretariat webmaster@jspe.org
September 14, 2022	19:00-21:00	Engineers Salon (3)	Kansai TBD, Kanto TBD/Zoom	Education Subcommittee education.2007@jspe.org

September 24, 2022	10:00-12:00	Onigane Seminar (2)	Kansai TBD, Kanto TBD/Zoom	Education Subcommittee, Onigane Subcommittee rep@jspe.org
October 1, 2022	-	JSPE Magazine Autumn Issue Distribution	E-mail notification to members	Public Relations Subcommittee public.2007@jspe.org
October 15, 2022	13:00-16:20	JSPE Day (Day 1)	Kansai TBD, Kanto TBD/Zoom	Education Subcommittee education.2007@jspe.org
October 22, 2022	13:00-16:20	JSPE Day (Day 2)	Kansai TBD, Kanto TBD/Zoom	Education Subcommittee education.2007@jspe.org
October 29, 2022	14:00-17:00	FY2022PE/FE Examination and Registration Consultation	Kansai TBD, Kanto TBD/Zoom	Member Subcommittee membership.2007@jspe.org
November 5, 2022	10:00-12:10	Onigane Seminar (3)	Kansai TBD, Kanto TBD/Zoom	Education Subcommittee, Onigane Subcommittee rep@jspe.org
November 12, 2022	9:30-12:00	Board of Directors meeting in November	TokyoMixer/Zoom	Secretariat webmaster@jspe.org
November 20, 2022	9:00-11:00	English Seminar (2)	Kansai TBD, Kanto TBD/Zoom	Education Subcommittee education.2007@jspe.org
December 4, 2022	9:00-11:00	English Seminar (3)	Kansai TBD, Kanto TBD/Zoom	Education Subcommittee education.2007@jspe.org
December 18, 2022	9:00-11:00	English Seminar (4)	Kansai TBD, Kanto TBD/Zoom	Education Subcommittee education.2007@jspe.org
December 24, 2022	13:00-15:00	Technology CPD Seminars (2)	Kansai TBD, Kanto TBD/Zoom	Education Subcommittee education.2007@jspe.org
January 1, 2022	-	JSPE Magazine Winter Issue	E-mail notification to members	Public Relations Subcommittee public.2007@jspe.org
January 7, 2023	-	Technical facility tour	TBD	Education Subcommittee education.2007@jspe.org
January 14, 2023	9:30-12:00	January Board of Directors	TokyoMixer/Zoom	Secretariat webmaster@jspe.org
January 21, 2023	10:00-12:10	Onigane Seminar (4)	Kansai TBD, Kanto TBD/Zoom	Education Subcommittee, Onigane Subcommittee rep@jspe.org
February 8, 2023	19:00-21:00	Engineers Salon (4)	Kansai TBD, Kanto TBD/Zoom	Education Subcommittee education.2007@jspe.org

February 18, 2023	10:00-12:10	Onigane Seminar (5)	Kansai TBD, Kanto TBD/Zoom	Education Subcommittee, Onigane Subcommittee rep@jspe.org
March 1, 2023	19:00-21:00	Engineers Salon (5)	Kansai TBD, Kanto TBD/Zoom	Education Subcommittee education.2007@jspe.org
March 5, 2023	9:00-11:00	English Seminar (5)	Kansai TBD, Kanto TBD/Zoom	Education Subcommittee education.2007@jspe.org
March 11, 2023	9:30-12:00	March Board of Directors	TOKYO/ TBD/Zoom	Secretariat webmaster@jspe.org
March 18, 2023	10:00-12:10	Onigane Seminar (6)	Kansai TBD, Kanto TBD/Zoom	Education Subcommittee, Onigane Subcommittee rep@jspe.org
March 25, 2023	14:00-17:00	FY2022PE/FE Examination and Registration Consultation	Kansai TBD, Kanto TBD/Zoom	Member Subcommittee membership.2007@jspe.org

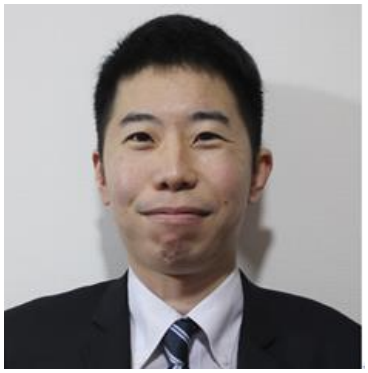
* In light of the impact of coronavirus, we will adjust and implement the schedule.

【Technical CPD Seminar】
< Technology CPD Seminar (1) >
Saturday, April 16, 2022

[Board Meeting]
【May Board of Directors】
Date: Saturday, May 14, 2022

【Annual Meeting】
Date: Saturday, June 11, 2022

13 New members



○ Name: Shunsuke Teraoka
○ Member number: FE-0425
○Qualification: FE Civil
Professional Engineer's Primary Examination (Construction Division)
First-class land special radio engineer, etc.
* Specialized field: Civil engineering
○ Motivation for joining: Collecting information for acquiring PE
○S/Introduction: I am involved in evaluation work in the civil engineering field at an electric power company.
I am planning to take the PE exam and am currently studying.
I am still inexperienced as an engineer, but through JSPE's activities and PE acquisition, I would like to acquire a broad perspective to become an engineer who can play an active role in Japan and overseas.

○ What jspe wants: PE registration support, CPD provision

14 Postface

When creating a spring magazine, the biggest problem is what to make a special article. The summer issue is roughly decided as JSPE General Assembly, the autumn issue is the NSPE General Assembly and PECON, and the winter issue is the greeting of jspe president and the aspirations of the New Year, but only the spring issue is because there is no fixed thing with this. 。This time, in response to the death of Mr. Shikano, who was instrumental in introducing PE to Japan, in addition to the lead of former Chairman Moriyama, the willingness of volunteer members to give shape to gratitude overlapped, A special article has been posted. Many of our volunteer members are the so-called 1st and 2nd generations involved in the establishment of JSPE and the creation of foundations. On the other hand, I think that there are many members who have little contact with the fourth generation. As for me in the third generation, I It was about that it remained in a corner of my memory, but after organizing past magazine articles, I learned that I was instrumental in the spread of PE, and I was grateful for the contribution. It is natural that the contact points and impressions differ depending on the generation like this, but it does not matter when the end comes there is something to be learned about the attitude to be able to do. Regarding the manuscript of the magazine, considering the current situation where the gap between the generations of jspe members is widening, is this content really the information that current members want the most? It can be said that there is no more way to provide information to members, or whether we are neglecting to disseminate information to society, and instead of repeating it in a careless manner, it is always necessary to refresh. Recently, facebook ads have also been posted for JSPE events. Marketing is important to aim at whom, and we are still groping. We would like to make it an opportunity to think about what kind of advertisements are effective with our members, and if you have anyone who says me, please contact us.

ターゲティング	Facebook 広告	ディスプレイ広告 (GDN・YDN)	リスティング広告 (検索連動型広告)
デモグラ (年齢、性別)	◎	○	△
デバイス	○	○	○
配信エリア	○	○	○
興味・関心	◎	△	-
リターゲティング	○	○	-

Always looking for adjustments to match the needs of the times, it can be said that this is a attitude that should never be forgotten in order to be active throughout your life as an engineer.

March 20, 2022
Tokoh Nishikubo (Editor-in-Chief, Magazine)

Please contact the Public Relations Subcommittee public.2007@jspe.org for any questions, suggestions, questions, or contributions you may have noticed.

【Editorial Board】
Nishikubo (Head of Planning and Editing)
Inaba (Board of Directors Topics, Report on CPD Seminar of The Education Subcommittee, Coming Events)
Sato (Ikoi-no-Hiroba), Fujimura (FE/PE pass/ PE registration experience record, introduction of new members)
Ethics, Hirose Reviewer, Moriyama and Ito (General Editing)