

This English translation of “2020 Annual Report” of the Institute of Actuaries of Japan is an unofficial translation. Only its original Japanese texts have effect, and the translation is to be used solely as reference material to aid in the understanding of the original one.

この「2020年度事業報告」の翻訳は公定訳ではありません。効力を有するのは日本語の資料であり、翻訳はあくまでその理解を助けるための参考資料です。

2020 Annual Report

From April 1, 2020 to March 31, 2021

1. Matters concerning Annual General Meeting of Members

The General Meeting of Members was held on June 18, 2020 at the main conference room of the Institute of Actuaries of Japan, and

“Report on a summary of business activities in 2019”

was presented, and the following two proposals were put before the meeting and approved as proposed:

Item 1: 2019 Approval of a Balance Sheet and Net Assets Variation Statement as well as Inventory of Properties

Item 2: Approval of amendments to the Articles of Incorporation (*)

(*) Amendments that allow the exercise of voting rights by electromagnetic method

<Actions for preventing COVID-19>

From the perspective of curbing the spread of COVID-19, members were restrained from visiting the general meeting venue, while the Bill was posted on the members-only page of our website and proxy voting by means of an electromagnetic method was recommended. By encouraging the use of proxy voting, we have implemented operations that allow members to exercise their voting rights even in the situation of COVID-19 pandemic. (The number of voting rights exercisers was 3,986, of which 2,952 were by means of the submission of a power of attorney.)

2. Movement of members

Movements of members during the current year were as follows: for corporate members, 3 members withdrew from the IAJ; for individual members, 327 members were newly admitted, and 201 members withdrew from the IAJ. The number of members as of the end of March 2021 is as shown in the table below.

Fellows	1,931	persons
Associates	1,297	persons
Students	2,144	persons
Semi-total	5,372	persons
Corporate members	107	corporations
Total	5,479	persons/corporations

3. Business report

[A. Related to examination]

(A1) Implementation of qualification examination

A 3-day qualification examination was held from December 14 to 16, 2020 in Tokyo (at TOC Gotanda) and Osaka (at Temma Training Center) and the successful examinees were announced on February 16, 2021.

The total number of examination subjects for the primary examination was 3,591 subjects and the total number of subjects passed was 833 subjects. There were 84 examinees who passed all basic subjects.

Primary examination (Basic subjects)	Mathematics	Life Insurance Mathematics	Non-life Insurance Mathematics	Pension Mathematics	Accounting, Economics and Investment Theory
Number of examinees	1,044	633	682	487	745
Number of successful examinees	200	230	91	64	248
Passing Rates	19.2%	36.3%	13.3%	13.1%	33.3%

The total number of examination subjects for the secondary examination was 1,095 subjects and the total number of subjects passed was 194 subjects. There were 100 examinees who passed all the subjects.

Secondary examination (Advanced subject)	Life Insurance 1	Life Insurance 2	Non-life Insurance 1	Non-life Insurance 2	Pension 1	Pension 2
Number of examinees	356	318	147	119	70	85
Number of successful examinees	62	63	22	22	10	15
Passing Rates	17.4%	19.8%	15.0%	18.5%	14.3%	17.6%

<Actions for preventing COVID-19>

From the perspective of curbing the spread of COVID-19, we implemented temperature measurement of examinees at the examination venue, disinfection of desks and chairs, and securing of seat spacing in the examination room, and also requested examinees to take preventative measures.

(A2) Implementation of CERA examination

The CERA examination in Japan is based on the SP9 (Enterprise Risk Management, Specialist Principles) of Institute and Faculty of Actuaries (IFoA). The IAJ implemented CERA examination on October 6, 2020, utilizing IFoA online platform in line with the IFoA online examination of SP9 in September 2020. The successful examinees were announced on January 18, 2021. There were 46 examinees, and 9 examinees passed the examination (Passing Rates 19.6 %).

(A3) Revision of textbooks

- ① In March 2021, the content and structure of "Medical Insurance" and "Life Insurance Accounting" were reviewed, focusing on updates to the latest status, and "Medical Insurance (Life Insurance 1, Chapter 7)" and "Life Insurance Accounting" (Life Insurance 2 Chapter 1) were revised.
- ② In March 2021, Life Insurance 2 Chapter 4 "Risk Management" was published in order to enhance the content related to risk management in the life insurance field.

[B. Related to education, training, and research presentation]

(B1) Implementation of actuary courses

The actuary courses were offered for a period from June 2,2020 to November 2,2020. Details are as follows.

	Subject	Number of students
Basic courses (12 Subjects)	<ul style="list-style-type: none"> ▪ Probability ▪ Probability Exercise ▪ Life Insurance Mathematics ▪ Non-life Insurance Mathematics ▪ Accounting ▪ Life table ▪ Statistics ▪ Statistics Exercise ▪ Pension Mathematics ▪ Economics ▪ Investment Theory ▪ Modeling 	139 people
Intermediate courses (6 Subjects)	<ul style="list-style-type: none"> ▪ Social Insurance Theory ▪ Population Theory ▪ Insurance Supervision Law ▪ Pension Practice Regulations ▪ Finance Mathematics ▪ Risk Management Theory 	31 people

The additional actuary exercise courses were offered for a period from September 29, 2020 to December 4, 2020. Details are as follows.

	Subject (Number of students)
Additional actuary exercise courses (4 Subjects)	<ul style="list-style-type: none"> ▪ Life Insurance Mathematics Exercise (29 people) ▪ Non-life Insurance Mathematics Exercise (43 people) ▪ Pension Mathematics Exercise (32 people) ▪ Modeling Exercise (23 people)

A specialized actuary course (ERM) was held and offered for the purpose of learning specialized knowledge and skills related to ERM, for the period of July 6, 2020 to September 19, 2020. Details are as follows:

	Subject	Number of students
ERM course (3 Subjects)	<ul style="list-style-type: none"> ▪ Finance Mathematics (*) ▪ Risk Management Theory (*) ▪ ERM <p>(*) Subjects common to Intermediate courses</p>	33 people

A specialized actuary course (Data Science) was held and offered for the purpose of acquiring specialized knowledge and skills related to data science through practical training, for the period of December 26, 2020 to March 20, 2021. Details are as follows:

	Content		Number of students
Data Science course (First/Second parts)	<p><First part></p> <ul style="list-style-type: none"> ▪ Introduction of R and simple Regression Model ▪ Linear Regression Model ▪ Linear Discriminant Analysis ▪ Decision Tree ▪ Generalized Linear Model 1 ▪ Generalized Linear Model 2 	<p><Second part></p> <ul style="list-style-type: none"> ▪ Basic procedure for Predictive Modeling ▪ Exploratory Data Analysis (EDA) ▪ Example model for Predictive Modeling ▪ Model selection and Model evaluation method 	20 people

		<ul style="list-style-type: none"> ▪ Practice in Regression Model (GW) ▪ Practice in Classification Model (GW) 	
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<Actions for preventing COVID-19>

From the perspective of curbing the spread of COVID-19, all courses were implemented online.

(B2) Holding of Annual Meeting

From the perspective of curbing the spread of COVID-19, the annual meeting, which was held face-to-face for two days every year, was consolidated into one day (Friday, November 6, 2020) and held online mainly on live distribution.

- <AM> • Common session (Address from the president, Congratulatory addresses, Common presentations (Status of IAJ research based on the revision of the IAA educational syllabus))
- Presentation of papers / Presentation / Panel discussion / Open Discussion Forum
- <PM> • Presentation of papers / Presentation / Panel discussion / Open Discussion Forum

11 papers were presented, 8 presentations and 4 panel discussions were held. The streamed videos were posted on the e-learning system after the annual meeting and can be viewed again on- demand.

(B3) Holding of IT Annual Meeting

From the perspective of curbing the spread of COVID-19, IT Annual Meeting was held online on February 19, 2021, by posting the documents (latest IT technology research, introduction of new technologies by the technology group) on the dedicated website for IT Annual Meeting and distributing videos (activity reports by the IT research groups (1st to 5th groups)). The videos were available for a certain period on e-learning and YouTube (limited distribution).

(B4) Holding of regular meetings

We held the following regular meetings in FY2020. Details are as follows.

1 st Apr.23, 2020 [Accounting Standards]	IFRS 17 Discount Curve Modelling Theoretical and Practical Challenges	Will Halley (Director, ERS Insurance, Moody's Analytics (Asia Pacific))
2 nd Aug.26, 2020[Accounting Standards]	IFRS17 Update adopted by the IASB in June 2020	Chris Murphy (RGA St. Luis, USA) Tristan Chung (RGA Toronto, Canada)
	Video rebroadcast: Sep.26 / Oct.26 / Nov.26	
3 rd ※ Sep. 16, 2020 [Professionalism]	※Joint seminar with Professionalism Training (Continuing Professional Development) (Reference to (B9) ①)	
	Video rebroadcast: Oct.16 / Nov.16/ Dec.16	
4 th Dec. 22, 2020 [Data Science]	Study on Prediction Error in Predictive Modeling	Data Science Related Basic Research WG Ryutaro Yamada (Willis Towers Watson) Yuji Hiramatsu

		(AXA Life Insurance) Tsutomu Watanabe (Dai-Ichi Life Insurance)
	Video rebroadcast: Dec.29	
5 th Jan.12, 2021 [Pension and Retirement Benefit System]	Past achievements and future directions of reform studies at the All- Generations Social Security Review Conference	Kosuke Wada (Counsellor (Policy Planning and Coordination) Statistics and Information Policy, Ministry of Health, Labour and Welfare)
	Video rebroadcast: Jan.26	
6 th Jan.28, 2021 [Data Science]	The power of data science to predict future health	Kuniyoshi Hayashi Ph.D. (Lecturer, (Biostatistics and Bioinformatics) Graduate School of Public Health, St. Luke's International University / Consultant, Center for Clinical Epidemiology and Health Technology Assessment)
	Video rebroadcast: Feb.11	
7 th Mar.4, 2021 [Others]	(Part 1) Remote work in new normal (Part 2) Next Wave, Scenarios and Actions for the Insurance Industry - Based on the Impact of the COVID-19 -	Yuji Nomura (Part 1) Kazunori Aoki (Part 2) (EY Strategy and Consulting Co., Ltd.)
	Video rebroadcast: Mar.18	
8 th Mar.31, 2021 [Others]	Stochastic Mortality Model and Its Applications: Bayesian perspective	Atsuyuki Kogure (Professor, Tokyo Keizai University/ Professor Emeritus, Keio University/ President, The Japanese Association of Risk, Insurance and Pensions (JARIP)/ Technical advisor, ProbSpace Inc.)

<Actions for preventing COVID-19>

From the perspective of curbing the spread of COVID-19, all regular meetings were held online. In addition, we rebroadcasted the recorded contents since the 2nd meeting for members who had difficulty participating on the day.

(B5) Holding of Kansai Committee regular meetings

From the perspective of curbing the spread of COVID-19, Kansai Committee regular meetings were held online, and the contents were released in the period of Mar.12 to 21,2021.

(Mar.12 –21, 2021) [Life Insurance, Pension, Risk Management]	2020 Report on Activities of Kansai Committee's Sub-committees	Each sub-committee
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(B6) Holding of moonlight seminars

From the perspective of curbing the spread of COVID-19, Moonlight seminars were held online under the following 4 themes from November 2020 to February 2021.

Let's do "The Working Level Conference on the Economic Value-based Solvency Framework".	Kazuyuki Doi Iwaki Shimada (Willis Towers Watson)
Novel Coronavirus (COVID-19) and actuaries	Noriyuki Kogo (Milliman)
Reading in turns - "Market Consistent Solvency Assessment: Financial Risk and Actuarial Modeling"	Yasutaka Shimizu (Faculty of Science and Engineering, Waseda University)
AGLM research	Hirokazu Iwasawa, and members of ASTIN-related Study Group

(B7) Holding of Kansai Committee seminars

From the perspective of curbing the spread of COVID-19, Kansai Committee seminars were held online on February 12, 2021, with the following themes.

<ul style="list-style-type: none"> • Studies on the effect of epidemic prevention strategy on COVID-19 infection • A Study on Solvency Margin Ratio -Statistical Consideration on Insurance Risk of Non-life Insurance Companies- • Mathematical model of mortality curve developed from TVF model and application of life table to future estimation • HARA type expected utility maximization problem under Volterra Heston model • A study on the risk about death that the similar pattern of Tontine pension holds 	Graduate School of Science, Kyoto University, Insurance Mathematics Seminar students
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(B8) Enhancement of e-learning

E-learning contents under the following were released.

- IFRS17 Pocket Guide on Reinsurance Contracts Held
- IFRS17 Reinsurance Contracts held : an example of proportionate reinsurance coverage
- Situation of minimum guaranteed interest rate in product development
- Stock Market Efficiency and Market Anomalies
- M & A in insurance companies
- Modern portfolio theory
- Professionalism Training (Continuing Professional Development) 2019
- 2017 General Meeting:
 - A trend of specific disease incidence rate in global and Japan (2nd)
 - A picture of actuarial education with a view to the future, Practical Standards model at IAA Update of the discussion on ISAPs (3rd)
 - Longevity and attached risks (5th)
 - Overview of Predictive Modeling and the latest trend, On the difference between "Statistical Science" and "Machine Learning"(8th)
- 2020 General Meeting:
 - IFRS 17 Discount Curve Modelling - Theoretical and Practical Challenges (1st)
- The changing role of insurance companies in the world of Society 5.0
- 2018 General Meeting:

- History of Capital Regulation and Recent Issues, Economic-Based Capital Requirements ~North America Updates (1st)
- Precision Medicine (4th)
- Asset allocation and ALM using an economic based approach (6th)
- Actuarial Mathematics & Statistical Method, and their meaning (10th)
- The Laws of Robotics and Artificial Intelligence, Research presentation on Data Science by young generations (11th)
- 2019 Annual Meeting:
 - Let's talk about future model governance.
 - Application of predictive modeling in insurance (Practical Version)
 - ICS Ver.2.0
 - IFRS 17 Insurance Contracts
 - About the result of the 2019 (1st year of Reiwa) public pension financial verification and the change from the previous verification
- Report of 2019 Open Discussion Forum:
 - ①Insurance Industry Change Session
 - ②Retirement Session
 - ③Financial Reporting Session

(B9) Implementation of professionalism training

- ① On September 16, 2020, professionalism training (Continuing Professional Development) covering the following training was offered.
(Video rebroadcast: Oct.16 / Nov.16 / Dec.16)

- The employed actuaries' dilemma
Norihiko Mizumura
(Professor, Saitama University
Graduate School of Humanity and
Social Sciences)

- ② On March 1, 2021, professionalism training covering the following training was offered.
The completion of this training is required to be approved as a Fellow.

- Actuaries and Professionalism
Ikuo Katayose (Resona Bank)
- Actuaries and Code of Conduct
Hideki Wakasugi (Meiji Yasuda Life Insurance)
- Professionalism in Life Insurance
Hitoshi Watanabe (Nippon Life Insurance)
- Professionalism in Non-life Insurance
Hiromi Kaneko (Sompo Japan Insurance)
- Professionalism in Pension
Akihiro Hotta (Tohatsu LLC)
- Case studies
Kazuo Kuroiwa (MetLife Inc.)

※The participants were limited to "associate members who passed all the examination subjects (including in the 2020 qualification examination)".

- ③ On March 29, 2021, an opinion exchange meeting for appointed actuaries of small amount & short-term insurance was held by IAJ as a place to share practical questions and issues.

<Actions for preventing COVID-19>

From the perspective of curbing the spread of COVID-19, all trainings/meetings were held online.

(B10) Implementation of CERA training

On January 30, 2021, a group workshop was held for successful examinees for CERA examination. The workshop contained lectures on ERM, such as the specific situation in Japan and the case studies. The completion of this training is required to be approved as CERA qualification and 4 participants completed the training.

(B11) Implementation of Research meeting

On February 13, 2021, with a view to expanding the base of academic human resources for holding ICA2026, the research meeting in FY 2020 was held in cooperation with JARIP. The purpose was to provide members with opportunities to meet with academic and research activities, and to expand the base of actuary-related researchers. From the perspective of curbing the spread of COVID-19, the meeting was held online.

[C. Related to investigation and research activities]

(C1) Holding of Standard Mortality Advisory Committee meeting

At the 26th Standard Mortality Advisory Committee meeting held on Thursday, November 19, 2020, and it was approved to continue to use in the year 2021 the “Life Insurance Standard Life Table 2018 (for death)”, “Third Sector Standard Life Table 2018” and “Life Insurance Standard Life Table 2007 (for annuity)”.

(C2) Improvement of practice standards

- ① With regard to “Guidance for Actuarial Practice Concerning Retirement Benefits Accounting”, the revisions were made in April 2020 not to refer to the “Practical Standards for Welfare Pension Funds”, based on the handling of that by the Japanese Society of Certified Pension Actuaries (JSCPA).
- ② In order to reflect the revision of the Fisheries Cooperatives Law, etc., and to carry out the necessary improvement of practical standards, the revision of “Practical Standards for Mutual Aid Accountants of the National Mutual Insurance Federation of Fisheries Cooperatives” was disclosed and opinions were solicited in January 2021. Since no opinion was submitted, the draft was finalized, and after a resolution to be revised by the Board of Directors on March 10, 2021, it was approved by the Minister of Agriculture, Forestry and Fisheries on March 29, 2021. In addition, the “Guidance for Practical Standards Manual for Mutual Aid Accountants of the National Mutual Insurance Federation of Fisheries Cooperatives” was revised for the same purpose.

(C3) Response to international accounting standards and international insurance regulation

The International Accounting Standards Board (IASB) and the International Association of Insurance Supervisors (IAIS) have been energetically reviewing international accounting standards and international insurance regulation. The International Actuarial Association (IAA) is carrying out contracted research and other activities as an actuarial professional group. The IAJ is actively participating in the activities of IAA committees.

(C4) Dispatch of an observer to “Members of The Study Group on the Economic Value-based Solvency Framework”

Upon request of the Financial Services Agency, we dispatched Mr. Jun Miyamoto (Dai-ichi Life Insurance) as an observer to the “Members of The Study Group on the Economic Value-based Solvency Framework”.

(C5) Work for the revision of IAA educational syllabus

- ① Corresponding to the amendment of IAA educational Syllabus and its application in 2021, IAJ has been considering the future qualification examination and education systems in Japan by Planning Committee, Examination and Education Planning Committee and the relative committees, respectively. Assuming to provide the fellow members with 2-days training in the 3 fields of “Financial Risks”, “Data and Systems”, and “Actuarial Risk Management” as the

qualification requirement, the trial on-line training was conducted on February 18, 24, 25, and March 5 to confirm the feasibility.

- ② The “Education Questionnaire” to assess the adoption of IAA 2017 Education Syllabus was answered and submitted to IAA on March 31, 2021.

(C6) Activities of Committees

Each committee, division, study group, working group and project team carried out investigations, research and other activities based on the purpose and mission set at the beginning of the fiscal year. The status of their activities was posted on IAJ web sites. The activities that were put together into investigation and research results were published on the IAJ’s member-only web page and/or in supplementary volumes of bulletins, etc.

[D. Expression of Opinions]

(D1) Voting at IAA Council (including electronic voting)

- ① In April 2020, voted for the approval of all the topics at the IAA virtual council meeting.
- ② In June 2020, voted for the approval of the venue of 4Q 2021 IAA Council & Committee Meeting (Seoul, South Korea), and the leadership of the newly formed Advance Committee.
- ③ In October 2020, voted for the approval of adopting the “Late Membership Fee Payment Policy”, new IAA Associate membership application (The Actuarial Association of Montenegro), and the revised section rules (AFIR-ERM, ASTIN, IAAHS, IACA & PBSS).
- ④ In November 2020, voted for the approval of all the topics at the IAA virtual council meeting.

[E. Related to International Activities]

(E1) IAA activities

- ① The IAJ send committee members to IAA and actively participates in the activities of IAA committees. Especially, Masaaki Yoshimura is in Nominating Committee as Chair, Toshihiro Kawano is in Actuarial Standards Committee, Ryutaro Yamada is in General Insurance Committee (Forum) as a Vice-chair, and Yosuke Fujisawa is in Enterprise and Financial Risk Forum as a Vice-chair.
- ② In December 2020, IAA invited Full Member Associations to delegate one of their members to IAA Strategic Planning Committee (SPC) for the seats rotating off at the end of 2020, which is to discuss IAA strategies as a lower association of Council. IAJ stood for election and was selected by draw as the result, and Masaaki Yoshimura was delegated. (The term: 4 years)

(E2) Cancellation of Actuarial Seminar of East Asia (ASEA) in 2020

From the perspective of curbing the spread of COVID-19, Actuarial Seminar of East Asia (ASEA) in 2020 was cancelled.

(E3) Dispatch of members to international conferences, etc.

Due to the spread of COVID-19, the conferences in person have been canceled and were held online as follows.

- ① From Apr.15 to May 12, 2020 IAA Virtual Conference
Tomio Murata, Masaaki Yoshimura, Nobuhiro Shimizu, Masaaki Shigehara, Yoshio Nakamura, Takashi Yamamoto, Ryutaro Yamada, Yosuke Fujisawa, Kenji Sekine, Minoru Ouchi

- ② From May 11 to 15,2020 Paris 2020 Virtual Actuarial Colloquium
Hirokazu Iwasawa, Shigeo Watanabe, Miyuki Ebisaki, Masafumi Suzuki, Suguru Fujita, Kenji Kondo, Toyoto Tanaka
- ③ From Sep.21 to Nov,18, 2020 Virtual Council and Committee Meetings
(4Q2020)
Tomio Murata, Masaaki Yoshimura, Nobuhiro Shimizu, Masaaki Shigehara, Toshihiro Kawano, Yoshio Nakamura, Takashi Yamamoto, Ryutaro Yamada, Yosuke Fujisawa, Kenji Sekine, Kentaro Katsuno, Minoru Ouchi

※The IAA section colloquium was held from May 11 to 15, 2020, with "SECTIONS VIRTUAL COLLOQUIUM 2020" as a virtual conference using actuvie as a platform.

※The 23rd AAC (Asian Actuarial Conference) was supposed to be held in Bali, Indonesia on October 2020, but it was cancelled.

[F. Advisory Committee]

- (F1) The 32nd Advisory Committee meeting was held online on March 4, 2021, where summary of business activities in 2020 and business plan in 2021 (draft) were discussed.

[G. Academic Activities]

- (G1) Upon request of Kyoto University to send lecturers for insurance mathematics and pension mathematics lectures, Jun Asano (Sumitomo Life Insurance), Hiroyuki Saito (Sumitomo Life Insurance), Tsuyoshi Suzuki (Sumitomo Life Insurance), Ikuo Katayose (Resona Bank), Yuya Tokuda (Daido Life Insurance), Takeshi Toyodome (Nippon Life Insurance), Hiroyuki Tsunekawa (Nippon Life Insurance) and Yoshihiro Minami (Nippon Life Insurance) were sent to the University.
- (G2) Upon request of Osaka University to send lecturers for insurance mathematics lectures, Akihiko Sasada (Sumitomo Life Insurance), Masaki Takemura (Daido Life Insurance) and Hiroyuki Tsunekawa (Nippon Life Insurance) were sent to the University.
- (G3) Upon request of Kobe University to send lecturers for insurance mathematics lectures, Koji Matsumoto (Sumitomo Life Insurance) was sent to the University.
- (G4) Upon request of Waseda University to send lecturers for insurance mathematics, pension mathematics, and general insurance theory and practice lectures, Yoshiki Adachi (Meiji Yasuda Life Insurance), Kouichi Tanaka (Meiji Yasuda Life Insurance), Junichi Hamada (Meiji Yasuda Life Insurance), Akira Arai (Meiji Yasuda Life Insurance) , Kentaro Sekiguchi (Aon PLC) and Yosuke Fujisawa (Sumitomo Life Insurance), Kaoru Shiojima (Aioi Nissay Dowa Insurance), Akio Hoshino (Nisshin Fire & Marine Insurance), Nobuhisa Ishio (Sompo Japan Insurance), Shuhei Hotta (Mitsui Sumitomo Insurance) were sent to the University.
- (G5) In October 2020, a career support seminar was held at Waseda University Graduate School of Accountancy for undergraduate and graduate students who are interested in actuaries, and Minoru Ouchi (general secretary) was dispatched as a lecturer as part of academic activities.

- (G6) In June 2020, a career guidance was held online at Kansai University Faculty of Engineering Science, Department of Mathematics to introduce actuaries to third-year undergraduate students, and Akihiko Sasada (Kansai Committee) was dispatched as a lecturer as part of academic activities.

[H. Related to Presentation of Awards]

- (H1) Awards presented to a person with outstanding results in the 2019 qualification examination

- ① Presentation of President Award
The IAJ presented the President Award to Kai Masaoka (Dai-Ichi Life Insurance).
- ② Presentation of award for outstanding results for each subject
The IAJ presented an award to 2 persons for Mathematics, 2 persons for Life insurance mathematics, 1 person for Non- life insurance mathematics, 1 person for Pension mathematics, 1 person for Accounting, economics, and investment theory, 1 person for Life insurance 1.

- (H2) Presentation of awards for outstanding research paper

- ① As a result of the examination by the Academic Committee, the excellent papers were not recommended by the committee, and there were no relevant papers in 2020.
- ② On February 19, 2021, awards were presented for the following outstanding IT-related papers at the IT Annual Meeting:
“How SoE & SoR should function in the insurance industry”
(IT Study Group IV)
“Measures and the challenges to cybersecurity in the supply chain of insurance industry”
(IT Study Group V)

[I. PR and Publication Activities]

- (I1) PR activities

- ① At the end of August 2020, the "Voice of successful examinees" on IAJ's website was renewed (replacement of the members) as the 2020 version.
- ② “Actuary Seminar” primarily for students was held on January 23, 2021 in Tokyo and Osaka. From the perspective of curbing the spread of COVID-19, the seminar was held online and there were 56 participated.
- ③ Prior to the renewal in April, the members only page of the IAJ website was released to members in advance from March 12, 2021 in order to shift to "Smart Core" (cloud type package system) from FY2021.

- (I2) Cooperative activities of related associations / institutes

- ① The IAJ sponsored the public interest purpose project such as "64th IMO2023 Japan Games" organized by the Mathematics Olympic Foundation of Japan (JMO).
- ② The IAJ was supposed to sponsor the public interest purpose project; “Suugaku Koshien 2020 (The 13th National Math Championship)” organized by the mathematics Certification Institute of Japan (SUKEN), but it was cancelled due to COVID-19.

- (I3) Publication of bulletins, etc.

The following bulletins and other publications were published.

- ① Bulletin

No.73	<ul style="list-style-type: none"> • Application of Reinforcement Learning in Life Insurance Actuary Tasks • Adequate funding levels for defined benefit pension plans • Note on the Reinsurance Strategy based on ICS as a Financial Soundness Standard • Consideration on subdivision of non-economic assumption • Expected mortality rate used for calculating survival rate of living benefit insurance
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② Supplementary volumes of bulletin

No.288	<p><The 60th IT Annual Meeting Report> (IT Committee)</p> <ul style="list-style-type: none"> • Latest IT Technology Survey / Research "Changes in Digital Driven IT Technology and Insurance Company Operations by COVID-19" (Presentation only) • Toward the realization of a common platform for the industry • Research on new services and products of insurance companies using new technology focusing on P2P insurance • DX promotion in the insurance industry based on sustainability • Data utilization by insurance companies based on the latest trends such as the establishment of information banks • The ideal way of working in the information system department in the digital age
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③ Actuary Journal

No.111	<ul style="list-style-type: none"> • The 6th regular meeting report in 2019 • ASTIN Bulletin Abstracts (Translated by ASTIN related Study Group) • 2019 Report of paper research activities (AFIR related study group) • 2019 Report on Activities of Kansai Committee's Sub-committees • 2019 Report on Moonlight Seminar • 2019 CERA qualified person(s) • 2019 accomplished members for CPD objectives • 2019 applicants who passed the qualified examination • Actuaries' relay talks (Series Part.12)
No.112	<ul style="list-style-type: none"> • <Report of Data Science Related Basic Research WG > <ul style="list-style-type: none"> – Data Visualization Technology Manual Using R – SOA Exam PA: Translation of Predictive Analytics • 2019 Continuing Professional Development / CPD units achievement report • 2020 Name lists of committees, study groups, working groups, project teams • Actuaries' relay talks (Series Part.13)
No.113	<ul style="list-style-type: none"> • The origin of actuary? Contribution to pension mathematics by Colin Maclaurin • Actuaries' relay talks (Series Part.14)
No.114	<ul style="list-style-type: none"> • 2020 Actuary Seminar report (PR Committee Actuary seminar Sub-committee, Kansai Committee) • The result of questionnaire for IAJ members on awareness of ICA2026 papers (ICA2026 Planning Committee, IAJ Secretariat) • Book Review - Financial Modeling, Actuarial Valuation and Solvency in insurance • Actuaries' relay talks (Series Part.15)
Special Edition	<p><Contribution ></p> <ul style="list-style-type: none"> • Economic value-based solvency regulation - Regulation or regime shift? –

<Risks and Insurance No.17>	<ul style="list-style-type: none"> • Now is the time to focus on introducing economic value-based solvency regulation • Looking back at the Advisory Council: To make the "three pillars" work <Lecture> <ul style="list-style-type: none"> • What ERM should be based on the introduction of economic value-based regulation <Paper> <ul style="list-style-type: none"> • The Policy for Policyholders' Dividend of Life Insurance Company based on the Cramér-Lundberg Model with Incorporating the Perspective of Fairness
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④ 2020 Qualification Examination Question Collection

(I4) Revision of PR brochure

In June 2020, the description of actuaries' activity field was reviewed in response to the recent circumstances, and the IAJ PR brochure was renewed accordingly, such as introducing data science as one of the new fields for actuaries. The other contents were also revised to the latest, such as in the items of breakdown of the number of individual members by business type, annual transition, the list of corporate members, and replacement of photos of overseas training.