

SESSION 5

PANEL DISCUSSION

HOW CAN NEW ICRP RECOMMENDATIONS BEST HELP TO ASSURE PUBLIC AND WORKER HEALTH AND SAFETY?

Moderator: Hans RIOTTE

The panel discussion moderated by the NEA secretariat addressed questions received in advance and during the conference from participants. The panel members were representatives from regulatory bodies of each of the countries participating in the conference, joined by experts from the Japanese nuclear industry, radiation protection and medical professionals. Among the key topics were numerical recommendations for exclusion and exemption.

PANEL DISCUSSION

How can the new ICRP recommendations best help to assure public and workplace health and safety?

For the purpose of this panel discussion participants had been asked to submit questions for this session or views on the new ICRP recommendations prior to the conference and during the first day of the conference. The NEA secretariat received a lot of responses which were categorised into topics for the panel discussion. The panel consisted of participants who had presented their specific views in previous sessions in addition to two new members: Mr. Yasuhito Awatsuji, MEXT, and Dr. Nobuyuki Sugiura, JHPS. (See annex; list of the panellists). Panellists were expected to discuss the questions presented by the moderator in accordance to their scientific, practical, regulation background and or personal ideas.

1. Lower boundary

There were lots of comments about the lower boundary for dose limit. While the panellists had expected the ICRP to give clear guidance for exemption, exclusion and clearance, they also showed many varieties of radiation exposure: occupational, from natural sources, internal exposure to radon. They also pointed out the difficulty to propose the figure set in the recommendations since it complicated the situation. Dr. Holm explained the role of the ICRP was not to recommend precise recommendations but a concept for the decision maker on radiation protection.

2. LNT hypothesis

Almost all participants considered the LNT hypothesis as the best tool at present to ensure radiation protection in low dose for its uncertainty.

3. Collective dose

Due to the uncertainty of dosimetry in low dose level and the LNT hypothesis, the concept of collective dose was recognised as useful. It was agreed however that a more precise explanation for the appropriate application of collective dose was needed in the new ICRP recommendations.

4. Dose constraint

There were a lot of questions and views regarding the concept of dose constraint. Questions were combined into two points: responsibility for setting the dose constraint figure and the effectiveness of prevention of occupational and public exposure, who and how to deal with the dose constraint concept. The responsibility for setting the dose constraint figure should depend on the right position for each state and each country. So, the ICRP should clearly state this in their recommendations. While on the one hand it was suggested that the Government is eligible to set dose constraints, on the other hand, industries stressed the importance for operators to maintain flexibility in order to achieve optimisation of radiation protection. It was shown that it is difficult to apply dose constraints to natural

sources and to workers who operate in several nuclear facilities. During the discussion, it was repeated that the ICRP suggests that the dose constraint concept is useful in order to approach the optimisation in the designing stage and the emergent situation.

Furthermore it is expected that consensus on international dose constraint will enhance stakeholder trust and be useful in the technical area. Some participants showed examples where the international peer review to radiation protection in power stations among the industries was effective. And the international effort was expected on the implementation radiation protection under the new ICRP recommendations.

REFERENCES

**Bibliography of CRPPH Publications
Concerning the Evolution of the System of Radiological Protection
(Available at www.nea.fr)**

OECD/NEA (2006), *The Process of Regulatory Authorisation*. A report by the CRPPH Expert Group on the Regulatory Application of Authorisation, OECD, Paris.

OECD/NEA (2005), *Evolution of the System of Radiological Protection*, Second Asian Regional Conference, Tokyo, Japan, 28-29 July 2004, OECD, Paris.

OECD/NEA (2005), *Optimisation in Operational Radiological Protection: A Report by the Working Group on Operational Radiological Protection of the Information System on Occupational Exposure*, OECD, Paris.

OECD/NEA (2004), *Future Policy for Radiological Protection: A Stakeholder Dialogue on the Implications of the ICRP Proposals*, Summary Report, Lanzarote, Spain, OECD, Paris.

OECD/NEA (2003), *Future Policy for Radiological Protection: Workshop Proceedings*, Lanzarote, Spain, 2-4 April 2003, OECD, Paris.

OECD/NEA (2003), *Possible Implications of Draft ICRP Recommendations*, OECD, Paris.

OECD/NEA (2003), *Proceedings of the Asian Regional Conference on the Evolution of the System of Radiological Protection*, Tokyo, Japan, 24-25 October 2002, OECD, Paris.

OECD/NEA (2003), *A New Approach to Authorisation in the Field of Radiological Protection: The Road Test Report*, prepared by R.V. Osborne and F.J. Turvey, OECD, Paris.

OECD/NEA (2003), *Radiological Protection of the Environment: Summary Report of the Issues*, OECD, Paris.

OECD/NEA (2003), *Radiological Protection of the Environment: The Path Forward to a New Policy?* Workshop Proceedings Taormina, Sicily, Italy, 12-14 February 2002, OECD, Paris.

OECD/NEA (2002), *The Way Forward in Radiological Protection*. An Expert Group Report, OECD, Paris

OECD/NEA (2000), *A Critical Review of the System of Radiation Protection*. First Reflections of the OECD Nuclear Energy Agency's Committee on Radiation Protection and Public Health, OECD, Paris.

Appendix 1

LIST OF PARTICIPANTS

AUSTRALIA

BURNS, Peter A.
Director
Environmental and Radiation Health Branch
Australian Radiation Protection and Nuclear Safety Agency (ARPANSA)
Lower Plenty Road
Yallambie, Victoria 3085

Tel: +61 3 9433 2335
Fax: +61 3 9432 1835
Eml: peter.burns@arpansa.gov.au

CHINA

LI, Xutong
Ph.D, Senior Permanent Research Fellow
Nuclear Safey and Radiation Center (SEPA)
Hongliannancun 54, Haidianqu
100088 Beijing

Tel: +86 10 82212544
Fax: +86 10 62257804
Eml: lixutong223@yahoo.com

PAN, Zi Qiang
Science and Technology Commission
China Atomic Energy Authority
P.O. Box 2102-14
100822 Beijing

Tel: +86 10 685 10 370
Fax: +86 10 685 39 375
Eml: zqpan@a-1.net.cn

XIA, Yihua
Dept of Health Physics
China Institute of Atomic Energy (CIAE)
P.O. Box 275-24
102413 Beijing

Tel: +86 (1069) 357 584
Fax: +86 (1069) 357 008
Eml: xiayh@iris.ciae.ac.cn

FRANCE

LOCHARD, Jacques
Directeur
The Nuclear Protection Evaluation Centre (CEPN)
Expansion 10000
28, rue de la Redoute
F-92260 Fontenay-aux-Roses

Tel: +33 1 55 52 19 40
Fax: +33 1 55 52 19 21
Eml: lochard@cepn.asso.fr

MÉIVIER, Henri
2, allé e des Hautes Futaies
F-91450 Soisy-sur-Seine

Tel: +(0)6 07 18 06 33
Eml: metivier.henri@wanadoo.fr

INDONESIA

TARYO, Taswanda
Director of Center for Dissemination of Nuclear and Science Technology
Indonesia National Nuclear Energy Agency (Batan)
Jalan Lebas Bulus Raya No. 49, Gedung Persatuan
Jakarta Selatan 12440

Tel: +62 21 765 9401 02
Fax: +62 21 7591 3833
Eml: ptrkn@batan.go.id

JAPAN

AKAHANE, Keiichi
Senior Researcher
National Institute of Radiological Sciences (NIRS)
4-9-1, Anagawa, Inage-ku,
Chiba 263-8555

Tel: +81 43 206 3064
Fax: +81 43 284 0918
Eml: akahane@nirs.go.jp

AKIMOTO, Seiichi
Counselling Expert
Japan Nuclear Energy Safety Organisation (JNES)
Tokyu Reit Toronomon Bildg.
3-17-1, Toranomon, Minato-ku
Tokyo 105-0001

Tel: +81 3 4511 1969
Fax: +81 3 4511 1998
Eml: akimoto-seiichi@jnes.go.jp

AMAYA, Takayuki
Safety Examiner, Office of Nuclear Regulation, Nuclear Safety Division
Ministry of Education, Culture, Sports and Technology (MEXT)
2-5-1, Marunouchi, Chiyoda-ku
Tokyo 100-8959

Tel: +81 3 6734 4035
Fax: +81 3 6734 4037
Eml: t-amaya@mext.go.jp

ANDO, Hideki
Director of Health and Safety Department
O-Arai Research and Development Centre
Japan Atomic Energy Agency (JAEA)
4002, Narita-cho, O-arai-machi, Higashiibaraki-gun
Ibaraki 311-1393

Tel: +81 29 267 4141
(ext. 5200)
Fax: +81 266 7475
Eml: ando.hideki@jaea.go.jp

AOKI, Hideto
Advisor
Japan Nuclear Energy Safety Organization (JNES)
3-17-1, Toranomon, Minato-ku
Tokyo 105-0001

Tel: +81 3 4511 1970
Fax: +81 3 4511 1998
Eml: aoki-hideto@jnes.go.jp

AOYAMA, Shin
Deputy Director-General for Nuclear Power
NISA/METI
1-3-1, Kasumigaseki, Chiyoda-ku
Tokyo 100-8986

Tel: +81 3 3501 5801
Fax: +81 3 3580 8570
Eml: aoyama-shin@meti.go.jp

AOYAMA, Yoshiko
Chief Consultant
Japan NUS Co., Ltd.
Loop-X Bldg. 7F, 3-9-15, Kaigan, Minato-ku
Tokyo 108-0022

Tel: +81 3 5440 1865
Fax: +81 3 5440 1869
Eml: uda@janus.co.jp

ARAI, Masaji
Officer for Nuclear Safety Review
Secretariat of the Nuclear Safety Commission, Radiation Protection
and Accident Management Division, Cabinet Office
3-1-1, Kasumigaseki, Chiyoda-ku
Tokyo 100-8970

Tel: +81 3 3581 9258
Fax: +81 3 3581 9839
Eml: masaji.arai@cao.go.jp

AWATSUJI, Yasuhiro
Deputy Director, Nuclear Safety Division
Ministry of Education, Culture, Sports and Technology (MEXT)
2-5-1, Marunouchi, Chiyoda-ku
Tokyo 100-8959

Tel: +81 3 6734 3957
Fax: +81 3 6734 3958
Eml: yawatsu@mext.go.jp

CHIBA, Yoshinori
Business Manager, Radiation Protection Center
Hitachi, Ltd. Nuclear Power System Division
2-2, Oomika-cho, 5-chome, Hitachi-shi
Ibaraki-ken 319-1221

Tel: +81 294 55 4919
Fax: +81 294 55 9891
Eml:
yoshinori.chiba.ys@hitachi.com

CHIKAMOTO, Kazuhiko
Unit Leader
Japan NUS Co., Ltd.
Loop-X Bldg. 7F, 3-9-15, Kaigan, Minato-ku
Tokyo 108-0022

Tel: +81 3 5440 1865
Fax: +81 3 5440 1869
Eml: chika@janus.co.jp

DE, Meng
Department of Nuclear Engineering
and Management School of Engineering
The University of Tokyo
2-11-16, Yayoi, Bunkyo-ku
Tokyo 113-0032

Tel: +81 3 5841 2915
Fax: +81 3 3813 2010
Eml: mou@n.t.u-tokyo.ac.jp

FUCHIGAMI, Keiko
Biotechnology Safety Division
Ministry of Agriculture, Forestry and Fisheries
1-2-1, Kasumigaseki, Chiyoda-ku
Tokyo 100-8950

Tel: +81 3 3501 3780
Fax: +81 3 3502 4028
Eml:
keiko_fuchigami@nm.maff.go.jp

FUJII, Katsutoshi
Office of Radiation Regulation
Ministry of Education, Culture, Sports and Technology (MEXT)
2-5-1, Marunouchi, Chiyoda-ku
Tokyo 100-8959

Tel: +81 3 6734 4045
Fax: +81 3 6734 4048
Eml: fujikatu@mext.go.jp

FUJIMOTO, Kenzo
Director
Research Centre for Radiation Emergency Medicine
National Institute of Radiological Sciences (NIRS)
9-1, Anagawa-4, Inage-ku
Chiba 263-8555

Tel: +81 43 206 3103
Fax: +81 43 206 4094
Eml: kenzofuj@nirs.go.jp

FUJIWARA, Saeko
Department Chief
Radiation Effects Research Foundation
5-2, Hijiyama Park, Minami-ku
Hiroshima 732-0815

Tel: +81 82 261 9122
Fax: +81 82 261 3259
Eml: fujiwara@rerf.or.jp

FUKUMOTO, Masahiro
Deputy Director for Nuclear Safety Review
Secretariat of the Nuclear Safety Commission, Radiation Protection
and Accident Management Division, Cabinet Office
3-1-1, Kasumigaseki, Chiyoda-ku
Tokyo 100-8970

Tel: +81 3 3581 9259
Fax: +81 3 3581 9839
Eml:
masahiro.fukumoto@cao.go.jp

FURUTA, Sadaaki
Deputy Director
Radiation Protection Department
Nuclear Fuel Cycle Engineering Laboratories
Tokai Research and Development Center
Japan Atomic Energy Agency (JAEA)
4-33, Muramatsu, Tokai-mura, Naka-gun
Ibaraki 319-1194

Tel: +81 29 282 1111(operator)
+81 29 282 1861(direct)
Fax: +81 29 282 1873
Eml: furuta.sadaaki@jaea.go.jp

GOMI, Kunihiro
Technical Counselor
Secretariat of the Nuclear Safety Commission
Cabinet Office
3-1-1, Kasumigaseki, Chiyoda-ku
Tokyo 100-8970

Tel: +81 3 3581 9948
Fax: +81 3 3581 9837
Eml: kunihiro.gomi@cao.go.jp

<p>HAO, Hu Department of Nuclear Engineering and Management School of Engineering The University of Tokyo 2-11-16, Yayoi, Bunkyo-ku Tokyo 113-0032</p>	<p>Tel: +81 3 5841 2915 Fax: +81 3 3813 2010 Eml: co-hiroshi@n.t.u-tokyo.ac.jp</p>
<p>HARA, Shintaro Unit Chief for Co-ordination Radioactive Waste Regulation Division Nuclear and Industrial Safety Agency (NISA) 1-3-1, Kasumigaseki, Chiyoda-ku Tokyo 100-8986</p>	<p>Tel: +81 3 3501 1948 Fax: +81 3 3501 6946 EML: hara-shintaro@meti.go.jp</p>
<p>HASHIMOTO, Makoto Japan Atomic Energy Agency (JAEA) 4002, Narita, O-Arai Ibaraki 311-1193</p>	<p>Tel: +81 29 267 4141 ext.5245 Fax: +81 29 267 4220 Eml: hashimoto.makoto@jaea.go.jp</p>
<p>HATTORI, Takatoshi Senior Research Scientist Central Research Institute of Electric Power Industry (CRIEPI) 2-11-1, Iwado-kita, Komae-shi Tokyo 201-8511</p>	<p>Tel: +81 3 3480 2111 Fax: +81 3 3480 2493 Eml: thattori@criepi.denken.or.jp</p>
<p>HAYASHIDA, Yoshihisa Senior Officer and Senior Researcher Japan Nuclear Energy Safety Organization (JNES) 3-17-1, Toranomon, Minato-ku Tokyo 105-0001</p>	<p>Tel: +81 3 4511 1953 Fax: +81 3 4511 1998 Eml: hayashida-yoshihisa@jnes.go.jp</p>
<p>HAYATA, Isamu Central Research Institute of Electric Power Industry (CRIEPI) 2-11-1, Iwado-kita, Komae-shi Tokyo 201-8511</p>	<p>Tel: +81 3 3480 2111 Fax: +81 3 3480 3113 Eml: i-hayata@criepi.denken.or.jp</p>
<p>HIDAKA, Tomonori Unit Chief, Office of Radiation Regulation Ministry of Education, Culture, Sports and Technology (MEXT) 2-5-1, Marunouchi, Chiyoda-ku Tokyo 100-8959</p>	<p>Tel: +81 3 6734 4045 Fax: +81 3 6734 4048 Eml: thidaka@mext.go.jp</p>
<p>HIGASHI, Kunio Deputy Chair Nuclear Safety Commission, Cabinet Office 3-1-1, Kasumigaseki, Chiyoda-ku Tokyo 100-8970</p>	<p>Tel: +81 3 3581 3470 Fax: +81 3 3581 3475 Eml: kunio.higashi@cao.go.jp</p>

HIGUCHI, Kiyotaka
Deputy Chief Central Expert Officer in Industrial Health
Organization of the Ministry of Health, Labour and Welfare
1-2-2, Kasumigaseki, Chiyoda-ku
Tokyo 100-8916

Tel: +81 3 3502 6756
Fax: +81 3 3502 1598
Eml:
higuchi-kiyotaka@mhw.go.jp

HIRANO, Shizuka
Officer for Nuclear Safety Review
Secretariat of the Nuclear Safety Commission, Radiation Protection
and Accident Management Division, Cabinet office
3-1-1, Kasumigaseki, Chiyoda-ku
Tokyo 100-8970

Tel: +81 3 3581 9258
Fax: +81 3 3581 9839
Eml: shizuka.hirano@cao.go.jp

HIROTA, Masahiro
National Institute of Radiological Science (NIRS)
4-9-1, Anagawa, Inage-ku
Chiba 263-8555

Tel: +81 43 206 3064
Fax: +81 43 284 0918
Eml: hirota@nirs.go.jp

HOMMA, Toshimitsu
Group Leader, Risk Analysis and Applications Reserch Group
Japan Atomic Energy Agency (JAEA)
2-4, Shirakata-shirane, Tokai-mura, Naka-gun
Ibaraki-ken 319-1195

Tel: +81 29 282 6862
Fax: +81 29 282 6147
Eml:
homma.toshimitsu@jaea.go.jp

HORIKAWA, Yoshihiko
General Manager
Kansai Electric Power Co., Inc.
13, Goichi, Mihama-cho, Mikata-gun
Fukui 919-1141

Tel: +81 770 32 3695
Fax: +81 770 32 3698
Eml: horikawa.yoshihiko
@a4.kepco.co.jp

HOSHI, Junichi
Deputy Director
Nuclear Safety Regulatory Standards Division
Nuclear and Industrial Safety Agency (NISA)
1-3-1, Kasumigaseki, Chiyoda-ku
Tokyo 100-8986

Tel: +81-3-3501-0621
Fax: +81-3-3580-5971
Eml: hoshi-junichi@meti.go.jp

HOSONO, Makoto
Professor
Kinki University Shool of Medicine
377-2, Ohno-Higashi, Osaka-Sayama
Osaka 589-8511

Tel: +81 72 366 0221
Fax: +81 72 368 2388
Eml: principle@mac.com

ICHIJI, Takeshi
Research Scientist
Central Research Institute of Electric Power Industry (CRIEPI)
2-11-1, Iwado-kita, Komae-shi
Tokyo 201-8511

Tel: +81 3 3480 2111
Fax: +81 3 3480 2493
Eml: ichiji@criepi.denken.or.jp

IMOTO, Takeshi
Research Associate, Department of Nuclear Engineering
and Management School of Engineering
The University of Tokyo
2-11-16, Yayoi, Bunkyo-ku
Tokyo 113-0032

Tel: +81 3 5841 2915
Fax: +81 3 3813 2010
Eml: iimoto@n.t.u-tokyo.ac.jp

IZUKA, Teruyoshi
Assistant Senior Manager, Nuclear Energy Field Department
Toshiba Corporation
8, Shinsugita-cho, Isogo-ku
Yokohama 235-8523

Tel: +81 45 770 2213
Fax: +81 45 770 2174
Eml:
teruyoshi.iizuka@toshiba.co.jp

INANOBE, Katsunori
Plant Management Department
The Japan Atomic Power Company
1-1, Kanda-Mitoshiro-cho, Chiyoda-ku
Tokyo 101-0053

Tel: +81 3 4415 6125
Fax: +81 3 4415 6191
Eml:
katsunori-inanobe@japc.co.jp

INOMATA, Ichiro
Group Manager, Radiation Safety
Tokyo Electric Power Company
1-1-3, Uchisaiwai-cho, 1-chome, Chiyoda-ku
Tokyo 100-0011

Tel: +81 3 4216 4971
Fax: +81 3 4216 4967
Eml: inomata.ichiro@tepco.co.jp

INOUE, Yasunori
Unit Chief
Ministry of Health, Labour and Welfare
1-2-2, Kasumigaseki, Chiyoda-ku
Tokyo 100-8916

Tel: +81 3 3595 2171
Fax: +81 3 3503 0183
Eml:
inoue-yasunori@mhlw.go.jp

ISHIDA, Kenji
Associate Vice-President
Central Research Institute of Electric Power Industry (CRIEPI)
2-11-1, Iwado-kita, Komae-shi
Tokyo 201-8511

Tel: +81 3 3480 2111
Fax: +81 3 3480 3113
Eml: ishida@criepi.denken.or.jp

ISHIGUCHI, Tsuneo
Professor
Aichi Medical University
21 Nagakute-cho, Aichi-gun

Tel: +81 561 62 3311
Fax: +81 561 63 3268
Eml: ishiguti@aichi-med-u.ac.jp

ISHIGURE, Nobuhito
Professor
School of Health Sciences, Nagoya University
1-1-20, Minami, Daiko, Higashi-ku
Nagoya 461-8673

Tel: +81 52 719 1548
Fax: +81 52 719 1506
Eml:
ishigure@met.nagoya-u.ac.jp

IWAI, Satoshi
Senior Research Advisor
Safety Policy Research Division
Mitsubishi Research Institute, Inc.
3-6, Otemachi 2-chome, Chiyoda-ku
Tokyo 100-8141

Tel: +81 3 3277 4505
Fax: +81 3 3277 3480
Eml: iwai@mri.co.jp

IWASAKI, Tamiko
5-18-7, Shinbashi, Minato-ku
Tokyo 105-0004

Tel: +81 3 5470 1986
Fax: +81 3 5470 1991
Eml: tiwa@nsra.or.jp

IWASAKI, Toshiyasu
Research Scientist
Central Research Institute of Electric Power Industry (CRIEPI)
2-11-1, Iwado-kita, Komae-shi
Tokyo 201-8511

Tel: +81 3 3480 2111
Fax: +81 3 3480 3113
Eml:
iwasakit@criepi.denken.or.jp

KAI, Michiaki
Professor
Department of Health Sciences
Oita University of Nursing and Health Sciences
2944-9, Megusuno, Notsuharu, Oita-gun
Oita-ken 870-1201

Tel: +81-97 586 4435
Fax: +81-97 586 4387
Eml: kai@oita-nhs.ac.jp

KANEKO, Masahito
Managing Director
Radiation Effects Association
1-9-16, Kajicho, Chiyoda-ku
Tokyo 101-0044

Tel: +81 3 5295 1781
Fax: +81 3 5295 1486
Eml: mkaneko@rea.or.jp

KASAI, Atsushi
(Former) Director of Laboratory
Japan Atomic Energy Institute
4-B-81, Gakusha-mura, Nagawa-machi
Nagano 386-0602

Tel: +81 268 68 4153
Fax: +81 268 68 4154
Eml: kasaiat@h7.dion.ne.jp

KATAOKA, Hideya
Japan Nuclear Energy Safety Organization (JNES)
3-17-1, Toranomon, Minato-ku
Tokyo 105-0001

Tel: +81 3 4511 1814
Fax: +81 3 4511 1898
Eml: kataoka-hideya@jnes.go.jp

KATAYAMA, Shoichiro
Secretary-General
Secretariat of the Nuclear Safety Commission,
Cabinet Office
3-1-1, Kasumigaseki, Chiyoda-ku
Tokyo 100-8970

Tel: +81 3 3581 0260
Fax: +81 3 3581 0260
Eml:
shoichiro.katayama@cao.go.jp

KATO, Masami
Japan Nuclear Energy Safety Organization (JNES)
3-17-1, Toranomon, Minato-ku
Tokyo 105-001

Tel: +81 3 4511 1790
Eml: kato-masami@jnes.go.jp

KATO, Takao
Director
Secretariat of the Nuclear Safety Commission
General Affairs Division, Cabinet office
3-1-1, Kasumigaseki, Chiyoda-ku
Tokyo 100-8970

Tel: +81 3 3581 3476
Fax: +81 3 3581 9835
Eml: takao.kato@cao.go.jp

KATOH, Kazuaki
Professor Emeritus
High Energy Accelerator Research Organization (KEK)
1318-1, Tsukuba
Tsukuba 300-4352

Tel: +81 29 850 8050
Fax: +81 29 850 8050
Eml: kk-riss@nifty.com

KAWAKAMI, Hiroto
Senior Counselor
Japan Nuclear Energy Safety Organization (JNES)
3-17-1, Toranomon, Minato-ku
Tokyo 105-001

Tel: +81 3 4511 1800
Fax: +81 3 4511 1898
Eml:
Kawakami-hiroto@jnes.go.jp

KAWAKAMI, Yutaka
Technical Consultant
Nuclear Safety Research Association
5-18-7, Shinbashi, Minato-ku
Tokyo 105-0004

Tel: +81 3 5470 1983
Fax: +81 3 5470 1989
Eml: ykawakami@nsra.or.jp

KAWASAKI, Masatsugu
Japan Atomic Energy Agency (JAEA)
2-4, Shirakata-shirane, Tokai-mura, Naka-gun
Ibaraki 319-1195

Tel: +81 29 282 5183
Fax: +81 29 282 5183
Eml:
kawasaki.masatsugu@jaea.go.jp

KAWATA, Yosuke
Mitsubishi Materials Corporation
1-297, Kitabukuro-tyo, Ohmiya-ku
Saitama-shi
Saitama-ken 330-8508

Tel: +81 48 641 5696
Fax: +81 48 641 5654
Eml: kawata@mmp.co.jp

KIKUCHI, Toru
Radiation Protection Supervisor
Jichi Medical School
3311-1, Yakuchiji, Shimotuke-chi
Tochigi 329-0498

Tel: +81 285 58 7062
Fax: +81 285 40 8481
Eml: tkikuchi@jichi.ac.jp

KIMURA, Masanori
Risk Analysis and Applications Research Group
Nuclear Safety Research Center
Japan Atomic Energy Agency (JAEA)
Tokai-mura 2-4, Naka-gun
Ibaraki 319-1195

Tel: +81 29 282 5459
Fax: +81 29 282 6147
Eml:
kimura.masanori@jaea.go.jp

KIRYU, Yasuo
Director for Radiation Protection Policy
Ministry of Education, Culture, Sports, Science and Technology (MEXT)
2-5-1, Marunouchi, Chiyoda-ku
Tokyo 100-8959

Tel: +81 3 6734 4045
Fax: +81 3 6734 4048
Eml: ykiryu@mext.go.jp

KIUCHI, Shigeaki
Planning Manager
Radiation Effects Association
1-9-16, Kaji-cho, Chiyoda-ku,
Tokyo 101-0044

Tel: +81 3 5295 1483
Fax: +81 3 5295 1486
Eml: kiuchi@rea.or.jp

KO, Susumu
Postdoctoral fellow
National Institute of Radiological Sciences (NIRS)
4-9-1, Anagawa, Inage-ku
Chiba 263-8555

Tel: +81 43 206 3064
Fax: +81 43 284 0918
Eml: ssmko@nirs.go.jp

KOBAYASHI, Hirohide
General Manager
Japan Atomic Energy Agency (JAEA)
Nuclear Fuel Cycle Engineering Laboratories
Radiation Protection Department
4-33, Tokai-mura, Naka-gun
Ibaraki 319-1194

Tel: +81 29 282 1111
Fax: +81 29 282 9966
Eml:
kobayashi.hirohide@jaea.go.jp

KOBAYASHI, Sadayoshi
Deputy Director
Radiation Effects Association
Maruishi-Daini B1dg.
1-9-16, Kaji-cho, Chiyoda-ku
Tokyo 101-0044

Tel: +81 3 5295 1492
Fax: +81 3 5295 1485
Eml: skobaya@rea.or.jp

KODAMA, Kazunori
Chief Scientist, Chief, Department of Epidemiology
Radiation Effects Research Foundation
5-2, Hijiyama Park, Minami-ku
Hiroshima 732-0815

Tel: +81 82 261 4723
Fax: +81 82 262 9768
Eml: kodama@rerp.or.jp

KOMORI, Akio
Director
Nuclear Power Plant Management Department (TEPCO)
1-3, Uchisaiwai-cho, 1-chome, Chiyoda-ku
Tokyo 100-8560

Tel: +81 3 4216 1111 (4801)
Eml: komori.akio@tepc.co.jp

KOSAKO, Toshiso
Professor
Nuclear Professional School, Post-graduate Course, School of Engineering,
University of Tokyo
2-22, Shirakata-shirane, Tokai-mura
Ibaraki

Tel: +81 29 287 8441
Fax: +81 29 287 8438
Eml: kosako@nuclear.jp

KUBA, Michiyoshi
Managing Director
Radiation Effects Association
1-9-16, Kaji-cho, Chiyoda-ku
Tokyo 101-0044

Tel: +81 3 5295 1781
Fax: +81 3 5295 1486
Eml: mkuba@numo.or.jp

KUNIYOSHI, Hiroshi
Director
Secretariat of the Nuclear Safety Commission, Radiation Protection
and Accident Management Division, Cabinet Office
3-1-1, Kasumigaseki, Chiyoda-ku
Tokyo 100-8970

Tel: +81 3 3581 3478
Fax: +81 3 3581 9839
Eml:
hiroshi.kuniyoshi@cao.go.jp

KUROKI, Noriko
Research and Planning Department
Nuclear Safety Research Association
5-18-7, Shinbashi, Minato-ku
Tokyo 105-0004

Tel: +81 3 5470 1986
Fax: +81 3 5470 1991
Eml: kuroki@nsra.or.jp

KUROTAKI, Katsumi
General Manager
Radiation Effects Association,
Maruishi-Daini Bldg 5F
1-9-16, Kaji-cho, Chiyoda-ku
Tokyo 101-0044

Tel: +81 3 5295 1484
Fax: +81 3 5295 1485
Eml: kurotaki@rea.or.jp

KUSAMA, Keiji
Manager, Radiation Protection Section
Japan Radioisotope Association
28-45, Honkomagome, 2-chome, Bunkyo-ku
Tokyo 113-8941

Tel: +81 3 5395 8084
Fax: +81 3 5395 8054
Eml: kusama@jriias.or.jp

KUSUMI, Shizuyo
Commissioner
Nuclear Safety Commission, Cabinet office
3-1-1, Kasumigaseki, Chiyoda-ku
Tokyo 100-8970

Tel: +81 3 3581 3470
Fax: +81 3 3581 3475
Eml: shizuyo.kusumi@cao.go.jp

MARUYAMA, Takashi
Ph.D /Honorary Scientist
National Institute of Radiological Sciences (NIRS)
9-1, Anagawa-4, Inage-ku
Chiba 263-8555

Tel: +81 43 206 3064
Fax: +81 43 284 0918
Eml: t_maru@fml.nirs.go.jp

MATSUDAIRA, Hiromichi
Advisor
Radiation Effects Association
Maruishi-Daini Bldg. 5F
1-9-16, Kaji-cho, Chiyoda-ku
Tokyo 101-0044

Tel: +81 471 58 1409
Fax: +81 471 58 1409
Eml: koshoji@ka2.koalanet.ne.jp

MIKAJIRI, Motohiko
General Manager
Radiation Effects Association
Maruishi-Daini Bldg. 5F
1-9-16, Kaji-cho, Chiyoda-ku
Tokyo 101-0044

Tel: +81 3 5295 1498
Fax: +81 3 5295 1485
Eml: mikajiri@rea.or.jp

MISUMI, Takashi
Managing Director
Radiation Effects Association
1-9-16, Kaji-cho, Chiyoda-ku
Tokyo 101-0044

Tel: +81 3 5295 1783
Fax: +81 3 5295 1485
Eml: tmisumi@rea.or.jp

MITANI, Shunji
Counseling Expert
Japan Nuclear Energy Safety Organization (JNES)
3-17-1, Toranomon, Minato-ku
Tokyo 105-001

Tel: +81 3 4511 1957
Fax: +81 3 4511 1998
Eml: mitani-shinji@jnes.go.jp

MIYAMARU, Kunio
General Manager
Nuclear Power Division
Tokyo Electric Power Environmental Engineering Co.
6-14, 4-chome, Shibaura, Minato-ku
Tokyo

Tel: +81 3 4511 7650
Fax: +81 3 3452 4730
Eml:
miyamaru-k@mail.tee-kk.co.jp

MIYAWAKI, Yutaka
Official for Subsequent Regulation Review
Secretariat of the Nuclear Safety Commission
Subsequent Regulation Review Division, Cabinet Office
3-1-1, Kasumigaseki, Chiyoda-ku
Tokyo 100-8970

Tel: +81 3 3581 9842
Fax: +81 3 3581 9837
Eml:
yutaka.miyawaki@cao.go.jp

MIYAZAKI, Shinichiro
Manager
Kansai Electric Power Co.
3-6-16, Nakanoshima, Kita-ku
Osaka 530-8270

Tel: +81 80 5303 7740
Fax: +81 6 6443 2659
Eml: miyazaki.shinichiro
@e5.kepco.co.jp

MIZUNO, Shoichi
Researcher
Tokyo Metropolitan Institute of Gerontology
35-2, Sakae-cho, Itabashi-ku
Tokyo 173-0015

Tel: +81 3 3964 3241.Ext 3153
Fax: +81 3 3579 4776
Eml: smizuno@tmig.or.jp

MORIMYOU, Mitsuoki
Research Councilor
Radiation Effects Association
Maruishi-Daini Bldg. 5F
1-9-16, Kaji-cho, Chiyoda-ku
Tokyo 101-0044

Tel: +81 3 5295 1484
Fax: +81 3 5295 1485
Eml: morimyou@rea.or.jp

MUKAIDA, Naoki
Radiation Safety Nuclear Power Engineering,
Quality and Safety Management
Tokyo Electric Power Company
1-3, Uchisaiwai-cho, 1-chome, Chiyoda-ku
Tokyo 100-8560

Tel: +81 3 4216 4975(direct)
+81 3 4216 1111
Fax: +81 3 4216 4967
Eml: mukaida.naoki@tepcō.co.jp

MURAKAMI, Hiroyuki
Japan Atomic Energy Agency (JAEA)
2-4, Shirakata, Tokai-mura,
Ibaraki 319-1195

Tel: +81 29 282 5876
Fax: +81 29 282 6063
Eml:
murakami.hiroyuki@jaea.go.jp

MURAKAMI, Takashi
Kyushu Electric Power Co., Inc.
2-1-82, Watanabe-dori, Chuo-ku
Fukuoka 810-8720

Tel: +81-092-726-1558
Eml: takashi_c_murakami
@kyuden.ne.jp

MUTO, Sakae
Deputy Chief Nuclear Officer
Tokyo Electric Power Company
1-3, Uchisaiwai-cho, 1-chome, Chiyoda-ku
Tokyo 100-0011

Tel: +81 3 4216 1111
Fax: +81 3 3596 8538
Eml: muto.sakae@tepc.co.jp

NAGATAKI, Shigenobu
Executive Director
Japan Radioisotope Association
2-28-45, Honkomagome, Bunkyo-ku
Tokyo 113-8941

Tel: +81 3 5395 8021
Fax: +81 3 5395 8051
Eml: nagataki@jriias.or.jp

NAKAGAMI, Motonori
Manager
Chubu Electric Power Co., Inc.
1, Toshin-cho, Higashi-ku
Nagoya 461-8680

Tel: +81 70 6588 9731
Fax: +81 52 973 3176
Eml: nakagami.motonori
@chuden.co.jp

NAKAGIRI, Shigeru
Commissioner
Nuclear Safety Commission, Cabinet Office
3-1-1, Kasumigaseki, Chiyoda-ku
Tokyo 100-8970

Tel: +81 3 3581 3470
Fax: +81 3 3581 3475
Eml: shigeru.nakagiri@cao.go.jp

NAKAI, Kunihiro
JGC Corporation
2-3-1, Minato Mirai, Nishi-ku
Yokohama 220-6001

Tel: +81 45 682 8385
Fax: +81 45 682 8812
Eml: nakai.kunihiro@jgc.co.jp

NAKAMURA, Koichiro
Director
Nuclear Safety Regulatory Standards Division
Nuclear and Industrial Safety Agency (METI)
1-3-1, Kasumigaseki, Chiyoda-ku
Tokyo 100-8986

Tel: +81 3 3501 0621
Fax: +81 3 3580-5971
Eml:
nakamura-koichiro1@meti.go.jp

NAKAMURA, Takashi
Professor Emeritus and Visiting Professor
Cyclotron and Radioisotope Centre
Tohoku University
6-3, Aoba, Aramaki, Aobaku, Sendai
Miyagi 980-8578

Tel: +81 22 795 7800
Fax: +81 22 795 3485
Eml:
nakamura@cyric.tohoku.ac.jp

NIWA, Ohtsura
Professor
Radiation Biology Centre, Kyoto University
Yoshida Konoe-cho, Sakyo-ku
Kyoto 606-8501

Tel: +81 75 753 7563
Fax: +81 75 753 7564
Eml:
oniwa@house.rbc.kyoto-u.ac.jp

NOGUCHI, Hiroshi
Deputy Director, Safety Administration Department
Japan Atomic Energy Agency (JAEA)
Muramatsu 4-49, Tokai-mura, Naka-gun
Ibaraki-ken 319-1184

Tel: +81 29 282 1122
Fax: +81 29 282 4921
Eml: noguchi.hiroshi@jaea.go.jp

NOMURA, Masashi
Radiological & Environmental Protection Group Manager
Japan Atomic Power Company
Mitoshiro Bldg.
1-1, Kanda-Mitoshiro-Cho, Chiyoda-ku
Tokyo 101-0053

Tel: +81 3 4415 6121
Fax: +81 3 4415 6191
Eml:
masashi-nomura@japc.co.jp

NUMAKUNAI, Takao
General Advisor
Institute of Radiation Measurements
2-4, Shirakata Shirane, Tokai-mura, Naka-gun
Ibaraki-ken 319-1184

Tel: +81 29 282 5546
Fax: +81 29 283 2157
Eml: t.numakunai@irm.or.jp

ODA, Keiji
Professor, Division of Environmental Energy Science
Faculty of Maritime Sciences, Kobe University
5-1-1, Fukaeminami-machi, Higashinada-ku
Kobe-shi
Hyogo-ken 658-0022

Tel: +81 78 431 6304
Fax: +81 78 431 6304
Eml: oda@maritime.kobe-u.ac.jp

ODA, Kimihiko
Director-General
Science and Technology Policy Bureau
Ministry of Education, Culture, Sports, Sciences and Technology (MEXT)
2-5-1, Marunouchi, Chiyoda-ku
Tokyo 100-8959

Tel: +81 6734 4000
Fax: +81 6734 4008
Eml: koda@mext.go.jp

OGISO, Zen-ichi
Principal Staff
Japan Nuclear Energy Safety Organization (JNES)
3-17-1, Toranomon, Minato-ku
Tokyo 105-0001

Tel: +81 3 4511 1710
Fax: +81 3 4511 1898
Eml: ogiso-zenichi@jnes.go.jp

OGIU, Toshiaki
M.D., Ph.D., Guest Researcher
National Institute of Radiological Sciences (NIRS)
4-9-1, Anagawa, Inage-ku
Chiba 263-8555

Tel: +81 3 5295 1489
Fax: +81 3 5295 1485
Eml: ogiu@rea.or.jp

OHKURA, Takehisa
Japan Atomic Energy Agency (JAEA)
2-4, Shirakata-shirane, Tokai-mura, Naka-gun
Ibaraki-ken 319-1195

Tel: +81 29 282 6351
Eml: ohkura.takehisa@jaea.go.jp

OHNO, Kazuko
Instructor,
Aichi Medical University Hospital
Nagakute-cho 21, Aichi-gun
Aichi-ken

Tel: +81 561 62 3311
Eml: kakochan@aichi-med-u.ac.jp

OISHI, Tetsuya
Japan Atomic Energy Agency (JAEA)
2-4, Shirakata-shirane, Tokai-mura, Naka-gun
Ibaraki-ken 319-1195

Tel: +81 29 282 5196
Fax: +81 29 282 5197
Eml: ohishi.tetsuya@jaea.go.jp

OKUBO, Toshiteru
Chairman
Radiation Effects Research Foundation
5-2, Hijiyama Park, Minami-ku
Hiroshima 732-0815

Tel: +81 82 261 3131
Fax: +81 82 263 7279
Eml: okubo@rerp.or.jp

PINAK, Miroslav
Eng., Ph.D./Principal Scientist
Japan Atomic Energy Agency (JAEA)
2-4, Shirakata-shirane, Tokai-mura, Naka-gun
Ibaraki-ken 319-1195

Tel: +81 29 284 3739
Fax: +81 29 282 6768
Eml: miroslav.pinak@jaea.go.jp

SAIGUSA, Shin
Technical Counsellor
Secretariat of the Nuclear Safety Commission
Cabinet Office
3-1-1, Kasumigaseki, Chiyoda-ku
Tokyo 100-8970

Tel: +81 3 3581 9258
Fax: +81 3 3581 9839
Eml: shin.saigusa@cao.go.jp

SAKAI, Kazuo
Director, Research Centre for Radiation Protection
National Institute of Radiological Sciences (NIRS)
4-9-1, Anagawa, Inage-ku
Chiba 263-8555

Tel: +81 43 206 6290
Fax: +81 43 206 4134
Eml: kazsakai@nirs.go.jp

SAKAI, Yasuhito
Vice-President, Professor of Graduate School
2600-1, Kita-Kanemaru, Otawara City
Tochigi 324-8501

Tel: +81 287 24 3000
Fax: +81 287 24 3120
Eml: ysasaki@iuhw.ac.jp

SATO, Shunsuke
Unit Chief
Ministry of Education, Culture, Sports, Sciences and Technology (MEXT)
2-5-1, Marunouchi, Chiyoda-ku
Tokyo 100-8959

Tel: +81 3 6734 4161
Fax: +81 3 6734 4162
Eml: ssato@mext.go.jp

SATO, Kaoru
Scientist
Japan Atomic Energy Agency (JAEA)
2-4, Shirakata-Shirane, Tokai-mura, Naka-gun
Ibaraki 319-1195

Tel: +81 29 282 5195
Fax: +81 29 282 6768
Eml: sato.kaoru@jaea.go.jp

SATO, Hideharu
General Manager
Research and Planning Department
Nuclear Safety Research Association
5-18-7, Shinbashi, Minato-ku
Tokyo 105-0004

Tel: +81 03 5470 1986
Fax: +81 3 5470 1991
Eml: hsato@nsra.or.jp

SHIBATA, Masahiro
Director, Office of International Relations
Nuclear Safety Division, Science and Technology Policy Bureau (MEXT)
2-5-1, Marunouchi, Chiyoda-ku
Tokyo 100-8959

Tel: +81 3 6734 3901
Fax: +81 3 6734 4027
Eml: shibata@mext.go.jp

SHIGEIRI, Yoshiharu
Deputy Director
Secretariat of the Nuclear Safety Commission
3-1-1, Kasumigaseki, Chiyoda-ku
Tokyo 100-8970

Tel: +81 3 3581 0021(ext 44777)
Fax: +81 3 3581 9839
Eml:
yoshiharu.shigeiri@cao.go.jp

SHIGEMATSU, Itsuzo
Consultant Emeritus
Radiation Effects Research Foundation
5-2, Hijiyama Park, Minami-ku
Hiroshima 732-0815

Tel: +81 3 5729 1855
Fax: +81 3 5729 1855
Eml: ishibe@rerp.or.jp

SHIOTSUKI, Keiko
Manager, Training Section
Japan Radioisotope Association
28-45, Honkomagome, 2-chome, Bunkyou-ku
Tokyo 113-8941

Tel: +81 3 5395 8083
Fax: +81 3 5395 8053
Eml: shiotsuki@jriias.or.jp

SODA, Kunihisa
Commissioner
Nuclear Safety Commission, Cabinet Office
3-1-1, Kasumigaseki, Chiyoda-ku
Tokyo 100-8970

Tel: +81 3 3581 3470
Fax: +81 3 3581 3475
Eml: kunihisa.soda@cao.go.jp

SOHN, Sang-Kyeong
The University of Tokyo
Yayoi, Bunkyo-ku
Tokyo

Tel: +81 3 5841 2905
Eml:
sang-kyeong@n.t.u-tokyo.ac.jp

SUGIURA, Nobuyuki
Associate Professor
Kinki University
3-4-1, Kowakae, Higashi-Osaka
Osaka 577-8502

Tel: +81 6 6721 2332 ext.4429
Fax: +81 6 6721 3743
Eml: nsugiura@kindai.ac.jp

SUZUKI, Gen
Director
Department Environment. Health
National Institute of Public Health
2-3-6, Minami, Wako city
Saitama 351-0197

Tel: +81 48 458 6254
Fax: +81 48 458 6255
Eml: gsuzuki@niph.go.jp

SUZUKI, Kyu
The Kansai Electric Power Co., Inc.
8 Yokota 13, Goichi, Mihamachi, Mikata-gun
Fukui 919-1141

Tel: +81 770 32 3696
Fax: +81 770 32 3698
Eml:
suzuki.kyuu@d5.kepco.co.jp

SUZUKI, Atsuyuki
Committee Chairperson
Nuclear Safety Commission, Cabinet Office
3-1-1, Kasumigaseki, Chiyoda-ku
Tokyo 100-8970

Tel: +81 3 3581 3470
Fax: +81 3 3581 3475
Eml: atsuyuki.suzuki@cao.go.jp

SUZUKI, Akira
Manager of Safety Technology Office
Japan Nuclear Fuel Limited
4-108, Okitsuke, Obuchi, Rokkasho-mura
Aomori-ken 039-3212

Tel: +81 175 71 2392
Fax: +81 175 71 2071
Eml: akira.suzuki@jnfl.co.jp

SUZUKI, Yasuyuki
Specialist Atomic Energy, Nuclear Safety Division
Science and Technology Policy Bureau
Ministry of Education, Culture, Sports and Technology (MEXT)
2-5-1, Marunouchi, Chiyoda-ku
Tokyo 100-8959

Tel: +81 3 6734 4161
Fax: +81 3 6734 4162
Eml: yasuszk@mext.go.jp

TACHIKAWA, Hirokazu
Nuclear Safety Research Association
5-18-7, Shinbashi, Minato-ku
Tokyo 105-0004

Tel: +81 3 5470 1986
Fax: +81 3 5470 1991
Eml: tachikawa@nsra.or.jp

TADA, Junichiro
Safety Officer
Spring-8, 1-1 Khoto, Sayo-mura, Sayo-gun
Hyogo-ken 679-5198

Tel: +81 791 0874
Fax: +81 791 0932
Eml: tada@spring8.or.jp

TAKAHASHI, Fumiaki
Japan Atomic Energy Agency (JAEA)
Shirakata 2-4, Tokai-mura
Ibaraki-ken 319-1195

Tel: +81 29 282 5803
Fax: +81 29 282 6768
Eml:
takahashi.fumiaki@jaea.go.jp

TAKANO, Atsuko
International Affairs and Research Department
Nuclear Safety Research Association
5-18-7, Shinbashi, Minato-ku
Tokyo 105-0004

Tel: +81 3 5470 1983
Fax: +81 3 5470 1989
Eml: takano@nsra.or.jp

TAKASAKI, Koji
Deputy General Manager
Japan Atomic Energy Agency (JAEA)
4-33, Muramatsu, Tokai-mura, Naka-gun
Ibaraki 319-1194

Tel: +81 29 282 1111
Fax: +81 29 282 2033
Eml: takasaki.koji@jaea.go.jp

TAKEDA, Norimasa
Deputy Director
Secretariat of the Nuclear Safety Commission, Radiation Protection
and Accident Management Division, Cabinet Office
3-1-1, Kasumigaseki, Chiyoda-ku
Tokyo 100-8970

Tel: +81 3 3581 9256
Fax: +81 3 3581 9839
Eml: norimasa.takeda@cao.go.jp

TATENO, Yukio
4-11-2, Sodegaura, Narasino-shi
Chiba 275-0021

Tel: +81 47 453 2475
Fax: +81 47 453 0256
Eml: yukio.tateno@nifty.com

TATSUMI, Kouichi
Director, Institute of Radiation Epidemiology
Radiological Effects
Maruishi-Daini Bldg. 5F
1-9-16, Kaji-cho, Chiyoda-ku
Tokyo 101-0044

Tel: +81 3 5295 1491
Fax: +81 3 5295 1485
Eml: tatsumi@rea.or.jp

TOYOSHIMA, Naoyuki
Manager, Radiation Protection Group
Nuclear Power Operation Department
Kyushu Electric Power Co., Inc.
2-1-82, Watanabe-dori, Chuo-ku
Fukuoka 817-8720

Tel: +81 92 726 1558
Eml:
naoyuki_toyoshima@kyuden.co.jp

UEKI, Tsutomu
Director, Nuclear Safety Division
Science and Technology Policy Bureau
Ministry of Education, Culture, Sports and Technology (MEXT)
2-5-1, Marunouchi, Chiyoda-ku
Tokyo 100-8959

Tel: +81 3 6734 3900
Fax: +81 3 6734 4027
Eml: ueki@mext.go.jp

UMEZAWA, Hirokazu
Technical Counsellor
Secretariat of the Nuclear Safety Commission
Cabinet Office
3-1-1, Kasumigaseki, Chiyoda-ku
Tokyo 100-8970

Tel: +81 3 3581 9259
Fax: +81 3 3581 9839
Eml:
hirokazu.umezawa@cao.go.jp

URABE, Itsunasa
Fukuyama University
Gakuen-cho 1, Fukuyama-shi
Hiroshima 729-0292

Tel: +81 84 936 2112 ex.4142
Fax: +81 84 936 2023
Eml:
urabe@fuee.fukuyama-u.ac.jp

WADA, Shigeyuki
Senior officer
Japan Nuclear Energy Safety Organization (JNES)
3-17-1, Toranomon, Minato-ku
Tokyo 105-001

Tel: +81 3 4511 1966
Fax: +81 3 4511 1998
Eml: wada-shigeyuki@jnes.go.jp

WAGATSUMA, Makoto
Japan Nuclear Fuel Limited
4-108, Aza Okitsuke, Oaza Obuchi, Rokkasho-mura, Kamikita-gun
Aomori-ken 039-3212

Tel: +81 175 71 2000
Eml:
makoto.wagatsuma@jnfl.co.jp

WAKASUGI, Kazuhiko
Technical Counsellor
Secretariat of the Nuclear Safety Commission
Cabinet Office
3-1-1, Kasumigaseki, Chiyoda-ku
Tokyo 100-8970

Tel: +81 3 3581 9842
Fax: +81 3 3581 9837
Eml:
kazuhiro.wakasugi@cao.go.jp

YAMAGUCHI, Ichiro
Senior Research Officer
National Institute of Public Health
2-3-6, Minami, Wako city
Saitama 351-0197

Tel: +81 48 458 6259
Fax: +81 48 458 6270
Eml: drhyama@niph.go.jp

YAMAGUCHI, Yasuhiro
Deputy Director
Department of Radiation Protection
Japan Atomic Energy Agency (JAEA)
Tokai-mura, Naka-gun
Ibaraki 319-1195

Tel: +81 29 282 5205
Fax: +81 29 282 6063
Eml:
yamaguchi.yasuhiro@jaea.go.jp

YAMAMOTO, Masafumi
Chief Project Manager, Safety Requirement Research Project
Radioactive Waste Management Funding and Research Centre
15 Mori Bldg.
2-8-10, Toranomon, Minato-ku
Tokyo 105-0001

Tel: +81 3 3504 1537
Fax: +81 3 3504 1297
Eml: m_yama@rwmc.or.jp

YAMAMOTO, Hideaki
Japan Atomic Energy Agency (JAEA)
Tokai-mura, Naka-gun
Ibaraki-ken 319-1195

Tel: +81 29 282 6459
Fax: +81 29 282 6063
Eml:
yamamoto.hideaki@jaea.go.jp

YAMANAKA, Takeshi
Senior Researcher, Safety Standard Division
Japan Nuclear Energy Safety Organization (JNES)
Tokyu Reit Toranomon Bldg.
3-17-1, Toranomon, Minato-ku
Tokyo 105-0001

Tel: +81 3 4511 1804
Fax: +81 3 4511 1898
Eml:
yamanaka-takeshi@jnes.go.jp

YAMASOTO, Koutaro
Japan Atomic Energy Agency (JAEA)
Tokai-mura, Naka-gun
Ibaraki 319-1195

Tel: +81 29 282 5183
Fax: +81 29 282 5183
Eml:
yamasoto.kotaro@jaea.go.jp

YASUDA, Takashi
The Kansai Electric Power Co., Inc.
8 Yokota, 13 Goichi, Mihamachi, Mikata-gun
Fukui 919-1141

Tel: +81 770 32 3697
Fax: +81 770 32 3698
Eml:
yasuda.takashi@d3.kepco.co.jp

YODA, Norihiko
Director-General
Tokyo Quarantine Station
Ministry of Health, Labour and Welfare
2-56, Aomi, Koto-ku
Tokyo 135-0064

Tel: +81 3 3599 1511
Fax: +81 3 5530 2151
Eml:
yoda-norihiko@keneki.go.jp

YOKOYAMA, Hayaichi
Associate Vice-President, Director
Nuclear Technology Research Laboratory
Central Research Institute of Electric Power Industry (CRIEPI)
2-11-1, Iwado-kita, Komae-shi
Tokyo 201-8511

Tel: +81 334802111 ext: 0942
Fax: +81 3 3480 7950
Eml:
hayaichi@criepi.denken.or.jp

YONEHARA, Hidenori
Team Leader
National Institute of Radiological Sciences (NIRS)
4-9-1, Anagawa, Inage-ku
Chiba 263-8555

Tel: +81 43 206 3099
Fax: +81 43 206 4097
Eml: yonehara@nirs.go.jp

YONEKURA, Yoshiharu
President
National Institute of Radiation Sciences (NIRS)
4-9-1, Anagawa, Inage-ku
Chiba 263-8555

Tel: +81 43 206 3000
Fax: +81 43 206 3271
Eml: yonekura@nirs.go.jp

YOSHIDA, Kazuo
Central Research Institute of Electric Power Industry (CRIEPI)
2-11-1, Iwado-kita, Komae-shi
Tokyo 201-8511

Tel: +81 3 3480 2111 ext.1330
Eml: kazu@criepi.denken.or.jp

YOSHIZAWA, Michio
General Manager
Japan Atomic Energy Agency (JAEA)
Shirakata-Shirane 2-4, Tokai, Naka-gun
Ibaraki 319-1195

Tel: +81 29 282 5200
Fax: +81 29 282 6063
Eml:
yoshizawa.michio@jaea.go.jp

KOREA (REPUBLIC OF)

CHOI, Ho-Sin
Director
Radiation Safety Regulation Division
Korea Institute of Nuclear Safety (KINS)
P.O. Box 114
Yuseong
Daejeon 305-600

Tel: +82 42 868 0289
Fax: +82 42 862 3680
Eml: hschoi@kins.re.kr

JUNG, Kyu-Hwan
Senior Researcher, Principal Engineer
Radiation & Waste Safety Evaluation Department of KINS
Korea Institute of Nuclear Safety
19 Guseong-dong, Yuseong
Taejeon 305-338

Tel: +82 42 868 0658
+82 42 868 0061
Fax: 042 868 0531
Eml: jkhwan@kins.re.kr

LEE, Jaiki
Hanyang University
Nuclear Engineering Department
17 Hangdang, Seongdong
Seoul

Tel: +82 2 2220 0466
Fax: +82 2 2292 9855
Eml: jklee@rrl.hanyang.ac.kr

LIM, Byoung-chan
Manager
Radiation Health Research Institute
388-1 Sangmun-dong, Dobong-gu
Seoul

Tel: +82 2 3499 6612
Fax: +82 2 3499 6699
Eml: imbycha@khnp.co.kr

INTERNATIONAL ORGANISATIONS

INTERNATIONAL ATOMIC ENERGY AGENCY (IAEA)

MASON, Ches
Radiation Safety Section
Division of Radiation and Waste Safety
Department of Nuclear Safety
IAEA
Wagramerstrasse 5, P.O. Box 100
A-1400 Vienna

Tel: +43 1 2060 22719 or 22736
Fax: +43 1 20607
Eml: c.mason@iaea.org

INTERNATIONAL COMMISSION ON RADIOLOGICAL PROTECTION (ICRP)

HOLM, Lars-Eric
Director-General
Swedish Radiation Protection Authority
SE-171 16 Stockholm

Tel: +46 8 72 97 110
Fax: +46 8 72 97 108
Eml: lars.erik.holm@ssi.se

OECD NUCLEAR ENERGY AGENCY (OECD/NEA)

Le Seine-St. Germain
12, Boulevard des Îles
F-92130 Issy-les-Moulineaux
France

MARCUS, Gail H.
Deputy Director-General

Tel: +33 (0)1 45 24 10 02
Fax: +33 (0)1 45 24 11 10
Eml: gail.marcus@oecd.org

RIOTTE, Hans
Head
Radiation Protection and Waste Management Division

Tel: +33(0)1 45 24 10 40
Fax: +33(0)1 45 24 11 10
Eml: hans.riotte@oecd.org

LAZO, Edward
Principal Administrator
Radiation Protection and Waste Management Division

Tel: +33 (0)1 45 24 10 42
Fax: +33 (0)1 45 24 11 10
Eml: lazo@nea.fr

ICHIHARA, Yoshiko
Radiation Protection and Waste Management Division

Tel: +33 (0)1 45 24 11 41
Fax: +33 (0)1 45 24 11 45
Eml:
yoshiko.ichihara@oecd.org

WORLD NUCLEAR ASSOCIATION (WNA)

SAINT-PIERRE, Sylvain
Director for Environment and Radiological Protection
World Nuclear Association
Carlton House
22a St. James's Square
London, W4 1EN

Tel: +44(0)20 7451 1539
Fax: +44(0)20 7839 1501
Eml:
saintpierre@world-nuclear.org

Appendix 2

LIST OF SPEAKERS

AUSTRALIA

BURNS, Peter A.
Director
Environmental & Radiation Health Branch
Australian Radiation Protection and Nuclear Safety Agency (ARPANSA)
Lower Plenty Road
Yallambie, Victoria 3085

Tel: +61 3 9433 2335
Fax: +61 3 9432 1835
Eml:
peter.burns@arpansa.gov.au

CHINA

PAN, Zi Qiang
Science and Technology Commission
China Atomic Energy Authority
P.O. Box 2102-14
100822 Beijing

Tel: +86 10 685 10 370
Fax: +86 10 685 39 375
Eml: zqpan@a-1.net.cn

XIA, Yihua
Department of Health Physics
China Institute of Atomic Energy (CIAE)
P.O. Box 275-24
102413 Beijing

Tel: +86 (1069) 357 584
Fax: +86 (1069) 357 008
Eml: xiayh@iris.ciae.ac.cn

INDONESIA

TARYO, Taswanda
Director of Center for Dissemination of Nuclear and Science Technology
Indonesia National Nuclear Energy Agency (Batan)
Jalan Lebas Bulus Raya No. 49, Gedung Persatuan,
Jakarta Selatan 12440

Tel: +62 21 765 9401 02
Fax: +62 21 7591 3833
Eml: ptrkn@batan.go.id

JAPAN

ISHIGUCHI, Tsuneo
Professor
Aichi Medical University
21 Nagakute-cho, Aichi-gun

Tel: +81 561 62 3311
Fax: +81 561 63 3268
Eml: ishiguti@aichi-med-u.ac.jp

ISHIGURE, Nobuhito
Professor
School of Health Sciences, Nagoya University
1-1-20, Minami Daiko, Higashi-ku
Nagoya 461-8673

Tel: +81 52 719 1548
Fax: +81 52 719 1506
Eml:
ishigure@met.nagoya-u.ac.jp

KAI, Michiaki
Professor
Department of Health Sciences
Oita University of Nursing and Health Sciences
2944-9, Megusuno, Notsuharu, Oita-gun
Oita-ken 870-1201

Tel: +81-97 586 4435
Fax: +81-97 586 4387
Eml: kai@oita-nhs.ac.jp

KIRYU, Yasuo
Director for Radiation Protection Policy
Ministry of Education, Culture, Sports, Science and Technology (MEXT)
2-5-1, Marunouchi, Chiyoda-ku
Tokyo 100-8959

Tel: +81 3 6734 4045
Fax: +81 3 6734 4048
Eml: ykiryu@mext.go.jp

KOSAKO, Toshiso
Professor
Nuclear Professional School, Post-graduate Course, School of Engineering
University of Tokyo
2-22, Shirakata-shirane, Tokai-mura
Ibaraki

Tel: +81 29 287 8441
Fax: +81 29 287 8438
Eml: kosako@nuclear.jp

KUNIYOSHI, Hiroshi
Director
Secretariat of the Nuclear Safety Commission, Radiation Protection
and Accident Management Division, Cabinet Office
3-1-1, Kasumigaseki, Chiyoda-ku
Tokyo 100-8970

Tel: +81 3 3581 3478
Fax: +81 3 3581 9839
Eml:
hiroshi.kuniyoshi@cao.go.jp

KUSUMI, Shizuyo
Commissioner
Nuclear Safety Commission, Cabinet office
3-1-1, Kasumigaseki, Chiyoda-ku
Tokyo 100-8970

Tel: +81 3 3581 3470
Fax: +81 3 3581 3475
Eml: shizuyo.kusumi@cao.go.jp

MUTO, Sakae
Deputy Chief Nuclear Officer
Tokyo Electric Power Company
1-3, Uchisaiwai-cho, 1-chome, Chiyoda-ku
Tokyo 100-0011

Tel: +81 3 4216 1111
Fax: +81 3 3596 8538
Eml: muto.sakae@tepcos.co.jp

NIWA, Ohtsura
Professor
Radiation Biology Centre, Kyoto University
Yoshida Konoe-cho, Sakyo-ku
Kyoto 606-8501

Tel: +81 75 753 7563
Fax: +81 75 753 7564
Eml:
oniwa@house.rbc.kyoto-u.ac.jp

ODA, Keiji
Professor, Division of Environmental Energy Science,
Faculty of Maritime Sciences, Kobe University
5-1-1, Fukaeminami-machi, Higashinada-ku
Kobe-shi,
Hyogo-ken 658-0022

Tel: +81 78 431 6304
Fax: +81 78 431 6304
Eml: oda@maritime.kobe-u.ac.jp

ODA, Kimihiko
Director-General
Science and Technology Policy Bureau
Ministry of Education, Culture, Sports, Sciences and Technology (MEXT)
2-5-1, Marunouchi, Chiyoda-ku
Tokyo 100-8959

Tel: +81 6734 4000
Fax: +81 6734 4008
Eml: koda@mext.go.jp

UEKI, Tsutomu
Director
Nuclear Safety Division
Science and Technology Policy Bureau
Ministry of Education, Culture, Sports, Sciences and Technology (MEXT)
2-5-1, Marunouchi, Chiyoda-ku
Tokyo 100-8959

Tel: +81 3 6734 3900
Fax: +81 3 6734 4027
Eml: ueki@mext.go.jp

KOREA (REPUBLIC OF)

CHOI, Ho-Sin
Director
Radiation Safety Regulation Division
Korea Institute of Nuclear Safety (KINS)
P.O. Box 114, Yuseong
Daejeon 305-600

Tel: +82 42 868 0289
Fax: +82 42 862 3680
Eml: hschoi@kins.re.kr

INTERNATIONAL ATOMIC ENERGY AGENCY (IAEA)

MASON, Ches
Radiation Safety Section
Division of Radiation and Waste Safety
Department of Nuclear Safety
IAEA
Wagramerstrasse 5, P.O. Box 100
A-1400 Vienna

Tel: +43 1 2060 22719 or 22736
Fax: +43 1 20607
Eml: c.mason@iaea.org

INTERNATIONAL COMMISSION ON RADIOLOGICAL PROTECTION (ICRP)

HOLM, Lars-Eric
Director General
Swedish Radiation Protection Authority
SE-171 16 Stockholm

Tel : +46 8 72 97 110
Fax : +46 8 72 97 108
Eml : lars.erik.holm@ssi.se

OECD NUCLEAR ENERGY AGENCY (OECD/NEA)

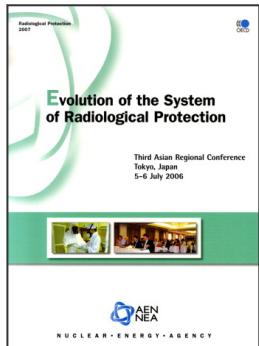
MARCUS, Gail H.
Deputy Director-General

Tel: +33 (0)1 45 24 10 02
Fax: +33 (0)1 45 24 11 10
Eml: gail.marcus@oecd.org

TABLE OF CONTENTS

Foreword	3
Executive Summary	7
Welcome Addresses	11
<i>Shizuyo KUSUMI (NSC)</i>	13
<i>Kimihiko ODA (MEXT)</i>	15
<i>Gail H. MARCUS (NEA)</i>	17
SESSION 1:	
The New ICRP General Recommendations	19
<i>Lars-Erik HOLM (ICRP)</i>	21
The New ICRP System of Radiological Protection	
<i>Ohtsura NIWA (Kyoto University)</i>	39
Views on the New ICRP Recommendations Focusing on the Radiation Effects	
<i>Nobuhito ISHIGURE (Nagoya University)</i>	51
Views on the New ICRP Recommendations Focusing on the Doses from Radiation Exposure	
<i>Toshiso KOSAKO (University of Tokyo)</i>	61
Views on the New ICRP Recommendations Focusing on the Optimisation of Protection and Individual Dose Limits	
<i>Michiaki KAI (Oita University of Nursing and Health)</i>	65
Views on the New ICRP Recommendations Focusing on Dose Constraints and Dose Limits	
SESSION 2:	
Views from Regulatory Authorities on the Draft ICRP Recommendations	69
<i>Hiroshi KUNIYOSHI (NSC)</i>	71
Views from the Japanese Regulatory Authority	
<i>Yasuo KIRYU (MEXT)</i>	79
Views from the Japanese Regulatory Authority	
<i>Ho-Sin CHOI (KINS)</i>	87
Views from the Korean Regulatory Authority	
<i>Peter A. BURNS (ARPANSA)</i>	101
Views from the Australian Regulatory Authority	

<i>Zi Qian PAN (CAEA) and Yihua XIA (CIAE)</i>	117
Views from the Chinese Regulatory Authority	
<i>Dr. Taswanda TARYO (BATAN)</i>	127
Views from Indonesia	
SESSION 3:	
Views from the Japanese Nuclear Industry and Radiation Protection Professionals on the Draft ICRP Recommendations	137
<i>Sakae MUTO (Federation of Electric Power Companies)</i>	139
Views from the Japanese Industry	
<i>Keiji ODA (JHPS)</i>	147
Views from Radiation Protection Professionals	
<i>Tsuneo ISHIGUCHI (Aichi Medical University)</i>	157
Views from the Medical Profession (JRS: Japan Radiological Society)	
SESSION 4:	
Special Session on the International Basic Safety Standards	171
<i>Ches MASON (IAEA)</i>	173
Implications of the New ICRP System of Radiological Protection for the International Basic Safety Standards	
SESSION 5:	
Panel Discussion: How Can New ICRP Recommendations Best Help to Assure Public and Worker Health and Safety?	177
<i>Hans RIOTTE (NEA, Moderator)</i>	179
Panel Discussion	
SESSION 6:	
Synthesis of the Meeting	181
<i>Henri METIVIER (Conference Rapporteur)</i>	183
Summary of Key Points	
<i>Tsutomu UEKI (MEXT)</i>	191
The Asian Perspective	
<i>Lars-Erik HOLM (ICRP)</i>	193
Implications for ICRP Developments	
<i>Jacques LOCHARD (ICRP)</i>	195
Implications for CRPPH Developments	
Conference Summary	197
References	213
Appendix 1: List of Participants	215
Appendix 2: List of Speakers	239



From:

Evolution of the System of Radiological Protection

Third Asian Regional Conference - Tokyo, Japan, 5-6 July 2006

Access the complete publication at:

<https://doi.org/10.1787/9789264042223-en>

Please cite this chapter as:

Riotte, Hans (2008), "How can new ICRP recommendations best help to assure public and worker health and safety?", in OECD/Nuclear Energy Agency, *Evolution of the System of Radiological Protection: Third Asian Regional Conference - Tokyo, Japan, 5-6 July 2006*, OECD Publishing, Paris.

DOI: <https://doi.org/10.1787/9789264042223-6-en>

This work is published under the responsibility of the Secretary-General of the OECD. The opinions expressed and arguments employed herein do not necessarily reflect the official views of OECD member countries.

This document and any map included herein are without prejudice to the status of or sovereignty over any territory, to the delimitation of international frontiers and boundaries and to the name of any territory, city or area.

You can copy, download or print OECD content for your own use, and you can include excerpts from OECD publications, databases and multimedia products in your own documents, presentations, blogs, websites and teaching materials, provided that suitable acknowledgment of OECD as source and copyright owner is given. All requests for public or commercial use and translation rights should be submitted to rights@oecd.org. Requests for permission to photocopy portions of this material for public or commercial use shall be addressed directly to the Copyright Clearance Center (CCC) at info@copyright.com or the Centre français d'exploitation du droit de copie (CFC) at contact@cfcopies.com.