Associate Professor National Institute of Technology, Kurume College

## Personal

Born on September 5, 1981.

Japanese Citizen.

## Education

Ph.D. Division of Human Cultural Studies, Graduate School of Humanities, Kobe University, 2010.

*Thesis title:* Speculation on the Professional Responsibility in Engineering Ethics based on the Case Study Analysis of the Asbestos Issues

Committee: Tsuyoshi Matsuda, Nobuo Kazashi, Akira Haji(co-chair), Ichiro Nagasaka(co-chair), Norifumi Saito (co-chair, Kansai University)

Master of Arts, Department of Philosophy, Graduate School of Humanities, Kobe University, 2007.

Bachelor of Arts, Department of Philosophy, Faculty of Letters, Kobe University, 2004.

## Academic and Professional Experience

Part-time Lecturer in "Engineering Ethics", Fukuoka Institute of Technology, Sep 2017 - Mar 2018.

Part-time Lecturer in "Science and Engineering Ethics", Kobe University, Apr 2017 - Sep 2017.

Associate Professor, National Institute of Technology, Kurume College, Apr 2017 - Present.

Part-time Lecturer in "Engineering Ethics", The University of Kitakyushu, Apr 2016 - Sep 2016.

Assistant Professor, National Institute of Technology, Kurume College, Apr 2011 - Mar 2017.

Visiting Scholar, Colorado School of Mines, Jun 2010 - Mar 2011.

JSPS Research Fellow [PD] (receiving research office: Kobe University), Apr 2010 - Mar 2011.

JSPS Research Fellow [DC2] (receiving research office: Kobe University), Apr 2009 - Mar 2010.

Research Support Assistant, Kobe University, Nov 2008 - Mar 2009.

## Committee Memberships

Member, Annual Conference Executive Committee of JSSTS, Apr 2017 - Nov 2017.

Member, Annual Meeting Planning Team and Program Reviewers of APPE, Nov 2015 - Feb 2016.

Member, Program Committee of APPE, Nov 2014 - Feb 2015.

Member, Annual Meeting Planning Team and Program Reviewers of APPE, Nov 2012 - Feb 2013.

Member, JSEE Research Committee on Engineering Ethics, Jun 2011 - Present.

## **Association Memberships**

Engineering Ethics, Professional Education, and the Infusion of Cultures (EPIC) 2016 - Present.

Miyairi Keinosuke Memorial Museum, 2016 - Present.

The Philosophical Association of Japan (PAJ), 2014 - Present.

The Philosophical Association of Western Japan (PAWJ), 2014 - Present.

Japanese Society for Engineering Education (JSEE), 2011 - Present.

The Association for Practical and Professional Ethics (APPE), 2010 - Present.

Society for Philosophy & Technology (SPT), 2009 - Present.

Japanese Association for the Contemporary and Applied Philosophy (JACAP), 2009 - Present.

Japanese Society for Science & Technology Studies (JSSTS), 2008 - Present.

The Japan Society of Mechanical Engineering (JSME), 2007 - Present.

## Fields of Interest

Engineering Ethics, Environmental Ethics, Public Health Ethics, Philosophy of Technology, STS, Engineering Education, Area Studies

## Research Activities

## Publications

#### **Book**

"Action Research", in Shunzo Majima, Taro Okuda and Tetsuya Kono eds. Jinbun-Shakai Kagaku no tame no Kenkyu Rinri Guidebook (Guidebook to Research Ethics for the Humanities and Social Sciences), pp.68-75., Keio University Press, 2015. ISBN:9784621089460 [in Japanese]

2-4 "Code of Ethics for Engineers" pp.42-43., 3-3 "National Society of Professional Engineers (NSPE)" pp.60-61., 4-4 "Responsibility of the State and Employers; Workers' Health in Asbestos Issues" pp.82-83. and 5-4 "Minamata Disease and Precautionary Principle" pp.104-105., in Kiyotaka Naoe and Shinichiro Morinaga eds. Rikei no tame no Kagaku-gijutsu-sha Rinri JABEE Kijun Taiou (Science and Engineering Ethics for the Students in STEM Fields: Conforming to the JABEE Accreditation Criteria), Maruzen, 2015. ISBN:4621089463 [in Japanese]

"Environmental Ethics: Japanese Perspective", in J. Britt Holbrook and Carl Mitcham eds. Ethics, Science, Technology, and Engineering: A Global Resource (The 2nd edition of Encyclopedia of Science Technology and Ethics [ESTE]), Vol.2, pp.121-122., Macmillan Reference USA, 2015. ISBN:0028661966

"Difficulties on System Design", in Norifumi Saito and Koji Sakashita eds. Hajimete no Kogaku Rinri (Engineering Ethics for Beginners) 3rd edition, pp.132-139., Showado, 2014. ISBN: 4812213495 [in Japanese]

#### **Journal Articles**

[Refereed] Keita Sugihara, Atsushi Fujiki and Kim Yonjyon, "How Can Values and Attitudes in Engineering Ethics Education Be Measured?", Nagoya Journal of Philosophy, Vol.12, 2017. [in Japanese] [forthcoming]

[Refereed] "Attempt at Connecting Environmental Ethics with Engineering Ethics Based on the Analysis of Schistosomiasis Japonica Eradication Activities", *Journal of Japanese Society for Engineering Education*, Vol.65, 3, pp.97-102., Japanese Society for Engineering Education, 2017. [in Japanese]

[Refereed] Tsuyoshi Matsuda and Atsushi Fujiki, "Asbestos in Japan: Social Mobilization and Litigation to Boost Regulation", *Journal of Innovative Ethics*, Vol.10, pp.75-91., Project Innovative Ethics, 2017.

[Refereed] Atsushi Fujiki and Mamoru Nagayoshi, "Constructing Active-Learning Based Philosophy of Technology through the Investigation of Local Heritage of Industrial Modernization in Kyushu – Aiming for Expansion into the History of Technology and Engineering Ethics –", Memoirs of Kurume National Institute of Technology, Kurume College, Vol.32, pp.7-17., National Institute of Technology, Kurume College, 2017. [in Japanese]

[Invited] "Curiosity-driven Ethics of Science and Engineering: Coexistence of Increasing Motivation to Learn and Forming Attitude toward Career by Introducing PBL Methods", *Journal of the Japan Association for College of Technology*, *Vol.*22, 1, pp.51-58., the Japan Association for College of Technology, 2017. [in Japanese]

[Refereed] "Conflicts between Environmental Protection and Public Health: *Schistosomiasis Japonica* Eradication Activities in the Chikugo River Basin", *Memoirs of Kurume National College of Technology*, *Vol.29*, **2**, pp.1-12., Kurume National College of Technology, 2014. [in Japanese]

[Refereed] "How Should We Accept the American-Style Engineering Ethics?", *Proceedings of the 2nd International Conference on Applied Ethics and Applied Philosophy in East Asia*, pp.47-60., Dalian University of Technology Press, 2012.

[**Refereed**] "External Causes of World-Wide Spread of Engineer Qualification and Accreditation System for Engineering Education", *Journal of Innovative Ethics*, *Vol.4*, pp.50-66., Project Innovative Ethics, 2011. [in Japanese]

[Refereed] Atsushi Fujiki and Keita Sugihara, "On the Transition of the Textbooks of Engineering Ethics from 1998 to 2010 in Japan", Journal of Engineering Ethics, Vol.7, pp.23-71., Nagoya Institute of Technology, 2010. [in Japanese]

[**Refereed**] "Why Are Engineering Ethics Considered as a Part of Professional Ethics?: from the Viewpoint of the Rise of Engineering Ethics in the United States", *Journal of Innovative Ethics*, Vol.3, pp.61-80., Project Innovative Ethics, 2010. [in Japanese]

[Refereed] Takashi Naruse and Atsushi Fujiki, "The Significance of Interview Survey on Asbestos Issues: Risk Assessment from a First-person Point of View", Journal of Innovative Ethics, Vol.2, pp.84-98., Project Innovative Ethics, 2009. [in Japanese]

[Refereed] "The Real State of Affairs and Problems of Seamen's Exposure to Asbestos", *Journal of Innovative Ethics*, Vol.1, pp.79-94., Project Innovative Ethics, 2008. [in Japanese]

[**Refereed**] "On Kuhn's incommensurability", φιλοσοφια(philosophia), Vol.19, pp.97-109., Social Meeting for Discussion of Philosophy, Kobe University, 2007. [in Japanese]

## Conference Activities and Talks

[Refereed] [Invited] "Developing Pedagogical Method of Engineering Ethics Integrated with Environmental Ethics", *The 20th Biennial Meeting of the Society for Philosophy and Technology (SPT2017)*, Technische Universität Darmstadt, Germany, Jun 15, 2017.

[Invited] "History of the Measures to Deal with *Schistosomiasis Japonica* in Chikugo River Basin and Its Applied-ethical Implications", *The 1st Colloquium of Humanities and Criticism*, Kyushu University, Feb 17, 2017. [in Japanese]

"Resilience as Risk Management", Workshop on Theory of Technology (b) "Various Phases of Risk and Management of Risk", The 7th Annual Meeting of Japan Association for the Contemporary and Applied Philosophy, Tohoku University, Apr 26, 2015. [in Japanese]

[Invited] "Possibility of Engineering Ethics Education Utilizing Local Cases: from the Perspectives of History of Technology and Environmental Ethics", *The 55th Kansai Engineering Ethics Seminar*, Kansai University, Mar 28, 2015. [in Japanese]

[Invited] "Even Harmful Organism Should Be Designated as Protective Species for Biodiversity Conservation?: from the Case Analysis of *Schistosomiasis Japonica* Eradication Activities in Japan", *Kyoto Bioethics Society Seminar*, Suzaku Campus, Ritsumeikan University, Mar 14, 2015. [in Japanese]

"What Is the Environment that Should Be Conserved?: from the Case Analysis of *Schistosomiasis Japonica* Eradication Activities in Japan", *The 65th Annual Conference of the Philosophical Association of Western Japan*, Yamaguchi University, Dec 7, 2014. [in Japanese]

"Engineers' Responsibility and Obligation to Consider the Environment: from the Result of Survey on the Code of Ethics for Engineering Societies and the Textbooks on Engineering Ethics", Workshop on Theory of Technology "Environment and Engineering Ethics", *The 13th Annual Meeting of Japanese Society for Science & Technology Studies*, Osaka University, Nov 16, 2014. [in Japanese]

"A Practical Example of the Engineering Ethics Education Based on Action Research Approach to Local Cases", Lecture Meeting of Technology and Society Division of the Japanese Society of Mechanical Engineering, Aichi University, Nov 15, 2014. [in Japanese]

[Refereed] Atsushi Fujiki and Eiji Izumoto, "Teaching Ethics across the Curriculum: A Pedagogical Method for Fostering of Practical Engineers", 8th International Symposium on Advances in Technology Education (ISATE2014), Nanyang Polytechnic, Singapore, Sep 24, 2014.

[Invited] "The Intersection of Environmental Ethics and Environmental Conservation Politics: from the Viewpoint of the History of *Schistosomiasis Japonica* Control Activities in Japan", *The 116th Seminar of Kansai Public Policy Society*, Kyoto University, Sep 6, 2014. [in Japanese]

[Invited] "Conflicts between Environmental Protection and Public Health: Extermination of Miyairi Nosophora in the Chikugo River Basin", The 14th Seminar and Extended Workshop of Challenging Exploratory Research, "Sei ni Kan-suru Yuruyaka na Governance no Ari-kata", Yoshida Izumidono, Kyoto University, Feb 18, 2014. [in Japanese]

Shin-ya Oie and Atsushi Fujiki, "Risk and Responsibility: the Lawsuit Seeking Redress from the State on Asbestos Hazards in Sennan Area", *The 12th Annual Meeting of Japanese Society for Science & Technology Studies*, Tokyo Institute of Technology, Nov 17, 2013. [in Japanese]

"The Characteristics of Textbooks of Engineering Ethics from 1998 to 2010 in Japan", Organized Session "Engineering Ethics Education", *The 59th Annual Conference of Japan Society for Engineering Education*, Hokkaido University, Sep 9, 2011. [in Japanese]

"How Should We Accept the American-Style Engineering Ethics?", *The 2nd International Conference: Applied Ethics and Applied Philosophy in East Asia*, Dalian University of Technology, China, May 2011.

Tsuyoshi Matsuda and Atsushi Fujiki, "Report on the 21st Fiscal Year's Activities Associated with 'Asbestos Health Risk Survey' of the Ministry of the Environment", The 5th Seminar of JSPS Bilateral Joint Project with France (Agence Nationale de la Recherche, ANR) ("CHORUS" Program), "Silicosis and Asbestos-Related-Diseases in France and Japan; Spatial Mapping Sociology, History and Ethics of Environmental Risk", Kobe University, Mar 6, 2010.

"Comment on the 'Asbestos Health Risk Survey 2008 in Amagasaki City' According to the Results of Interviews in Sennan, Amagasaki, Tosu", The 4th Seminar of JSPS Bilateral Joint Project with France (Agence Nationale de la Recherche, ANR) ("CHORUS" Program), "Silicosis and Asbestos-Related-Diseases in France and Japan; Spatial Mapping Sociology, History and Ethics of Environmental Risk", L'École des Hautes Études en Science Sociales, Paris, France, Sep 15, 2009.

[Refereed] "The Difference of Professional Responsibilities in Engineering: Asbestos Issues and Space Shuttle Challenger Disaster", *The 16th Biennial International Conference of the Society for Philosophy and Technology*, University of Twente, the Netherlands, July 10, 2009.

"How Should We Deal with the Concept of Risk Assessment: from the Standpoint of Engineering Ethics", The 3rd Seminar of JSPS Bilateral Joint Project with France (Agence Nationale de la Recherche, ANR) ("CHORUS" Program), "Silicosis and Asbestos-Related-Diseases in France and Japan; Spatial Mapping Sociology, History and Ethics of Environmental Risk", Kobe University, Mar 17, 2009. [in Japanese]

"What Kinds of Implication Does Asbestos Issues Include?", Workshop "Philosophical Investigation of Risk Theory based on 'Action Research Approach': from the Collaborative Research on Health Hazard Caused by Asbestos", *The 1st Annual Meeting of Japan Association for the Contemporary and Applied Philosophy*, Kyoto University, Apr 25, 2009. [in Japanese]

"Seamen's Exposure to Asbestos in Japan: Observation Based on Interviews", The 2nd Seminar of JSPS Bilateral Joint Project with France (Agence Nationale de la Recherche, ANR) ("CHORUS" Program), "Silicosis and Asbestos-Related-Diseases in France and Japan; Spatial Mapping Sociology, History and Ethics of Environmental Risk", L'École des Hautes Études en Science Sociales, Paris, France, Jan 9, 2009.

Takashi Naruse and Atsushi Fujiki, "The Significance of Interview Survey on Asbestos Issues: Risk Assessment from a First-person Point of View", *The 22nd Innovative Ethics Seminar*, Kobe University, Nov 14, 2008. [in Japanese]

"Risk Governance and Precautionary Principle in the Asbestos Issues: from the Viewpoint of the Causal Relation and Burden of Proof", *The 7th Conference of Japanese Society for Science & Technology Studies*, Osaka University, Nov 8, 2008. [in Japanese]

"The Analysis of the Asbestos Issues by the Methods of Humanities: toward the Evidence Based Ethics", The 1st Seminar of JSPS Bilateral Joint Project with France (Agence Nationale de la Recherche, ANR) ("CHORUS" Program), "Silicosis and Asbestos-Related-Diseases in France and Japan; Spatial Mapping Sociology, History and Ethics of Environmental Risk", Kobe University, Sep 11, 2008. [in Japanese]

"Some Case Studies of Engineering Ethics in Japan", Conference on Ethics of Science, Technology and Engineering & Construction of Harmonious Society, Dalian University of Technology, China, May 3, 2008.

"Project Innovative Ethics: Practice and Prospects", *The 1st ESD Symposium in Kobe University*, Kobe University, Mar 8 and 9, 2008. [in Japanese] [Poster Presentation]

"Practical Examples of Hyogo-Kobe RCE", ESD Asian RCE Leader Youth Meeting in Sendai, Kahoku Shimpo Hall, Feb 16, 2008. [in Japanese]

"Report on Interview Survey of Asbestos Health Hazard Victims: from the Viewpoint of Action Research Approach", *The 18th Innovative Ethics Seminar*, Kobe University, Dec 12, 2007. [in Japanese]

"Asbestos Issues as a Case of Engineering Ethics", *The 27th Kansai Engineering Ethics Seminar*, Kansai University, Jul 21, 2007. [in Japanese]

#### Miscellaneous

#### **Forum**

Humanistic Engineering: Letter to "The True Grand Challenge for Engineering: Self-Knowledge" by Carl Mitcham, *Issues in Science and Technology Vol.*31, No.3 (Spring 2015), pp.22-24., 2015.

#### Translation

Naohisa Shinoda and Atsushi Fujiki translate Bernhard Irrgang's "Techniktransfer als transkulturelle Modernisierung (Europe/Südostasien)" into Japanese, *Journal of Innovative Ethics, Vol.*3, pp.1-17., Project Innovative Ethics, 2010.

## Teaching Experience

Engineering Ethics, 2011 - Present.

Environmental Ethics, 2011 - Present.

Ethics, 2011 - Present.

Philosophy of Technology, 2011 - Present.

Science and Engineering Ethics, 2017

## Research Grants

**Representative of Research Project**, "Research on the Conflict between the Public Paramountcy Principle and Obligation to Consider the Environment in Engineering Ethics", *Japan Society for the Promotion of Science: Grant-in-Aid for Young Scientists* (B), [JSPS KAKENHI Grant Number JP17K13326], Budget Amount: JPY 2,730,000 in total (direct: JPY 2,100,000 / indirect: JPY 630,000), Project Year: Apr 2017 - Mar 2020.

**Representative of Grant**, "Bridging the Gap between Environmental Ethics and Engineering Ethics Education", *National Institute of Technology, Kurume College: Educational Grant for FY 2016 (Submission fee)*, Budget Amount: JPY 43,200, Oct 2016.

**Representative of Research Project**, "Environmental Ethical Inquiry into the Conflicts between Public Health and Environmental Protection: Regional Comparison among Measures against Schistosomiasis Japonica", *The Asahi Glass Foundation: Research Encouragement Grants of Humanities and Social Sciences*, Budget Amount: JPY 700,000, Project Year: Apr 2016 - Mar 2018.

**Representative of Grant**, "Teaching Ethics across the Curriculum: A Pedagogical Method for Fostering of Practical Engineers", *National Institute of Technology, Kurume College: Educational Grant for FY 2014* (*Registration fee for the international conference and overseas travel expenses*), Budget Amount: JPY 90,000, Sep 2014.

**Representative of Research Project**, "Research on Engineers' Responsibility and Obligation to Consider the Environment: Approach from the Standpoints of Engineering Ethics and Environmental Ethics", *Japan Society for the Promotion of Science: Grant-in-Aid for Young Scientists* (B), [JSPS KAKENHI Grant Number JP26770018], Budget Amount: JPY 1,950,000 in total (direct: JPY 1,500,000 / indirect: JPY 450,000), Project Year: Apr 2014 - Mar 2018.

**Representative of Grant**, "How Should We Accept the American-Style Engineering Ethics?", *National Institute of Technology, Kurume College: Educational Grant for FY 2011 (Registration fee for the international conference and overseas travel expenses)*, Budget Amount: JPY 40,605, May 2011.

Representative of Research Project, "Philosophical Speculation on the Attribute of Engineering based on the Case Study Analysis of the Asbestos Issues", *Japan Society for the Promotion of Science: Excellent Young Researcher Overseas Visit Program*, Amount of Support: Maintenance Allowance: JPY 1,702,400 (not including Round-trip Airfare), Project Year: Jun 2010 - Mar 2011.

**Representative of Research Project**, "Philosophical Speculation on the Attribute of Engineering based on the Case Study Analysis of the Asbestos Issues", *Japan Society for the Promotion of Science: Grant-in-Aid for JSPS Fellows*, Budget Amount: JPY 2,000,000 in total, Project Year: Apr 2009 - Mar 2011.

**Co-researcher**, "Silicosis and Asbestos-Related-Diseases in France and Japan; Spatial Mapping Sociology, History and Ethics of Environmental Risk", *Japan Society for the Promotion of Science: JSPS Bilateral Joint Project with France (Agence Nationale de la Recherche, ANR)*, Budget Amount: JPY 2,000,000 in total, Project Year: Aug 2008 - Mar 2011, Investigator: Tsuyoshi Matsuda

## Awards and Honors

Runner-up Prize for Encouragement of the Research of Social Ethics, Institute for Social Ethics of Nanzan University, Feb 2009.

*Prize-winning paper:* "The Real State of Affairs and Problems of Seamen's Exposure to Asbestos", *Journal of Innovative Ethics, Vol.1*, pp.79-94., Project Innovative Ethics, 2008. [in Japanese]

## Professional and Social Activities

Activities in Academic and Professional Societies

**Panelist**, Michael C. Brannigan's *Japan's March* 2011 *Disaster and Moral Grit: Our Inescapable In-Between*, 2016 Authors on the Program in *Association for Practical and Professional Ethics (APPE)* 25th annual international conference, Hyatt Regency Reston, Virginia, USA. Feb 19, 2016. [Invited]

**Session Chair**, Workshop on Theory of Technology (b) "Various Phases of Risk and Management of Risk", *The 7th annual meeting of Japan Association for Contemporary and Applied Philosophy*, Apr 26, 2015

#### Social Contribution and Outreach Activities

**Lecturer at Open Lecture**, "Education for Disaster Prevention as the Foundation of Resilience", *Dispatching from Consortium Kurume* — *Open Lecture in Close Cooperation with Five Universities and Colleges based in Kurume City*, Satellite Campus in Kurumeria Mutsu-mon, Kurume, Dec 10, 2016.

**Lecturer at Omnibus Lecture**, "History of *Shicstosomiasis Japonica* Eradication Activities centered around Kurume City and its Contemporary Significance — from 'Endemic' to 'Neglected Tropical Diseases' ", *Dispatching from Consortium Kurume* — *Omunibus Lecture by Contracting Institutions to the Credit Exchange System in Kurume City (FY 2016)*, Satellite Campus in Kurumeria Mutsu-mon, Kurume, Oct 25, 2016.

**Coordinator**, Technonet Kurume Lecture Meeting "Rocket Development and Tanegashima Space Center", Lecturer: Norio Sakazume (Japan Manned Space Systems Corporation (JAMSS), former Director of Tanegashima Space Center), National Institute of Technology, Kurume College, Jun 24, 2016.

**Lecture at Open Lecture**, "Asbestos Issues and Environmental Risk", *Dispatching from Consortium Kurume* — *Open Lecture in Close Cooperation with Five Universities and Colleges based in Kurume City*, Satellite Campus in Kurumeria Mutsu-mon, Kurume, Nov 17, 2012.

**Scenario Planning**, Tsuyoshi Matsuda and Keiko Takemiya, *Ishi no Wata — Manga de Yomu Asbestos Mondai (Stone Wool — Asbestos Issues in Cartoons)*, Kamogawa Books, 2012. ISBN:4780305438

**Guest Commentator**, "Stakeholder Meeting 'Kankyo, Syakai Houkoku-sho wo Yomu Kai (Meeting of Reading Environmental and Social Report)' — To Invite Wide Range of Opinion Concerning CSR Activities of Kawasaki Heavy Industries Group", the Head Office of Kawasaki Heavy Industries, Apr 6, 2009.

**Guest Speaker**, Tsuyoshi Matsuda and <u>Atsushi Fujiki</u>, "Philosophy and Asbestos Issues", *Science Cafe Kobe and RCE Hyogo-Kobe collaborate in 2nd ESD Cafe*, the 54th Science Cafe Kobe (No.57), Kobe Nishimura Coffee, Mikage, Dec 18, 2008.

**Coordinator**, The 24th Innovative Ethics Seminar "Minamata Disease and Causal Relationship in Medicine", Lecturer: Toshihide Tsuda (Okayama University), Kobe University, Dec 12, 2008.

**Lecturer at High School**, "Mindset in Engineering Ethics: Learning from Case Study" in "Science and Human" Course, Hyogo Prefectural Akashi Shimizu High School, Sep 2008 - Feb 2009.