

CURRICULUM VITAE

Hiroshi Shimizu

PERSONAL INFORMATION

- Nationality: Japanese
- Date of Birth: 29/May/ 1973
- Current Address: Naka 2-1 Kunitachi, Tokyo, JAPAN, 186-8603
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CURRENT POSITION

- Associate Professor
 - Hitotsubashi University
 - Graduate School of Commerce and Management
 - Institute of Innovation Research
 - From April of 2011

ACCADEMIC APPOINTMENT

- Assistant Professor
 - 2008 -2011
 - Hitotsubashi University
 - Institute of Innovation Research
 - Tokyo, Japan
- Post-Doctoral Research Fellow
 - 2007 -2008
 - Technische Universiteit Eindhoven
 - Department of Technology Management, Innovation Studies
 - Eindhoven, the Netherlands

EDUCATION

- Ph.D in Economic History, 2007
 - Thesis title: "Competition, Knowledge Spillover, and Technological Change:

Technological Development of Semiconductor Lasers 1960-1990”

2004-2007

London School of Economics and Political Science

Department of Economic History

London, UK

■ MA in History, 2002

2001-2004

Northwestern University

Department of History

Illinois, USA

■ MA in Commerce and Management, 1999

1997-2001

Hitotsubashi University

Graduate School of Commerce and Management

Tokyo, Japan

■ BA in Business Management, 1997

1993-1997

Chuo University

School of Commerce and Business Administration

Tokyo, Japan

RESEARCH INTERESTS

- Innovation in General Purpose Technology
- Technological Development of Laser Diodes
- International Comparative Study of Scientists Network
- Inter-Organizational Collaboration in New Product Development
- Dynamics between Market Structure and Innovation
- Historical Development of Inventive Activity in Japan

PUBLICATIONS

■ Refereed Paper

- Roberto Fontana, Alessandro Nuvolari, Hiroshi Shimizu and Andrea Vezzulli, “Reassessing Patent Propensity: Evidence from a dataset of R&D awards, 1977–2004” *Research Policy*, Vol.42 (10), pp.1780-1792, 2013.
- Tom Nicholas and Hiroshi Shimizu, “Intermediary Functions and the Market for

Innovation in Meiji and Taisho Japan” *Business History Review*, Vol.87 (Spring), pp.121-149, 2013.

- Roberto Fontana, Alessandro Nuvolari, Hiroshi Shimizu and Andrea Vezzulli, “Schumpeterian patterns of innovation and the sources of breakthrough inventions: evidence from a data-set of R&D awards” *Journal of Evolutionary Economics*, Vol.22 (4), pp. 785-810, 2012.
- Hiroshi Shimizu, “Scientific Breakthroughs and Networks in the Case of Semiconductor Laser Technology in the U.S. and Japan, 1960s-2000s” *Australian Economic History Review*, Vol.51 (1), pp. 71-95, 2011.
- Hiroshi Shimizu and Yasushi Hara, “Role of Doctoral Scientists in Corporate R&D in Laser Diode Research in Japan” *Prometheus*, Vol.29 (1), pp.5-21, 2011.
- Hiroshi Shimizu, “Different Evolutionary Paths: Technological Development of Laser Diodes in the U.S. and Japan: 1960-2000” *Business History*, Vol.52 (7), pp. 1151-1181, 2010.
- Hiroshi Shimizu and Takashi Hirao, “Inter-Organizational Collaboration in Semiconductor Laser Technology in the U.S. and Japan: University-Industry Relation” *International Journal of Global Business and Competitiveness*, Vol.4 (1), pp. 15-21, 2009.
- Hiroshi Shimizu and Takashi Hirao, “Inter-Organizational Collaborative Research Networks in Semiconductor Lasers 1975-1994” *Social Science Journal*, Vol.46 (2), pp. 233-251, 2009.

■ Book Chapter

- Seiichiro Yonekura and Hiroshi Shimizu, “Entrepreneurship in Pre World War II Japan: Organizational Innovation, the role and logic of the Zaibatsu” J. Mokyr, W. Baumol and D. Landes eds, *The Invention of Enterprise: Entrepreneurship from Ancient Mesopotamia to Modern Times*, Princeton University Press, pp. 501-526, 2010.

■ No Refereed Paper (conference paper, working paper, and invited paper)

- Roberto Fontana, Alessandro Nuvolari, Hiroshi Shimizu, Andrea Vezzulli, “Reassessing patent propensity: evidence from a data-set of R&D awards 1977-2004” Working Papers 2013/09, Department of Economics at the School of Economics and Management (ISEG), Technical University of Lisbon. 2013.
- Yaichi Aoshima and Hiroshi Shimizu, “A Pitfall of Environmental Policy: An Analysis of “Eco-point Program” in Japan and its Application to the Renewable Energy Policy” IIR Working Paper, WP#12-12, 2012.

- Roberto Fontana, Alessandro Nuvolari, Hiroshi Shimizu and Andrea Vezzulli, 2012. "Schumpeterian Patterns of Innovation and the Sources of Breakthrough Inventions: Evidence from a Data-Set of R&D Awards," Working Papers 2012/24, Department of Economics at the School of Economics and Management (ISEG), Technical University of Lisbon, 2012.
- Hiroshi Shimizu and Yusuke Hoshino, "The Nature of Inventive Activities: Evidence from a Data-Set of the Okouchi Prizes and a Comparison with the R&D 100 Awards" IIR Working Paper, WP#12-02, 2012.
- Hiroshi Shimizu and Satoshi Kudo, "How Well Does Knowledge Travel? The Transition from Energy to Commercial Application of Laser Diode Fabrication Technology" *Business and Economic History On-Line*, Vol.9., 2011.
- Hiroshi Shimizu, "Pitfalls of Open Innovation: Technological Trajectory in Laser Diodes in the United States and Japan" *Business and Economic History On-Line*, Vol.8., 2010.
- Fontana Roberto, Alessandro Nuvolari, Hiroshi Shimizu, and Andrea Vezzulli, "The Nature of Inventive Activities: Evidence from a Data-Set of R&D Awards", IIR Working Paper, WP#09-09, Hitotsubashi University IIR, 2009.
- Hiroshi Shimizu and Takashi Hirao, "Collaborative Research Networks in Semiconductor Laser Technology, 1960-2000: A Comparative Perspective on Networks and Breakthroughs in the U.S. and Japan" *Business and Economic History On-Line*, Vol.6., 2008.
- Laura Hein and Hiroshi Shimizu, "The International History of Japanese Economic Thought and Policy, 1945-2000" 『経済学史研究』 Vol.47 (1), pp. 79-93, 2006.
- Book Review
 - Hiroshi Shimizu, "Book Review: Odaka Kōnosuke and Matsushima Shigeru eds, Inove-shon no Sōshutsu: Monozukuri o Sasaeru Jinzai to Soshiki" *Social Science Japan Journal*, Vol. 14 (2), pp.271-274, 2010.
 - Hiroshi Shimizu, "Book Review: Ulrike Schaede, Choose and Focus: Japanese Business Strategies for the 21st Century" *the Journal of Asian Studies*, Vol.69 (3), pp. 916-918, 2010.

PUBLICATIONS in Japanese

■ Refereed Paper

- 清水洋「新日本窒素肥料株式会社の石油化学工業への進出と水俣病問題－目的と手段の非一貫性」

『経営史学』第35巻2号, 75-94頁, 2000年

■ Book Chapter

- 清水洋「経営史」東洋経済新報社（編）『はじめての経営学』東洋経済新報社 174-191頁, 2013年
- 米倉誠一郎・清水洋「日本の業界団体：産業政策と企業能力構築の共進化」岡崎哲二（編）『制度転換期の企業と市場』ミネルヴァ書房 195-220頁, 2011年
- 清水洋「ヤマト運輸」米倉誠一郎編『ケースブック 日本のスタートアップ企業』有斐閣 147-170頁, 2006年
- 清水洋「産業政策と企業行動の社会的合成：石油化学工業の『利益なき繁栄』」米倉誠一郎編『企業の発展』八千代出版 153-174頁, 2002年

■ No Refereed Paper (conference paper, working paper, and invited paper)

- 丸山康明・清水洋「住友電気工業：研究開発と事業化戦略の転換-青紫色半導体レーザー用窒化ガリウム基板の開発を事例として」『一橋ビジネスレビュー』第61巻2号, 116-128頁, 2013年
- 清水洋・青島矢一「科学技術イノベーション政策における経営学の役割」『研究技術計画』第27巻3/4号, 183-196頁, 2012年
- 清水洋・星野雄介「オープン・イノベーションのマネジメント：探索と知識マネジメント」『一橋ビジネスレビュー』第60巻2号, 8-41頁, 2012年
- 星野雄介位・清水洋「経営資源の補完を目指した日蘭合弁事業超高強力ポリエチレン繊維「ダイニーマ® (Dyneema)」の開発」IIR ケーススタディ Case#12-02 一橋大学イノベーション研究センター、2012年
- 清水洋「科学技術におけるコミュニティ構築のリーダーシップ」『一橋ビジネスレビュー』第58巻4号, 52-65頁, 2011年
- 清水洋「経営史」『一橋ビジネスレビュー2010年別冊 No.1 はじめての経営学』96-103頁, 2010年
- 清水洋「日本の科学技術：研究開発の効率性と資源配分」『一橋ビジネスレビュー』第58巻2号, 58-71頁, 2010年
- 工藤悟志・清水洋「ソニー：MOCVD法による化合物半導体デバイスの開発と量産化」IIR ケーススタディ Case#10-09 一橋大学イノベーション研究センター、2010年
- 工藤悟志・清水洋「株式会社東芝：0.6μm帯可視光半導体レーザーの開発」IIR ケーススタディ Case#10-01 一橋大学イノベーション研究センター、2010年
- 清水洋「サウスウェスト航空：ポイント・システムの経営戦略」『一橋ビジネスレビュー』第53巻4号, 112-122頁, 2006年
- 清水洋「茨城県東海村臨界事故：組織の危機管理」『一橋ビジネスレビュー』第50巻第4号, 146-161頁, 2003年
- 清水洋「ヤマト運輸：競争とビジネスモデルの革新」『一橋ビジネスレビュー』第49巻1号, 120-131

- 頁, 2001 年
- 清水洋「東海村臨界事故」一橋大学イノベーション研究センターケーススタディ #00-01、2000 年

CONFERENCE PRESENTATION

■ Conference Presentation

- “Do Doctoral Degree and Prior Publication Matter? How Do They Vary across Countries? Science-Linkage and Technological Development in Laser Diodes” Forth Asia-Pacific Innovation Conference, National Taiwan University, Taipei (with Yasushi Hara) December 7. 2013.
- “Does Collaboration Accelerate R&D? Evidence from a Data Set of the Okochi Prizes” Third Asia-Pacific Innovation Conference, Seoul National University, Korea, (with Yusuke Hoshino) October 14. 2012.
- “Management of Science, Serendipity, and Research Performance: Evidence from Scientists’ Survey in the US and Japan” Third Asia-Pacific Innovation Conference, Seoul National University, Korea, (with Kota Murayama and Makoto Nirei) October 13. 2012.
- “Management of Science, Serendipity, and Research Performance: Evidence from Scientists’ Survey in the US and Japan” the 13th International Schumpeter Society Conference, Brisbane, Australia, July, 4. 2012.
- “How Well Does Knowledge Travel? The Transition from Energy to Commercial Application of Laser Diode Fabrication Technology” Business History Conference 2011 Annual Meeting, St. Louis, Missouri, (with Satoshi Kudo) March-April. April 1st. 2011.
- “The Nature of Inventive Activities: Evidence from a Data-Set of R&D Awards” the 13th International Schumpeter Society Conference, Aalborg University, Aalborg, June, 22, 2010.
- “Pitfalls of Open Innovation: Technological Trajectory in Laser Diodes in the United States and Japan” Business History Conference 2010 Annual Meeting, University of Georgia, Athens, Georgia, March, 26, 2010.
- “Scientific and Technological Breakthroughs and Networks in the Case of Semiconductor Laser Technology in the U.S. and Japan” International Conference on Business History (Formerly Fuji Conference) Hitotsubashi University, Tokyo, January, 2, 2000.
- “Networking and Scientific Breakthrough in Semiconductor Laser Technology in the

U.S. and Japan” The 4th European Conference on Entrepreneurship and Innovation, Poster Session, University of Antwerp, Antwerp (presented by Hirao Takashi) September, 10-11, 2009.

- “The Sources of Invention 1963-2005. Evidence from a Dataset of R&D Awards”, The 6th European Meeting on Applied Evolutionary Economics Max Planck Institute of Economics, Jena, (presented by Roberto Fontana, Alessandro Nuvolari) May 22, 2009.
- “Breakthrough Illusions in the case of semiconductor laser technology in the US and Japan” Asia-Pacific Economic and Business History Conference, Gakushuin University, Tokyo, February 19, 2009.
- “The Ingenious Crowd: Great British Inventors and Their Patents”, Patent and Innovation, Applied Econometrics Association, Applied Econometric Association, Hitotsubashi University, Tokyo (with MacLeod Christine, Nuvolari Alessandro) December 19, 2008
- “Inter-Organisational Research Networks in Semiconductor Laser Technology, 1960-2000” Business History Conference 2008 Annual Meeting, California State University at Sacramento, Sacramento (with Takashi Hirao) April, 2008.
- “Inter-Organisational Research Networks in Semiconductor Laser Technology, 1975-1994” Hannover Messe 2008, Poster session, Hannover Messe, (with Takashi Hirao) April, 2008.
- “Competition, Knowledge Spillover, and Technological Change: Technological Development of Semiconductor Lasers 1960-1990” The Economic History Society Conference, University of Exeter, Exeter, April, 2008.
- “Research Networks and Knowledge Spillovers in Semiconductor Laser Technology in North America, Europe, and Japan” British Association For Japanese Studies Annual Conference, University of East Anglia, Norwich, March, 2007.

■ Workshop Presentation

- “Management of Science, Serendipity, and Research Performance: Evidence from Scientists’ Survey in the US and Japan” International Workshop on Measuring and Managing Innovation, Kasumigaseki, Tokyo, March, 2012.
- “Technological Development of Semiconductor Lasers in the U.S. and Japan: 1960-2000” JHG Workshop, University of Tokyo, Tokyo, June, 2009.
- “Competition and Technological Change, the OMCS project in Semiconductor Laser Technology” Mitsubishi Bank Foundation International Conference; Exploring New Perspectives on Management, Shonan International Village, Kanagawa, August,

2006.

■ Conference Presentation in Japanese

- **Pitfalls of Open Innovation: Technological Trajectory in Laser Diodes in the United States and Japan** 経営史学会中部部会、名城大学、愛知 12 月 17 日 2011 年
- 「科学技術における研究開発マネジメント、生産性とセレンディピティ」研究・技術計画学会、山口大学、山口 10 月 14 日 2011 年
- 「日本企業のコラボレーションによる新機能探索」経営史学会全国大会、札幌大学、北海道 10 月 3 日 2010 年
- 「半導体レーザーにおける科学的ブレークスルー：エンジニアの流動性とネットワーク」日本商品学会、諏訪東京理科大学、諏訪（平尾毅との共同）6 月, 2008
- 「利益なき繁栄考察：石油化学工業における産業政策と企業行動の合成－」経営史学会関東部会、拓殖大学、東京 5 月 2001 年

■ Workshop Presentation in Japanese

- **“Pitfalls of R&D Competition: Technological Trajectory in Laser Diodes in the US and Japan, 1960-2010”** 京都大学日本型クリエイティブ・サービス研究会 11 月 24 日 2012 年
- **“Pitfalls of Open Innovation: Technological Trajectory in Laser Diodes in the United States and Japan”** 関西学院大学イノベーションセミナー 11 月 21 日 2011 年

RESEARCH FUNDING

- **Grants-in-Aid for Scientific Research**
 - 2012-2015: Grants-in-Aid for Young Scientists (B) : 24730308
 - 2012-2015: Scientific Research(A): 23243054
 - 2009-2011: Grants-in-Aid for Young Scientists (B): 21730291
- **Japan Science and Technology Agency**
 - 2010-2011: Science of Science, Technology and Innovation Policy (Fukabori)
- **The Japan Securities Scholarship Foundation**
 - 2010-2011: Research Fund
- **The Telecommunications Advancement Foundation**
 - 2010-2011: Research Fund
- **Japan Productivity Center**
 - 2009-2010: Research Fund