

Hisashi NINOKATA, Dr. Eng.

Professor
Politecnico di Milano
Dipartimento di Energia
Via La Masa 34, 20156 Milano
Italy

Phone: +39-02-2399-8243
Mobile: +39-334-613-2308
E-mail: hisashi.ninokata@polimi.it
ninokata@alum.mit.edu

Professor Emeritus
Tokyo Institute of Technology
Nuclear Engineering

Summary of Accomplishments

Steady and sustained R&D contributions to nuclear reactor thermal hydraulics and safety; innovative and skillful practice and applications of art, science and technology of thermal hydraulics with a direct impact on nuclear industry and education programs and services to international thermal hydraulics community.

Education:

- BA in Pure and Applied Sciences, the University of Tokyo, 1970.04
- MS in Nuclear Engineering, the University of Tokyo, 1972.03
- Rotary International Fellow Student at Nuclear Engineering Department of MIT, 1972.09-73.06
- Dr. of Engineering in Nuclear Engineering, the University of Tokyo, 1972.04-1977.03

Job Experiences:

- 1977-80 Tokyo Electric Power Co..
He worked in BWR core management and then in the Japan Demonstration Fast Breeder Reactor Development Project.
- 1980-93 O-arai Engineering Center (OEC), Power Reactor and Nuclear Fuel Development Cooperation
He was engaged in LMFBR thermohydraulics and safety analysis.
 - 1982/83 Visiting Scientist at Argonne National Laboratory in COMMIX code development
 - 1986/87 Visiting Scientist at Los Alamos National Laboratory in SIMMER-AFDM code development
 - From 1987, he was responsible for LMFBR safety R&D programs as section manager and later as Deputy Director of Safety Engineering Division of OEC.
- 1993 to 2012: Professor at Research Laboratory for Nuclear Reactors, Tokyo Institute of Technology
He taught nuclear reactor design and safety courses. R&D topics of his work included LMFR safety and core design, computational fluid dynamics and subchannel analysis for LMFBR and LWR fuel bundle thermohydraulics, and risk-informed design of innovative nuclear reactors.
- 2012- : Professor at Dipartimento di Energia, Politecnico di Milano

Professional Activities:

- He serves Japanese government including the Ministry of Economy, Trade and Industry (METI), Ministry of Education, Culture, Sports, Science and Technology (MEXT), and Fire and Disaster Management Agency (FDMA) as advisor on nuclear reactor safety.
- He is Vice Chair and Chair-elect of the International Nuclear Societies Council (INSC)
- He is currently an associate member of Science Council of Japan.
- He is a member of American Nuclear Society (ANS), Atomic Energy Society of Japan (AESJ), International Association for Hydro-Environment Engineering and Research (IAHR) and Japan Society of Mechanical Engineers (JSME).
 - **ANS Commitment:** Board of Directors (2006-2009); Chair of the ANS Thermal Hydraulics Division (THD) (2010-2011). Also he is a past member of ANS Honors and Award Committee and currently a member of International Committee. He is a past chairman of the ANS Japan Section.
 - **AESJ Commitment:** He was a member of the Board of Directors of AESJ from 2005 to 2007. He served Thermal Hydraulics Division and Computational Science and Engineering Division as Chairman, 2002/2003 and 2003/2004, respectively.
 - **IAHR Commitment:** He served IAHR as Section Head of Fluid Phenomena in Energy Exchanges (1995-2001) and as Chairman of Applied Hydraulics Division (2001-2005).
- He has been and is active in leading a number of international professional societies. He has presided and/or participated in organizing:
 - Series of international seminar on subchannel analysis (ISSCA);
 - Series of International Symposia on Global Environment and Nuclear Energy System (GENES-I to IV);
 - IAHR Symposium on Flow Modeling and Turbulence Measurement;
 - Japan-Korea Nuclear Thermal Hydraulics and Safety conferences (NTHAS series) either as Technical Program Committee (TPC) Chair or as Organizing Committee Chair. He is an honorary chair of the NTHAS-8 (2012). He has been deeply involved in organizing the follow ANS Topical Meetings on
 - Nuclear Reactor Thermal Hydraulics (NURETH); and
 - Nuclear Reactor Thermal Hydraulics, Operation and Safety (NUTHOS) as a General Organizing Committee Co-Chair of NUTHOS-6 in Nara (2004), TPC Chair of NURETH-13 in Kanazawa (2009) and General Co-Chair of NUTHOS-9 in Taiwan (2012), a member of the International Steering Committees of NUTHOS-7 in Seoul (2008) and NUTHOS-8 in Shanghai (2010), NURETH-11 in Avignon (2005), NURETH-12 in Pittsburgh (2007), NURETH-14 in Toronto (2011).
 - Other conferences
 Also he is regularly organizing a forum and sessions in ASME Fluid Engineering Division Summer Meetings (FSDM series) and giving lectures in ICONE CFD Seminars.
- He has published more than 300 technical papers in archival journals as well as in international conference proceedings.

Honors and Awards:

- 1984 and 1986 LMBWG VSOP Best Paper Awards from Liquid Metal Boiling Working Group (JRC Ispra, KfK, CEA, UKAEA and PNC)
- 1996 Best Paper Award and FBR Award, AESJ
- 1997 Harold Jan Schoemaker Award, IAHR
- 2005 THD Best Paper Award, ANS
- 2006 Technical Leadership Award, AESJ THD
- 2008 Technical Achievement Award, AESJ CSED
- 2009 ANS Fellow
- 2010 THD Best Paper Award, ANS
- 2011 Technical Achievement Award, AESJ THD
- 2012 THD Technical Achievement Award, ANS

Publications:

Dr. Ninokata has written or contributed to 5 books, edited 4 international conference proceedings, and edited two major international archival journals as a guest editor, has more than 400 technical publications.

10 selected published articles of Dr. H. Ninokata

1. Ninokata, H., Efthimiadis, A. and Todreas, N.E., Distributed resistance modeling of wire-wrapped rod bundles, *Nuclear Engineering and Design* 104 (1987) 93 - 102.
2. Ninokata, H. and Okano, T., SABENA: Subassembly boiling evolution numerical analysis, *Nuclear Engineering and Design* 120 (1990) 349 - 367.
3. Shimizu, T., Ninokata, H. and Shishido, H., Distributed parameter analysis for the prediction of the fine structure of flow and temperature fields in wire-wrapped pin bundle geometries, *Nuclear Engineering and Design* 120 (1990) 369 - 383.
4. Kamide, H., Kobayashi, J., Ieda, Y. and Ninokata, H., Benchmark exercise for multi-dimensional thermohydraulic analysis codes: Buoyancy driven penetration flow phenomena and thermal stratification, *Journal of Hydraulic Research*, Vol. 34, No 3 (1996) pp. 317-344.
5. Ninokata, H., Tomozoe, H., Endo, H. and Shimizu, A., "On self-controllability and self-terminability of fast reactors," *Int. J. Progress in Nuclear Energy*, 32 (3/4), 737-744 (1998).
6. Mizuno, Y., Ninokata, H. and Finnicum, D. J., Risk-informed design of IRIS using a level-1 probabilistic risk assessment from its conceptual design phase, *Reliability Engineering and System Safety*, Elsevier, 87, 201-209, 2005.
7. Baglietto, E., and Ninokata, H., A turbulence model study for simulating tight lattice rod bundles, *Nuclear Engineering and Design*, Elsevier, Vol. 235 Issue 7, pp. 773-784, 2005.
8. Ninokata, H., A Comparative Overview of Thermal Hydraulic Characteristics of Integrated Primary System Nuclear Reactors, *Journal of Nuclear Engineering and Technology*, Vol. 38, No. 1, pp. 33-44, February 2006.
9. E. Merzari, H. Ninokata, A. Mamhood, M. Rohde, Proper Orthogonal Decomposition of the Flow in Geometry Containing a Narrow Gap, *Journal of Theoretical and Computational Fluid Dynamics*: DOI 10.1007/s00162-009-0152-3 (2009)
10. Ninokata, H., Merzari, E. and Khakim, A., Analysis of low Reynolds number turbulent flow phenomena in nuclear fuel pin subassemblies of tight lattice configuration, *Nuclear Engineering and Design*, 239 (2009) 855-866.

A most updated list of publication is attached in the following.

List of Publication

Professional Archival Journals

1. H. Ninokata, A simple calculation method for BWR inlet subcooling, (in Japanese) Journal of Atomic Energy Society of Japan, Vol.20, No. 11, p.812, Nov. 1978.
2. H. Ninokata, Thermohydraulics analysis of LMFBR fuel subassemblies as a distributed parameter system, (in Japanese) Journal of Atomic Energy Society of Japan, Vol.22, No. 1, p.812, January 1980.
3. H. Ninokata, A.L. Schor and A. Deguchi, An unconditionally stable numerical scheme for sodium boiling calculation, *Computational Mechanics*, VII-188 - 194, Springer-Verlag, Tokyo (1986).
4. H. Ninokata, Analysis of low heat flux sodium boiling test in a 37-pin bundle by the two-fluid model computer code SABENA, *Nuclear Engineering and Design* **97** (1986) 233 - 246.
5. H. Ninokata, A. Efthimiadis and N.E. Todreas, Distributed resistance modeling of wire-wrapped rod bundles, *Nuclear Engineering and Design* **104** (1987) 93 - 102.
6. T. Shimizu and H. Ninokata, A numerical technique for the prediction of the fine structure of flow and temperature fields in wire-wrapped fuel pin bundle geometry - development and testing of the SPIRAL code - , *Refined Flow Modelling and Turbulence Measurements*, ed. Y. Iwasa et al., pp. 463 - 470, Universal Academy Press, Inc. Tokyo, Japan (1989).
7. H. Ninokata and A. Deguchi, Assessment of the physical models in a two-fluid model code and interpretation of experiments, *Nuclear Energy*, **28**, No. 3 (1989) 161 - 170.
8. H. Ninokata and T. Okano, SABENA: Subassembly boiling evolution numerical analysis, *Nuclear Engineering and Design* **120** (1990) 349 - 367.
9. T. Shimizu, H. Ninokata and H. Shishido, Distributed parameter analysis for the prediction of the fine structure of flow and temperature fields in wire-wrapped pin bundle geometries, *Nuclear Engineering and Design* **120** (1990) 369 - 383.
10. H. Oshima and H. Ninokata, Numerical simulation of oscillatory convection in low-Pr fluids, *Notes on Numerical Fluid Mechanics*, Vol. **27**, Viewweg, pp. 90 - 97, Braunschweig 1990.
11. Maekawa, H. Ninokata, M. Bottoni and T. Muramatsu, Assessment and implementation of second order schemes for advection terms in general-purpose 3D thermohydraulics computer codes, *Numerical Methods for Thermal Problems*, ed. R.W. Lewis et al., Vol. VII, pp. 662 - 672, Pineridge Press, Swansea, U.K. (1991).
12. 村松 寿晴, 二ノ方 寿, サーマルストライピング現象の解析手法の開発, 日本機械学会論文集 (B編) **57** 巻 540 号 (1991-8) 論文 No. 90-1461A, pp. 486 - 496.
13. T. Muramatsu and H. Ninokata, In-vessel thermohydraulics evaluation of a UTOP accident and DN precursor concentration transport analysis using a multi-dimensional code, *Nuclear Technology* **97** (1992) 186 - 197.
14. T. Muramatsu and H. Ninokata, Thermal striping temperature fluctuation analysis using the algebraic stress turbulence model in water and sodium, *JSME International Journal, Series II*, Vol. **35**, No. 4 (1992) 486 - 496.
15. T. Muramatsu and H. Ninokata, Investigation of turbulence modeling in thermal stratification analysis, *Nuclear Engineering and Design* **150**, 81-93 (1994).
16. T. Muramatsu and H. Ninokata, Adaptive control system using the Fuzzy theory for transient multi-dimensional thermohydraulics calculations, *International Journal for Numerical Methods in Engineering*, Vol. **37**, 3397-3415 (1994).

17. Yamaguchi, H. Niwa, M. Yamaoka, K. Tsukimori, Y. Shimakawa, H. Ninokata and K. Aizawa, Comprehensive analysis of passive safety test phase-IIB in the Fast Flux Test Facility, *Nuclear Technology*, Vol. **107**, No. 1 (1994) 23 - 37.
18. 村松 壽晴, 二ノ方 寿, サーマルストライピング現象に対する解析的評価手法の開発, *日本原子力学会誌*, Vol. **36**, No.12, 1152-1163 (1994)
19. H. Ninokata, T. Sawada, H. Tomozoe, H. Endo and A. Shimizu, A study on recriticality characteristics of fast reactors in pursuit of recriticality-accident-free concepts, *Int. J. Progress in Nuclear Energy*, **29** (Supplement) 387-393 (1995).
20. 二ノ方寿, 佐藤和二郎, 高速炉における伝熱流動, *伝熱研究*, Vol. **34**, No. 133, 60-69 (1995)
21. T. Sawada, H. Ninokata and A. Shimizu, Analysis of an out-of-pile experiment for materials redistribution under core disruptive accident condition of fast breeder reactors, *J. Nuclear Science and Technology*, Vol.**32**, No.6, pp. 584-595, June (1995)
22. T. Sawada, H. Ninokata and A. Shimizu, Calculation of a materials relocation experiment simulating a core disruptive accident condition in fast breeder reactors, *Nuclear Engineering and Design*, Vol. **157** (1995) 177-196.
23. T. Muramatsu and H. Ninokata, Development of thermohydraulics computer program for thermal stripping phenomena, *Nuclear Technology*, Vol. **113**, No. 1 (1996) 54 - 72.
24. T. Sawada, H. Ninokata and A. Shimizu, Validation studies on a computational model for molten materials freezing, *Nuclear Technology*, Vol. **113**, No.2 (1996) 167 - 176.
25. V.G. Zimin and H. Ninokata, Chebyshev semi-analytical method for the solution of space-dependent neutron kinetics equations, *Annals of Nuclear Energy*, Vol. **23**, No 17 (1996), pp. 1407-1424.
26. H. Kamide, Y. Ieda, J. Kobayashi and H. Ninokata, Benchmark exercise for multi-dimensional thermohydraulic analysis codes - Buoyancy driven penetration flow phenomena and thermal stratification -, *Journal of Hydraulic Research*, Vol. **34** (1996), pp. 317-344.
27. T. Sawada, H. Ninokata, H. Tomozoe and H. Endo, Recriticality characteristics of fast reactors and possibility to preclude recriticality by controlled materials relocation, *Int. J. Progress in Nuclear Energy*, **32** (3/4), 745-751 (1998)
28. H. Ninokata, T. Sawada, H. Tomozoe, H. Endo and A. Shimizu, On self-controllability and self-terminability of fast reactors, *Int. J. Progress in Nuclear Energy*, **32** (3/4), 737-744 (1998)
29. H. Endo, M. Kawashima, M. Suzuki, H. Ninokata, T. Sawada, A. Shimizu and Y. Fujii-e, Safety characteristics of the SCNES core, *Int. J. Progress in Nuclear Energy*, **32** (3/4), 689-696 (1998)
30. M. Bottoni and H. Ninokata, An algorithm for attenuation of turbulence in particulate flow linked to the fluid-dynamic code COMMIX-M, *Journal of Nuclear Science and Technology*, **35**, No.2, 101-112, (1998)
31. V. Zimin and H. Ninokata, Nodal neutron kinetics model based on nonlinear iteration procedure for LWR analysis, *Annals of Nuclear Energy*, **25** (8), 507-528 (1998)
32. T. Sawada and H. Ninokata, Validation of a computational model for the evaluation of fuel-coolant interaction under severe accidental condition in fast breeder reactors, *Annals of Nuclear Energy*, **25** [18], 1543-1552 (1998)
33. Vladimir Kriventsev and Hisashi Ninokata, An effective locally-exact finite difference scheme for convection-diffusion problems, *Numerical Heat Transfer*, Part B, Vol. **36**, 183-205, 1999.
34. Akitoshi Hotta, Katsumi Tate and Hisashi Ninokata, Nonlinear Iterative Nodal Method Applied to Neutron Flux Modal Analysis, *Journal of Nuclear Science and Technology*, **36**, No. 11, 1009-1020, November (1999)
35. V. Kriventsev and H. Ninokata, An effective finite-difference scheme for problems of turbulent heat and mass transfer, *Nuclear Engineering and Design*, **200** (2000) 11-21.

36. Akitoshi Hotta, Hisashi Ninokata, Hiroyuki Takeuchi and Youjirou Suzawa, Regional instability evaluation of Ringhals unit 1 based on extended frequency domain model, *Nuclear Engineering and Design*, **200** (2000) 201-220.
37. Vladimir Kriventsev and Hisashi Ninokata, Numerical method for simulation of fluid flow and heat transfer in geometrically disturbed rod bundles, *Journal of Nuclear Science and Technology*, **37**, No.8 (2000) 646-653.
38. Fumio Kasahara and Hisashi Ninokata, The multi-fluid multi-phase subchannel analysis code KAMUI for subassembly accident analysis of an LMFR, *Journal of Nuclear Science and Technology*, **37**, No.8 (2000) 654-669.
39. T. Sawada, H. Ninokata and H. Tomozoe, A recriticality-free fast reactor concept, *Nuclear Technology*, **130**, 242-251 (2000)
40. T. Sawada, H. Ninokata, H. Taneichi and H. Endo, Characteristics of fuel melting and relocation in metallic-fueled fast reactor core and its feasibility for eliminating recriticality, *Progress in Nuclear Energy*, **37**, No. 1-4, 157-162 (2000)
41. H. Endo, A. Netchaev, K. Yoshimura, K. Arie, M. Yamadate, T. Sawada and H. Ninokata, A Concept of the Multipurpose Liquid Metallic-fueled Fast Reactor System (MPFR), *Progress in Nuclear Energy*, **37**, No. 1-4, 291-298 (2000)
42. T. Sawada, A. Netchaev, H. Ninokata and H. Endo, Gallium-cooled liquid metallic-fueled fast reactor, *Progress in Nuclear Energy*, **37**, No. 1-4, 313-319 (2000)
43. A. Netchaev, T. Sawada, H. Ninokata and H. Endo, Long life Multipurpose Small Size Fast Reactor with Liquid Metallic-fueled Core, *Progress in Nuclear Energy*, **37**, No. 1-4, 299-306 (2000)
44. A. Hotta, H. Ninokata and A. J. Baratta, Development of Parallel Coupling System between Three Dimensional Nodal Kinetic Code ENTRÉE and Two-Fluid Plant Simulator TRAC/BF1, *Journal of Nuclear Science and Technology*, **37**(10), 840-854 (2000)
45. 二ノ方, 村松, 西村, 富山他, 原子炉熱流動の微視的シミュレーション, 日本原子力学会誌, Vol. **42**, No.12, 1242-1259 (2000)
46. A. Netchaev, H. Endo, T. Sawada and H. Ninokata, The concept and neutronic characteristic of a multipurpose fast reactor, *Annals of Nuclear Energy*, **28**, 1083-1099 (2001).
47. A. Netchaev, Y. Hizume, H. Endo, T. Sawada and H. Ninokata, Safety Characteristics of the Multipurpose Fast Reactor (MPFR), *Annals of Nuclear Energy*, **28**, 1717-1732 (2001).
48. N. Doda, H. Ninokata and H. Ohira, Prediction of Release Rate of Burnt Sodium as Aerosol, *Journal of Nuclear Science and Technology*, Vol.**38**, No.1, 2001.
49. H. Shirai and H. Ninokata, Prediction of the equilibrium two-phase flow distributions in inter-connected subchannel systems, *Journal of Nuclear Science and Technology*, **38**, No. 6, 379-387 (2001)
50. H. Kuraishi, T. Sawada, H. Ninokata and H. Endo, Inherent and passive safety sodium cooled fast reactor core design with minor actinide and fission product incineration, *Nucl Technology*, **138**, 205-232 (2001)
51. A. Hotta, M. Honma, H. Ninokata, and Y. Matsui, BWR Regional Instability Analysis by TRAC/BF1-ENTRÉE - I: Application to Density-wave Oscillation -, *Nucl. Technol.*, **135**, 1-16 (2001).
52. A. Hotta, M. Zhang and H. Ninokata, BWR Regional Instability Analysis by TRAC/BF1-ENTRÉE - II: Application to Ringhals Unit 1 Stability Test -, *Nucl. Technol.*, **135**, 17-38 (2001).
53. V. Kriventsev, H. Ninokata and A. Yamaguchi, Numerical accuracy of temperature, velocity and pressure distributions predicted with efficient finite-differencing (EFD) scheme, CHT'01:

- Advanced in Computational Heat Transfer II*, pp. 469-476 (2001)
54. V. Barchevtsev, H. Ninokata and V. Artisyuk, Potential to approach the long life core in a light water reactor with uranium oxide fuel, *Annals of Nuclear Energy*, **29**, 595-608 (2002)
 55. V. Barchevtsev, V. Artisyuk and H. Ninokata, Concept of erbium doped uranium oxide fuel cycle in light water reactors, *Journal of Nuclear Science and Technology*, **39**, No. 5, 506-513 (2002)
 56. V. Kriventsev, A. Yamaguchi and H. Ninokata, Multi-scale viscosity model of turbulence, *Advances in Fluid Modeling and Turbulence Measurements*, World Scientific Publishing Co., Pte. Ltd, pp. 577-584 (2002)
 57. V. Barchevtsev, V. Artisyuk and H. Ninokata, Double-strata high burnup fuel performance in LWRs, *Annals of Nuclear Energy*, **29**, 1919-1932 (2002)
 58. H. Ninokata, Y. Hizume, H. Endo and T. Sawada, Evaluation of self-controllability of LMFBRs against ATWS, *Progress in Nuclear Energy*, **40**, No. 3-4, pp. 569-575, 2002
 59. A. Hotta, T. Anegawa, T. Hara and H. Ninokata, Simulation of Boiling Water Reactor One-Pump Trip Transient by TRAC/BF1-ENTRÉE, *Nuclear Technology*, Vol. **42**, No. 3, pp. 205-229 (2003)
 60. 仲嶺信英, 堀池寛, 片岡勲, 二ノ方寿, 宮崎慶次, 高速増殖原型炉「もんじゅ」控訴審判決に係る原子力安全の技術的論点, *日本原子力学会誌*, Vol. **45**, No. 8 (2003)
 61. V. Kriventsev, H. Ohshima, A. Yamaguchi and H. Ninokata, Numerical Prediction of Secondary Flows in Complex Areas Using Concept of Local Turbulent Reynolds Number, *Journal of Nuclear Science and Technology*, Vol. **40**, No. 9, pp. 655~663 (2003)
 62. N. Doda, Y. Okano and H. Ninokata, Numerical Simulation of Sodium Pool Fire, *Nuclear Technology*, Vol. **144**, pp. 175-185, Nov. 2003
 63. T. Misawa, I. Maekawa and H. Ninokata, Calculation of Heat Transfer Coefficients on a Flat Plate by Pseudo Direct Numerical Simulation of Turbulence, *Journal of Nuclear Science and Technology*, Vol **40**, No 10, pp 703~707 (2003)
 64. M. D. Carelli, L. E. Conway, L. Oriani, B. Petrovic, C. V. Lombardi, M. E. Ricotti, A.C.O. Barroso, J. M. Collado, L. Cinotti, N. E. Todreas, D. Grgic, M. M. Moraes, R. D. Boroughs, H. Ninokata, D. T. Ingersoll, F. Oriolo, The Design and Safety Features of the IRIS Reactor, *Nucl. Eng. Design* **230**, pp. 151-167 (2004)
 65. E. Baglietto, H. Ninokata, "CFD Modeling of Flow in Geometrically Disturbed Rod Bundles", *International Journal of Heat and Technology*, Vol. **22**, n. 2, 2004.
 66. Tsugio Yokoyama, Takashi Fujiki, Hiroshi Endo and Hisashi Ninokata, "A Study on Reactivity Insertion Controlled LMR Cores with Metallic Fuel", *Progress in Nuclear Energy*, Volume **47**, Issues 1-4, pp. 361-368 (2005)
 67. Sheng Wang, Hisashi Ninokata, "The Pumping Performances of the Turbomolecular Pump Simulated by Direct Simulation Monte Carlo Method", *Progress in Nuclear Energy*, Vol. **47**, No. 1-4, pp. 664-671, May, 2005.
 68. J. Kaneko, A. Minato and H. Ninokata, Multi-dimensional analysis of two-phase flow inside subchannels of nuclear fuel assembly, *Progress in Nuclear Energy*, Vol. **47**, No. 1-4, pp. 147-154, May, 2005.
 69. Y. Mizuno, H. Ninokata and D. J. Finnicum, Risk-informed design of IRIS using a level-1 probabilistic risk assessment from its conceptual design phase, *Reliability Engineering and System Safety*, **87** (2005) 201-209
 70. E. Baglietto, H. Ninokata, A turbulence model study for simulating tight lattice rod bundles, *Nuclear Engineering and Design*, Vol. **235** Issue 7, pp. 773-784, 2005.
 71. Hisashi Ninokata, An overview of the microscopic approaches to thermal hydraulics computations of fluid transport phenomena in energy exchanges, *Int J Transport Phenomena*, vol.7 pp.219-240, (2005).

72. A. Hotta, H. Shirai, M. Azuma, M. Sadatomi, A. Kawahara and H. Ninokata, A Modified Equilibrium Void Distribution Model Applicable for Conventional Square and Tight Lattice BWR Fuel Bundles, *Nuclear Engineering and Design*, Vol. **235**, pp. 983-999, 2005.
73. H. Ninokata, A Comparative Overview of Thermal Hydraulic Characteristics of Integrated Primary System Nuclear Reactors, *Journal of Nuclear Engineering and Technology*, Vol. 38, No. 1, pp. 33-44, February 2006
74. S. Wang and H. Ninokata, A Three-Dimensional DSMC Simulation of Single-Stage Turbomolecular Pump Adopting Accurate Intermolecular Collision Models, *Journal of Fluid Science and Technology*, Vol. 1, No. 2, pp. 58-71, 2006.
75. G. Sorokin, H. Ninokata, A. Sorokin, H. Endo, E. F. Ivanov, Experimental and Numerical Study of Liquid Metal Boiling in a System of Parallel Bundles under Natural Circulation Conditions, *Journal of Nuclear Science and Technology*, Vol. **43**, No. 6, pp.623-634 (2006).
76. E. Baglietto, H. Ninokata, T. Misawa, CFD and DNS Methodologies Development for Fuel Bundle Simulations, *Nuclear Engineering and Design*, **236** (2006) 1503-1510.
77. E. Baglietto, H. Ninokata, Anisotropic Eddy Viscosity Modeling for Application to Industrial Engineering Internal Flows, *Int. J. Transport Phenomena*, Volume **8**, Number 2, 2006
78. E. Baglietto, H. Ninokata, Improved Turbulence Modeling for Performance Evaluation of Novel Fuel Designs, *Nucl. Tech.*, Volume **158**, Number 2, May 2007, 237-248
79. 白山晋, 二ノ方寿, 連載講座 計算科学手法と原子力分野における応用 第10回 可視化技術, 課題と今後の展望, 日本原子力学会誌, Vol. **49**, No. 2, 122-128 (2007)
80. 二ノ方寿, 笹尾信行, 米国の高速炉開発の歴史-I, 高速炉の変遷と現状第3回, 日本原子力学会誌, Vol. **49**, No. 9 (2007)
81. 二ノ方寿, 笹尾信行, 米国の高速炉開発の歴史-II, 高速炉の変遷と現状第4回, 日本原子力学会誌, Vol. **49**, No. 10 (2007)
82. Y. Kumagai, H. Ninokata and D. Finicum, PRA-based SMA: the first tool toward a risk-informed approach to the seismic design of the IRIS, *J Nuclear Science and Technology*, Vol. **44**, No. 10, 1268-1274, 2007
83. E. Baglietto, H. Ninokata and M. Naitoh, 2008 - Investigation of ALPHA experiment by severe accident analysis code SAMPSON – *Nuclear Engineering and Design* Vol. **238**, Issue 7, July 2008, Pages 1561-1568.
84. E. Merzari, H. Ninokata and E. Baglietto, “Numerical Simulation of the Flow in Tight-Lattice Rod-Bundles”, *Nuclear Engineering and Design*, **238**, pp.1703-1719 (2008)
85. M. Naitoh, S. Uchida, S. Koshizuka, H. Ninokata, A. Minato, H. Saitoh, K. Hotta, M. Akiyama, N. Anahara, and K. Dozaki, “Evaluation Methods for Flow Accelerated Corrosion of Components by Corrosion Analysis Coupled with Flow Dynamics Analysis”, *International Journal of Heat Transfer Engineering*, **29**, August (2008) pp 712-720.
86. M. Naitoh, S. Uchida, S. Koshizuka, H. Ninokata, N. Hiranuma, K. Dozaki, K. Nishida, M. Akiyama and H. Saito, Evaluation Methods for Corrosion Damage of Components in Cooling Systems of Nuclear Power Plants by Coupling Analysis of Corrosion and Flow Dynamics, *J Nucl Sci Tech*, **45**, No. 11, 1116, 2008
87. E. Merzari, H. Ninokata, and E. Baglietto, 2008 - Numerical Simulation of Flows in Tight-lattice Fuel Bundles - *Nuclear Engineering and Design*, **238** (2008) 1703–1719.
88. E. Merzari, S. Wang, H. Ninokata and V. Theofilis, “Biglobal linear stability analysis for the flow in eccentric annular channels and a related geometry”, *Physics of Fluids* **20**, 114104 (2008); DOI:10.1063/1.3005864, Published 25 November 2008.
89. E. Merzari and H. Ninokata, “Anisotropic Turbulence and Coherent Structures in Eccentric

- Annular Channels”, *Flow, Turbulence and Combustion*, Springer Netherlands ISSN 1386-6184 (Print) 1573-1987 (Online); DOI:10.1007/s10494-008-9170-2, pp. 93-120, Volume 82, No. 1 January 2009.
90. E. Merzari, H. Ninokata, S. Wang, E. Baglietto and H. Ohshima “Numerical Simulation of Free-Surface Vortices”, *Nuclear Technology*, VOL. **165**, 313-320, March 2009.
 91. H. Ninokata, E. Merzari and A. Khakim, “Analysis of low Reynolds number turbulent flow phenomena in nuclear fuel pin subassemblies of tight lattice configuration”, *Nuclear Engineering and Design*, **239** (2009) 855-866.
 92. Sheng Wang, Hisashi Ninokata, Elia Merzari, Kangbin Lei, Xilian Luo, Luyi Lu, Kiwamu Kase, “Numerical study of a single blade row in turbomolecular pump”, *VACUUM*, Vol. **83**, No. 8, pp.1106-1117 May 2009.
 93. E. Merzari and H. Ninokata, “Development of an LES methodology for complex geometries”, *Journal of Nuclear Engineering and Technology* Vol. **41**, No. 7, Page 893-907, September (2009)
 94. Tomoko ISHIZU, Hiroshi ENDO and Hisashi Ninokata, “On Void Reactivity Limitation for the Core Loaded with Mixed Nitride Fuels”, *Journal of Nuclear Science and Technology*, Vol. **46**, No. 10, p. 981–994 (2009)
 95. E. Merzari, A. Khakim, H. Ninokata and E. Baglietto, Unsteady Reynolds-averaged Navier-Stokes: toward accurate prediction of turbulent mixing phenomena, *International Journal of Process Systems Engineering*, Vol. **1**, No. 1 (2009) 100-123.
 96. E. Merzari, H. Ninokata, A. Mamhood, M. Rohde, Proper Orthogonal Decomposition of the Flow in Geometry Containing a Narrow Gap, *Journal of Theoretical and Computational Fluid Dynamics* (Received April 8, 2008; accepted June 9, 2009): DOI 10.1007/s00162-009-0152-3
 97. E. Merzari, A. Khakim, H. Ninokata and E. Baglietto, Toward an Accurate Approach for the Prediction of the Flow in a T-junction: URANS, *Journal of Nuclear Engineering and Technology*, Vol. **41**, No. 9, pp. 1191-1204, (2009).
 98. Junichi Kaneko, Hisashi Ninokata, Akihiko Minato, “Numerical studies on dynamic behaviors of air-water cross flow between inter-connected two circular channels”, *Journal of Nuclear Science and Technology*, Vol. **46**, No.9, p.883-894, 2009
 99. Tomoko Ishizu, Hiroshi Endo, Moriyasu Tokiwai, Tsugio Yokoyama and Hisashi Ninokata, Study of the Self-Controllability for the Fast Reactor Core with High Thermal Conductivity, *Journal of Nuclear Science and Technology*, Vol.**47**, No.8, 684-697 (2010)
 100. Rui Li, Akinori Yamaguchi, Hisashi Ninokata. Computational Fluid Dynamics Study of Liquid Droplet Impingement Erosion in the Inner Wall of a Bent Pipe, *Journal of Power and Energy Systems*, (4-2): 327-336 (2010)
 101. A. Khakim and H. Ninokata, Feasibility study of the application of exotic pin for tight-lattice fuel assembly, *Progress in Nuclear Energy*, Vol. **53**, Issue 4, pp. 320-329, May (2011)
 102. Rui Li, Marco Pellegrini, Hisashi Ninokata,. A Numerical Study on Turbulence Attenuation Model for Liquid Droplet Impingement Erosion. *Annals of Nuclear Energy*, (**38-6**): 1279 - 1287 June, (2011)
 103. Rui Li, Hisashi Ninokata. A Numerical Study of Impact Force Caused by Liquid Droplet Impingement onto a Rigid Wall, *Progress in Nuclear Energy*, Vol. **53**, issue 7, September (2011) Pages 881–885.
 104. Azizul Khakim and Hisashi Ninokata, Simulation of two regime sodium flows in a parallel plate channel during buoyancy-driven flow, *Progress in Nuclear Energy*, Vol. **53**, issue 7, September

(2011) pp. 909-915.

105. Marco Pellegrini, Hiroshi Endo, Hisashi Ninokata, Numerical investigation of bent pipe flows at transitional Reynolds number, *Progress in Nuclear Energy*, **53**, pp.916-920, 2011.
106. Tsugio Yokoyama, Hiroshi Endo and Hisashi Ninokata, "Development of Analysis Method for Sodium Void Reactivity of Step Type FBR Cores by Using Group-wise Monte Carlo Code", *Annals of Nuclear Energy*, Volume **38**, pp. 1382-1388 (2011).
107. E. Merzari, H. Ninokata, R. Mereu, E. Colombo and F. Inzoli, URANS simulation of confined parallel jet mixing, *Nuclear Technology*, VOL. **175**, pp. 538 – 552 September (2011)
108. E. Merzari, H. Ninokata, Proper orthogonal decomposition of the flow in a tight lattice rod-bundle, *Nuclear Engineering and Design*, **241**, issue 11 November 2011, 4621-4632.
109. Rui Li, Hisashi Ninokata. A Calculation Methodology Proposed for Liquid Droplet Impingement Erosion, *Nuclear Engineering and Design*, **242** (2012) 157-163.
110. Marco Pellegrini, Hiroshi Endo, Hisashi Ninokata, Prediction of Thermal Stratification in a U-Bent Pipe: A URANS Validation, *Nuclear Engineering and Technology*, Vol. **44**, N. 1, pp. 1-10, 2012
111. E. Merzari, H. Ninokata "Recent Advances in Understanding of Global Flow Pulsations in Geometry Containing a Narrow Gap: Linear Stability and Proper Orthogonal Decomposition", *Nuclear Engineering and Design* (under review)
112. Yasushi Tsuboi, Tomoko Ishizu, Isao Tatewaki, Hiroaki Saito, Hisashi Ninokata, Analysis of Fuel Pin Behavior under Slow-ramp Type Transient Overpower Condition by FEMAXI-FBR, *J. Nucl. Sci. Tech.*, Vol. **49**, issue 4, pp. 408-424, 2012.
113. Bojan Petrovic, Marco Ricotti, Stefano Monti, Nikola Cavlina, Hisashi Ninokata, The Pioneering Role of IRIS in Resurgence of Small Modular Reactors (SMRs), *Nuclear Technology* **178**, No. 2, pages 126-152, May, 2012
114. Marco Pellegrini, H. Endo, H. Ninokata, On the CSAU Employment during ULOF Accident Initiating Phase for Sodium-Cooled Fast Reactors, *Nuclear Engineering and Design*. **249** (2012), pp. 197-203.
115. Y. Tsuboi, H. Endo, T. Ishizu, I. Tatewaki, H. Saito, H. Ninokata, 'Sensitivity analysis of Fuel Pin Failure performance under Slow-ramp Type Transient Overpower Condition by using fuel performance analysis code FEMAXI-FBR, *J Nuclear Science and Technology*, Volume **49**, issue 10, October (2012) pp. 975–987
116. Marco Pellegrini, Hiroshi Endo, Elia Merzari, Hisashi Ninokata, "Algebraic turbulent heat flux model for prediction of thermal stratification in piping system", *Nuclear Technology* (invited, *NURETH-14 paper selected for publication*) (accepted for publication, Vol. **181**, January 2013).
117. Hisashi Ninokata and Hideki Kamide, Thermal Hydraulics of Sodium-cooled Fast Reactors - Key Design and Safety Issues and Highlights -, *Nuclear Technology*, Vol. **181**, January 2013

Conference Proceedings Papers with Peer Review

1. N. Hirata, K. Kimura, M. Arai, H. Ninokata, Analysis of void fraction distribution in a nuclear fuel rods assembly, JSME conference paper proceedings, No. 814-11, December 1981
2. H. Ninokata, Analysis of low heat flux sodium boiling test in a 37-pin bundle by the two-fluid model computer code SABENA, Proc. 2nd Specialists Meeting on Decay Heat Removal and Natural Convection in LMFBRs, pp. 298 - 310, Upton, N.Y., April (1985).
3. Yoshikawa, A. Yamaguchi, I. Maekawa and H. Ninokata, An integrated analysis of natural circulation test in JOYO using SSC-L and COMMIX-1A, S. Proc. International Topical Meeting on Fast Reactor Safety, Vol. 1, pp. 293 - 300, Knoxville, April (1985).
4. H. Ninokata and T. Okano, SABENA: an advanced subchannel code for sodium boiling analysis, Proc. 3rd International Topical Meeting on Reactor Thermal Hydraulics, Vol. 2, pp. 16.K-1 - 7, Newport, October (1985).
5. H. Ninokata, Current practice in fast reactor safety thermohydraulic analysis, Keynote lecture, Proc. 3rd International Topical Meeting on Reactor Thermal Hydraulics, Vol. 2, pp. 12.A-1 - 9, Newport, October (1985).
6. H. Ninokata, A. Efthimiadis and N.E. Todreas, Distributed resistance modeling of wire-wrapped rod bundles, Proc. 2nd International Topical Meeting on Nuclear Power Plant Thermal Hydraulics and Operations, pp.1-132 - 140, Tokyo, April (1986).
7. H. Ninokata, A. Yamaguchi and A. Deguchi, An analytical investigation of decay heat removal performances of an LMFBR under adverse thermal conditions, Proc. Conference on Science and Technology of Fast Reactor Safety, Vol. 1, pp. 281 - 287, Guernsey, May (1986).
8. W.R. Bohl, D. Wilhelm, H. Ninokata and L. Luck, Computational methods of the advanced fluid dynamics model, Proc. ANS International Meeting on Advances in Reactor Physics, Mathematics, and Computation, pp. 1625 - 1640, Paris, April (1987).
9. H. Ninokata, T. Okano and A. Deguchi, Numerical simulation of rod bundle sodium boiling by SABENA, Proc. 1988 National Heat Transfer Conference, HTC Vol. 3, pp. 306 - 319, (ANS Proceedings), Houston, July (1988).
10. W.R. Bohl, F.R. Parker, and H. Ninokata, Multiphase flow in the advanced fluid dynamics model, Proc. 1988 National Heat Transfer Conference, HTC Vol. 3, pp. 61 - 70, (ANS Proceedings), Houston, July (1988).
11. H. Ninokata, Interpretation of sodium boiling and two-phase flow experiments in pin bundles by the use of the basic two-fluid model, Proc. 3rd International Topical Meeting on Nuclear Power Plant Thermal Hydraulics and Operations, Vol. 1, pp. A1-10 - 18, Seoul, November (1988).
12. H. Ninokata and A. Deguchi, Experimental validation of the subchannel two-fluid model code SABENA with out-of-pile sodium boiling experiments, Proc. 4th International Topical Meeting on Nuclear Reactor Thermal Hydraulics, Vol. 1, pp. 547 - 554, Karlsruhe, FRG, October (1989). Recommended to be published in Nuclear Technology.
13. H. Ninokata, Advances in computer simulation of fast breeder reactor thermohydraulics, Proc. International Conference on Supercomputing in Nuclear Applications, pp. 80 - 85, Mito, Japan, March (1990).

14. T. Muramatsu and H. Ninokata, Adaptive control system using the FUZZY theory for transient multi-dimensional thermohydraulics calculations, Proc. International Conference on Supercomputing in Nuclear Applications, pp. 69 -73, Mito, Japan, March (1990).
15. H. Ninokata, S. Kondo, Y. Sagayama, H. Endo, K. Koyama and M. Tezuka, Design consideration for CDA accommodations, Proc. of the Symposium on the Core Disruptive Accidents of Fast Breeder Reactors, Research Laboratory for Nuclear Reactors, Tokyo Institute of Technology, Tokyo, Japan, pp. 57 - 81, July 27-28 (1990).
16. H. Ninokata and A. Izumi, Decay heat removal system of the Monju reactor plant and studies related to the passive actuation and performances, (Invited paper) Proc. 1990 International Fast Reactor Safety Meeting, Vol. II, pp. 319 - 330, Snowbird, USA, August (1990).
17. T. Muramatsu, M. Matsumoto and H. Ninokata, In-vessel thermohydraulics evaluation of a UTOP accident and DN precursor concentration analysis using a multi-dimensional code, Proc. 1990 International Fast Reactor Safety Meeting, Vol. III, pp. 161 - 170, Snowbird, USA, August (1990).
18. T. Muramatsu and H. Ninokata, Intensity evaluation of the temperature fluctuations related to thermal striping phenomena using the algebraic stress turbulence model, 7th Proc. of Nuclear Thermal Hydraulics, pp. 156 - 162, American Nuclear Society -Winter Mtg, San Francisco, Nov. 1991.
19. H. Ninokata and M. Konomura, Thermohydraulics analysis of local subassembly accidents in liquid metal cooled fast breeder reactors, Proc. 5th International Topical Meeting on Nuclear Reactor Thermal Hydraulics (NURETH-5), pp. 1537 - 1545, Salt Lake City, USA, September (1992).
20. H. Ninokata, N. Nonaka and S. Kondo, Key issues in R&Ds and their prospective views related to LMFBR core disruptive accidents, Proc. International Conference on Design and Safety of Advanced Nuclear Power Plants (ANP'92), pp. 29.3-1 - 5, Tokyo, October (1992). (Recommended to be published in Nuclear Technology)
21. A. Yamaguchi, H. Niwa, K. Tsukimori, Y. Shimakawa, H. Hayashi, H. Ninokata and K. Aizawa, PNC's analysis of passive safety test phase2B in Fast Flux Test Facility, Proc. International Conference on Design and Safety of Advanced Nuclear Power Plants (ANP'92), pp. 30.4-1 - 9, Tokyo, October (1992).
22. H. Ninokata and T. Shimizu, Fast reactor safety and computational thermo-fluid dynamics approaches, Proc. Joint Int. Conf. Mathematical Methods and Supercomputing in Nuclear Applications, Karlsruhe, 151-163 (1993)
23. T. Sawada, H. Ninokata and A. Shimizu, Analysis of an out-of-pile experiment for fuel relocation under CDA conditions of FBR, Proc. Fourth International Topical Meeting on Nuclear Thermal-Hydraulics, Operations and Safety, Taipei, Taiwan, April (1994).
24. H. Ninokata, A. Deguchi and A. Kawahara, Analysis of two-phase flow inter-subchannel mass and momentum exchanges by the two-fluid model approach, Proc. 7th International Topical Meeting on Nuclear Reactor Thermal Hydraulics, Saratoga Springs, NY, September (1995), pp. 2721-2737.
25. T. Sawada, H. Ninokata, and A. Shimizu, Computational modelling for hexacan failure under core disruptive accident conditions, Proc. 7th International Topical Meeting on Nuclear Reactor Thermal Hydraulics, Saratoga Springs, NY, September (1995), pp. 1398-1406.
26. H. Ninokata, T. Sawada, H. Tomozoe and H. Endo, On self-controllability and self-terminability of fast reactors, Proc. 2nd International Symposium on Global

- Environment and Nuclear Energy System (GENES-2), October 1996, Tsuruga, Japan.
27. T. Sawada, H. Ninokata, H. Tomozoe and H. Endo, Recriticality characteristics of fast reactors and possibility to preclude recriticality by controlled material relocation, Proc. 2nd International Symposium on Global Environment and Nuclear Energy System (GENES-2), October 1996, Tsuruga, Japan.
 28. H. Endo, M. Kawashima, M. Suzuki, H. Ninokata, T. Sawada, et al., Safety characteristics of the SCNES core, Proc. 2nd International Symposium on Global Environment and Nuclear Energy System (GENES-2), October 1996, Tsuruga, Japan.
 29. T. Sawada and H. Ninokata, Evaluation of FCI under severe core accident conditions in fast breeder reactors, Proc. 5-th International Topical Meeting on Nuclear Thermal Hydraulics, Operations & Safety (NUTHOS-5), Beijing, China, Y6-1 - 6, April (1997)
 30. H. Ninokata, M. Sato, H. Endo and T. Sawada, A general method to evaluate passive safety characteristics of FBRs, Proc. 5-th International Topical Meeting on Nuclear Thermal Hydraulics, Operations & Safety (NUTHOS-5), Beijing, China, T6 - 1-6, April (1997)
 31. V. Kriventsev and H. Ninokata, An application of efficient finite-difference scheme to transient problems of fluid flow and heat transfer, Proc. 5th International Conference in Nuclear Engineering (ICONE-5), Nice, France, May (1997)
 32. V. Kriventsev and H. Ninokata, Toward more efficient and accurate finite-differencing solution scheme for transient problems of heat and mass transfer, Proc. 5th International Conference in Nuclear Engineering (ICONE-5), Nice, France, May (1997)
 33. H. Shirai, Y. Onoda and H. Ninokata, A contribution to modeling of the void drift phenomena in the BWR subchannel analysis, Proc. 5th International Conference in Nuclear Engineering (ICONE-5), Nice, France, May (1997)
 34. H. Ninokata, M. Satoh, H. Endo and T. Sawada, Enhanced passive safety features against ATWS of fast breeder reactors with capabilities of MA incineration, Proc. 2nd International Conference on Advanced Reactors Safety (ARS'97), Orland, Florida, USA, June 1997
 35. H. Ninokata, T. Sawada, H. Tomozoe and H. Endo, On a recriticality-free fast reactor core concept, Proc. 2nd International Conference on Advanced Reactors Safety (ARS'97), Orland, Florida, USA, June 1997
 36. H. Ohshima, H. Narita and H. Ninokata, Analysis of thermohydraulic behavior in a fast reactor fuel subassembly with porous blockages, Proc. 2nd International Conference on Advanced Reactors Safety (ARS'97), Orland, Florida, USA, pp. 1157-1164, June 1997
 37. V. Zimin and H. Ninokata, Nonlinear iteration procedure based on Legendre polynomials, ANS Transactions, Vol. 76, 162-163, June 1997.
 38. 二ノ方 寿, サブチャネル解析手法による原子炉炉心集合体内二相流解析, 日本機械学会第10回計算力学講演会講演論文集, pp 27-28, 1997.
 39. H. Ninokata, Y. Onoda and A. Kawahara, Phenomenological Modeling of the two-phase flow void drift phenomena in a two-subchannel system, Proc. 8th Topical Meeting on Nuclear Reactor Thermal Hydraulics (NURETH-8), Kyoto, 247-255, September (1997)
 40. V. Kriventsev and H. Ninokata, An effective finite-difference scheme for transient problems of heat and mass transfer, Proc. 8th Topical Meeting on Nuclear Reactor Thermal Hydraulics (NURETH-8), Kyoto, 572-580, September (1997)
 41. V.G. Zimin and H. Ninokata, Polynomial and semi-analytical nonlinear nodal schemes for

neutron diffusion calculations, Proc. VOLGA97, September (1997)

42. V. Kriventsev and H. Ninokata, A finite difference scheme for convection-diffusion equation: Numerical simulation of sample problems, Proc. Second All Russian Symposium "Heat-Mass Transfer Processes, Single Crystals and Thin Film Growth," Obninsk, Russia, September (1997).
43. V. Kriventsev and H. Ninokata, An Application of Object-Oriented Programming in Numerical Simulation of Fluid Dynamics in Complex Geometry, Proc. JSME Ann. Mtg., I.S. III-3 1231 (1998)
44. V.G. Zimin, H. Ninokata and L.R. Pogosebkyan, Polynomial and semi-analytical nodal methods for nonlinear iteration procedure, Proc International Conference on the Physics of Nuclear Science and Technology, 2, 994-1002, Long Island, New York (1998)
45. Yuri Kornienko and Hisashi Ninokata, Influences of the transverse non-homogeneous parameter distribution on wall friction, heat and mass transfers in single- and two-phase flows in vertical annular and subchannel geometries, 7th International Conference on Nuclear Engineering, Tokyo, Japan, April, 1999.
46. Yuichi Hizume and Hisashi Ninokata, A simple analytical method to evaluate transient behaviors of fast reactors, 7th International Conference on Nuclear Engineering, Tokyo, Japan, April, 1999.
47. Akitoshi Hotta, Akihiro Fukano, Hisashi Ninokata, and Anthony J. Baratta, Implementation of discontinuity factor in 3D nodal code ENTREE and coupling calculation with TRAC-BF1, M&C ANS Madrid, 1999
48. Vladimir Kriventsev and Hisashi Ninokata, Two-dimensional calculation of fluid flow and heat transfer in a rod bundle with geometrical disturbance, XXVIII IAHR Congress, on CD ROM, Abstract Proc. p. 59, Graz, Austria, August 1999.
49. Hisashi Ninokata and Hiroshi Shirai, Calculation of two-phase flow distributions in subchannel systems by the principle of minimum entropy production, Thermophysics99, pp. 9-11, Obninsk, Russia, September 1999.
50. Hisashi Ninokata, Microscopic approaches in nuclear reactor thermal hydraulics computations, (Keynote Lecture), Ninth International Topical Meeting on Nuclear Reactor Thermal Hydraulics (NURETH-9), on CD ROM, San Francisco, California, October 3 - 8, 1999.
51. Vladimir Kriventsev and Hisashi Ninokata, Calculation of detailed velocity and temperature distributions in a rod bundle of nuclear reactor, Ninth International Topical Meeting on Nuclear Reactor Thermal Hydraulics (NURETH-9), on CD ROM, San Francisco, California, October 3 - 8, 1999.
52. Hiroshi Shirai and Hisashi Ninokata, Prediction of the equilibrium two-phase flow distribution in a rod bundle and void drift, Ninth International Topical Meeting on Nuclear Reactor Thermal Hydraulics (NURETH-9), on CD ROM, San Francisco, California, October 3 - 8, 1999.
53. Norihiro Doda, Hisashi Ninokata and Hiroaki Ohira, Prediction of release rate of burnt sodium as aerosol, Ninth International Topical Meeting on Nuclear Reactor Thermal Hydraulics (NURETH-9), on CD ROM, San Francisco, California, October 3 - 8, 1999.
54. Fumio Kasahara and Hisashi Ninokata, Development of multi-fluid multi-phase subchannel analysis code KAMUI for analyzing accident conditions in a subassembly of LMFR, Ninth International Topical Meeting on Nuclear Reactor Thermal Hydraulics (NURETH-9), on CD

ROM, San Francisco, California, October 3 - 8, 1999.

55. Akitoshi Hotta, Hisashi Ninokata and Anthony J. Baratta, Development of three dimensional kinetic code *ENTRÉE* coupled with *TRAC-BF1*, Ninth International Topical Meeting on Nuclear Reactor Thermal Hydraulics (NURETH-9), on CD ROM, San Francisco, California, October 3 - 8, 1999.
56. Y. Kornienko and H. Ninokata, Development of one-dimensional models for subchannel analysis in rod bundles, Trans. IV Minsk International Forum "Heat/Mass Transfer MIF-2000" Vol. 10, pp. 226-233, May 22-26, 2000.
57. Y. Kornienko and H. Ninokata, Estimation of contributions of the flow parameters changes in the transverse direction to behaviors of the friction coefficients and heat exchanges in annular channels and rod bundles, Trans. IV Minsk International Forum "Heat/Mass Transfer MIF-2000" Vol. 10, pp. 234-241, May 22-26, 2000.
58. M. D. Carelli, D. V. Paramonov, C. V. Lombardi, M. E. Ricotti, N. E. Todreas, E. Greenspan, J. Vujic, R. Yamazaki, K. Yamamoto, A. Nagano, G. L. Fiorini, P. Dumaz, T. Abram and H. Ninokata, IRIS, International New Generation Reactor, ICONE-8 8447 on CD-ROM, 8th International Conference on Nuclear Engineering, Baltimore, USA, April 2-6, 2000.
59. H. Ninokata, A.P. Sorokin and P.L. Kirillov, Comparison of Sodium and Lead/Lead-Bismuth as a Coolant and LMFR Safety, Invited paper (ICONE-8 8826) on CD-ROM, 8th International Conference on Nuclear Engineering, Baltimore, USA, April 2-6, 2000.
60. Y. Kornienko and H. Ninokata, Analytical Foundation and Appraisal of Wall Friction and Heat Transfer Coefficients used in the Bubble Detachment Region of Subcooled Boiling Flow, (ICONE8 8723) on CD-ROM, 8th International Conference on Nuclear Engineering, Baltimore, USA, April 2-6, 2000.
61. H. Ninokata, M. Aritomi, T. Anegawa, et al., Development of the NASCA code for predicting transient BT phenomena in BWR rod bundles, Proc. OECD-CSNI Workshop on Advanced Thermal-Hydraulic and Neutronic Codes: Current and Future Applications, Barcelona, April 10-11, 2000.
62. A. Hotta, H. Ninokata and A. J. Baratta, Peach Bottom 2 Turbine Trip Simulation by Coupling System of 3D Nodal Code *ENTRÉE* and *TRAC-BF1*, *Int. Topical. Mtg. on Math. and Comp.*, 1804-1812, Sept. 27-30, (1999).
63. F. Kasahara, H. Ninokata, A.P. Sorokin, and G.P. Bogoslovskaya, Analysis of liquid-metal boiling under the natural circulation condition, Proc. 2nd Japan-Korea Symposium on Nuclear Thermal Hydraulics and Safety, Fukuoka, October (2000)
64. A. Romano, V. Kriventsev, H. Ninokata and N.E. Todreas, Novel fuel geometries for the generation IV IRIS reactor, on CD-ROM, Proc. 9th International Conference on Nuclear Engineering (ICONE9), Nice, France, April, 2001
65. M. D. Carelli, D. V. Paramonov, K. Miller, C. V. Lombardi, M. E. Ricotti, N.E. Todreas, E. Greenspan, K. Yamamoto, A. Nagano, H. Ninokata, J. Robertson and F. Oriolo, IRIS Reactor Development, Proc. 9th International Conference on Nuclear Reactor, Nice, France, 2001
66. T. Sawada, H. Endo and H. Ninokata, A concept of recriticality-free fast reactor under core degradation accidents and the feasibility of associated practical measure, on CD-ROM, Proc. 9th International Conference on Nuclear Engineering (ICONE9), Nice, France, April, 2001
67. Y. Kornienko, E. Kornienko and H. Ninokata, On closure strategy for 1D thermohydraulics models and closure relationships of two-phase flows in simple and subchannel geometry for NPP accident conditions, on CD-ROM, Proc. 9th International Conference on Nuclear

- Engineering (ICONE9), Nice, France, April, 2001
68. V. Kriventsev, H. Ninokata and A. Yamaguchi, Multi-scale viscosity model of turbulence for fully-developed channel flows, on CD-ROM, Proc. 9th International Conference on Nuclear Engineering (ICONE9), Nice, France, April, 2001
 69. M.D. Carelli, B. Petrovic, L.E. Conway, D.V. Paramonov, M. Galvin, N.E. Todreas, C.V. Lombardi, F. Maldari, M.E. Ricotti, L. Cinotti, E. Greenspan, K. Miller, A. Nagano, K. Yamamoto, H. Ninokata, J. Robertson, F. Oriolo, The IRIS Reactor Conceptual Design, Paper #104 Proc. GLOBAL2001, Paris, France, September 2001
 70. V. Barchevtsev, V. Artisyuk and H. Ninokata, Double-strata high burnup fuel performance in LWRs, Proc. ANS 2001 Winter Meeting, November 11-17, Reno, NV, USA (2001)
 71. K. Ogura and H. Ninokata, An Approach of Uncertainty Evaluation for Thermal-Hydraulics Analysis, ICONE10-22062, Proc. 10th International Conference on Nuclear Engineering (ICONE10), on CD-ROM, Arlington, VA, USA, April, 2002
 72. V. Kriventsev, H. Ohshima, A. Yamaguchi and H. Ninokata, Numerical prediction of secondary flows in complex areas using concept of local turbulent Reynolds number, ICONE10-22333, Proc. 10th International Conference on Nuclear Engineering (ICONE10), on CD-ROM, Arlington, VA, USA, April, 2002
 73. Y. Mizuno, K. Ogura, L. Conway and H. Ninokata, Preliminary Probabilistic Safety Assessment of the IRIS Plant, ICONE10-22095, Proc. 10th International Conference on Nuclear Engineering (ICONE10), on CD-ROM, Arlington, VA, USA, April, 2002
 74. M.D. Carelli, K. Miller, C. Lombardi, N. Todreas, E. Greenspan, H. Ninokata, F. Lopez, et al., IRIS: Proceeding toward the preliminary design, ICONE10-22497, Proc. 10th International Conference on Nuclear Engineering (ICONE10), on CD-ROM, Arlington, VA, USA, April, 2002
 75. V. Barchevtsev, V. Artisyuk and H. Ninokata, Synergetic potential of light water reactors, Proc. Embedded Topical Meeting at the 2002 ANS Annual Meeting, Hollywood, FL, USA, June (2002)
 76. K. Ogura and H. Ninokata, A robust approach to uncertainty in nuclear reactor thermal-hydraulic analysis, Proc. 3rd Korea-Japan Symposium on Nuclear Thermal Hydraulics and Safety (NTHAS3), Kyongju, Korea, pp. 93-98, October 2002
 77. T. Misawa, I. Maekawa and H. Ninokata, Calculation of Heat Transfer Coefficients on a Flat Plate by Pseudo Direct Numerical Simulation of Turbulence, Proc. 3rd Korea-Japan Symposium on Nuclear Thermal Hydraulics and Safety (NTHAS3), Kyongju, Korea, pp. 116-120, October 2002
 78. T. Fujita, H. Endo and H. Ninokata, On void reactivity limitation for nitride-fueled LMFR core, Proc. 3rd Korea-Japan Symposium on Nuclear Thermal Hydraulics and Safety (NTHAS3), Kyongju, Korea, pp. 600-607, October 2002
 79. H. Shirai, H. Ninokata, A. Hotta and T. Hara, Analytical study on detailed void distributions inside BWR fuel bundle under turbine trip event considering realistic pin power distribution, Proc. 3rd Korea-Japan Symposium on Nuclear Thermal Hydraulics and Safety (NTHAS3), Kyongju, Korea, pp. 500-507, October 2002
 80. E. Baglietto and H. Ninokata, Study of steam generator overheating tube failure in FBRs, Proc. 3rd Korea-Japan Symposium on Nuclear Thermal Hydraulics and Safety (NTHAS3), Kyongju, Korea, pp. 616-622, October 2002

81. A. Yamaguchi and H. Ninokata, Computational fluid dynamics code system for liquid metal cooled reactor safety analysis, Proc IAEA Technical Meeting on Use of CFD Codes for Safety Analysis of Reactor Systems, Including Containment, Pisa, Italy, Nov. 11-13, 2002
82. M. D. Carelli, L. Oriani, L. Conway, C. Lambardi, A. Barroso, J. Collado, L. Cinoti, M. Moraes, D. Grgic, H. Ninokata, D. Ingersoll and R. Borougs, The Design and Safety Features of the IRIS Reactor, Proc. 11th International Conference on Nuclear Engineering, ICONE 11-36564 (2003)
83. E. Baglietto and H. Ninokata, Selection of an Appropriate Turbulence Model to Evaluate Performances of Novel Fuel Geometries for the "IRIS" Reactor, Proc. 4TH ASME • JSME Joint Fluids Engineering Conference (2003)
84. Y. Mizuno and H. Ninokata, Preliminary Level-1 Probabilistic Risk Assessment of the IRIS Plant in a Conceptual and Preliminary Design Phase, Proc. International Conference on Global Environment and Advanced Nuclear Power Plants (GENES4/ANP2003), 1078 (2003)
85. E. Baglietto and H. Ninokata, Selection of an Appropriate Turbulence Modeling in a CFD code for an Ultra-long Life Core for the IRIS Reactor, Proc. International Conference on Global Environment and Advanced Nuclear Power Plants (GENES4/ANP2003), 1153 (2003); also presented at the GLOBAL2003-Advanced Nuclear Energy and Fuel Cycle Systems (ANS/ENS) Nov. 2003
86. H. Ninokata, M. Sadatomi, T. Okawa, A. Serizawa, K. Mishima, S. Koshizuka, K. Yoshiro, A. Hotta, S. Morooka, Y. Yamamoto, N. Shirakawa and K. Nishida, Development of Generalized Boiling transition Model Applicable for Wide Variety of Fuel Bundle Geometries, Proc. International Conference on Global Environment and Advanced Nuclear Power Plants (GENES4/ANP2003), 1013 (2003)
87. H. Ninokata, A Comparative Overview of Thermal Hydraulic Characteristics of Integrated Primary System Nuclear Reactors, Proc. 10th International Topical Meeting on Nuclear Reactor Thermal Hydraulics (NURETH-10), KL-07 (2003)
88. E. Baglietto and H. Ninokata, Turbulence Models Evaluation for Heat Transfer Simulation in Tight Lattice Fuel Bundles, Proc. 10th International Topical Meeting on Nuclear Reactor Thermal Hydraulics (NURETH-10), E00214 (2003)
89. T. Misawa, H. Ninokata and I. Maekawa, Calculation of Detailed Velocity and Temperature Distributions in a Triangular Pin Bundle Using Pseudo Direct Numerical Simulation, Proc. 10th International Topical Meeting on Nuclear Reactor Thermal Hydraulics (NURETH-10), E00218 (2003)
90. Y. Kornienko, H. Ninokata, Development of Generalized Integral Form for Two-Phase Flow Quasi-One-Dimension Closure Relationships of Distribution Parameters and Wall Friction, Heat and Mass Transfer Coefficients for Pipe, Annular and Subchannel Geometry, Proc. 10th International Topical Meeting on Nuclear Reactor Thermal Hydraulics (NURETH-10), A00312 (2003)
91. H. Ninokata, M. Sadatomi, T. Okawa, S. Serizawa, K. Mishima, S. Koshizuka, K. Yoshiro, A. Hotta, S. Morooka, Y. Yamamoto, N. Shirakawa and K. Nishida, Development of Generalized Boiling Transition Model Applicable to Wide Variety of BWR-Type Fuel Bundle Geometry – Master Plan and Status of First Year, Proc. 10th International Topical Meeting on Nuclear Reactor Thermal Hydraulics (NURETH-10), A00307 (2003)
92. M. Tokiwai, H. Endo, K. Fukushima, T. Yokoyama and H. Ninokata, Feasibility of Metallic Fueled Light Water Reactor, Proc. GLOBAL2003-Advanced Nuclear Energy and Fuel Cycle Systems (ANS/ENS) (2003)

93. H. Ninokata, N Atake, E Baglietto, T Misawa, T Kano, Direct Numerical Simulation of Turbulent Flows in a Subchannel of Tight Lattice Fuel Pin Bundles of Nuclear Reactors - Annual Report of the Earth Simulator Center, April, 2004.
94. A. Minato, T. Nagayoshi, M. Misawa, A. Suzuki, H. Ninokata, S. Koshizuka, Numerical Simulation Method of Complex 3D Gas-Liquid Two-Phase Flow, ICMF2004, Yokohama, June (2004)
95. G. Sorokin, H. Ninokata, A. Sorokin and H. Endo, Numerical Modeling of Liquid Metal Boiling in Parallel Channels under Natural Circulation Conditions, Proc. 11th Meeting of the IAHR Working Group on Advanced Nuclear Reactors Thermal Hydraulics "Hydrodynamics and heat transfer in single and two-phase flow of liquid metals", Obninsk, Russian Federation, July 2004.
96. H. Ninokata, CFD and CMFD Applications for Subchannel Analysis of Fuel Rod Bundles, NUTHOS-6, Keynote Paper KN-12, October 4-8, 2004, Nara, Japan
97. T. MISAWA, H. NINOKATA and I. MAEKAWA, Calculation of Detailed Velocity Distributions in Fuel Pin Bundles of Infinite Triangular Array Configuration Using Direct Numerical Simulation, NUTHOS-6, N6P-377, October 4-8, 2004, Nara, Japan
98. E. Baglietto and H. Ninokata, CFD Modeling of Secondary Flows in Fuel Rod Bundles, Proc. 6th International Topical Meeting on Nuclear Thermal Hydraulics, Operations & Safety (NUTHOS-6), N6P-343, October 4-8, 2004, Nara, Japan
99. V. Kriventsev, H. Ohshima, A. Yamaguchi and H. Ninokata, Turbulence Modeling and Pressure Drop Prediction in Channel Flows, Proc. 6th International Topical Meeting on Nuclear Thermal Hydraulics, Operations & Safety (NUTHOS-6), N6P-032, October 4-8, 2004, Nara, Japan
100. T. Ishizu, H. Endo and H. Ninokata, On the Design Limit of the Void Reactivity for MOX-Fueled LMFR Core, Proc. 6th International Topical Meeting on Nuclear Thermal Hydraulics, Operations & Safety (NUTHOS-6), N6P-371, October 4-8, 2004, Nara, Japan
101. A.P. Sorokin, H. Ninokata, G.P. Bogoslovskaya and A.V. Zhukov, Models and Characteristics of Interchannel Exchange as a Decisive Factor in Subchannel Analysis of Reactor Subassembly, Proc. 6th International Topical Meeting on Nuclear Thermal Hydraulics, Operations & Safety (NUTHOS-6), N6P-086, October 4-8, 2004, Nara, Japan
102. H. Ninokata, M. Sadatomi, T. Okawa, A. Serizawa, K. Mishima, S. Koshizuka, A. Tomiyama, Y. Yamamoto, Y. Kudo, A. Hotta, K. Nishida, N. Shirakawa, Current Status of Generalized Boiling Transition Model Development Applicable to a Wide Variety of Fuel Bundle Geometry, Proc. 6th International Topical Meeting on Nuclear Thermal Hydraulics, Operations & Safety (NUTHOS-6), N6P-363, October 4-8, 2004, Nara, Japan
103. H. Shirai, A. Hotta and H. Ninokata, A strategy of Implementation of the Improved Constitutive Equations for the Advanced Subchannel Code, Proc. 6th International Topical Meeting on Nuclear Thermal Hydraulics, Operations & Safety (NUTHOS-6), N6P-384, October 4-8, 2004, Nara, Japan
104. A. Hotta, H. Shirai, M. Azuma, M. Sadatomi, A. Kawahara and H. Ninokata, A Modified Equilibrium Void Distribution Model Applicable for Conventional Square and Tight Lattice BWR Fuel Bundles, Proc. 6th International Topical Meeting on Nuclear Thermal Hydraulics, Operations & Safety (NUTHOS-6), N6P-088, October 4-8, 2004, Nara, Japan
105. M. Azuma, A. Hotta, H. Shirai and H. Ninokata, Effects of Fluid Properties on the Cross-Flow Between Subchannels, Proc. 6th International Topical Meeting on Nuclear

- Thermal Hydraulics, Operations & Safety (NUTHOS-6), N6P-089, October 4-8, 2004, Nara, Japan
106. H. Ninokata, Two-phase flow modeling in the rod bundle subchannel analysis, 177ème Session du comité scientifique et technique de la Société Hydrotechnique de France, Progrès récents des méthodologies de modélisation des écoulements diphasiques, Lyon, France, 24-26 Novembre 2004
 107. S. Wang and H. Ninokata, Influences of Geometrical Properties to the Pumping Characteristics of Turbo Molecular Pump by DSMC Calculation, Proc 4th Japan-Korea Symposium on Nuclear Thermal Hydraulics and Safety, NTHAS-086, Sapporo, Japan November 28-December 1, 2004
 108. E. Baglietto and H. Ninokata, Simulation of Turbulent Flow Inside Tight Lattice Bundles with an Improved Non-Linear Eddy Viscosity Model, Proc 4th Japan-Korea Symposium on Nuclear Thermal Hydraulics and Safety, NTHAS-059, Sapporo, Japan November 28-December 1, 2004
 109. J. Kaneko, A. Minato and H. Ninokata, Multi-dimensional analysis of two-phase flow inside subchannels of nuclear fuel assembly Japan-US Seminar on Two-Phase Flow Dynamics, Vol. 1, pp. 327-333, Nagahama, December 2004
 110. J. Kaneko and H. Ninokata, Study on the redistribution of flow due to cross flow between subchannels, 1st COE-INES International Symposium INES-1, Paper No. 75, Tokyo, Japan, October 31-November 4, 2004.
 111. T. Yokoyama, T. Fujiki, H. Endo and H. Ninokata, A study on reactivity insertion controlled LMR cores with metallic fuel, 1st COE-INES International Symposium INES-1, Paper No. 80, Tokyo, Japan, October 31-November 4, 2004.
 112. T. Ishizu, H. Endo, M. Tokiwai, T. Yokoyama and H. Ninokata, Study of self-controllability and self-terminability of the core loaded with high thermal conductivity fuels, 1st COE-INES International Symposium INES-1, Paper No. 91, Tokyo, Japan, October 31-November 4, 2004.
 113. H. Kumagai, and H. Ninokata, The preliminary IRIS PRA-Based Seismic Margins Assessment, 1st COE-INES International Symposium INES-1, Paper No. 116, Tokyo, Japan, October 31-November 4, 2004.
 114. S. Wang and H. Ninokata, The Pumping Performances of the Turbo Molecular Pump Simulated By Direct Simulation Monte Carlo Method, 1st COE-INES International Symposium INES-1, Paper No. 111, Tokyo, Japan, October 31-November 4, 2004.
 115. H. Ninokata, T Okumura, E Merzari, T Kano, Direct Numerical Simulation of Turbulent Flows in an Eccentric Annulus Channel, Annual Report of the Earth Simulator Center, April, 2005
 116. Hisashi Ninokata, CFD Applications to Subchannel Turbulent Flows in a Rod Bundle, CFD Seminar on the Computational Fluid Dynamics Applications in Nuclear Industry, 13th International Conference on Nuclear Engineering (ICONE-13), Beijing, China, May 16-20, 2005.
 117. K. Miller, C.V. Lombardi, M.E. Ricotti, A.C.O. Barroso, J.M. Collado, L. Cinotti, S. Storai, F. Berra, N.E. Todreas, H. Ninokata, N. Cavlina, D. Grgic, F. Orioro, M.M. Moraes, F. Frederico, F. Henning, W. Griffith, J. Love, D.T. Ingersoll, R. Wood, G. Alosnso, N. Kodochigov, F. Polunichev, A. Auguitis, R. Alzbutas, R.D.Boroughs, A. Naviglio, B. Panella, IRIS design overview and status update, ICONE13-50442, 13th International Conference on

- Nuclear Engineering (ICONE-13), Beijing, China, May 16-20, 2005
118. E. Baglietto and H. Ninokata, Improved anisotropic turbulence modeling for CFD applications in the IRIS design, ICONE13-50143, 13th International Conference on Nuclear Engineering (ICONE-13), Beijing, China, May 16-20, 2005
 119. E. Baglietto, H. Ninokata and T. Misawa, CFD and DNS methodologies development for fuel bundle simulations, ICONE13-50144, 13th International Conference on Nuclear Engineering (ICONE-13), Beijing, China, May 16-20, 2005
 120. M. Carelli, B. Petrovic, K. Miller, C. Lombardi, M. Ricotti, N. Cavlina, D. Grgic, J. Collado, L. Cinotti, A. Barroso, H. Ninokata, N. Crucitti, F. Henning, D. Ingersoll, N. Todreas, N. Kodochigov, G. Alonso, F. Orioro, J. Augutis, W. Griffith, C. Frederico, R. Boroughs, B. Panella, A. Naviglio, The IRIS Consortium: International cooperation in advanced reactor development, ICONE13-50799, 13th International Conference on Nuclear Engineering (ICONE-13), Beijing, China, May 16-20, 2005
 121. S. Wang and H. Ninokata, Analysis of pumping performances in one-stage turbomolecular pump by 3D direct simulation Monte Carlo calculation, ICONE13-50937, 13th International Conference on Nuclear Engineering (ICONE-13), Beijing, China, May 16-20, 2005
 122. M.D. Carelli, L.E. Conway, C.L. Kling, L. Oriani, B. Petrović, C.V. Lombardi, M.E. Ricotti, A.C.O. Barroso, J.M. Collado, L. Cinotti, N.E. Todreas, D. Grgić, R.D. Boroughs, H. Ninokata, F. Oriolo, Annex 2: Design and safety of IRIS, an integral water cooled SMR for near term deployment in Innovative small and medium sized reactors: Design features, safety approaches and R&D trends, Final report of a technical meeting held in Vienna, 7–11 June 2004, IAEA-TECDOC-1451, May 2005.
 123. S. Wang, and H. Ninokata, Numerical simulation of 3d flow in turbomolecular pump by direct simulation Monte Carlo method, FEDSM2005-77364, Proceedings of FEDSM2005: 2005 ASME Fluids Engineering Division Summer Meeting and Exhibition, June 19-23, 2005, Houston, TX, USA
 124. 二ノ方 寿, 原子炉工学におけるCFDの役割, 2005JSME年次大会, 基調講演【K16】, 講演資料集, pp. 500-501, 電気通信大学, 2005年9月21日 (H. Ninokata, The role of CFD in nuclear reactor engineering, keynote lecture K16, Proc. 2005 JSME Annual Meeting, pp. 500-501, September 2005.)
 125. S. Wang and H. Ninokata, 3D flow simulation in the single blade row of one stage turbomolecular pump by Direct Simulation Monte Carlo method, Proc NURETH11(on CDROM), paper 279, Avignon, France, October 2-6, 2005.
 126. E. Baglietto and H. Ninokata, Improved turbulence modeling for performance evaluation of novel fuel designs, Proc NURETH11(on CDROM), paper 331, Avignon, France, October 2-6, 2005.
 127. 湊 明彦, 二ノ方 寿, 越塚 誠一, 三澤 雅樹, 原子炉における気液二相流複雑流動評価に関する技術開発(1) (複雑な気液二相流の数値解析技術開発), Technology Development of Estimation Method for Complex Gas-liquid Two-phase Flow in Nuclear Reactors (1) (Development of numerical method for complex gas-liquid two-phase flow), 日本混相流学会年会講演会 2005
 128. T. Yokoyama, M. Tokiwai, H. Ninokata and H. Endo, Optimization of Aluminum-Metal Fueled Fast Reactor Cores for Inherent Safety, Proc. ANS Winter Meeting (on CDROM), Washington DC, November 2005.
 129. 金子順一, 湊 明彦, 二ノ方寿, 拡張二流体モデルを用いた燃料集合体サブチャンネル

ル内二相流の多次元解析, 第 18 回計算力学講演会, 2005 年 11 月 19 日~21 日

130. H. Ninokata, Direct Numerical Simulation of Turbulent Flows in a Subchannel of Tight Lattice Fuel Pin Bundles of Nuclear Reactors, *Annual Report of the Earth Simulator Center*, p. 293, December 2005.
131. B. Petrovic, M. Carelli, M. Ricotti, N. Todreas, F. Oriolo, N. Cavlina, H. Ninokata, Integrating Students Research into IRIS Design Development, Proc. ANS Annual Meeting (on CDROM), Reno, CA, June 2006.
132. M.D. Carelli, B. Petrović, M. Ricotti, N. Todreas, N. Čavlina, F. Oriolo and H. Ninokata, Role of University Research in the Development of IRIS, Proc. International Youth Nuclear Congress (IYCN-2006), Sweden, June, 2006.
133. 二ノ方 寿, 奥村 剛征, 阿竹 規男, 高速炉燃料集合体内低 Re 数乱流の局所層流化について, 2637, S-57 日本機械学会 2006 年度年次大会, 熊本大学, 2006 年 9 月 18 日~22 日
134. Tsunayuki Okumura, Elia Merzari and Hisashi Ninokata; Direct Numerical Simulation of Turbulent Flows in an Eccentric Annulus Channel, Proc. ANS Winter Meeting, Albuquerque, NM, USA, November 2006.
135. Tsugio Yokoyama, Moriyasu Tokiwai, Hisashi Ninokata and Hiroshi Endo; Aluminum-Metal Fueled Long Life Fast Reactor Cores with Inherent Safety Features, Proc. ANS Winter Meeting, Albuquerque, NM, USA, November 2006.
136. E. Merzari, H. Ninokata and E. Baglietto; LES Simulation of the Vortex Street Between Rectangular Channels, C101, Proc. Fifth Korea-Japan Symposium on Nuclear Thermal Hydraulics and Safety (NTHAS-5), Jeju, Korea, November 26- 29, 2006.
137. Hisashi Ninokata; Development of the Advanced Subchannel Analysis Code, Plenary Lecture, PL02, Proc. Fifth Korea-Japan Symposium on Nuclear Thermal Hydraulics and Safety (NTHAS-5), Jeju, Korea, November 26- 29, 2006.
138. Elia Merzari and Hisashi Ninokata, Test of large eddy simulation sub-grid-scale models for flows in annular channels, Paper 7075, Proceedings of 2007 International Congress on Advances in Nuclear Power Plants (ICAPP2007), Nice, France, May 13-18, 2007.
139. E. Merzari and H. Ninokata and E. Baglietto, Detached eddy simulation and large eddy simulation models for the simulation of gas entrainment, Paper 7481, Proceedings of 2007 International Congress on Advances in Nuclear Power Plants (ICAPP2007), Nice, France, May 13-18, 2007.
140. H. Ninokata and E. Merzari, Computational Fluid Dynamics and simulation-based-design approach for tight lattice nuclear fuel pin subassemblies, *Keynote lecture*, KN#6, 12th Topical Meeting on Nuclear Reactor Thermal Hydraulics (NURETH-12), Pittsburgh, USA, October 1-5, 2007.
141. E. Merzari and H. Ninokata, Development of an LES Methodology for Complex Geometries, F00123, 12th Topical Meeting on Nuclear Reactor Thermal Hydraulics (NURETH-12), Pittsburgh, USA, October 1-5, 2007.
142. E. Merzari and H. Ninokata, Toward a Dynamical Systems Approach for the Understanding of Turbulent Flow Pulsations between Subchannels, E00124, 12th Topical Meeting on Nuclear Reactor Thermal Hydraulics (NURETH-12), Pittsburgh, USA, October 1-5, 2007.
143. E. Merzari and H. Ninokata and E. Baglietto, Unsteady Reynolds Averaged Navier-Stokes Simulation for an Accurate Prediction of the Flow Inside Tight Rod Bundles, F00213, 12th

- Topical Meeting on Nuclear Reactor Thermal Hydraulics (NURETH-12), Pittsburgh, USA, October 1-5, 2007.
144. Hisashi Ninokata and Elia Merzari, Computer simulation of turbulent flow phenomena in nuclear fuel pin subassemblies, *Invited lecture*, Asian Physics Symposium (APS2007), Bandung, Indonesia, November 29 – 27, 2007.
 145. Hisashi Ninokata and Elia Merzari, Computational approaches to some key phenomena in nuclear fuel pin subassemblies, *Invited lecture*, BARC Workshop "New Horizons in Nuclear Thermal-Hydraulics," Bhabha Atomic Research Centre, Mumbai, India, January 8-9, 2008.
 146. H. Ninokata, E. Merzari and N. Atake, CFD Approaches to Anisotropic Turbulent Flow Phenomena in Nuclear Fuel Subassemblies (invited lecture), Proc the 19th International Symposium on Transport Phenomena (ISTP-19), Reykjavik, Iceland, August 17-20, 2008.
 147. H. Ninokata, Current Nuclear Reactor Safety R&Ds and Trends in Japan (Keynote Lecture), TOPSAFE2008, Dubrovnik, Croatia September 30 to October 3, 2008.
 148. H. Ninokata, E. Merzari and A. Khakim, Low Reynolds Number Turbulent Flow Phenomena in Nuclear Fuel Pin Subassemblies of Tight Lattice Configuration (Keynote lecture) Proc 7th International Topical Meeting on Nuclear Reactor Thermal Hydraulics, Operations and Safety (NUTHOS-7), Seoul, Korea, October 5-9, 2008.
 149. E. Merzari, A. Khakim and H. Ninokata, Toward an Accurate URANS Approach for the Prediction of the Flow in a T-junction, paper 164, Proc 7th International Topical Meeting on Nuclear Reactor Thermal Hydraulics, Operations and Safety (NUTHOS-7), Seoul, Korea, October 5-9, 2008.
 150. E. Merzari and H. Ninokata, Recent Advances in Understanding of Global Flow Pulsations in Geometry Containing a Narrow Gap, Paper 163, Proc 7th International Topical Meeting on Nuclear Reactor Thermal Hydraulics, Operations and Safety (NUTHOS-7), Seoul, Korea, October 5-9, 2008.
 151. E. Merzari, H. Ninokata, E. Baglietto, Unsteady Reynolds Averaged Navier-Stokes: toward accurate predictions in Fuel-Bundles and T-junctions - 2008 Symposium on Simulation Methods in Nuclear Engineering, Ottawa, CANADA, November 2008.
 152. H. Ninokata and E. Merzari, Large Eddy Simulation of Flows in Annular Channels on The Earth Simulator, Keynote Lecture, N6PKL5, Proc. NTHAS6: Sixth Japan-Korea Symposium on Nuclear Thermal Hydraulics and Safety, Nago, Okinawa, November 24- 27, 2008.
 153. E. Merzari and H. Ninokata, Large Eddy Simulation and Proper Orthogonal Decomposition of the Flow in Annular Channels, Chapter 3 Epoch-Making Simulation, pp. 269-275. Annual Report of the Earth Simulator Center, April 2007–March 2008, Published December 2008.
 154. E. Merzari, E. Baglietto and H. Ninokata, "Large Eddy Simulation of the Flow in a T-junction", ICAPP 2009, Tokyo, Japan, May 2009
 155. E. Merzari, I.C. Bang and H. Ninokata, "Numerical Simulation of the Flow in a Natural Circulation Loop with Nanofluids and Differential Heating", ICAPP 2009, Tokyo, Japan, May 2009.
 156. A. Khakim, E. Merzari and H. Ninokata, "Feasibility study of the application of exotic pin for tight-lattice fuel assembly" ANS annual meeting 2009, Atlanta, USA, June 2009
 157. E. Merzari and H. Ninokata, URANS Simulation of Parallel Jets Mixing in a Rectangular Confinement, ANS annual meeting 2009, Atlanta, USA, June 2009

158. H. Futagami and H. Ninokata, Analysis for Rarefied Gas Flow in a Rotating Cylinder, [[FEDSM2009-78356](#)] Proceedings of the ASME 2009 Fluids Engineering Division Summer Meeting FEDSM2009 August 2-6, 2009, Vail, Colorado USA
159. Sheng Wang Kangbin Lei Xilian Luo Kiwamu Kase, Elia Merzari, Hisashi Ninokata, Cylindrical Couette Flow of a Rarefied Gas From Macro- to Micro-Scales, [[FEDSM2009-78359](#)] Proceedings of the ASME 2009 Fluids Engineering Division Summer Meeting FEDSM2009 August 2-6, 2009, Vail, Colorado USA
160. Elia Merzari and Hisashi Ninokata, A-Priori Test of the Flow in an Annular Channel With Differential Heating at the Walls, [[FEDSM2009-78467](#)] Proceedings of the ASME 2009 Fluids Engineering Division Summer Meeting FEDSM2009 August 2-6, 2009, Vail, Colorado USA
161. Elia Merzari Azizul Khakim Hisashi Ninokata Large Eddy Simulation of the Flow in Tight-Lattice Rod Bundles at Low Reynolds Number, [[FEDSM2009-78471](#)] Proceedings of the ASME 2009 Fluids Engineering Division Summer Meeting FEDSM2009 August 2-6, 2009, Vail, Colorado USA
162. Sheng Wang Kangbin Lei Xilian Luo Kiwamu Kase, Elia Merzari, Hisashi Ninokata Simulation of Eccentric-Shaft Journal Microbearing by DSMC, [[FEDSM2009-78572](#)] Proceedings of the ASME 2009 Fluids Engineering Division Summer Meeting FEDSM2009 August 2-6, 2009, Vail, Colorado USA
163. R. Li, A. Yamaguchi, E. Merzari, H. Ninokata, F. Watanabe and M. Mori, Computational Fluid Dynamics Study on Flow Modeling of Liquid Droplet Impingement Erosion in BWR, Proc. 13th Topical Meeting on Nuclear Reactor Thermal Hydraulics (NURETH-13), N13P1355, Kanazawa, Japan, September 27-October 2, 2009.
164. Hideki Horie, Hisato Matsumiya, Kazumi Miyagi, Yoshihisa Nishi, Tony Greci, Mario H. Fontana, Frederick J. Moody, Hisashi Ninokata, Gary E. Wilson, Akira Yamaguchi, Phenomena Identification and Ranking Tables (PIRTs) for 4S Loss of Offsite Power, Failure of a Cavity Can, and Sodium Leakage from Intermediate Piping Scenarios, Proc. 13th Topical Meeting on Nuclear Reactor Thermal Hydraulics (NURETH-13), N13P1093, Kanazawa, Japan, September 27-October 2, 2009.
165. E. Merzari and H. Ninokata, Proper Orthogonal Decomposition of the Flow in a Rod-Bundle, Proc. 13th Topical Meeting on Nuclear Reactor Thermal Hydraulics (NURETH-13), N13P1372, Kanazawa, Japan, September 27-October 2, 2009.
166. Elia Merzari, Hisashi Ninokata, Emanuela Colombo, Fabio Inzoli, URANS Simulation of Confined Parallel Jets Mixing, Proc. 13th Topical Meeting on Nuclear Reactor Thermal Hydraulics (NURETH-13), N13P1373, Kanazawa, Japan, September 27-October 2, 2009.
167. Rui LI, Elia Merzari and Hisashi Ninokata, Numerical Study on Liquid Droplet Impingement Erosion in BWRs, Proc. ANS Winter Meeting 2009, Washington DC, USA, November, 2009.
168. Riccardo Mereu, Emanuela Colombo, Fabio Inzoli, Elia Merzari and Hisashi Ninokata, Large Eddy Simulation of Confined Parallel Jets, Proc. ANS Winter Meeting 2009, Washington DC, USA, November, 2009.
169. Riccardo Mereu, Emanuela Colombo, Fabio Inzoli, Elia Merzari and Hisashi Ninokata, Numerical Study of Parallel Jet Interaction, Proc. ASME-ATI-UIT 2010 Conference on Thermal and Environmental Issues in Energy Systems, Sorrento, Italy, May 16-19, 2010.

170. Rui Li, Hisashi Ninokata. Numerical Study on Turbulence Attenuation Model for Liquid Droplet Impingement Erosion in BWRs, The 21st International Symposium on Transport Phenomena(ISTP-21), November 2-5, 2010, Kaohsiung City, Taiwan.
171. A. Khakim, H. Ninokata, 'Simulation of two regime flows in a parallel plate channel during buoyancy-driven flow', The Third International Symposium on Innovative Nuclear Energy Systems, October 31 - November 3, 2010, Tokyo Institute of Technology, Tokyo, Japan
172. Rui Li, Hisashi Ninokata. Numerical Simulation of Impact Force Caused by Liquid Droplet Impingement in BWRs, The Third International Symposium on Innovative Nuclear Energy Systems (INES-3), October 31-November 3, 2010, Tokyo, Japan.
173. Marco Pellegrini, Hiroshi Endo, Hisashi Ninokata, On the CSAU Employment during ULOF Accident Initiating Phase for Sodium-Cooled Fast Reactors, The 8th International Topical Meeting on Nuclear Thermal-Hydraulics, Operation and Safety (NUTHOS-8) N8P0341, Shanghai, China, October 10-14 (2010)
174. Marco Pellegrini, Hiroshi Endo, Hisashi Ninokata, Effect of Thermal Stratification in FBR Horizontal Piping on Natural Convection during Protected Accident Scenario, The Third International Symposium on Innovative Nuclear Energy System (INES-3), Tokyo, Japan, October 31-November 3, 2010.
175. Marco Pellegrini, Hiroshi Endo, Hisashi Ninokata, Numerical Analysis of Thermal Stratification in Horizontal Pipe with Upward Bend, American Nuclear Society: 2010 Winter Meeting (ANS Winter Meeting), Las Vegas, Nevada, U.S.A., November 7-11, 2010
176. Marco Pellegrini, Hiroshi Endo, Hisashi Ninokata, Numerical Analysis of Thermal Stratification Phenomenon in Bent Pipes, The Seventh Korea-Japan Symposium on Nuclear Thermal Hydraulics and Safety (NTHAS7), November 14-17, 2010, Chuncheon, Korea
177. Elia Merzari, Paul Fischer, Hisashi Ninokata, Numerical Simulation of the Flow in a Toroidal Thermosiphon, AJK2011-03084, Proceedings of ASME-JSME-KSME Joint Fluids Engineering Conference 2011, AJK2011-FED, July 24-29, 2011, Hamamatsu, Shizuoka, JAPAN
178. Rui Li, Hisashi Ninokata, Parametric Investigation on the Effect Factors for Liquid Droplet Impingement Erosion. The ASME-JSME-KSME Joint Fluids Engineering Conference (AJK-FED), July24-29, 2011, Hamamatsu, Japan.
179. Marco Pellegrini, Hiroshi Endo, Hisashi Ninokata, Study on General Wall Damping Functions Definition: A Low Reynolds Number Bounded Flows Validation, The ASME-JSME-KSME Joint Fluids Engineering Conference (AJK2011-FED), July 24-29, 2011, Hamamatsu, Shizuoka, Japan.
180. T. Yokoyama, H. Endo and H. Ninokata, Core design with enhanced inherent safety features for fast reactors, Low Carbon Earth Summit-2011 (LCES-2011), Forum 7: Clean and Sustainable Energy, Part 7: Low Carbon Energy Industry Leader Forum, Dalian, China, October 19-26, 2011
181. E. Merzari, P. Fischer, D. Pointer, H. Ninokata, Numerical Simulation of the Flow in a Tight Lattice SFR Rod Bundle with Grid Spacers, The 14th International Topical Meeting on Nuclear Reactor Thermal Hydraulics (NURETH-14), Toronto, Ontario, Canada, September 25-30, 2011.
182. Marco Pellegrini, Hiroshi Endo, Hisashi Ninokata, Thermally Stratified Sodium Channel Flow: Turbulence And Modelization, The 14th International Topical Meeting on Nuclear Reactor Thermal Hydraulics (NURETH-14), September 25-30, 2011, Toronto, Ontario,

Canada.

183. Marco Pellegrini, Hiroshi Endo, Elia Merzari, Hisashi Ninokata, Algebraic Turbulent Heat Flux Model For Prediction Of Thermal Stratification In Piping System, The 14th International Topical Meeting on Nuclear Reactor Thermal Hydraulics (NURETH-14), September 25-30, 2011, Toronto, Ontario, Canada.
184. Marco Pellegrini, Hisashi Ninokata, Turbulence modeling assessment during thermally stratified conditions in a circular pipe, 72186, Proceedings of Fluids Engineering Division Summer Meeting 2012, FEDSM2012
185. E. Merzari, H. Ninokata, R. Mereu, E. Colombo and F. Inzoli, URANS simulation of confined parallel jet mixing, *Nuclear Technology*, VOL. 175 SEP. 2011, pp. 538 – 552 (2011)
186. Tsugio Yokoyama, Taiki Fujishiro, Hisashi Ninokata, Study on Particle and Absorber Effects on Multiplication Factors, ANS Winter Meeting, Washington DC, October – November (2011)
187. T. Yokoyama, H. Endo and H. Ninokata, Core design with enhanced inherent safety features for fast reactors, Low Carbon Earth Summit-2011 (LCES-2011), Forum 7: Clean and Sustainable Energy, Part 7: Low Carbon Energy Industry Leader Forum, Dalian, China, October 19-26, 2011

Guest Editor Journals

Hisashi Ninokata, Special Issue on the 13th Topical Meeting on Nuclear Reactor Thermal Hydraulics (NURETH-13), Nuclear Engineering and Design 241 (2011) 4327

Hisashi Ninokata, Special Issue on the 13th Topical Meeting on Nuclear Reactor Thermal Hydraulics (NURETH-13), Nuclear Technology, Vol. 175, No. 3 (2011) 509

Books and Proceedings Written, or Contributed to or Edited by Ninokata

1. Subchannel Analysis in Nuclear Reactors, ed. H. Ninokata and M. Aritomi, ISBN 4-9900222-0-3, Institute of Applied Energy and Atomic Energy Society of Japan, October 1992.
2. 基礎高速炉工学 (分担); 堀雅夫編 第5章伝熱流動, pp73-96, ISBN4-526-03402-9, 日刊工業新聞社 (1993)
3. LIQUID METAL THERMAL-HYDRAULICS; (分担) Ed. H.M. Kottowski, Chapter 7, 333-394, ISBN 3-926956-22-4, INFORUM Verlag- und Verwaltungs GmbH (1994)
4. Fourth International Seminar on Subchannel Analysis, Ed. H. Ninokata and S. Kusuno, Institute of Applied Energy and Atomic Energy Society of Japan, ISBN4-9900222-1-1, September (1997)
5. Global Environment & Nuclear Energy Systems-2: Proceedings of the Second International Symposium GENES-2, Ed. by H. Ninokata and T. Sawada, Special Issue of Progress in Nuclear Energy, Vol. 32, Number 3/4, ISSN 0149-1970, Pergamon Press (1998)
6. LMFR core and heat exchanger thermohydraulic design: Former USSR and present Russian approaches, by G.P. Bogoslovskaya, S. Cevolani, H. Ninokata, A.A. Rinejski, A.P. Sorokin and A.V. Zhukov, ISSN1011-4289, IAEA-TECDOC-1060, International Atomic Energy Agency, Vienna, (1998)
7. Global Environment & Nuclear Energy Systems-3: Proceedings of the Second International Symposium GENES-3, Ed. by H. Ninokata and T. Sawada, Special Issue of Progress in Nuclear Energy, Vol. 37, Number 1/4, Pergamon Press (2000)
8. Fluid Modeling and Turbulence Measurements, ed. H. Ninokata, A. Wada and N. Tanaka, ISBN 981-02-4931-4, World Scientific Publishing Co. Pte. Ltd. (2002)
9. 機械工学便覧応用システム編 γ 5(分担), 4・7 高速炉, pp. γ5-134 - γ5-138, 丸善(2005)
10. 乱流工学ハンドブック(分担), 21.9.1 軽水炉, 高速炉, ISBN978-4-254-23122-9 C3053 朝倉書店(2009)
11. 軽水炉プラントーその半世紀の進化の歩み; 高速炉の変遷と現状 (分担)、3. 米国の高速炉開発の歴史 (I)、4. 米国の高速炉開発の歴史 (II)、 pp. 123-136、日本原子力学会、2009年12月。
12. サイエンスカフェによろこそ!ー地震・津波・原発事故・放射線ー滝沢公子、室伏きみ子編著「東京電力福島第一原発事故と現状② --- 福島第一原発事故をひもとく、 pp. 101-136、富山房インターナショナル、2012年3月

Invited Lectures; Plenary Talks and Keynote Lectures

1. Current practice in fast reactor safety thermohydraulic analysis, Keynote paper, Proc. 3rd International Topical Meeting on Reactor Thermal Hydraulics, Vol. 2, pp. 12.A-1 - 9, Newport, October (1985).
2. "Natural Circulation Boiling Phenomena in a Nuclear Reactor Core," Special Lecture in Nuclear Engineering Department, Purdue University, September 1987.
3. Current Status of FBR Safety Analysis, Nuclear Engineering Dept Special Lecture, Kyushu University, April 1991.
4. Advances in subchannel analysis and experiments for boiling two-phase flow in rod bundles, (International Lecture Course), First JSME-ASME International Conference on Nuclear Engineering (ICONE-1), Tokyo, November (1991).
5. Thermal Hydraulics Topics in LMFBRs (Keynote Lecture), 29th Japan Heat Transfer Symposium, Osaka International Trade Center, May 1992.
6. Inherent Safety Features of Fast Reactors and Related R&Ds in TIT, Lecture in Purdue Univ. (1993)
7. Special Lecture on "Global Environment and Nuclear Energy", Kumamoto University, July 1999.
8. Microscopic approaches in nuclear reactor thermal hydraulics computations, [Hisashi Ninokata](#), (Keynote Lecture), Ninth International Topical Meeting on Nuclear Reactor Thermal Hydraulics (NURETH-9), on CD ROM, San Francisco, California, October 3 - 8, 1999.
9. Intensive Course in Korea Atomic Energy Research Institute I: §1. Thermal hydraulics and safety analysis for LMR based on Japan experience; §2. Verification and new model development for SSC-L (P); §3. Natural circulation analysis and sodium fire in LMR; §4. Rod bundle subchannel analysis and sodium boiling in LMR; §5. Flow blockage analysis and experiments for LMR; §6. Simple analytical approach to evaluate inherent-passive safety characteristics of LMR, March 6-8, 2001.
10. Special Lecture on Distributed Resistance Model of Wire Wrapping in Fuel Subassemblies (lecture), Institute of Physics and Power Engineering (IPPE), Obninsk, Russia, March 15, 2001.
11. Intensive Course in Korea Atomic Energy Research Institute II: §1. Current world-wide trend of the LMR development; §2. Key issues on R&D related to LMR safety; §3. Subchannel analysis; §4. Single-phase flow subchannel analysis for local blockages; §5. Wire-spacer modeling for single-phase flow subchannel analysis; §6. Multi-fluid multi-phase flow subchannel analysis methodology and applications, December 3-5, 2002.
12. A Comparative Overview of Thermal Hydraulic Characteristics of Integrated Primary System Nuclear Reactors, Keynote Lecture, 10th International Topical Meeting on Nuclear Reactor Thermal Hydraulics (NURETH-10), KL-07, Seoul, Korea (2003)
13. Special Lecture on Nuclear Reactor Safety and Thermal Hydraulics Analysis, Nuclear Engineering Department, Royal Institute of Technology (KTH), Stockholm, Sweden, March 22, 2004.
14. RANS and DNS: Improved Turbulence Modeling for Single-Phase Flow Rod Bundle Applications, CFD Seminar, 12th International Conference on Nuclear Engineering (ICONE-12), Crystal City, USA, April 25, 2004

15. CFD and CMFD Applications for Subchannel Analysis of Fuel Rod Bundles, NUTHOS-6, Keynote Lecture, KN-12, October 4-8, 2004, Nara, Japan.
16. Two-phase flow modeling in the rod bundle subchannel analysis, 177ème Session du comité scientifique et technique de la Société Hydrotechnique de France, Progrès récents des méthodologies de modélisation des écoulements diphasiques, Lyon, France, 24-26 Novembre 2004.
17. CFD Applications to Subchannel Turbulent Flows in a Rod Bundle, CFD Seminar on the Computational Fluid Dynamics Applications in Nuclear Industry, 13th International Conference on Nuclear Engineering (ICONE-13), Beijing, China, May 16, 2005.
18. The role of CFD in nuclear reactor engineering, Keynote Lecture K16, Proc. 2005 JSME Annual Meeting, pp. 500-501, September 2005.
19. Overview of Activities on Design and Technology Development for Integral Type PWRs around the World, Invited Lecture at *IAEA Workshop on "Deployment and application potential of integral type PWRs for developing countries"*, Buenos Aires, Argentina, November 1-3, 2005.
20. KAIST 2005NQe Fall Semester Seminar on Overview of Activities on Design and Technology Development for Integrated Primary System Reactors around the World, Invited Lecture, Korea Advanced Institute of Science and Technology (KAIST), November 29, 2005.
21. Overview of Activities on Design and Technology Development for Integrated Primary System Reactors around the World, Invited Lecture, Korea Atomic Energy Research Institute, November 30, 2005.
22. Development of the Advanced Subchannel Analysis Code, Plenary Lecture, PL02, Proc. Fifth Korea-Japan Symposium on Nuclear Thermal Hydraulics and Safety (NTHAS-5), Jeju, Korea, November 26- 29, 2006.
23. Computational Approaches Relevant to Safety-by-Design, The Second Tokyo Tech-MIT Symposium on Innovative Nuclear Energy Systems (TM-INES 2), Kamakura, July 23-25, 2007.
24. Special Lecture on Computational Fluid Dynamics and Simulation-Based-Design Approach for Nuclear Reactor Fuel Rod Bundles, Xian Jiao-tong University, September 21, 2007.
25. Computational Fluid Dynamics and simulation-based-design approach for tight lattice nuclear fuel pin subassemblies, Keynote lecture, KN#6, 12th Topical Meeting on Nuclear Reactor Thermal Hydraulics (NURETH-12), Pittsburgh, USA, October 1-5, 2007.
26. Computer simulation of turbulent flow phenomena in nuclear fuel pin subassemblies, Invited Keynote Lecture at Asian Physics Symposium (APS2007), Bandung, Indonesia, November 29 – 27, 2007.
27. Simulation-based Technology and Nuclear Reactor Thermohydraulics and Safety - Current states of the arts and future perspective –, Special Lecture, Korea Advanced Institute of Science and Technology, February 26, 2008
28. Computational approaches to some key phenomena in nuclear fuel pin subassemblies, *Invited lecture*, BARC Workshop "New Horizons in Nuclear Thermal-Hydraulics," Bhabha Atomic Research Centre, Mumbai, India, January 8-9, 2008.
29. CFD Approaches to Anisotropic Turbulent Flow Phenomena in Nuclear Fuel Subassemblies (invited lecture), Proc the 19th International Symposium on Transport Phenomena (ISTP-19), Reykjavik, Iceland, August 17-20, 2008.
30. Current Nuclear Reactor Safety R&Ds and Trends in Japan (Keynote Lecture), TOPSAFE2008,

Dubrovnik, Croatia September 30 to October 3, 2008.

31. Low Reynolds Number Turbulent Flow Phenomena in Nuclear Fuel Pin Subassemblies of Tight Lattice Configuration (Keynote lecture) Proc 7th International Topical Meeting on Nuclear Reactor Thermal Hydraulics, Operations and Safety (NUTHOS-7), Seoul, Korea, October 5-9, 2008.
32. Large Eddy Simulation of Flows in Annular Channels on The Earth Simulator, Keynote Lecture, N6PKL5, Proc. NTHAS6: Sixth Japan-Korea Symposium on Nuclear Thermal Hydraulics and Safety, Nago, Okinawa, November 24- 27, 2008.
33. What can CFD do for innovation in simulation-based nuclear reactor design and safety? Special Lecture, Ulsan Institute of Science and Technology, Korea, May 29, 2009.
34. Nuclear Reactor Engineering for Tomorrow, Special Lecture, Dipartimento di Energia, Politecnico di Milano , Leonardo campus, October 20, 2009
35. Thermal Hydraulics of SFR Highlights and Key Issues in Japanese Efforts (Keynote) The 8th International Topical Meeting on Nuclear Thermal - Hydraulics, Operation and Safety (NUTHOS-8), Shanghai, China, October 10-14 (2010)
36. History of the fast reactor development in Japan, Plenary paper N7, The Seventh Korea-Japan Symposium on Nuclear Thermal Hydraulics and Safety, Chuncheon, Korea, November 14-17, 2010

Public Seminar and Symposium on the Fukushima Nuclear Accident

1. 参議院自民党政策審議会「福島第一原子力発電所で起こっていることの理解のために」、参議院議員会館、平成 23 年 3 月 18 日
2. 工学院大学「緊急シンポジウム」福島原発事故を理解する —放射能と原子炉の正しい知識— 「福島原発事故の現状と今後の展開をどう読むか」、午後 1 時～午後 4 時半、工学院大学新宿校舎 3 階 アーバンテックホール 平成 23 年 4 月 2 日
3. 「First Week of the Fukushima Daiichi NPP Accident and Its One Month Later」、Nuclear Engineering Department, Korea Advanced Institute of Science and Technology (KAIST), April 25, 2011
4. 日本学術会議サイエンスカフェ、「福島第一原発事故と現状—福島第一原発事故をひもとく」、富山房、平成 23 年 5 月 20 日
5. 「Lessons from Fukushima」 MIT Nuclear Plant Safety Course 2011, Massachusetts Institute of Technology, Cambridge, Mass., USA, June 16, 2011
6. 「Event Sequence After the Earthquake」 ANS Special Panel Session on Fukushima, Hollywood FL, USA (Tuesday June 28, 4-6 PM) 2011
7. 子どもの放射線被爆不安を軽減するために 勉強会「福島第一原発事故・今後の展開、可能性について解説する」アルカディア市ヶ谷 6F 伊吹の間、平成 23 年 7 月 13 日 (水) 12 : 30~16 : 30
8. 工学院大学サイエンスカフェ「福島原発事故の現状と今後の展開をどう読むか」工学院大学、ファカルティクラブ、平成 23 年 7 月 22 日 (水) 18 : 30~20 : 00
9. 日本原子力学会福島第一原発事故と原子力安全に関するシンポジウム「福島第一原子力発電所事故の概要」、茨城県東海村リコッティ、平成 23 年 8 月 2 日
10. 「Lessons from Fukushima」、ANL Nuclear Engineering Division Seminar, Bld 208/A138, August 11, 2011
11. 三鷹クラブ定例懇談会「原発の現状とこれから」学会館 平成 23 年 9 月 1 日
12. 平成 23 年度宮崎県医師会医学会特別講演「東電福島第一原発事故の経緯と教訓」宮崎県医師会館、平成 23 年 9 月 3 日
13. 日本原子力学会「2011 年秋の大会」福島第一原子力発電所事故に関する特別シンポジウム「福島第一原子力発電所の現状と見通し」北九州国際会議場 メインホール、2011 年 9 月 19 日 (月)
14. 14th International Topical Meeting on Nuclear Reactor Thermal Hydraulics (NURETH-14), Special Panel Session on Fukushima 「Inside Information of the Accident, Environmental and Economical Impacts; Lessons Learned in Japan」 Toronto, Canada, September 27, 2011
15. 東京都庁技術セミナーII 講義「東電福島原発事故と放射性物質・放射能について」東京都庁第一本庁舎 4 階北側 サテライトルーム、平成 23 年 10 月 14 日
16. 日本交通協会午さん会講演「東電福島第一原発事故の現状と収束への見通し」新国際ビル(社)日本交通協会、平成 23 年 11 月 11 日
17. 東京銀座新ロータリークラブ例会卓話「東電福島第一原発事故の教訓と原子力安全

の確保」コートヤード・マリオット銀座東武ホテル 2階「桜の間」、平成23年12月2日（金）

18. Hasanuddin University International Conference: “Reflecting on Fukushima, Future Challenges in Nuclear Engineering and Technology to the Safety and Environmental Sustainability” Keynote Lecture 「Fukushima Daiichi Nuclear Power Station Accident *Issues, Lessons Learned and Nuclear Safety*」 Ball Room of Clarion Hotel & Convention, Makassar, 90222 South Sulawesi – Indonesia, December 6, 2011
19. 日本地震工学会原子力発電所の地震安全問題に関する調査委員会報告会 招待講演「福島第一原発事故の要因と課題」建築会館ホール、平成24年2月21日（火）
20. 平成23年度 都筑区医師会 市民医学講演会「東電福島第一原発事故の教訓と原子力の安全性」都筑区役所・6階会議室、平成24年2月26日(日)14:00～16:30
21. ANS-AESJ Fukushima Symposium 東京電力福島第一原子力発電所事故の技術分析に関する日本原子力学会と米国原子力学会の見解「Loss of Ultimate Heat Sink」東京大学工学部 武田先端知ホール、平成24年3月4日
22. 外国特派員協会記者会見 ANS President’s Special Committee on the Fukushima Accident –Report Summary、日本外国特派員協会、東京、平成24年3月9日
23. 日本証券経済倶楽部第504回定例月例会「福島第一原子力発電所事故の教訓 - 安全確保への課題 - 」東京証券会館9階会議室、平成24年3月16日
24. 平成24年電気学会全国大会シンポジウム講演「原発事故の教訓と原子力発電による電力の安定供給」1-S1-4、広島工業大学 五日市キャンパス 三宅の森ネクサス21、平成24年3月23日
25. KAIST International Forum on Safe Nuclear Power Plant, invited plenary talk 「Nuclear Power Safety in Japan after Fukushima」(Tentative) Korea Advanced Institute of Science and Technology, Daejeon, Korea, April 9-10, 2012
26. 東京中央ロータリークラブ例会卓話「原子力のより高い安全性について（仮題）」帝国ホテル、平成24年4月19日

Conference papers without review

1. Experimental subchannel local parameter measurements - laser anemometer, H. Ninokata (in "Coolant Mixing in LMFBR Rod Bundles" MIT COO-2245-3, July 1973)
2. Turbulent exchange coefficients for reactor rod bundle analysis, H. Ninokata and N.E. Todreas, MIT COO-2245-22TR, June (1975).
3. Current status of the rod bundle thermal hydraulics studies at PNC, H. Ninokata and K. Haga, 2nd IAHR Liquid Metals Working Group Meeting, Rome, Italy, September (1982).
4. The application of ASFRE to the 10th LMBWG benchmark tests, H. Ninokata and S. Tamura, 10th LMBWG Meeting, Karlsruhe, FRG, October (1982).
5. Analytical studies of loss of flow experiments by the ASFRE/TOPFRES codes, H. Ninokata and S. Tamura, 10th LMBWG Meeting, Karlsruhe, FRG, October (1982).
6. Review of thermal-hydraulics analytical activities related to LMFBR safety at PNC O-arai Engineering Center, H. Ninokata, 4-th IAHR Liquid Metals Working Group Meeting, Richland, July (1984).
7. Six-equation two-phase flow model code SABENA for sodium boiling simulation, H. Ninokata and T. Okano, 11-th LMBWG Meeting, Grenoble, October (1984).
8. 高速炉安全解析コードの開発, 二ノ方寿, 近藤悟, JAERI-M 85-017, 1985年3月
9. Recent progress in sodium boiling calculations based on the two-fluid model, H. Ninokata, 5-th IAHR Liquid Metals Working Group Meeting, Grenoble, July (1986).
10. "Natural Circulation Boiling Phenomena in a Nuclear Reactor Core," Lecture Notes, Special Lecture in Nuclear Engineering Department, Purdue University, September 1987.
11. On the use of a distributed parameter approach in evaluating the crossflow pressure losses for the subchannel rod bundle analysis, H. Ninokata, T. Shimizu and H. Shishido, 6th IAHR Liquid Metals Working Group Meeting, O-arai, August (1988).
12. Recent progress in the SABENA code development and assessment of the physical models, H. Ninokata, T. Okano, A. Deguchi and M. Satoh, 13th LMBWG Meeting, Winfrith, September (1988).
13. Comparative study of thermohydraulic computer code simulations of sodium boiling under loss of flow conditions, with F. Huber, K. Schleisiek, et al., 13th LMBWG Meeting, Winfrith, September (1988).
14. Numerical simulation of oscillatory convection in low Pr fluids, H. Oshima and H. Ninokata, GAMM Workshop, Gesellschaft fur Angewandte Mathematik und Mechanik (GAMM), Marseille, October (1988).
15. Current status of the numerical methods in advanced nuclear reactor thermohydraulics, 筑波大学変換技術開発特別プロジェクト研究 第4回研究会講演集, 11月 (1989).
16. AFDM: An Advanced Fluid Dynamics Model, Vol.1, W.R. Bohl, D. Wilhelm, F.R. Parker, J. Berthier, L. Goutagny, H. Ninokata, LA-11692-MS, Los Alamos National Laboratory, September 1990.
17. A subchannel analysis code ASFRE-III and its application to a local blockage experiment in a

- wire-wrapped pin bundle, H. Ninokata, 14th LMBWG Meeting, Brasimone, Italy, April (1991).
18. Calculations for the SCARABEE PI-A experiment using SABENA, M. Konomura, H. Ninokata and T. Kurosawa, 14th LMBWG Meeting, Brasimone, Italy, April (1991).
 19. Two-fluid model formulation for two-phase flow subchannel analysis, 7th IAHR Working Group on Advanced Nuclear Reactor Thermal Hydraulics, H. Ninokata, Karlsruhe, August (1991).
 20. Buoyancy driven penetration flow phenomena - Benchmark problem -, H. Kamide, Y. Ieda and H. Ninokata, 7th IAHR Working Group on Advanced Nuclear Reactor Thermal Hydraulics Karlsruhe, August (1991).
 21. Advances in subchannel analysis and experiments for boiling two-phase flow in rod bundles, (International Lecture Course), H. Ninokata, Proc. First JSME-ASME International Conference on Nuclear Engineering (ICONE-1), Tokyo, November (1991).
 22. 高速炉における熱流動問題 (展望講演), 二ノ方 寿, 第29回日本伝熱シンポジウム講演論文集, (1992-5) B151, pp. 91 - 95, 平成4年5月
 23. Advances in subchannel analysis for boiling two-phase flows in rod bundles, H. Ninokata, Proc. Subchannel Analysis in Nuclear Reactors, pp. 15-68, IAE and AESJ, Tokyo, October (1992).
 24. Synthesis of computational codes for evaluation of decay heat removal by natural circulation, H. Ohshima, H. Kamide, T. Muramatsu, A. Yamaguchi, Y. Ieda, T. Shimizu, I. Maekawa and H. Ninokata, Proc. IAEA-IWGFR Specialists Meeting on Evaluation of Decay Heat Removal by Natural Convection, IAEA, O-arai, February (1993)
 25. Strategy of Experimental Studies in PNC on Natural Convection Decay Heat Removal, Y. Ieda, H. Kamide, H. Ohshima and H. Ninokata, Proc. IAEA-IWGFR Specialists Meeting on Evaluation of Decay Heat Removal by Natural Convection, IAEA, O-arai, February (1993).
 26. An Overview of the BWR Subchannel Analysis Code Development and Experiments for Japanese Utilities, H. Ninokata and M. Aritomi, EPRI TR-103188, 15-1~17 (1993)
 27. AFDM: An Advanced Fluid Dynamics Model, Vol. VI, W.R. Bohl, E.A. Fischer, L. Goutagny, P.J. Maudlin, H. Ninokata, F.R. Parker, D. Wilhelm, LA-11692-MS, Los Alamos National Laboratory, January 1994.
 28. Analysis of out-of-pile freezing experiments by SIMMER-II, Tetsuo Sawada and Hisashi Ninokata, Proc. IAEA Technical Committee Meeting on Material-Coolant Interactions and Material Movement and Relocation in Liquid Metal Fast Reactors, O-arai, 385-395 (1994)
 29. Analytical studies on advanced reactor safety, H. Ninokata, T. Sawada and V. Kuznetsov, Proc. First Korea-Japan Seminar on Advanced Reactors, KAIST, Korea, August 1994.
 30. Validation studies on a computational model for molten material freezing, T. Sawada, H. Ninokata and A. Shimizu, Proc. International Topical Meeting on Sodium Cooled Fast Reactor Safety, Obninsk, Russia, 1-146 ~ 1-155 (1994)
 31. A study on recriticality characteristics of fast reactors in pursuit of recriticality-accident-free concepts, H. Ninokata, T. Sawada, H. Tomozoe, H. Endo and A. Shimizu, Proc. Global Environment and Nuclear Energy Systems, Susono, Sesseion 5A-4, October 1994.
 32. Basic concepts to resolve the recriticality problem, H. Ninokata, Proc. Specialists Workshop on CDA Scenario, Tokyo Institute of Technology, November 1994.

33. Current status of the BWR subchannel analysis code development for Japanese utilities, H. Ninokata, A. Deguchi and Y. Tajima, Proc. 3rd International Seminar on Subchannel Analysis, SKI Report 95:16, pp.215-223, Stockholm, May 1995.
34. Experimental approach to CMR concepts," Hisashi Ninokata and Kazuya Koyama, Proc. 2nd Specialists Workshop on CDA Scenario ; Landau, Germany, August (1995).
35. Chebyshev semi-analytical method for the solution of space-dependent neutron kinetics equations, V.G. Zimin and H. Ninokata, Proc. International Topical Meeting on Problems of Nuclear Reactor Safety, Moscow Engineering Physics Institute, September 4-8, 1995.
36. Space-dependent neutron kinetics code SKETCH - Current status and development, V.G. Zimin and H. Ninokata, Proc. 2nd Japan-Korea Seminar on Advanced Reactors, TITech, Japan, Oct. (1996)
37. Modeling and validation of fuel-coolant interactions under simulating severe core accident condition of fast breeder reactors, T. Sawada and H. Ninokata, Proc. 2nd Japan-Korea Seminar on Advanced Reactors, 209-212, TITech, Japan, Oct. (1996)
38. Study of self-controllability of fast reactor cores, H. Ninokata and T. Sawada, Bull. Res. Lab. Nucl. Reactors, 20, 31 (1996)
39. Development of three-dimensional space-dependent neutron kinetics model and coupling with the whole core thermal hydraulics analysis, H. Ninokata and V.G. Zimin, Bull. Res. Lab. Nucl. Reactors, 20, 32 (1996)
40. Study on recriticality characteristics of fast reactors, H. Ninokata and T. Sawada, Bull. Res. Lab. Nucl. Reactors, 20, 98 (1996)
41. Single- and two-phase flow analysis in rod bundles, H. Ninokata, Bull. Res. Lab. Nucl. Reactors, 20, 32 (1996)
42. Modeling and validation of FCI under severe core accident conditions in fast breeder reactors, T. Sawada and H. Ninokata, Bull. Res. Lab. Nucl. Reactors, 20, 99 (1996)
43. On self-controllability and self-terminability to eliminate recriticality potentials, H. Ninokata, Proc. 3rd Specialists Workshop on CDA Scenarios, Matsushima, Japan, Nov. (1996)
45. Development of the NASCA code for prediction of Transient BT and post BT phenomena in BWR rod bundles, H. Ninokata, M. Aritomi, T. Anegawa, Y. Sato, M. Sadatomi, K. Mishima, K. Nishida, Y. Yamamoto, S. Morooka, Y. Yabushita, A. Sou, H. Kamo and S. Kusuno, Proc. Fourth International Seminar on Subchannel Analysis (ISSCA-4), Institute of Applied Energy and Atomic Energy Society of Japan, pp. 231-266, September (1997)
46. Thermal hydraulics analysis of fast reactor fuel subassembly with porous blockage, H. Ohshima, H. Narita and H. Ninokata, Proc. Fourth International Seminar on Subchannel Analysis (ISSCA-4), Institute of Applied Energy and Atomic Energy Society of Japan, pp. 323-334, September (1997)
47. Validation of FCI evaluation method under severe core accidents in fast breeder reactors, T. Sawada and H. Ninokata, Proc. Int. Seminar on Vapor Explosions and Explosive Eruptions (AMIGO-IMI), Sendai, Japan, 245-251 (1997)
48. V. Zimin and H. Ninokata: Development of the three-dimensional space dependent neutron kinetics model and coupling with the whole core thermal hydraulics analysis; Bull. Res. Lab. Nucl. Reactors, 21, 5 (1997)
49. H. Ninokata and V. Kriventsev: Single- and two-phase flow analysis in nuclear fuel rod bundles; Bull. Res. Lab. Nucl. Reactors, 21, 6 (1997)

50. H. Ninokata and T. Sawada: Study on self-controllability of fast reactors; Bull. Res. Lab. Nucl. Reactors, 21, 7 (1997)
51. T. Sawada and H. Ninokata: Recriticality characteristics of fast reactors and precluding recriticality by controlled materials relocations; Bull. Res. Lab. Nucl. Reactors, 21, 81-82 (1997)
52. T. Sawada and H. Ninokata: Validation of FCI evaluation method under severe core accidents in fast breeder reactors; Bull. Res. Lab. Nucl. Reactors, 21, 83-84 (1997)
53. An application of object-oriented programming in numerical simulation of fluid dynamics in complex geometry, V. Kriventsev and H. Ninokata, 日本機械学会第75回総会講演予稿集, I.S. III-3 1231 (1998)
54. An object oriented tool for computational fluid dynamics: COOLFD, V. Kriventsev and H. Ninokata, Proc. 9th Working Group Meeting on Advanced Nuclear Reactors Thermal Hydraulics, IHAR, Grenoble, April 7-9, (1998).
55. Numerical analysis of wire-wrapped pin bundle thermal hydraulics, H. Ohshima and H. Ninokata, Proc. 9th Working Group Meeting on Advanced Nuclear Reactors Thermal Hydraulics, IHAR, Grenoble, April 7-9, (1998).
56. Calculation of fluid flow and heat transfer in a rod bundle with geometrical disturbance based on the "locally exact" finite differencing scheme, V. Kriventsev and H. Ninokata, Proc. Tech. Com. Meeting on Methods and Codes for Calculations of Thermohydraulic Parameters for Fuel, Absorber Pins and Assemblies of LMFBRs with Traditional and Burner Cores, Obninsk, Russia, July 27-31,(1998)
57. A simple analytical method to evaluate transient behaviors of metal fueled fast reactors, H. Ninokata, Y. Hizume, T. Sawada and H. Endo, Proc. Tech. Com. Meeting on Methods and Codes for Calculations of Thermohydraulic Parameters for Fuel, Absorber Pins and Assemblies of LMFBRs with Traditional and Burner Cores, Obninsk, Russia, July 27-31, (1998)
58. Inherent and Passive Safety Fast Reactor Core Design, Tetsuo SAWADA and Hisashi Ninokata, Proc. 3rd Japan-Korea Seminar on Advanced Reactors, ##-##, KAIST, Korea, July (1998)
59. V. KRIVENTSEV and H. NINOKATA: Calculation of detailed velocity and temperature distributions in a rodbundle with geometrical disturbance based on the "locally exact" finite difference scheme; Proc. First Korea-Japan Symposium on Nuclear Thermal Hydraulics and Safety, 287-290, Pusan, Korea (1998)
60. Potential of multi-purpose liquid metallic fueled fast reactor (MPFR) as a hydrogen production system, H. Endo, H. Ninokata, A. Netchaev, and T. Sawada, Proc. OECD/NEA First Information Exchange Meeting on Nuclear Production of Hydrogen, Paris, April (2000)
61. A Concept Concept of a Long Life Multipurpose Small Size Fast Reactor with Liquid Metallic-Fueled Core, A. Netchaev, H. Endo, T. Sawada and H. Ninokata, Proc. 12th Pacific Basin Nuclear Conference PBNC-2000, Seoul, Korea, October 29-November 1, 2000.

Aural Presentation at AESJ Annual Meeting and Fall Meeting

More than 200 presentations summary have been on the Proceedings of Annual Meetings and Fall Meetings of the Atomic Energy Society of Japan from 1972 to present.

PNC Reports

More than 50 technical reports were written while he was working in O-arai Engineering Center, Power Reactor and Nuclear Fuel Development Corporation from 1980 to 1993.