

Curriculum Vitae

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Education

- Undergraduate School: Kyoto University (Civil Engineering), 4/1974–3/1977
- B.S.: 1977, Kyoto University (Civil Engineering)
- Graduate School (master course): Kyoto University (Civil Engineering), 4/1977–3/1979
- M.S.: 1979, Kyoto University (Civil Engineering)
- D. Eng.: 1988, Kyoto University (Civil Engineering, Advisor: S. Kobayashi)

Employment

- Instructor, Dept. Civil Eng., Kyoto Univ, 4/1979–3/1991
- Instructor, Dept. Global Environment Eng., Kyoto Univ, 4/1991–6/1994
- Associate Professor, Dept. Global Environment Eng., Kyoto Univ, 7/1994–3/2002
- Professor, Dept. Civil Eng., Kyoto Univ, 4/2002–6/2002
- Professor, Academic Center for Computing and Media Studies, Kyoto Univ, 7/2002–2/2006
- Professor, Graduate School of Informatics, Kyoto Univ, 2/2006–present

In the mean while

- Post Doctoral Fellow, Dept. Civil Eng., Northwestern University, 9/1983–9/1985
- Visitor, CMAP, Ecole Polytechnique, 10/1988–12/1988, 3/1989, 9/2005

List of Publications

- Original papers ((*): refereed)

- [1] R. Misawa, K. Niino and N. Nishimura, Boundary integral equations for calculating complex eigenvalues of transmission problems, *SIAM J. Appl. Math.*, vol.77, pp. 770-788, 2017.4 (*)
<http://dx.doi.org/10.1137/16M1087436>
- [2] K. Niino, S. Akagi and N. Nishimura, A discretisation method with the Hdiv inner product for electric field integral equations, *IEEE Transactions on Antennas and Propagation*, vol.65, pp. 3102-

- 3113, 2017 (doi:10.1109/TAP.2017.2696422) (*)
- [3] R. Misawa, N. Nishimura, A study on the single boundary integral equation method for transmission problems for Helmholtz' equation in 2D based on the distribution of fictitious complex eigenvalues, *Trans. JASCOME*, vol.16, pp.73–78, 2016.12(*) (in Japanese)
 - [4] T. Yoshimi, N. Nishimura, A time domain boundary integral equation for periodic problems for the wave equation in 2D with oblique incidence and its solution with CQM, *Trans. JASCOME*, vol.16, pp.79–84, 2016.12(*) (in Japanese)
 - [5] Y. Matsumoto, N. Nishimura, A fast direct solver for transmission boundary value problems for Helmholtz' equation in 2D, *Trans. JASCOME*, vol.16, pp.97–102, 2016.12(*) (in Japanese)
 - [6] R. Misawa, K. Niino and N. Nishimura, An FMM for waveguide problems of 2-D Helmholtz' equation and its application to eigenvalue problems, *Wave Motion*, vol.63, pp.1-17 (2016)(*) doi:10.1016/j.wavemoti.2015.12.006
 - [7] T. Yoshimi, K. Niino, N. Nishimura, T. Ishihara, Analyses of transverse photo-induced voltages in nanoporous gold with the periodic fast multipole boundary element method, *Trans. JASCOME*, vol.15, pp.85–90, 2015.12(*) (in Japanese)
 - [8] Y. Matsumoto, K. Niino, N. Nishimura, A fast direct solver of periodic boundary value problems for Helmholtz' equation in 2D based on the H matrix arithmetics, *Trans. JASCOME*, vol.14, pp.79–84, 2014.12(*) (in Japanese)
 - [9] T. Nose, K. Niino, N. Nishimura, A numerical method for boundary value problems for Helmholtz' equation with partly defective unit of periodicity in 2D, *Trans. JASCOME*, vol.14, pp.85–90, 2014.12(*) (in Japanese)
 - [10] T. Nose, N. Nishimura, Calculation of eigenvalues related to 2 dimensional periodic boundary value problems for the Helmholtz equation using the Sakurai-Sugiura method and periodic fast multipole method, *Trans. JSIAM*, Vol.24, pp.185–201, 2014.10(*) (in Japanese)
 - [11] R. Misawa, N. Nishimura and M.S. Tong, Preconditioning of periodic fast multipole method for solving volume integral equations, *IEEE TAP*, Vol.62, pp.4709–4804, 2014.9(*)
 - [12] T. Ueta, Y. Otani and N. Nishimura, Photonic-crystal like approach to structural color of the earthworm epidermis, *Forma*, Vol. 29, S23-S28, 2014(*)
 - [13] H. Yoshikawa, R. Matsuura and N. Nishimura, Time domain BIEM with CQM accelerated with ACA and truncation for the wave equation, *Computer Modeling in Engineering and Sciences*, Vol. 94, pp. 553–565, 2013(*)
 - [14] J. Morita, N. Nishimura, An improved method of solution of almost periodic boundary value problems for Helmholtz' equation, *Trans. JASCOME*, vol.13, pp.43–48, 2013.11(*) (in Japanese)
 - [15] K. Niino, N. Nishimura, On discretisation methods with H div scalar product for PMCHWT formulations for Maxwell's equations, *Trans. JASCOME*, vol.13, pp.79–84, 2013.11(*) (in Japanese)
 - [16] H. Isakari, N. Nishimura, On the Calderon preconditioning for periodic FMMs in acoustic-elastodynamic coupled problems, *Trans. JASCOME*, vol.12, pp.61–66, 2012.12(*) (in Japanese)
 - [17] R. Misawa, N. Nishimura, Boundary integral formulations for one-periodic transmission problems for Helmholtz' equation in 2-D, *Trans. JASCOME*, vol.12, pp.109–114, 2012.12(*) (in Japanese)
 - [18] W. Wang and N. Nishimura, Calculation of shape derivatives with periodic fast multipole method

- with application to shape optimization of metamaterials, *Progress In Electromagnetics Research*, vol.127, pp.49–64, 2012 (*)
- [19] K. Niino and N. Nishimura, Calderon preconditioning approaches for PMCHWT formulations for Maxwell’s equations, *International Journal of Numerical Modelling: Electronic Networks, Devices and Fields*, vol.25, pp.558–572, 2012, DOI: 10.1002/jnm.1834 (*)
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