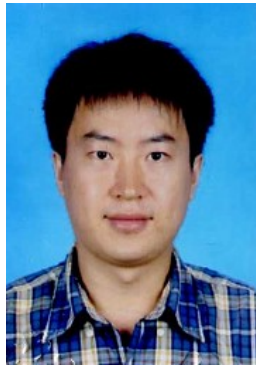


CURRICULUM VITAE

	Lei Wang, Ph.D.
	Professor,
	School of Environmental Science and Engineering,
	Nanjing Tech University
	NO.30 Puzhu Road(S), Nanjing 211816, China
	Phone: +86 (0)187 5194 9786
	E-mail: wlei05@mails.tsinghua.edu.cn
	Office: SESE 508
	Website: http://hj.njtech.edu.cn/Shownews1.asp?id=117

EDUCATION

Tsinghua University, China, 2009, Ph.D.

Zhejiang University, China, 2003, M.A.Sc.

Northeast Dianli University, China, 2000, B.A.Sc.

EMPLOYMENT

Professor, School of Environmental Science and Engineering, Nanjing Tech University (2017-)

Visiting Associate Professor, Chemical and Biological Engineering, The University of British Columbia (2015-2017)

Associate Professor, Environmental technician, College of Energy & Environment, Shenyang Aerospace University, China (2009-2015)

Assistant, College of Energy & Environment, Shenyang Aerospace University, China (2003-2005)

RESEARCH INTERESTS

Waste Manage and Waste to Energy: Source separation of municipal solid waste (MSW). Solid waste treatment, especially MSW, MSW incinerator fly ash and sewage sludge treatment and management. Combustible waste such as sewage sludge, waste tyre and waste oil using as alternable fuel in power plant or cement kiln. High high caloric waste from source separated MSW to produce Refuse Derived Fuel(RDF) and subsequent utilisation including gasification of RDF, utilisation of RDF as alternable fuel in power plant or cement kiln.

Clean Energy and Bioenergy: Gasification of MSW, RDF and other waste with higher caloric value water to produce gas. Drying, fractionating, densification of cellulosic biomass, gaisification of biomass to produce clean combustible gas. Production Biodiesel from biomass.

PUBLICATIONS

Thermal Treatment of Waste[M]. Chemical industry press, China, Chapter 7 & 9, The Melting & Sintering of waste.

SELECTED JOURNAL PUBLICATIONS

- **Wang L, Li RD, etc.** Investigation of accelerated and natural carbonation of MSWI fly ash with a high content of Ca. *Journal of hazardous materials*, 2010, 174(15) :1428-1435. (SCI)

- **Wang L**, Li RD, etc. Recycling of municipal solid waste incineration fly ash for ordinary Portland cement production: A real-scale test. *Resources, Conservation and Recycling*. 2010, 54(12): 334-343. (SCI)
- **Wang L**, Li RD, etc. Accelerated Carbonation of Municipal Solid Waste Incineration Fly Ash Using CO₂ as an Acidic Agent for Clinker Production. *Environmental Engineering Science*. 2012, 29(7) :677-683. (SCI)
- Li RD, **Wang L**, Yang TH, Bernhard R. Investigation of MSWI fly ash melting characteristic by DSC-DTA. *Waste Management*. 2007,27(10):1383-1392.(SCI).
- Wang J,**Wang L***,Yuan WW, Xu WC,Wang D, Liang ZY, Xu LH. Biological Diesel Oil produced from hogwash Oil by transesterification in Supercritical Methanol. *Energy Conservation*, in press. (in Chinese)
- **Wang L**, Jin YY, Li RD, Nie YF. Stabilization of arsenic in waste during co-processing with cement kiln and leaching characteristics of clinker. *Huagong Xuebao*. 2011, 62(3): 816-822. (EI, in Chinese)
- **Wang L**, Jin YY, Li RD, Nie YF. Equilibrium analysis of lead in hazardous waste during co-processing with cement kiln. *Journal of Combustion Science and Technology*, 2011,17(3):224-230. (EI, in Chinese)
- **Wang L**, Li RD, Li YY, Li YL, Xu J. Modeling of lead migration in MSWI fly ash during the co-processing with cement kiln. *Journal of Shenzhen University Science and Engineering*. 2012, 29(6): 509-514. (EI, in Chinese)
- **Wang L**, Jin YY, Nie YF, Li RD. Characteristics of arsenic migration in MSWI fly ash during the co-processing with cement kiln. *ACTA SCIENTIAE CIRCUMSTANTIAE*. 2011, 31(2): 407-413.
- Li RD, Li YL, **Wang L**, Wang JP, Ke X. Migration characteristics of heavy metals during pilot melting process of incineration fly ash. *Environmental Science*, 2007,28(12):2873-2876. (EI, in Chinese).
- **Wang L**, Nie YF, Jin YY, Liu JG, Li RD. Effect of Additive and Washing Pre-treatment on Heavy Metal Vaporization During Sintering Process of MSWI Fly Ash. *Environmental Science*, 2009,30(4):1232-1237. (EI source).
- **Wang L**, Li RD, Li AM, Wei LH, Feng L. Kinetic study on aircraft-used polymethyl methacrylate under different oxygen concentration. *Acta Aeronautica et Astronautica Sinica*, 2005, 26(6.):783-786. (EI in Chinese)

RESEARCH PROJECTS

Project Leader

- National Science Foundation(NSC) “Co-precipitation of amphoteric metals in the water effluent of the MSWI fly ash using industrious tail gas riched of carbon dioxide as a acidic agent” (No. 51108276) 2012.1-2014.12
- National Undergraduate Training Programs for Innovation and Entrepreneurship “Comprehensive utilization of crop straw to produce bio-diesel” (No. 201310143030) 2013.6-2015.5
- Dr.Start-up foundation in Liaoning Province “Waste to alternative energy of sewage sludge after drying with exhaust gas from cement kiln” (No. 20111053) 2012.1-2014.12
- Liaoning Province innovative team project “Producing Sulphoaluminate cement from MSWI

fly ash” (No. 2008T150) 2008.1-2010.12

- Liaoning Province talents Project “Waste to energy of Packaging Waste” (No.LJQ2013018)
- Dr.Start-up foundation in Shenyang Aerospace University “Evaporization of heavy metals in sewage sludge during the waste to alternative fuel” (No. 11YB05) 2011.1-2013.12
- “Settling characteristics of particles and response plans in Dashiqiao”(No. SK0943) 2009.12-2010.3
- “Toxic analysis of EPDM, butyl rubber and PVC during the Laser engraving process” 2005.8-2005.9

Participants

- National Basic Research Program of China, Sub-topics “Research & Development of combustible solid waste to energy” (No. 2011CB201506) 2011.1-2015.8, Ranked 4.
- NSC “Mechanism of control and interaction of characteristic elements during gasification of biomass-derived fuel by source modifying”. 2012.1-2015.12, Participant.
- National Key S & T Projects, Sub-topics “Reduction and Energy utilisation of Sewage sludge”(No. 2008ZX07313-002) 2008.12- 2011.12, Participant.
- NSC “Vaporization kinetics of heavy metals in the MSWI fly ash during the high temperature treatment and the effect of Ca/Si (No. 50606028) ” 2007.6- 2010.5, Ranked 2.
- NSC “Transition of heavy metals in Sewage sludge during the thermal treatment process” (No. 51077141) 2011.1-2013.12, Ranked 2.
- Liaoning Province innovative team project “Drying & Sintering technology of sewage sludge” (No. 2007T142) 2009.4-2012.3, Ranked 2.
- State 863 Sub-topics “waste incineration fly ash melting process demonstration unit ”(No. 2002AA644010) 2002.12-2005.12, Ranked 2.
- FP7 “Risk-based management of chemicals and products in a circular economy at a global scale ”(No. FP7-226552) 2009.1- 2011.12. Ranked 4.
- "12th Five-Year" National S & T Support Program “Technology integration and demonstration of continuous MSW dry fermentation for middle and small city in cold regions” (No. 2011BAZ03160), Participant.

PATENTS

- **Wang L**, Li RD and Nie YF. “A method to produce micro light weight spherical calcium carbonate from MSWI fly ash”, Chinese patent No. ZL201210123990.9, 2012.
- **Wang L**, Yang TH, Li RD, Xu J and Li YL. “A method to produce Sulphoaluminate cement from MSWI fly ash”, Chinese patent No. ZL201210425922.8, 2012.
- **Wang L**, Li RD, Wei LH, Li YL, Xu J, He YG, Sun Y, Yang TH and Liu YX. “A method of waste sewage sludge to alternative energy after inerting treatment with CaO addition”, Chinese patent No. ZL201210235669, 2012.
- **Wang L**, Li RD, Li YL, Wei LH, Xu J, Yang TH and Liu YX. “A method of reusing of plastic packaging waste as aluminous correcting agent of Portland cement”, Chinese patent No. ZL201210234041.8, 2012.
- **Wang L**, Li RD, Li YL, Xu J, Wei LH, Sun Y. “A method of MSWI fly ash solidification/stabilization”. Chinese patent No. ZL201210269521.8, 2012
- Li RD, **Wang L**, Yang TH, Wang JP, Wei LH, Feng L, Yao W, Sun J and Wang Z. “MSWI

fly ash Melting System”, Chinese patent No. ZL200510047774.0. 2, 2011.

- Jin YY, Zhang JL, Ling TS, Li H, **Wang L**, Nie YF. “Leachate recirculation pretreatment of MSWI fly ash before co-processing with cement kiln”, Chinese patent No.ZL201010104161.7, 2013.

AWARDS

- Excellent talents in Colleges and Universities of Liaoning Province, No. LJQ2013018, 2013.
- The Third Prize of Science and Technology Progress Award of Liaoning province, “Reusing Technology of MSWI fly ash”, No.2008J-2-49-02, Ranked 2.
- The Second Prize of Science and Technology Progress Award of Liaoning province, “Resource Recovery and Utilisation of Bioorganic Municipal Waste”, No.2011J-2-39-07, Ranked 7.
- The Third Prize of Science and Technology Progress Award of Shenyang, “Melting of MSWI fly ash”, Ranked 2.
- The Third Prize of Science and Technology Progress Award of Shenyang, “Pyrolysis of biorganic wastes”, No.2005-3-41-5, Ranked 2.
- The Third Prize of Natural Science Academic Achievement of Liaoning Province Award, “Recycling of municipal solid waste incineration fly ash for ordinary Portland cement production: A real-scale test”, No.2012LNL-0015, Ranked 1.
- The Third Prize of Natural Science Academic Achievement of Liaoning Province Award, “Accelerated Carbonation of Municipal Solid Waste Incineration Fly Ash Using CO₂ as an Acidic Agent for Clinker Production”, No.2013LNL-0108, Ranked 1.
- Advanced science and technology worker in SAU. 2011.