CURRICULUM VITAE

Brajesh K Dubey, PhD, FIE, C.Eng.

Associate Professor – Environmental Engineering

Laboratory-in-charge: Environmental Engineering and Management Teaching and Research Lab Department of Civil Engineering, Indian Institute of Technology - Kharagpur, Kharagpur, West Bengal, India, 721302

Associate Editor: Journal of Air and Waste Management Association (JA&WMA)

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 $\underline{http://scholar.google.com/citations?user=gLXcah0AAAAJ\&hl=en}$

www.brajeshdubey.com

EDUCATION

2005	PhD (Environmental Engineering Sciences)
	University of Florida, Gainesville, FL, USA.

Bachelor of Technology (Hons), Civil Engineering Indian Institute of Technology (IIT) Kharagpur, WB, India.

EXPERIENCE (Academic)

2015 onward	<u>Associate Professor (Environmental Engineering)</u> Department of Civil Engineering, Indian Institute of Technology – Kharagpur (IIT-KGP), West Bengal, 721302
2011- 2015	<u>Assistant Professor& Graduate Faculty</u> , Environmental Engineering Program, School of Engineering, University of Guelph, 50 Stone Road East, Guelph, ON, N1G 2W1, Canada
2014 - onward	Adjunct International Faculty, Amrita Center for Sustainable Development, Amrita Nagar, Coimbatore, Tamil Nadu, India
2009- 2011	<u>Assistant Professor& Graduate Faculty</u> , Department of Environmental Health, 65 Lamb Hall, East Tennessee State University, PO Box 70682, Johnson City, TN, 37614, USA
2008- 2009	Senior Lecturer, Department of Civil and Environmental Engineering, The University of Auckland, Auckland, New Zealand, 1142.
2006 - 2008	<u>Post Doctoral Fellow</u> , Department of Environmental Engineering Sciences, University of Florida, Gainesville, FL, 32611
2001- 2005	<u>Graduate Research and Teaching Assistant</u> , Department of Environmental Engineering Sciences, University of Florida, Gainesville, FL, 32611.

EXPERIENCE (Industry)

1997-2001 <u>Environmental Engineer</u>, Engineers India Limited, New Delhi, India.

2006 (part time) Project Environmental Engineer, Innovative Waste Consulting Services LLC. Gainesville, FL

HONORS and AWARDS

- **2008** Certificate of Academic Excellence from Hinkley Center for Solid and Hazardous Waste Management, Gainesville, Florida
- **2005** Outstanding International Student Award from College of Engineering, University of Florida, Gainesville, FL, USA
- **2004** Ron Cockcroft Award (RCA) from International Research Group on Wood Protection (IRG-WP), 2004; Stockholm, Sweden

TEACHING (University Course Developed and/or Taught)

At IIT Kharagpur

CE 41601/60135 Solid Waste Management	Autumn 2015, 2016, 2017
CE 41603/60148 Hazardous Waste Management	Spring 2016, 2017, 2018
CE 31302 Environmental Engineering	Spring 2016, 2017, 2018
CE 13001 Engineering Drawing and Computer Graphics	Autumn 2015, 2016, 2017

EV 20001Environmental Science

MOOC Course on Life Cycle Assessment

MOOC Course on Integrated Waste Management for Smart Cities

MOOC Course on E-Waste Management (Link)

MOOC Course on Sustainable Engineering and LCA (Link)

Autumn 2015, Spring 2016, 17, 18

Spring 2017 (≈ 5000 participants)

Autumn 2017 (≈ 7000 participants)

Spring 2018 (≈ 4000 participants)

Spring 2018 (≈ 3500 participants)

At University of Guelph

ENGG 6670 Hazardous Waste Management Winter 2012

ENGG 4340 Solid and Hazardous Waste Management Fall 2012, 2013, 2014 ENGG 6630 Environmental Contaminants - Fate Mechanisms Fall 2012, 2013, 2014 ENGG 4070 Life Cycle Technique for Sustainable Design (with SimaPro Lab) Winter 2013, 2014

ENGG 2160 Mechanics-2 (Strength of Materials) Fall 2014

At East Tennessee State University

ENVH 4379/5379 Environmental Analysis (with Laboratory Component)	Spring 2010, Spring 2011
ENVH 5100 Environmental Health Practice Spring 2010 (offered on ground).	Fall 2009, 2010 (online)

ENVH 3700 Solid Waste Management Fall 2009, 2010, 2011

ENVH 5780 Chemistry of Hazardous Materials Fall 2010 ENVH 3040 Environmental Sanitation Fall 2010, 2011 ENVH 4710 Introduction to Hazardous Waste Spring 2011

At University of Auckland

ENVENG 244 Environmental Engineering-I (with Laboratory Component)	2009, 2008
ENVENG 752 Sustainability Assessment and Risk (including Life Cycle Analysis)	2009
ENGGEN 115 Introduction to Engineering Design	2009

<u>At University of Florida</u>: Teaching Assistant for several Undergraduate and Graduate Environmental Courses including assisting and supervising students for their laboratory projects, Filled in as Lecturer when Instructors were out of station.

Research Interests

- Integrated Solid Waste Management Issues, including construction, operational issues of Solid and Hazardous Waste Management and Treatment units including Construction and Demolition Debris Waste, Industrial Waste etc.
- Beneficial Reuse and Resource Recovery of Potential Solid Waste Components, Potential Industrial
 Waste Streams (e.g., Coal combustion products, Ash from Waste Incinerators); Source Reduction,
 Electronics Waste Management (including Environmental, Social Issues Including Environmental
 Justice)
- Green Engineering, Pollution Prevention, Sustainable Environmental Technologies, including Treatment Technologies, Life Cycle Analysis and Sustainable Design
- Environmental Nanotechnology including its Remediation Application, Fate and Transport of Manufactured Nanomaterials in the Environment

Training Programs Attended:

 Training Workshop (2 Days) on "Life Cycle of Products, Processes & Services (LCA Training with Hands on practice using Sima Pro for LCA Project Managers, Engineers and Designers)", Nov 28th&29th 2012, Organized jointly by Interuniversity Research Center for the Life Cycle of Products, Processes and Services (CIRAIG) and The Sustainability Learning Centre, Toronto, Canada

- Training Workshop on "Adding Sustainability to Engineering Education", Center for Sustainable Engineering, Syracuse University; June 4-5, 2012.
- Participated and attended 25th Annual Teaching & Learning Innovations Conference, organized at University of Guelph by Center for Open Learning and Educational Support, May 1, 2012.
- Participated at the National Science Foundation (NSF) CAREER Workshop, Association of Environmental Engineering and Science Professors (AEESP) 2011 Research and Education Conference, University of South Florida, Tampa, Florida, July 10th 2011.
- Completed 2 Semester (2010-11) Course at East Tennessee State University titled "Faculty Grant Leadership Course". The faculty members who took the course were given assistance in the following specific activities: Refine and/or develop their research/academic program, Identification of funding sources, Targeting and "packaging" a proposal to funding agencies, Identifying and contacting the appropriate agency or sponsor staff for additional guidance and in developing a well "packaged" proposal.
- Attended and Participated at the National Science Foundation Workshop "NSF Day at Middle Tennessee State University", December 18, 2009 Murfreesboro, Tennessee.
- Completed 2 Semester (2009-10) Course at East Tennessee State University titled "Faculty Technology Leadership". This course supports faculty who are interested in integrating technology with education. Course content includes the use of course management system applications, multimedia applications, and applications required for efficient and effective delivery of electronic course materials. Production and incorporation of a multimedia learning unit into a course is the capstone project for this course. This course also prepares faculty to develop and teach online courses.
- Three day workshop on "Introduction to University Teaching and Learning" organized by Center for Academic Development, The University of Auckland, Auckland, NZ; September 2008.
- Half day Teaching Workshop on "Getting Students Taking Responsibility" organized by Center for Academic Development, The University of Auckland, Auckland, NZ; September 2008.
- One day Teaching Workshop on "Getting Participation in a Large Class" organized by Center for Academic Development, The University of Auckland, Auckland, NZ; August 2008.
- One day Workshop on "The Art of Graduate Research Supervision" organized by Center for Academic Development, The University of Auckland, Auckland, NZ; June 2008.
- Bioreactor Landfill Workshop, Two day Workshop on Design and Operational Issues of Bioreactor Landfill by Hinkely Center for Solid and Hazardous Waste Management, Orlando, Florida, May 2006.
- MINTEQA2 Two day Workshop on Geochemical and Hydrological Modeling and Training, Organized by Allison Geosciences Consultants, Inc. at Atlanta, USA. May 2004.
- Two day training workshop on "Principle of Arsenic Behavior in Florida's Soil" Soil and Water Science Department, University of Florida, March 4-5, 2002, Gainesville, Florida.

PROFESSIONAL ASSOCIATIONS

AEESP	Association of Environmental Engineering and Science Professors	
AWMA	Air & Waste Management Association (North America)	
ISWA	International Solid Waste Association	
ISSP	International Society of Sustainability Professionals	
NSWAI	National Solid Waste Association of India (Life Member)	

PROFESSIONAL AND COMMUNITY ACTIVITIES

- 2018: Thematic Speaker for Smart Resources Management Session during Smart Cities Workshop: Sustainable Urban Development, Organized by Heidelberg University, ORF, Mizoram University in Collaboration with SPA, CNRS, GIZ and Indo-German Chamber of Commerce, Presentation title: e Smart Resource Management for Sustainable Urbanization, April 27, 2018, Aizawl, India.
- 2017: Thematic Speaker and Moderator for Smart Resources Management Session during India-EU

Dialogue Smart Cities: Sustainable Urbanization, Organized by Heidelberg University, Delegation of the EU to India, ORF, BayIND in Collaboration with SPA, CNRS, GIZ and Indo-German Chamber of Commerce, Presentation title: How to achieve Smart Resource Management for Sustainable Urbanization, Oct 13-14, 2017, Bangalore, India

- 2017: Presented on topic Integrated Waste Management for a Smart City, under the session Smart Resource Management during Smart Cities Workshop Sustainable Urban Development Organized by Heidelberg University, ORF, SPA and BayIND in Collaboration with Xavier University Bhubaneswar and Indo-German Chamber of Commerce, Sep 21-22, 2017.
- 2017 onward: Subject Expert Member of State Level Advisory Committee for Solid Waste Management, Ministry of Urban Development and Urban Affairs, Government of West Bengal, Kolkata, India.
- 2017: Chaired/Moderated a Session on "Fate and Presence of Environmental Contaminants in Communities" at the AEESP 2017 Conference, June 20-22, 2017, University of Michigan, Ann Arbor, Michigan
- 2016 onward: Member of the Team for Appraisal of Solid Waste Management (SWM) DPRs under Swacch Bharat Mission (Clean India Mission) for Urban Towns in Bihar, India.
- 2016 onward: Member, IIT Consortium responsible for Technical Project Appraisals of Projects Proposed under Namami Gange Program of National Mission of Clean Ganga (NMCG), Ministry of Water Resources and Ganga Rejuvenation, New Delhi, India. The panel meets once a month on average to review outstanding submitted project proposals for approval.
- 2016-2019: Associate Editor, Journal of the Air and Waste Management Association (JA&WMA), a Taylor and Francis Journal.
- 2016: Organizing Team Core Member: 6th International Conference on Solid Waste Management, Nov 24 to 26th, 2016 at Jadavpur University, Kolkata; organized in collaboration with The Energy and Research Institute (TERI), Indian Institute of Science Center for Sustainable Technology and Indian Institute of Technology Kharagpur.
- 2016: Chaired the Session on "Mainstreaming Life Cycle Thinking in Decision Making Process" at the Indian Conference on Life Cycle Management (ILCM), Oct 17th -18th, New Delhi, India
- 2016: Co-Chair, National Conference on Electronic Waste Management, Jan 13-14, 2016, XLRI, Jamshedpur, India, Organized in collaboration with The University of Queensland, Australia and Xavier School of Management, Jamshedpur, India
- 2016: Program Officer for National Service Scheme (NSS) Unit #1 at Indian Institute of Technology-Kharagpur, Our unit is working with three elementary schools helping the teachers in innovative teaching methods in the science and math education. We also work in a village on water and sanitation issues.
- 2016: Book Proposal Review for the Book "Advances in Phytoremediation of Environmental Pollutants"/CRC Press/Taylor and Francis Group.
- 2015 onward: Editor-in-Chief for the Journal "Expert Opinion on Environmental Biology" http://www.scitechnol.com/expert-opinion-on-environmental-biology.php
- 2015 onward: Advisory Board Member, Clean Up and Recycle for Environment (CURE), NGO working in the area of Electronics Waste Management, Jaipur, Rajasthan.
- 2014-15: Member, Organic Waste Facility Public Liaison Committee, City of Guelph, Ontario, Canada.
- 2014 onward: Member "Council of Reference" Wasteaid a NGO connecting vulnerable communities to waste management resources and expertise
- 2014 Member, Scientific Committee, Global Development Symposium, University of Guelph, Guelph, Ontario May 4 May 7, 2014
- 2014: Reviewer, Natural Sciences and Engineering Research Council of Canada (NSERC) Collaborative Research and Development (CRD) Grant Program
- 2013 onward: Serving on AEESP's Student Services Committee

- 2013 onward: Serving as Writer and Reviewer for Training Resources Pack for Hazardous Waste Management being developed by International Solid Waste Association (ISWA) in association with United Nations Environmental Program (UNEP) and United Nations Industrial Development Organization (UNIDO)
- 2013-14: Co-Chair, City of Guelph Solid Waste Management Master Plan Review Public Steering Committee
- 2013 onward: Member, Expert Panel for International Institute of Waste Management, Bhopal, India
- 2013: Member, Working Group "Waste Minimization and Recycling", International Solid Waste Association
- 2013: Member, Working Group "Climate Change and Waste Management", International Solid Waste Association
- 2013: Member Working Group on "Risk Assessment" of Interstate Technology and Regulatory Council (ITRC), 50 F Street, NW, Suite 350, Washington, DC 20001
- 2012-13: Reviewer, Natural Sciences and Engineering Research Council of Canada (NSERC) College and Community Innovation Grant Program
- 2012-13: Reviewer, Natural Sciences and Engineering Research Council of Canada (NSERC) Collaborative Research and Development (CRD) Grant Program
- 2012-13: Reviewer, Natural Sciences and Engineering Research Council of Canada (NSERC) Discovery Grant Program
- 2011-12Served as International Expert: Municipal Solid Waste Management and Institutional Strengthening for Environmental Sustainability, United Nations Industrial Development Organization (UNIDO) Country Project Nigeria, Programme for Implementation of Green Industry for POPs Pollution Prevention and Reduction
- 2012 Organizer and Moderator of Environmental Nanotechnology Session during the 28th Annual International Conference on Soils, Sediment, Water and Energy, Oct 15th to 18th, 2012, University of Massachusetts, Amherst, MA
- 2012 Present, Member-Editorial Board of the "Journal of Experts Opinion on Environmental Biology" SciTechnol An OMICS Group Initiative, Henderson, NV, USA
- 2012-Present, Member-Editorial Board of the "Journal of Waste Management" Hindawi Publishing Corporation, New York, USA
- 2011 Organizer and Moderator of Environmental Nanotechnology Session during the 27th Annual International Conference on Soils, Sediment, Water and Energy, Oct 17th to 20th, 2011, University of Massachusetts, Amherst, MA
- 2011 Solid Waste Management Book Proposal Review for Elsevier Limited, Oxford, UK
- 2011-Present, Member-Editorial Board of the "The Scientific World Journal of Environmental Chemistry", Hindawi Publishing Corporation, New York, USA
- 2011- Present, Member, Scientific Advisory Board, The Association for Environmental Health and Sciences Foundation, Amherst, MA
- 2011 EPA Proposal Review for RFA, EPA-ORD-NRMRL-C1-11-07
- 2010 Present, Consultant/Advisor to Zeal Environmental Technologies Limited, Takoradi, Ghana; a consulting firm who deals with management of oil drilling generated waste and West African Gas Pipeline Condensate.
- 2010, American Society of Public Health (ASPH) Working Group Member for the Global Health Core Competency Development Project, Washington DC
- 2010, NIEHS Proposal Review for RFA-ES-09-003 Hazmat Training at DOE Nuclear Weapons Complex and RFA-ES-09-004 Hazardous Materials Worker Health and Safety Training

- 2010, Reviewer, Diversity Research Grants, Tennessee Board of Regents, Nashville, Tennessee
- 2010 Member, Organizing Committee, 3rd International Congress of Environmental Research, University of Mauritius, Reduit, Mauritius, September 16-18, 2010
- 2009, Reviewer for Graduate Fellowship Applications under U.S. EPA's Science to Achieve Results (STAR) Program
- 2009 & 2007, Peer Reviewer for Proposals received by U.S. EPA's Office of Research and Development (ORD) Phase 1 Small Business Innovation Research (SBIR) Program.
- 2008, Coordinator, International Congress of Environmental Research (ICER-2008), Goa, India, December 18th –December 20th 2008.
- 2007, Consultant to "World Bank" on Assessing Fate of Arsenic during the Management of Diseased Animal Wastes
- 2004, Summer Environmental Enrichment Program funded by NSF, Co-taught a course on "Environmental chemistry and waste management" for a class comprising high school students and teachers from various Gainesville, Florida schools.
- 2004, Session Chair, "Special Waste Management", International Conference on Solid Waste Technology, Winder University, Philadelphia, USA
- 2003, Summer Environmental Enrichment Program funded by NSF, Co-taught a course "Environmental waste chemistry" for a class comprising high school students and teachers from various Gainesville, Florida schools.
- Served as reviewer for scholarly journals: (<u>I get review request of average 2-3 papers/month</u>)
- 1. Bulletin of Environmental Contamination and Toxicology
- 2. Environmental Science and Technology (ES&T)
- 3. Environmental Toxicology and Chemistry
- 4. Ecotoxicology and Environmental Safety
- 5. Geotextile and Geomembrane
- 6. Environmental Engineering Science
- 7. Journal of Hazardous, Toxic, and Radioactive Waste
- 8. International Journal of Environment and Waste Management (Inderscience)
- 9. Journal of Nanoparticle Research
- 10. Journal of Air and Waste Management Association

- 11. Journal of Environmental Engineering ASCE
- 12. Journal of Hazardous Material
- 13. Resource Conservation and Recycling
- 14. Soil and Sediment Contamination: An International Journal
- 15. Waste Management
- 16. Waste Management and Research
- 17. Science of the Total Environment
- 18. Journal of Environmental Chemistry and Ecotoxicology (JECE)
- 19. International Journal on Water, Sanitation and Development
- 20. International Journal of Environmental Analytical Chemistry (Taylor and Francis journal)
- 21. Asian Journal of Water, Environment and Pollution

TRAINING WORKSHOPS/SHORT TERM COURSES CONDUCTED

2017: Design and Delivery of One Day Workshop on Integrated Waste Management at Bilaspur University, Bilaspur, MP, India, July 25th, 2017.

2017: Design and Delivery of Five Day Short Term Course on "Sustainable Engineering: Concepts and Applications" offered at College of Urban Construction and Environmental Engineering, Chongqing University, June 26th to June 30th, Chongqing, China.

2016: Design and Delivery of Three Day Short Term Course on "Introduction to Life Cycle Assessment: From Theory to Practical Applications" offered at Indian Institute of Technology (IIT), Kharagpur, WB, India, Sep 14th to 16th, 2016.

2016: Design and Delivery of Short Term Course on "Waste Management & Resource Recovery" with a focus on Urban Issues at College of Urban Construction and Environmental Engineering, Chongqing University, July 1st to July 9th, Chongqing, China

2016: Design and Delivery of Two Day Training Program on Electronic Waste Management at DVC Towers, Damodar Valley Corporation (a power sector company), Kolkata, Mar 17th and 18th, 2016; Kolkata, India

2015: Design and Delivery of One week Course on "Life Cycle Analysis (LCA) as a Tool for Sustainable Engineering", at College of Urban Construction and Environmental Engineering, Chongqing University, Dec 14th to Dec 18th, Chongqing, China

2015: Design and Delivery of 4-Day Course on "Electronic Waste (E-Waste) Management – Global Issues", at College of Urban Construction and Environmental Engineering, Chongqing University, Dec 21st to Dec 24th, Chongqing, China

2015: Co-Instructor for Training Workshop on "Waste Management" at Northern Coalfields Ltd., Singrauli, MP, India, November 16th, 2015.

2015: Co-Instructor for Capacity Building Programme on Hazardous Waste Management" at NTPC, Singrauli, MP, India, 17th -18th November, 2015.

2015: Co-Instructor and Facilitator for Capacity Building Training Program for Electronic Waste Management, Organized at Hotel Sagar Plaza, Pune, Oct 30th -31st, 2015 by International Institute of Waste Management, Bhopal, India.

2015: Co-Instructor for Short Term Course on "Land Acquisition, Rehabilitation and Environmental Clearance of Projects" Sept 15-19, 2015, Indian Institute of Technology (IIT), Kharagpur, West Bengal, India.

2013: Main Instructor at the Capacity Building Training/Workshop on Electronics Waste Management, Organized by International Institute of Waste Management, Bhopal; April 25-26, 2013, India.

UNIVERSITY SERVICE:

At IIT Kharagpur, India

- Autumn 2015 onward: Faculty Advisor, 2015-19 Undergraduate Students Batch
- July 2015 onward: Assistant Warden, Madan Mohan Malviya Hall of Residence
- Jan 2016 onward: Program Officer National Service Scheme (NSS)
- May 2016 onward: Member, Faculty Search Committee
- May 2016 onward: Member, Academic Curriculum Review Committee
- July 2016 onward: Laboratory In-charge Environmental Engineering

At University of Guelph, Ontario, Canada

- 2013 onward: Faculty Advisor, Engineers Without Border Student Chapter at University of Guelph
- 2013-15: Co-op Coordinator for Environmental Engineering and Water Resources Engineering BEng Program
- 2012-14: Member, Industrial Advisory Committee, School of Engineering, University of Guelph
- 2012-15: Member, Graduate Committee, School of Engineering, University of Guelph
- 2012: Member, Awards Committee, School of Engineering, University of Guelph
- 2012-13: Member, Working Group on Graduate Attributes "Environment and Society & Business and Project Management"

At East Tennessee State University, Johnson City, TN, USA

- 2011:Inter-Professional Education (IPE) committee, The Academy Health Science Center, East Tennessee State University
- 2011: Member, Sustainability Tracking and Rating System Curriculum and Research Planning Task Force, ETSU
- 2010: Member "Search Committee: Web Content Developer Position" Office of E-Learning, ETSU
- 2010-2011: UG student advisor for Department of Environmental Health
- 2009: Member of Ad-Hoc Working Group on Alumni Affairs for the College of Public Health, East Tennessee State University, Johnson City, TN
- 2009-2011: Member, Graduate Student Admissions Committee

At University of Auckland, New Zealand

- 2008-2009: Assessor for Masters' Thesis for Environmental, Water Resources, Construction Management and LCA and Sustainability Clusters in the Department of Civil and Environmental Engineering. The role of Assessor was to ensure uniformity in evaluations/grading and expected standards of the Masters Thesis.
- 2008-2009: Member, Scholarship Committee for Scholarships in Civil and Environmental Engineering Program
- 2008-2009: Member Graduate Student Admission Committee for Environmental Engineering Program.

PUBLICATIONS

I have published original research and review articles in several internationally reputed journals in the field of Environmental Engineering and Science and have attended and presented research papers/posters at several national and international conferences.

Publication Summary:

Published (192): Referred Journal Articles (59), Full Paper in Conference Proceedings (26), Abstracts (65), Magazine Articles (4), Technical Reviewed Project Reports (22), Other Project Reports (8), Book Chapters (6) and PhD Dissertation (1).

Submitted/Re-Submitted after Comments: (5): Referred Journal Articles (5)

<u>Peer Reviewed Journal Publications:(As on 12th Feb, 2018 Total Citation: 1545; h-index = 24, I-10 index = 36, as per Google Scholar)</u>

indicates supervised/mentored Graduate/Undergraduate students, Underline indicates corresponding author.

- 1. Mandal, P[#]., <u>Dubey, B</u>., Gupta, A.K., 2017. Review on landfill leachate treatment by electrochemical oxidation: Drawbacks, challenges and future scope, **Waste Management**, 69, 250-273.
- 2. Paul, S.*, Dutta, A., Defersha, F., <u>Dubey, B.</u>, 2017.Municipal Food Waste to Biomethane and Biofertilizer: A Circular Economy Concept ., **Waste and Biomass Valorization**.,11 pages, https://doi.org/10.1007/s12649-017-0014-y
- 3. Jahanfar, M.*, <u>Dubey, B.</u>, Gharabaghi, B., and McBean, E., 2017. Municipal Solid Waste Slope Stability Parameters: A Probabilistic Approach, **ASCE Journal of Geotechnical Geoenvironmental Engineering** 143 (8) ,04017035
- 4. Jahanfar, M.*, Amirmojahedi, M.*, <u>Dubey, B.</u>, Gharabaghi, B., and Kumar, D., 2017. A Novel Risk Assessment Method for Major Landfill Failure: Case Study Application for Bhalswa Landfill, Delhi, India, **Waste Management and Research** 35(3), 220-227
- 5. Osei-Fosu, P., Donkor, A., Ziwu, C., <u>Dubey, B.</u>, Kingsford-Adaboh, R., Asante, I., Nyarko, S., Tawiah, R., and Nazzah, N. 2017. Surveillance of Pesticide residues in Fruits and Vegetables from Accra Metropolis Markets, Ghana, 2010–2012: A Case Study in Sub-Saharan Africa. **Environmental Science and Pollution Research**, 1-19

- 6. Pokhrel L. R[#], Ettore N, Jacobs Z. L, Zarr A, Weir M. H, Strongin D. R, Scheuerman P. R, Kanel S. R, <u>Dubey B.</u>, 2017. Novel Carbon Nanotube (CNT)-based Ultrasensitive Sensors for Trace Mercury(II) Detection in Water: A Review. **Science of the Total Environment**, 574.,1379-1388
- 7. Zhang, J.*, Kim, H., Dubey, B., and Townsend, T., 2017. Arsenic Leaching and Speciation in C&D Debris Landfills and the Relationship with Gypsum Drywall Content, **Waste Management** 59, 324-329
- 8. Donkor, A., Addae Fordjour, L., Tawiah, R., Asomaning, W., <u>Dubey, B.</u>, Osei-Fosu, P., Ziwu, C., and Mohammed, M. 2017. Evaluation of Trace Metals in Vegetables Sampled from Farm and Market Sites in Accra Metropolis, Ghana, **International Journal of Environmental Studies** 74(2), 315-324
- 9. Nuralam, H.M., Xiao-lan, Z., <u>Dubey, B.</u>, Wen-Chuan, D., 2017. Healthcare Waste Management Practices in Bangladesh: A Case Study in Dhaka City, Bangladesh. **International Journal of Environmental,** Chemical, Ecological, Geological and Geophysical Engineering
- 10. Jahanfar, M.*, <u>Dubey, B.</u>, Gharabaghi, B., and Movahed, S., 2016. Landfill Failure Mobility Analysis A Probabilistic Approach, **World Academy of Science, Engineering and Technology, International Journal of Environmental, Chemical, Ecological, Geological and Geophysical Engineering, 10(5), 476-484.**
- 11. Wang, Y.*, Plesant, S., <u>Dubey, B.</u>, Rhue, D., Bonzongo, J-C., and Townsend, T. 2017. Assessing the Propensity of Landfill Soils to Undergo Reductive Iron Dissolution, **Science of the Total Environment** (Submitted –Under Review)
- 12. <u>Dubey, B.</u>, Townsend, T., and Solo-Gabriele, H., 2017. Risk Comparison among Decks Constructed with Different Treated Wood Products. **Environmental Research**, (Submitted- Under Review)
- 13. Donkor, A., Osei-Fosu, P., <u>Dubey, B.</u>, Kingsford-Adaboh, R., Ziwu, C., and Asante, I. 2016 Pesticide Residues in Fruits and Vegetables in Ghana: A Review. **Environmental Science and Pollution Research**, 23 (19), 18966-18987
- 14. Donkor, A., Owusu, G., Ziwu, C., Nyarko, S., Tawiah, R., Bonzongo, J-C, <u>Dubey, B.</u>, Asante, I., and Nyame, F., 2016. Assessment of Trace Metals Leaching from Mixed Electronic Waste using four Extraction Methods, **International Journal of Basic and Applied Sciences** (Submitted -Under Review)
- 15. Owusu, G., Donkor, A., Ziwu, C., Nyarko, S., Tawiah, R., Bonzongo, J-C, Dubey, B., Asante, I., and Nyame, F. 2016. A Survey on Public Perception of E-Waste Management and Disposal Practices in Accra Metropolis, Ghana. **International Journal of Basic and Applied Sciences** (Submitted Under Review)
- 16. Bindra, N.*, <u>Dubey, B.</u>, and Dutta, A., 2015. Technological and Life Cycle Assessment of Organics Processing Odour Control Technologies. **Science of the Total Environment** 527-528, pages 401-412; (5 year Impact factor:4.41)
- 17. Joseph, T.*, Jahanfar, M.*, Kelly, B.* and <u>Dubey, B</u>., 2015. A Comparative Life Cycle Assessment of Conventional Hand Dryer and Roll Paper Towel as Hand Drying Methods. **Science of the Total Environment** 515–516, pages 109–117 (*5 year Impact factor:4.41*)
- 18. Kelly, B.*, <u>Dubey, B.</u>, Harvey, R., and McBean, E., 2015. A Risk Based Approach to Sanitary Sewer Pipe Asset Management. **Science of the Total Environment** 505, Pages 1011-1017 (*5 year Impact factor:4.41*)
- 19. Misra, A.*, Dubey, B., Wu, C., Townsend, T., and Solo-Gabriele, H., 2015 Leaching Retention of CCA Metals from High-Temperature Reaction with Alkaline Earth and Iron Based Sorbents", **American Scientific Research Journal for Engineering, Technology, and Sciences**, vol. 14(3), pp. 142-160.
- 20. Joseph, T.[#], <u>Dubey, B</u>. and McBean, E., 2015. Human Health Risk Assessment from Arsenic Exposures in Bangladesh. **Science of the Total Environment** 527-528, Pages 552-560 (*5 year Impact factor:4.41*)
- 21. Joseph, T.[#], <u>Dubey, B</u>. and McBean, E., 2015. A Critical Review of Arsenic Exposures for Bangladeshi Adults. **Science of the Total Environment** 527-528, Pages 540-551 (*5 year Impact factor:4.41*)

- 22. Misra, A.*, Dubey, B., Wu, C., Townsend, T., and Solo-Gabriele, H., 2015 Impact on Leaching & Retention of Metals from High Temperature Reaction of CCA Metals with Alumino-Silicate Sorbents", **American Scientific Research Journal for Engineering, Technology, and Sciences**, vol. 14(3), pp. 161-176.
- 23. Donkor, A., Osei-Fosui, P., Nyarko, S., Kingsford-Adabohi, R., <u>Dubey, B.</u>, and Asante, I., 2015. Validation of QuEChERS Method for the Determination of 36 Pesticide Residues in Fruits and Vegetables from Ghana, using Gas Chromatography with Electron Capture and Pulsed Flame Photometric Detector. **Journal of Environmental Science and Health, Part B (Pesticides, Food Contaminants, and Agricultural Wastes)** 50, Pages 1-11 (Taylor and Francis Journal, *Impact factor:1.20*)
- 24. Misra, A.*, Dubey, B., Wu, C., Townsend, T., and Solo-Gabriele, H., 2015 Minimization of Metals Leaching from CCA Wood Incineration through High Temperature Reaction with Mineral Sorbents", **International Journal of Sciences: Basic and Applied Research**, 24(7), pp. 197-209, 2015.
- 25. Donkor, A., Kofi Bempah, C., <u>Dubey, B.</u>, and Attandoh, N., 2015 Chlorinated Pesticide Residues in Selected Fruits from Some Ghanaian Markets and the Possible Impact on Children's Health, **Research Journal of Chemical and Environmental Sciences** 3 [1] February 2015: 01-09 (*Impact factor:2.59*)
- 26. Donkor, A., Kumi-Amoah, G., Nartey, V., <u>Dubey, B.</u>, and Attandoh, N., 2015. Seasonal trends in Groundwater Arsenic levels in Obuasi Municipality and its vicinity, Ghana. **Research Journal of Chemical and Environmental Sciences** 3 [1] February 2015. 29-39 (*Impact factor:2.59*)
- 27. Zhang, J.[#], Dubey, B., and Townsend, T., 2014. The Effect of Moisture Control and Air Venting on H₂S Production and Leachate Quality in Mature C&D Debris Landfills. **Environmental Science and Technology** 48 (20), page 11777–11786, (2014 Impact factor: 5.33)
- 28. Silva, T.*, Pokhrel, L.*, <u>Dubey, B.</u>, Tolaymat, T. and Maier, K., 2014. Particle Size, Surface Charge, and Concentration Dependent Ecotoxicity of Three Organo-Coated Silver Nanoparticles: Comparison between Model-Predicted and Observed Toxicity. **Science of the Total Environment**, 468–469, Pages 968-976(5 *year Impact factor:4.41*)
- 29. Pokhrel, L. *, <u>Dubey</u>, <u>B</u>., and Scheuerman, P, 2014 Natural Water Chemistry (Dissolved Organic Carbon, pH, and Hardness) Modulates Colloidal Stability, Dissolution, and Antimicrobial Activity of Silver Nanoparticles. **Royal Society of Chemistry journal, Environmental Science: Nano**1 (1), Pages 45-54
- 30. Pokhrel, L. *, <u>Dubey, B.</u>, and Scheuerman, P, 2013 Impacts of Select Organic Ligands on the Colloidal Stability, Dissolution Dynamics and Toxicity of Silver Nanoparticles. **Environmental Science and Technology** 47 (22) 12877-12885, (2014 Impact factor: 5.33)
- 31. Pokhrel, L.*, and <u>Dubey, B.</u>, 2013. Global Scenario of Metal Mining, Environmental Repercussions, Policies and Sustainability: A Review. **Critical Reviews in Environmental Science and Technology**, 43 (21), 2352 2388. (2014 Impact factor: 3.47)
- 32. Pokhrel, L.*, Scheuerman, P., and <u>Dubey, B.</u>, 2013. Evaluation of Experimental Design Options in Environmental Nanoscience. **Expert Opinion on Environmental Biology**, 2:1 http://www.scitechnol.com/2325-9655/2325-9655-2-103.pdf
- 33. Pokhrel, L.*, and <u>Dubey, B.</u>, 2013. Untangling Species Sensitivity Paradox in Environmental Research. **Invited Editorial in Expert Opinion on Environmental Biology**, 2:1 http://dx.doi.org/10.4172/2325-9655.1000e105
- 34. Pokhrel, L.*, and <u>Dubey, B.</u>, 2013. Silver and Zinc Oxide Nanoparticles Cause Developmental Anomalies in the Crop Plants. **Science of the Total Environment**, 452-453: 321-332(*5 year Impact factor: 4.41*). The manuscript has been selected and added to the virtual online issue on "Nanomaterials in the Environment" put together by the editors of this journal.
- 35. Pokhrel, L.*, and <u>Dubey, B.</u>, 2012. Potential Impact of Low-Dose Silver Nanoparticles on Predator-Prey Interactions between Predatory Dragonfly Nymphs and Daphnia magna as a Prey. **Environmental Science and Technology**, 46(14):7755-62. (2014 Impact factor: 5.33)

- 36. Pokhrel, L. *, Silva, T. *, <u>Dubey, B.</u>, El Badawy, A., Tolaymat, T. and Scheuerman, P., 2012. Rapid Screening of Aquatic Toxicity of Metal and Metal Oxide Nanoparticles using MetPLATETM Bioassay. **Science of Total Environment** 426, 414-422(5 year Impact factor:4.41). The manuscript has been selected and added to the virtual online issue on "Nanomaterials in the Environment" put together by the editors of this journal.
- 37. Wang, Y.*, Sikora, S., Kim, H., Dubey, B., and Townsend, T. 2012. Mobilization of Iron and Arsenic from Soil by Construction and Demolition Debris Landfill Leachate. **Waste Management** 32 (5) 925-932.(5 year Impact factor: 3.52)
- 38. Bempah, C. *, Donkor, A., Yeboah, P., Dubey, B., and Osei-Fosu, P., 2011 A Preliminary Assessment of Consumer's Exposure to OrganochlorinePesticides in Fruits and the Potential Health Risk in Accra Metropolis, Ghana. **Food Chemistry** 128 (4) 1058-1065.(5 year Impact factor: 3.92)
- 39. Dubey, B., Townsend, T., and Solo-Gabriele, H., 2010. Metal Loss from Treated Wood Products in Contact with Municipal Solid Waste Landfill Leachate. **Journal of Hazardous Material** 175 558-568.(5 year Impact factor: 4.68)
- 40. Jang, Y., Jain, P., Tolaymat, T., Dubey, B., Singh, S. *, Townsend, T. 2010. Characterization of Roadway Stormwater System Residuals for Reuse and Disposal Options. **Science of Total Environment** 408 1878-1887.(5 year Impact factor:4.41)
- 41. Dubey, B., Spalvins, E., Townsend, T., and Solo-Gabriele, H., 2009. Comparison of CCA- and ACQ-Treated Wood Disposal in Construction and Demolition Debris Landfill. **ASCE Journal of Environmental Engineering** 135(10) 910-917.(*Impact factor: 1.27*)
- 42. Jang, Y., Jain, P., Tolaymat, T., <u>Dubey, B.</u>, Townsend, T. 2009. Characterization of Pollutants in Florida Street Sweepings for Management and Reuse. **Journal of Environmental Management** 91(2) 320-327.(5 year Impact factor: 3.90)
- 43. Spalvins, E., <u>Dubey, B.</u>, and Townsend, T., 2008. Impact of Electronic Waste Disposal on Leachate Quality during the Acidic Phase of Simulated Landfills. **Environmental Science and Technology** 42(19) 7452-7458.(2014 Impact factor: 5.33)
- 44. Tolaymat, T., <u>Dubey</u>, <u>B</u>., and Townsend, T., 2008. Assessing Risk Posed by Land Application of Ash from the Combustion of Wood and Tires. **The Journal of Residual Science and Technology** 5(2) 61-67. (*Impact factor:* 0.55)
- 45. Wadanambi, L. *, Dubey, B., and Townsend, T., 2008. Leaching of Lead from Lead-Based-Paint under a Variety of Leaching Conditions. **Journal of Hazardous Materials** 157(1) 194-200. (5 year Impact factor: 4.68)
- 46. Townsend, T., Musson, S., and Dubey, B., and Pearson, B. **, 2008.Leachability of Printed Wire Boards Containing Leaded and Lead-Free Solder. **Journal of Environmental Management** 88 926-931.(5 year Impact factor: 3.90)
- 47. Dubey, B., Townsend, T., Solo-Gabriele, H., and Bitton, G., 2007 Impact of Surface Water Conditions on Preservative Concentrations and Aquatic Toxicity of Treated Wood Leachate. **Environmental Science and Technology**, 41(10) 3781-3786.(2014 Impact factor: 5.33)
- 48. Dubey, B., Solo-Gabriele, H., and Townsend, T., 2007. Quantities of Arsenic Treated Wood in Hurricane Katrina Demolition Debris. **Environmental Science and Technology,** 41(5) 1533-1536.Based on this study a news story is published in ES&T in the same edition of the journal. Another news story by C&EN (Chemical and Engineering News, ACS) was published online on 2nd Feb, 2007.(2014 Impact factor: 5.33)
- 49. Dubey, B. and Townsend, T., 2007. Leaching of Milled Asphalt Pavement Amended with Waste to Energy Ash. **International Journal of Environment and Waste Management,** 1(2/3) 145-158.
- 50. Jacobi, G., Solo-Gabriele, H., Townsend, T., Dubey, B., 2007. Evaluation of Technologies for Sorting CCA-Treated Wood. **Waste Management**, 27(12) 1617-1625.(5 year Impact factor: 3.52)

- 51. Dagan, R., Dubey, B., Bitton, G., and Townsend, T., 2007. Aquatic Toxicity of Leachates Produced from Several Electronic Devices. **Archives of Environmental Contamination and Toxicology,** 53(2) 168-173.(2014 Impact factor: 1.90)
- 52. Jacobi, G., Solo-Gabriele, H., Dubey, B., Townsend, T., Shiba, T., 2007. Evaluation of Commercial Landscaping Mulch for Possible Contamination from CCA-treated Wood. **Waste Management**, 27(12)1765-1773.(5 year Impact factor: 3.52)
- 53. Townsend, T., Dubey, B., and Tolaymat, T., 2006. Interpretation of SPLP Results for Assessing Risk to Groundwater from Land Applied Granular Waste. **Environmental Engineering Science**, 23(1) 236-248. (*Latest Impact factor: 0.99*)
- 54. Song, J., Dubey, B., Jang, Y., Townsend, T. and Solo-Gabriele, H., 2006. Implication of Chromium Speciation on Disposal of Discarded CCA-Treated Wood. **Journal of Hazardous Material**, B128, 280-288. (5 year Impact factor: 4.68)
- 55. Shibata, T., Solo-Gabriele, H., Dubey, B., Townsend T., Jacobi, G., 2006. Arsenic leaching from mulch made from recycled construction and demolition wood and impacts of iron-oxide. **Environmental Science and Technology** 40(16) 5102-5107.(2014 Impact factor: 5.33)
- 56. Townsend, T., Dubey, B., Tolaymat, T. and Solo-Gabriele, H., 2005. Preservative Leaching from Weathered CCA-Treated Wood. **Journal of Environmental Management**, 75(2): 105-113.(5 year Impact factor: 3.90)
- 57. Stook, K., Tolaymat, T., Ward, M., Dubey, B., Townsend, T., Solo-Gabriele, H. and Bitton, G., 2005. Relative Leaching and Aquatic Toxicity of Pressure-Treated Wood Products Using Batch Leaching Tests. **Environmental Science and Technology**, 39(1) 155-163.(2014 Impact factor: 5.33)
- 58. Dubey, B. and Townsend, T., 2004. Arsenic and Lead Leaching from the Waste Derived Fertilizer Ironite. **Environmental Science and Technology**, 38(20) 5400-5404. Based on this study a news story was also published in ES&T in the same edition of the journal.(2014 Impact factor: 5.33)
- 59. Stook, K., Dubey, B., Ward, M., Townsend, T., Bitton, G. and Solo-Gabriele, H., 2004. Heavy Metal Toxicity of Pressure Treated Wood Leachates with MetPLATE[™]. **Bulletin of Environmental Contamination and Toxicology**, 73(6): 987-994. (2014 Impact Factor: 1.26)
- 60. Townsend, T., Tolaymat, T., Solo-Gabriele, H., Dubey, B., Stook, K. and Wadanambi, L., 2004. Leaching of CCA Treated Wood: Implications for Waste Disposal. **Journal of Hazardous Material**, B114 75-91. (5 year Impact factor: 4.68)
- 61. Khan, B., Solo-Gabriele, H., Dubey, B., Townsend, T., and Cai, Y., 2004. Arsenic Speciation of Solvent-Extracted Leachate from New and Weathered CCA-Treated Wood. **Environmental Science and Technology**, 38 (17) 4527-4534.(2014 Impact factor: 5.33)
- 62. Dubey, B. and Bhattacharya, S., 2000. Concrete Filled Steel Tubular Columns under Axial Compression and Reversed Cycling Bending. **Journal of the Institution of Engineers (India)**, 80:135-150.

Refereed Book Chapters:

- 1. Gupta, A.K., Ghosal, P.S. *, <u>Dubey, B.</u>, (2017). Hybrid Nano adsorbents for Drinking Water Treatment: A Critical Review., Hybrid Nanomaterials: Advances in Energy, Environment, and Polymer Nanocomposites., 199-236
- 2. Pradhan, R., Pradhan, R., Dash, B., <u>Dubey, B.</u>, and Dutta, A. (2017) Bioenergy Combined with Carbon Capture Potential by Microalgae at Flue Gas Based Carbon Sequestration Plant of Nalco as Accelerated Carbon Sink. Book Chapter published in the Book on Carbon Utilization Applications to Energy Industry under Springer series on Green Energy and Technology, page 231-244.
- 3. Pokhrel, L.*, and <u>Dubey, B</u> (2015). Early Developmental Responses of Plants Exposed to Metals and Oxides Nanoparticles (Chapter-8) in Siddiqui, M. H., Al-Whaibi, M. H., and Mohammad, F. "Nanotechnology and Plant Sciences Nanoparticles and their Impacts on Plants" Springer Publishers.

- 4. Townsend, T., Dubey, B., and Solo-Gabriele, H (2008). Disposal Issues of Preservative Treated Wood, book chapter (Chapter-33) in Schultz, T., Miltz, H., Freeman. M., Goodell, B. and Nicholas, D. "Development of Commercial Wood Preservatives: Efficacy, Environment and Health Issues" ACS Symposium Series 982, published by American Chemical Society, Washington D.C. page no 545-562.
- 5. Jambeck, J., Dubey, B., Townsend, T. and Solo-Gabriele, H. (2006). Disposal of Preservative Treated Wood in Landfills, book chapter in Townsend, T., and Solo-Gabriele, H. "Environmental Impacts of Treated Wood" CRC Press, Boca Raton, FL, page no 467 485.
- 6. Cai, Y., Solo-Gabriele, H., Townsend, T., Khan, B., Georgiadis, M. and Dubey, B. (2006). Elemental Speciation and Environmental Importance Associated with CCA-Treated Wood, book chapter in Townsend, T., and Solo-Gabriele, H. "Environmental Impacts of Treated Wood" CRC Press, Boca Raton, FL, page no 117 137.

Full Papers Published in Conference Proceedings:

- 1. Praneet, S.*, Chella, R. S.*, and <u>Dubey, B.</u>, 2017. Environmental Risk Assessment for Beneficiary Use of Coal Combustion Residues Using Leaching Environmental Assessment Framework, Paper in the Proceedings of 19th International Conference on Solid Waste (ICSW 2017) Paris, France; February 23-24, 2017. The student received the "Best Student Paper Award".
- 2. Nuralam, H.[#], Xiao-lan, Z., <u>Dubey, B.</u>, Wen-Chuan, D., 2017. *Healthcare Waste Management Practices in Bangladesh: A Case Study in Dhaka City, Bangladesh*, Paper in the Proceedings of 19th International Conference on Solid Waste (ICSW 2017) Paris, France; February, 23-24, 2017.
- 3. Silva, T.*, Chella, R. S.*, and <u>Dubey, B.</u>, 2016. *Contribution of Biodegradable Plastics to Global Methane Production*, Paper in the Proceedings of 6th International Conference on Solid Waste Management, Kolkata, India, Nov 24 26, 2016.
- 4. Praneet, S.*, Chella, R. S.*, and <u>Dubey, B.</u>, 2016. *Environmental risk assessment for beneficial reuse of coal combustion residues*, Paper in the Proceedings of 6th International Conference on Solid Waste Management, Kolkata, India, Nov 24 26, 2016.
- 5. <u>Dubey, B.</u>, and Sarkar, S. *, 2016. Use of Life Cycle Analysis Data as a Decision Tool in Sustainable Built Environment, Paper in the Proceedings of INNOVA 2016, published as part of the Annual Technical Magazine of the Chemical Engineering Department, Jadavpur University, Kolkata, page 13-19
- 6. Jahanfar, M.*, <u>Dubey, B.</u>, Gharabaghi, B., and McBean, E., 2016. Landfill Failure Mobility Analysis: A Probabilistic Approach, **Geological and Environmental Engineering Conference (World Academy of Science, engineering and Technology; WASET)**
- 7. Paul, S.*, <u>Dubey, B.</u>, and Dutta, A. 2014. *Evaluation of a Hybrid Approach of Food Waste Management*, Paper Number 141897079, Paper in the Proceedings of 2014 ASABE and CSBE/SCGAB Annual International Meeting, Sponsored by ASABE, Montreal, Quebec Canada, July 13 16, 2014
- 8. Baah, K.*, and <u>Dubey, B.</u>, 2014. *A Review of Surfactant Enhanced Remediation of Contaminated Soil*, Paper in the proceedings of 2014 Canada Water Resource Congress, June 2-4, Hamilton, ON Canada.
- 9. Paul, S.* and <u>Dubey, B.</u>, 2013. *Food Waste Composting Nitrous Oxide as GHG Emission*, Paper Number 131620588, Paper in the Proceedings of American Society of Agricultural and Biological Engineering (ASABE) annual international meeting, Kansas City, Missouri, USA July 21-24, 2013.
- 10. <u>Dubey, B.</u>, Pokhrel, L.*, and Scheuerman, P., 2012. *Ecological Risk Assessment of Zinc Oxide Nanoparticles*, Paper in the Proceedings of the 2nd International Conference on Environmental Pollution and Remediation, Montreal, Quebec, Canada, 28-30 August 2012
- 11. Bempah, C., Donkor, A., <u>Dubey, B.</u>, Yeboah, P. and Attandoh, N. *Environmental Monitoring of Chlorinated Pesticide Residues in Selected Fruits from Ghanaian Markets* presented at International

- Conference on Water and Health: Where Science meets Policy, UNC, Chapel Hill, October 23-26, 2010.
- 12. Kumi-Amoah, G., Donkor, A., Nartey, V., <u>Dubey, B.</u>, and Attandoh, N., *Seasonal trends in Groundwater Arsenic levels in Obuasi Municipality and its vicinity, Ghana: The impact of Gold mining*, presented at International Conference on Water and Health: Where Science meets Policy, UNC, Chapel Hill, October 23-26, 2010.
- 13. <u>Dubey, B.</u>, Townsend, T. and Santra, S., *Preliminary Evaluation of Environmental Impact of Nanoparticles and Nanoparticle Containing Discarded Waste Materials on Waste Disposal Systems*, Conference Proceedings (on CD), International Conference on the Environmental Implications and Applications of Nanotechnology, June 9-11, 2009, University of Massachusetts, Amherst.
- 14. <u>Dubey</u>, <u>B</u>., and Townsend, T., *Biomass Resource Assessment: Availability and Cost Analysis of Using Municipal Solid Waste Components as Alternative Fuel Sources for Power Generation: A Case Study of Gainesville, Florida, USA*, Paper published in Conference Proceedings, Renewable Energy Asia Conference, Organized by Kyoto University, Japan and Indian Institute of Technology, Delhi, New Delhi, India, December 11 13, 2008.
- 15. <u>Dubey, B.</u>, and Townsend, T., *A Review of Environmental Risk Assessment Approach for Emerging Waste Streams*, Paper presented at 2nd International Congress of Environmental Research, Goa, India, December 18 20, 2008.
- 16. Dubey, B., Townsend, T. and Solo-Gabriele, H., *Comparison of Relative Risks from Preservative Components of Treated Wood Structures*, Paper presented at Wood Protection 2006, Forest Products Society, New Orleans, USA, March 21 23, 2006.
- 17. Dubey, B., Townsend, T. and Solo-Gabriele, H., *Comparison of CCA- and ACQ-Treated Wood Disposal in a Construction and Demolition Debris Landfill*, Paper presented at Wood Protection 2006, Forest Products Society, New Orleans, USA, March 21 23, 2006.
- 18. Solo-Gabriele, H., Townsend, T., Jacobi, G. and Dubey, B., *Methods to Minimize Preservative-Treated Wood in Recovered Wood Waste*, Paper presented at Wood Protection 2006, Forest Products Society, New Orleans, USA, March 21 23, 2006.
- 19. Dubey, B., Townsend, T., Solo-Gabriele, H. and Bitton, G., *Comparison of Temporal Changes in Metal Leaching and Aquatic Toxicity from Wood Treated with CCA and Alternative Preservatives*, Proceedings 2005, IRG/WP 05-50236, Paper presented at 36th Annual Meeting of International Research Group on Wood Preservation at Bangalore, India, April 24 28, 2005.
- 20. Solo-Gabriele, H., Townsend, T., Jacobi, G., Dubey, B., Fernandes, J., and Lam, E., Wood Waste Management Practices in the U.S. with Emphasis on the Management of Wood Treated With Metal-Based Preservative, Paper presented at COST E31 Management of Recovered Wood, 2nd Conference: Towards a Higher Technical, Economical and Environmental Standard, 29th September 1st October, 2005; Wood and Furniture Technical Centre (CTBA), 33000, Bordeaux, France.
- 21. Townsend, T., Dubey, B., Jambeck, J. and Solo-Gabriele, H., *Disposal of Pressure Treated Wood in Construction and Demolition Debris Landfill;* Proceedings 2005, IRG/WP 05-50235, Paper presented at 36th Annual Meeting of International Research Group on Wood Preservation at Bangalore, India, April 24 28, 2005.
- 22. Shibata, T., Solo-Gabriele, H., Townsend, T. and Dubey, B., Leaching of Arsenic from mulch made from Recycled Construction and Demolition Wood, Proceedings 2005, IRG/WP 05-50232, Paper presented at 36th Annual Meeting of International Research Group on Wood Preservation at Bangalore, India, April 24 - 28, 2005.
- 23. Solo-Gabriele, H., Townsend, T., Yong, C., Khan, B., Song, J., Jambeck, J., Dubey, B. and Jang, Y., *Speciation of Leachate from CCA-Treated Wood*, Proceedings 2005, IRG/WP 05-50224:27, Paper presented at 6th International Symposium, Environment and Wood Preservation, at Cannes-Mandelieu,

- France, Feb 7-8, 2005.
- 24. Dubey, B., Townsend, T., and Solo-Gabriele, H., *Metal Leaching from Pressure Treated Wood in Sanitary Landfill Leachate*, Proceedings 2004, IRG/WP 04-50220, Paper presented at 35th Annual Meeting of International Research Group on Wood Preservation at Ljubljana, Slovenia, June 6-10, 2004.
- 25. Dubey, B., Townsend, T., and Solo-Gabriele, H., *Comparing Arsenic Leachability in Landfill Leachate and in TCLP*, Proceedings 2004, Nineteenth International Conference on Solid Waste Technology and Management; Philadelphia, March 21-24, 2004 567-576.
- 26. Townsend, T., Dubey, B. and Solo-Gabriele, H., Assessing Potential Wood Disposal impact from Preservative Treated Wood Products- A Life Cycle Analysis Approach, Proceedings 2004, International Conference on Environmental Impact of Preservative-Treated Wood; Orlando, February 8 – 11, 2004, 169-188.

Magazine Article

- 1. <u>Dubey, B.</u>, 2015. *Integrated Waste Management Plan for Clean India View Point* in the Clean India Journal, January 15, 2015 page 60 62. Also available at <u>www.cleanindiajournals.com</u>
- 2. <u>Dubey, B.</u>, and Singhal, N., 2014. *Organics Waste Diversion from Landfills Case Study from Auckland, New Zealand* in the Clean India Journal, July Sep 2014 page 46-48. Also available at www.wasterecyclingindia.com
- 3. Pokhrel, L.*, <u>Dubey, B.</u>, and Scheuerman, P., 2011. Pharmaceuticals in the aquatic environment: A critical appraisal of uncertainty and knowledge gaps in human health risk assessment. NESAJ Patra, Volume 8, Issue-1, Published by Nepali Student Association of Japan, University of Tokyo, Japan.
- 4. Solo-Gabriele, H., Jacobi, G., Dubey, B., and Townsend, T., 2005. Warning Signs: certain chemical preservatives are unwelcome contaminants in the mulch and wood fuel markets. *Construction & Demolition Recycling*, September/October: 24-32.

Published abstracts(# indicate supervised/mentored Graduate/ *Undergraduate students)

- 1. Bindra N,* Dubey B, and Dutta A. 2016. Technological and Life Cycle Assessment of Organics Processing Odour Control Technologies. Paper Presented at the Indian Life Cycle Management Conference, Oct 17-18, New Delhi, India.
- 2. Rosen M. B, Pokhrel L. R, and Dubey B. 2016. Evaluation of Multiple Heavy Metals and Metalloids in Glass Beads Used in Retroreflective Road Markings. Abstract ID: 2518130, 252nd ACS National Meeting, Philadelphia, PA, August 21-25, 2016.
- 3. Rosen M B, Pokhrel L R, and Dubey B. 2016. Quantification and Environmental Risk Assessment from Multiple Heavy Metals and Metalloids in Glass Beads Used in Retroreflective Road Markings. College of Public Health Research Day, Temple University, Philadelphia, PA, April 20, 2016.
- 4. Fosu, P. O., Donkor, A. K., Kingsford-Adaboh R., Asante, I., Nyarko, S., and Dubey, B. (2016) Exposure Assessment of the Ghanaian Population to Pesticide Residues Through Fruit and Vegetable Consumption "Science For Development: Ghana Asks, Legon Answers", 2016 College of Basic & Applied Sciences (CBAS) Annual Science and Development Platform; 17-19 February, 2016, RS Amegashie Auditorium, UGBS/Centre for African Wetlands Auditorium, University of Ghana, Legon- Accra, Ghana.
- 5. Dubey, B., 2015. *Environmental Pollutants from Waste Management Systems*, Invited Key Note Presentation at the University Grants Commission (UGC) Sponsored Two Day National Seminar on "Environmental Pollutant: Safety Measure and Management" Dec 5th-6th, 2015 at Magadh Mahila College, Patna University, Patna, India
- 6. Dubey, B., 2015. *Sustainable Waste/Resource Management: Issues and Challenges*, Invited presentation at the 4th Conference on "Waste Uninterrupted Resource and Encouraging Opportunities", Waste to Energy Research and Technology Council (WTERT India), Mumbai, India, Nov 26th -27th, 2015.
- 7. Nyarko, S.*, Donkor, A., and Dubey, B., 2014. Preliminary Assessment of Environmental Impact of CCA-

- *treated Wood in the Ghana*, Paper presented at the Global Development Symposium, Guelph, Ontario, Canada, May 4-7, 2014, Page-88
- 8. Mohammad, M.*, Donkar, A., Dubey, B., Egyir, I., and Amoah, P., 2014. *Biogas Production Potential from Greywater from Households in Accra Metropolis, Ghana*, Poster presented at the Global Development Symposium, Guelph, Ontario, Canada, May 4-7, 2014, Page-72
- 9. Jahanfar, A.[#] and Dubey, B., 2014. *Development of Risk Assessment Tool for Landfill Failure*, Paper presented at the 29th International Conference on Solid Waste Technology, Philadelphia, PA USA March 30- April 2nd 2014
- 10. Pokhrel, L.[#] and Dubey, B., 2014. *General Linear Model-Predicted and Observed Toxicity of Three Organo-Coated Silver Nanoparticles: Impacts of Particle Size, Surface Charge and Dose*, Abstract ID# 685, Paper to be presented at 2014 ASCE World Environmental & Water Resources Congress, June 1-5, Portland, Oregon.
- 11. Samoilenko, I.*, Farahbakhsh, K., Dubey, B., 2014. *Phytoremediation as a Possible Solution to Remediate Radioactive Contaminated Area in Chornobyl, Ukraine*, Paper presented at the Guelph Engineering Symposium, March 27th University of Guelph, Ontario, Canada
- 12. Baah, K.*, Dubey, B., McBean, E., 2014. *Risk Assessment of Sewer Pipe Failure: A Case Study of City Guelph, Ontario*, Paper presented at the Guelph Engineering Symposium, March 27th University of Guelph, Ontario, Canada
- 13. Qamar, S.*, Dubey, B., and Zytner, R., 2014. *Industrial Commercial and Institutional (IC&I) Waste Stream: An Energy Source for Ontario*, Paper presented at the Guelph Engineering Symposium, March 27th University of Guelph, Ontario, Canada
- 14. Paul, S.*, Dubey, B., Dutta, A., 2014. *Evaluation of a Hybrid Approach for Food Waste Management*, Paper presented at the Guelph Engineering Symposium, March 27th University of Guelph, Ontario, Canada
- 15. Bindra, N.*, Dubey, B., 2014. *Life Cycle Assessment of Odor Control Technologies for MSW Organics Processing*, Paper presented at the Guelph Engineering Symposium, March 27th University of Guelph, Ontario, Canada
- 16. Dubey, B. and Pokhrel, L.*, 2013. *Implications of Engineered Nanoparticles and Nanowaste in the Waste Disposal and Treatment System*, Paper presented at International Solid Waste Association World Congress, Oct 7th 9th 2013, Vienna, Austria.
- 17. Dubey, B., Pokhrel, L.*, Silva, T.*, 2013. *The Toxicity of Metal Nanoparticles and the Role of Water Chemistry and Organic Ligands*, In the Proceedings of 59th International Conference of Analytical Sciences and Spectroscopy organized by Canadian Society for Analytical Sciences and Spectroscopy, Mont-Tremblant, Québec, Canada June 26-28, 2013.
- 18. Samoilenko, I.*, Dubey, B., 2013. *Nitrate Fate and Transport: Case Study of a River System in Ukraine*, Paper presented at the Guelph Engineering Symposium, March 28th University of Guelph, Ontario, Canada
- 19. Jahanfar, A.*, Dubey, B., and McBean, E., 2013. *Stability Risk Assessment of Leuwigajah Dumpsite*, Paper presented at the Guelph Engineering Symposium, March 28th University of Guelph, Ontario, Canada
- 20. Nourin, N.*, Dubey, B., 2013. *A Mass Balance Model to Evaluate Arsenic Contamination in Cropland Soils of Bangladesh*, Poster presented at the Guelph Engineering Symposium, March 28th University of Guelph, Ontario, Canada
- 21. Joseph, T.*, Dubey, B., 2013. *Arsenic in Soil-Rice Plant Systems: Fate, Transport and Human Risk Assessment*, Paper presented at the Guelph Engineering Symposium, March 28th University of Guelph, Ontario, Canada
- 22. Qamar, M.*, Dubey, B., 2013. A Review of Fate and Transport of Engineered Nanoparticles in the Environment, Paper presented at the Guelph Engineering Symposium, March 28th University of Guelph, Ontario, Canada
- 23. Paul, S.*, Dubey, B., 2013. *Nitrous Oxide as Greenhouse Gas Emissions for Food Waste Composting*, Paper presented at the Guelph Engineering Symposium, March 28th University of Guelph, Ontario, Canada
- 24. Pokhrel, L.*, and Dubey, B., 2012. *Metal Mining Industry: Global Production Statistics, Potential Environmental Effects, Mitigation Techniques, and Sustainability*, Paper presented at The International Congress on Science and Technonology, Dec 22nd 24th, 2012, Allahabad, India
- 25. Pokhrel, L.*, and Dubey, B., 2012. Potential Developmental Toxicity of Silver and Zinc Oxide

- *Nanoparticles to the Terrestrial Plants*, Paper presented at The 28th Annual International Conference on Soils, Sediments, Water and Energy, Oct 15th -18th, 2012.
- 26. Dubey, B., and Dutta, A., 2012 Waste Treatment Using Advanced Thermal Technologies: Torrefaction of Nonconventional Waste Biomass, International Summit on Waste-to-Energy: An Emerging Trend Towards Environmental Sustainability, NDCC Convention Centre, Jaisingh Marg, New Delhi, 9th& 10thJuly 2012.
- 27. Pokhrel, L.*, Dubey, B., and Scheuerman, P., 2012 *Developmental Phytotoxicity of Silver and Zinc Oxide Nanoparticles to the Crop Plants*, NEHA Conference, June 28-30, San Diego, CA. (Winner of AEHAP Student Competition Research Award 2012).
- 28. Dubey, B., and Pokhrel, L.*, 2012. *Opportunities for Nanoparticle Research*, Invited presentation at University Consortium for Field-Focused Groundwater Contamination Research Program, Annual Progress Meeting: June 12-14, 2012 The Arboretum, University of Guelph.
- 29. Craig, E.*, Nandi, A., Dubey, B., and Evanshen, B., 2012. *Mineralogic, Statistical and Chemical Analysis Concerning the Implacement of Iron Ore in the Cranberry Granite Formation*, Poster presented at 2012 Appalachian Student Research Forum, Johnson City, TN, April 5, 2012.
- 30. Pokhrel, L.*, Dubey, B., Tolaymat, T., and Scheuerman, P. 2012. *Potential Impacts of Metal Nanoparticles on the Development of Crop Plants*, Paper presented at 2012 Appalachian Student Research Forum, Johnson City, TN, April 5, 2012.
- 31. Dubey, B. 2012. *Assessing Risk to Groundwater from Land Applied Granular Waste*, Paper presented at Ontario Research Fund "Sustainable Bedrock Water Supplies for Ontario Communities" Annual Progress Meeting: OAC Centennial Arboretum Centre, University of Guelph, March 26-27, 2012.
- 32. Pokhrel, L.*, and Dubey, B., 2012. *Silver and Zinc Oxide Nanoparticles Cause Developmental Anomalies in the Crop Plants*, Paper presented at 2012 East Tennessee Environmental Conference, Kingsport, Tennessee, March 13-14, 2012
- 33. Pokhrel, L.*, Dubey, B., and Singhal, N. 2012. *Assessing the Environmental Risks from Road Marking Glass Beads*. Paper presented at 2012 East Tennessee Environmental Conference, Kingsport, Tennessee, March 13-14, 2012.
- 34. Craig, E.*, Nandi, A., Dubey, B., and Whitelaw, M., 2011. *Mineralogy and Geochemistry of the Magnetite Ore and Granitoid Host Rock in the Cranberry Iron Mine, Western North Carolina*, Poster presented at 2011 GSA Annual Meeting in Minneapolis, 9–12 October 2011, Paper No. 243-15
- 35. Pokhrel, L. *, Dubey, B., El Badawy, A., and Tolaymat, T., 2011. Evaluation of Aquatic Toxicity of Nanoscale Silver, Zinc Oxide, Titanium Dioxide and Cadmium Selenide Quantum Dots, and their Ionic Particulates to the MetPLATETM Bioassay, Paper presented at The 27th Annual International Conference on Soils, Sediment, Water and Energy, Oct 17th to 20th, 2011, University of Massachusetts, Amherst, MA. Mr. Pokhrel received best student presentation award for this platform presentation.
- 36. Pokhrel, L. *, Silva, T. *, El Badawy, A., Tolaymat, T., and Dubey, B., 2011. *Assessment of Aquatic Toxicity of Metal Nanoparticles using MetPLATE*TM *Bioassay as a Rapid Screening Tool*, Poster presented at Gordon Research Conference on Life Cycle Perspectives of Nanostructured Materials: Synthesis, Characterization & Risk Assessment for Public Health, Waterville Valley, NH, May 29th to June 3rd, 2011.
- 37. Dubey, B., and Moore, K., 2011. *Improving MSW recycling at East Tennessee State University as a part of campus wide green initiative*, Paper presented at Tennessee Department of Environment and Conservation 40th Annual Solid Waste Conference, Gatlinburg, Tennessee, April 27-29, 2011
- 38. Dubey, B., and Silva, T. *, 2011. *Methane from Biodegradable Plastics : Is it a Significant Source of Green House Gas Emission*, Paper presented at Tennessee Department of Environment and Conservation 40th Annual Solid Waste Conference, Gatlinburg, Tennessee, April 27-29, 2011
- 39. Pokhrel, L. *, and Dubey, B., 2011. *Assessment of Aquatic Toxicity of Metal Nanoparticles using MetPLATE*TM *Bioassay as a Rapid Screening Tool*, Paper presented at Appalachian Student Research Forum, Johnson City, TN, March 24, 2011.
- 40. Silva, T. *, and Dubey, B., 2011. *An Estimation of Contribution of Biodegradable Plastics to Global Methane Production*, Poster presented at Appalachian Student Research Forum, Johnson City, TN, March 24, 2011.
- 41. Pokhrel, L. *, and Dubey, B., 2011. *Nanoecotoxicology and Human Health: Where Do We Stand?*, Poster presented at Appalachian Student Research Forum, Johnson City, TN, March 24, 2011.

- 42. Silva, T. *, and Dubey, B., 2011. *Potential Contribution of Biodegradable Plastics to Global Methane Production*, Paper presented at 2011 East Tennessee Environmental Conference, Kingsport, Tennessee, March 15-16, 2011.
- 43. Sinhababu, K., and Dubey, B., 2010. *Performance Evaluation of Infiltration and Filtration Storm water Management Practices*, Paper presented at the Unban Drainage, Sewerage and Irrigation Conference, Muscat, Oman, September 26-27, 2010.
- 44. Dubey, B. *Economic Issues of Recycling of Solid Waste Components*, Oral presentation made at Tennessee Pollution Prevention Partnership Conference (TP3), Montgomery Bell State Park, Burns, Nashville, TN, September 23-24, 2010.
- 45. Pokhrel, L.[#] and Dubey, B. *Investigation of Fate and Transport of Silver Nanoparticle in Waste Disposal Systems* Poster presented at 2010 Appalachian Student Research Forum, Johnson City, TN, April 6-8, 2010
- 46. Silva, T.* and Dubey, B. *Environmental Concerns of Nanoparticles in Wastewater Treatment Plant A Review* Poster presented at 2010 Appalachian Student Research Forum, Johnson City, TN, April 6-8, 2010
- 47. Holley, A.*, Boggan, J.*, Bannister, J.*, Reynolds, H.*, Panganiban, J.*, Hammond, L.* and Dubey, B. *Biological and Chemical Analysis of Water Samples collected over a Period of One Year from Brush Creek, Johnson City, TN, Part-1*; Poster presented at 2010 Appalachian Student Research Forum, Johnson City, TN, April 6-8, 2010
- 48. Jarratt, T.*, Justus, K.*, Rogers, B.*, Woody, J.*, Fleetwood, F.*, Hammond, L.* and Dubey, B. *Biological* and Chemical Analysis of Water Samples collected over a Period of One Year from Brush Creek, Johnson City, TN, Part-2; Poster presented at 2010 Appalachian Student Research Forum, Johnson City, TN, April 6-8, 2010
- 49. Dubey, B., *Environmental Risk Assessment of Emerging Waste Materials : Issues and Challenges*, Presented at Tennessee Department of Environment and Conservation 39th Annual Solid Waste Conference, Gatlinburg, Tennessee, April 28-30, 2010
- 50. Dubey, B and Singhal, N., *Evaluation of Test Methods for Assessing the Environmental Risks from Road Marking Glass Beads*, Presented at 2010 American Chemical Society Annual Meeting in San Francisco, California, Division of Environmental Chemistry, Session of Sustainable Waste Management: Issues and Challenges, March 21-25, 2010.
- 51. Dubey, B., Environmental Risk Assessment for Beneficial Reuse and Disposal Options of Waste Materials: Issues and Challenges, Presented at 2010 East Tennessee Environmental Conference, Kingsport, Tennessee, March 16-17, 2010.
- 52. Wang, Y.[#], Dubey, B., Townsend, T., and Rhue, D., *Laboratory Studies for Assessing Reductive Iron Dissolution in Landfill Soils*, Poster Presented at SWANA Florida Sunshine Chapter Senior Managers Conference, St. Augustine, FL, Jan 21-23, 2008
- 53. Santra, S., Dubey, B., Patel, C., Kar, S., and Townsend, T., *Preliminary Study to Assess Fate and Transport of Different Manufactured Nanoparticles (MNPs) in Different Soil Matrix*, Presented at 2007 Florida Section ACS meeting (FAME 2007) at Orlando, Florida, USA.
- 54. Misra, A.*, Dubey, B., Wu, C., Townsend, T., and Solo-Gabriele, H., *Controlling Heavy Metal Emission and Leaching in Combustion Environments by using Sorbent Technology during Disposal of Chromated Copper Arsenate (CCA) Treated Wood*, Paper presented at 2005 Florida Section A&WMA Annual Conference at St. Pete Beach, Florida, USA, Oct 23-25, 2005.
- 55. Misra, A.*, Dubey, B., Wu, C., Townsend, T., and Solo-Gabriele, H., *Use of mineral Sorbents to Control the Emission and Leaching of Arsenic, Chromium and Copper during the Disposal of CCA Treated Wood*, Paper presented at International Symposium on the Role of Adsorbed Films and Particulate Systems in Nano and Biotechnologies at Gainesville, Florida, USA, Aug 24-26, 2005.
- 56. Misra, A.*, Dubey, B., Wu, C., Townsend, T., and Solo-Gabriele, H., Evaluating the use of sorbent technology in thermal processes for disposal of Chromated Copper Arsenate (CCA) treated wood in combustion facilities, Paper presented at Florida 81st Annual Meeting and Exposition (FAME) 2005 organized by American Chemical Society (ACS) Florida Section at Orlando, Florida, USA, May 5-7, 2005.
- 57. Dubey, B., Jacobi, G., Townsend, T., and Solo-Gabriele, H., *CCA-Treated Wood in Consumer Mulches: Tools to Minimize Contamination*, Proceedings 2005, Special Waste Symposium, Solid Waste Association of North America (SWANA), West Palm Beach, Florida, Feb 7-10, 2005.

- 58. Dubey, B., Townsend, T., *Arsenic and Lead Leaching from the Waste Derived Fertilizer Ironite*TM, Poster Presented at Florida Department of Environmental Protection Solid Waste Workshop 2004-2005, Cocoa Beach, Feb 15-17, 2005. This poster was also presented at 7th Annual Environmental Engineering Sciences Poster Symposium, April 12th 2005.
- 59. Dubey, B., Sylvie, M.*, Townsend, T., *Comparing Arsenic Leachability in TCLP with Other Leaching Procedures*, Poster Presented at Florida Department of Environmental Protection Solid Waste Workshop 2004-2005, Cocoa Beach, Feb 15-17, 2005. This poster was also presented at 7th Annual Environmental Engineering Sciences Poster Symposium, April 12th 2005. Received third prize in graduate category.
- 60. Misra, A.*, Dubey, B., Wu, C.Y., Townsend, T., and Solo-Gabriele, H., *Use of Sorbent Technology to Prevent Leaching of Heavy Metals (As, Cr, Cu) and Their Application to Disposal of CCA Treated Wood in Combustion Systems*, Poster presented at 7th Annual Environmental Engineering Sciences Poster Symposium, April 12th 2005.
- 61. Spalvins, E., Dubey, B., Sylvie, M. *, Townsend, T., Simulated Landfill Lysimeters to Asses the Leaching of Metals from Potentially Hazardous Wastes, Poster Presented at Florida Department of Environmental Protection Solid Waste Workshop 2004-2005, Cocoa Beach, Feb 15-17, 2005. This poster was also presented at 7th Annual Environmental Engineering Sciences Poster Symposium, April 12th 2005. Received first prize in graduate category.
- 62. Dubey, B., Townsend, T. and Solo-Gabriele, H., *Leaching of Preservatives from Pressure-treated wood in sanitary landfills*, Received 2nd Prize at UF AWMA 6th Annual Environmental Poster Symposium, April 15, 2004.
- 63. Jacobi, G., Solo-Gabriele, H., Townsend, T., Dubey, B. and Lugo, L., *Extent of CCA-Treated Wood in Consumer Mulches*. International Conference on Environmental Impact of Preservative-Treated Wood; Orlando, February 8 11, 2004. This poster was also presented at the NIEHS-MFBS Center/Arch Program Science Symposium held in Miami, FL on March 18, 2004.
- 64. Dubey, B., Townsend, T. and Solo-Gabriele, H., *Leaching of Copper, Chromium and Arsenic from CCA-treated wood in sanitary landfill leachate*, International Conference on Environmental Impact of Preservative-Treated Wood; Orlando, February 8 11, 2004.
- 65. Dubey, B., Townsend, T. and Garret, K. *Leaching of Milled Asphalt Pavement Amended with Waste to Energy Ash*, Poster Presented at 2003 Annual Conference of Florida Section Air and Waste Management Sept 7-9, 2003, Orlando USA.

Invited Presentations

- 1. Invited to deliver "Science Lecture Series" on Waste Management for Sustainable Urbanization, delivered on 17th Nov 2017 at the Consulate General of the Federal Republic of Germany, Kolkata, India
- 2. Invited to present on "Waste Management Issues for Smart Cities" at the Smart Cities Workshop Sustainable Urban Development, Organised by Heidelberg University, Germany ORF, SPA and BayIND In Collaboration with Xavier University Bhubaneswar and Indo-German Chamber of Commerce, at Hotel Mayfair Lagoon, Bhubaneswar, September 21-22, 2017
- 3. Invited as a Chief Guest for Engineers Day function at MVGR College of Engineering (Autonomous), Vizianagaram, Andhra Pradesh, delivered two invited lectures on "Waste Management Challenges for Urban India" and on "Research Initiatives that Country needs in Environmental Field", Sept 15th 2017
- 4. Invited Research Seminar at Annual Technical Meet of IIChE Students' Chapter of Chemical Engineering Department, Jadavpur University (INNOVA 2016) on "Use of Life Cycle Analysis as a Decision Tool in Environmental Engineering" Organized by Indian Institute of Chemical Engineers Students' Chapter of Chemical Engineering Department, Jadavpur University, April 7th 2016.
- 5. Invited Research Seminar at World Environment Day Program at Indian Institute of Technology Kharagpur on "Challenges for Municipal Solid Waste Management in India", Organized by Institution of Engineers India and School of Environmental Science and Engineering, June 5th, 2015.
- 6. Invited Research Seminar at Centre for Environmental Science and Engineering, Indian Institute of Technology Bombay, Mumbai, India on "Solid Waste Management Issues and Challenges: A Summary

- of Research Efforts with a Case Study of E-Waste Management Issues" April 4, 2014.
- 7. Invited Lecture at Amritapuri Center for Sustainable Future, Amritapuri Campus, Amrita Vishwa Vidyapeetham University, Clappana, Kollam, Kerala, India on "Basics of Environmental Control and Associated Technologies", March 19th, 2014.
- 8. Invited Seminar at Mata Amritanandamayi Math, Amritapuri, Kollam, Kerala, India on "Latest Global Trends in Water and Waste Problems", March 20th, 2014.
- 9. Invited Lecture at Amrita School of Engineering, Amrita University, Ettimadai, Coimbatore, India on "The Hazardous Waste Perspective", March 27th, 2014.
- 10. Invited Online Seminar Telecasted Live to Several (more than 20 campuses) University Campuses in India, Lecture at Amrita University, Ettimadai, Coimbatore, India on "Environmental Sustainability Issues with a Focus on How to Make Efforts to Have a Greener Campus", March 28th, 2014.
- 11. Invited Lecture at School of Business, Amrita University, Ettimadai, Coimbatore, India on "Waste Management as an Industry: Opportunities and Challenges for Innovation and Entrepreneurship" March 28th, 2014.
- 12. Invited Research Colloquium Seminar Presentation at Golisano Institute for Sustainability, Rochester Institute of Technology, NY, USA on "Overview of Electronic Waste Management Issues Challenges and Opportunities" Oct 16th 2013.
- 13. Invited Presentation at the Perkin Elmer Inspiring INnovation Tour, Toronto, ON, on "Silver Nanoparticles Toxicity and the Role of Water Chemistry and Organic Ligands" April 4, 2013.
- 14. Invited Seminar Presentation at School of Earth, Biological and Environmental Science, Central University of Bihar, Patna, India on "Understanding the Role of Water Chemistry and Organic Ligands on the Nanoparticle Toxicity in Environment", May 3rd 2013.
- 15. Invited Seminar Presentation at Central Building Research Institute (CBRI), Roorkee, India, on "A Waste Management Oriented Life Cycle Perspective of Sustainable Building Material Selection", April 29th 2013.
- Invited Seminar Presentation at Earth and Environmental Division, Indian Institute of Science, Bangalore, on "Environmental Nanotoxicology Issues of Engineered Nano-materials: Summary of Recent Research Efforts", August 13th 2012.
- 17. Invited Seminar Presentation at Indo-German Center for Sustainability, Indian Institute of Technology, Madras; in Chennai, on "Sustainable Resource Management: Issues and Challenges", August 9th2012.
- 18. Invited Seminar Presentation at Indian Institute of Technology, Kharagpur, on "Solid Waste Management Issues and Challenges: A Summary with a Case Study of E-Waste Management Issues", Organized by Society of Civil Engineering and Infrastructure, August 3rd2012.
- 19. Invited Seminar Presentation at Department of Civil Engineering, Indian Institute of Technology, Delhi, on "Environmental Nanotoxicology: Summary of Recent Research Efforts with Nanosilver and Other Example Nanoparticles," July 10th2012.
- 20. Invited Seminar Presentation at Indian Institute of Technology, Gandhinagar, on "Solid Waste Management Issues and Challenges: A Summary of Research Efforts with a Case Study of E-Waste Management Issues," June 19th 2012.
- 21. Invited Seminar Presentation at College of Public Health, Department of Preventive Medicine and Environmental Health, University of Kentucky, Lexington on "Assessing Environmental Risks from Emerging Waste Streams: Tools, Issues and Challenges" May 31, 2011
- 22. Invited Platform Presentation as part of ASCE Community Outreach on "Liquid Assets" Our Water Infrastructure. Presentation was focused on "Water Quality and Public Health Issues", April 20th 2011 at Johnson City, TN and May 26th 2011 at Bristol, VA.

- 23. Invited Seminar Presentation at Department of Civil Engineering, Kansas State University, Manhattan on "Simulated Landfills for Assessing the Leachate Quality Impacts from Co-Disposal of Electronic Waste" May 2, 2011.
- **24.** Invited Seminar Presentation at College of Public Health, Division of Environmental Health Sciences, University of Massachusetts, Amherst on "Application of Environmental Engineering Tools in Environmental Public Health Issues: A Summary of Research Results" March 7, 2011.
- **25.** Invited Seminar Presentation at College of Environmental Sciences, Jawaharlal Nehru University, New Delhi, India on "Waste Management; Issues and Challenges in Assessing Beneficial Reuse and Disposal Options for Waste Materials" June 22, 2010.
- **26.** Invited Earth Day Seminar Presentation at Colonial Hill Retirement Center, Johnson City, Tennessee on "Solid Waste Management: Current Status of Sustainable Initiatives by Waste Industry" April 22, 2010.
- 27. Invited Seminar Presentation at the Department of Civil and Environmental Engineering, University of Southern California (USC, Los Angeles) on "Impact of Surface Water Conditions on Preservative Leaching and Aquatic Toxicity from Treated Wood Products", February 6, 2009.
- **28.** Invited Seminar Presentation at Division of Environmental Engineering and Science, National University of Singapore (NUS) on "Environmental Risks of Emerging Waste Streams", November 20, 2008.
- 29. Invited Seminar Presentation at AWRA Florida Chapter Meeting on Iron Research, April 14th, 2008.
- **30.** Invited Seminar Presentation at Department of Civil and Environmental Engineering, University of Auckland on "Simulated Landfills for Assessing the Leachate Quality Impacts from Co-Disposal of Hazardous Constituents" October 8, 2007.
- **31.** Invited Seminar Presentation at the Department of Civil Engineering, Indian Institute of Science, Bangalore on "Comparison of Environmental Impact of Wood Treated with Chromated Copper Arsenate (CCA) and Three Different Arsenic Free Preservatives", November 2006.
- **32.** Invited Lecture Presentation on "Disposal Issues related to Pressure Treated Wood" to a class comprising high school students and teachers from various Gainesville, Florida schools; as a part of 2005, Summer Environmental Enrichment Program funded by NSF, July 15, 2005.
- **33.** Invited Seminar Presentation at Department of Civil Engineering , Indian Institute of Technology (IIT), New Delhi, India on "Leaching Tests : A Tool for Risk Assessment in Solid Waste Management"; on April 20th , 2005.
- **34.** Invited Presentation on "Disposal Issues for Preservative Treated Wood" at the Division of Cellulose Material, American chemical society (ACS) national 2005 spring meeting -2005, San Diego, California March 13-17, 2005.
- **35.** Invited Seminar Presentation at Department of Civil Engineering , Indian Institute of Technology (IIT), New Delhi, India on "Solid Waste Management: A US Perspective"; on Feb 13th, 2004.

Technical Reports

- 1. <u>Dubey B.</u> (2014). Life Cycle Analysis of Energy of Waste (EfW) facility proposed for Peel Region as part of Integrated Waste Management Plan-A preliminary study report, Submitted to Regional Municipality of Peel, Brampton, Ontario, Canada June 2014.
- 2. Kumar, D., Hait, S., and <u>Dubey B.</u>, (2013). Occurrence, Fate and Removal of Emerging Contaminants in Surface Water, Project Report, Institutional Research Collaboration Development Grant, Submitted to Indo-Canadian Shastri Institute, Calgary Canada
- 3. <u>Dubey, B.</u>, Fassman, E., (2009). "Performance Evaluation of Infiltration and Filtration Stormwater Management Practices." Prepared by University of Auckland (Auckland UniServices Ltd.) for Auckland Regional Council, Auckland, New Zealand.

- 4. Singhal, N., Dubey, B., Johnson, A., Swift, S., (2009). "Estrogenic Endocrine Disrupting Compounds A Review of their Presence and Fate in Water and Sediments in New Zealand", Prepared by University of Auckland (Auckland UniServices Ltd.) for Auckland Regional Council, Auckland, New Zealand.
- 5. <u>Dubey, B.</u>, Singhal, N., (2009). "Evaluation of Test Methods for Assessing the Environmental Risks from Road Marking Glass Beads", Final Report, Submitted to Britesite (NZ) Limited, Ramarama, New Zealand.
- 6. <u>Dubey, B.</u>, (2009). "Background Information to Assist Preparation of a Proposal to Set up and operate a Plasma Co-generation Plant in New Zealand to Burn Waste to Produce Energy" Final Report, Submitted to A-ward Attachments Limited, Auckland, New Zealand.
- 7. Townsend, T., Dubey, B., Ko, J., Kim, H., Cho, Y., (2008). "Landfilled Municipal Waste Characteristics in World Regions", Final Technical Report". Submitted to the *Caterpillar Inc.* Peoria, IL.
- 8. Rhue, R., Townsend, T., Dubey, B., Wang, Y., (2008). "Soils underneath Florida Landfills and their Role in the Occurrence and Fate of Iron and Arsenic in Groundwater, Final Technical Report". Submitted to the *Hinkley Center for Solid and Hazardous Waste Management*, Gainesville, FL.
- 9. Townsend, T., Singh S, Dubey, B., (2007) "Research and Data Report for the Alachua County Southwest Landfill." Submitted to Alachua County Public Works Department, Alachua County, Florida.
- 10. Dubey, B., Townsend, T., (2007). "Biomass Resources Assessment Part II: Availability and Cost Analysis of Using Municipal Solid Waste Components as Alternative Fuel Sources for Power Generation, Final Technical Report". Submitted to *Gainesville Regional Utilities, Gainesville*, FL.
- 11. Dubey, B., Townsend, T., (2007). "Assessing Fate of Arsenic during the Management of Diseased Animal Wastes, Set of Notes". Submitted to *Sandra Cointreau*, *Solid Waste Management Advisor*, World Bank, Washington DC.
- 12. Townsend, T., Dubey, B., Cochran, K., Henry, S., (2007). "Government Policies for Encouraging Recycling of Construction and Demolition Debris" Submitted to *Clay County Solid Waste Division, Clay County*, Florida, USA.
- 13. Townsend, T., Dubey, B., Kim, H., Nepal, S., Laux, S., (2007). "Evaluation of Leachate Recirculation and Gas Collection Systems for Highlands County Landfill" Submitted to *Department of Solid Waste Management, Highlands County*, Florida, USA.
- 14. Townsend, T., Xu, Q, Dubey, B., Cochran, K., Jordan, A., (2007). "Research Advancing the Management of Construction and Demolition Debris in Florida, Final Technical Report". Submitted to the *Hinkley Center for Solid and Hazardous Waste Management, Gainesville*, FL.
- 15. Townsend, T., Xu, Q, Dubey, B., Abichou, T., (2007). "Use of Waste Materials to Reduce Emissions of Hydrogen Sulfide from Landfills to Attenuate Odors, Final Technical Report". Submitted to the *Hinkley Center for Solid and Hazardous Waste Management, Gainesville*, FL
- 16. Reinhart, D., Townsend, T., Dubey, B., Kim, H., Bonilla, V., Xu, Q., (2006). "Design and Operational Issues Related to Co-disposal of Sludges and Biosolids in Class-I Landfills, Final Technical Report (Phase-III)". Submitted to the *Hinkley Center for Solid and Hazardous Waste Management, Gainesville*, FL.
- 17. Solo-Gabriele, H., Townsend, T., Jacobi, G, Dubey, B., Eduardo, L., (2006). "Augmented Sorting of Recovered Wood Waste using Stain and X-ray technologies, Technical Report". Submitted to the *Florida Department of Environmental Protection, Tallahassee*, FL.
- 18. Solo-Gabriele, H., Townsend, T., Jacobi, G, Shibata, T., Dubey, B., (2005). "CCA-Treated Wood in Commercial Landscaping Mulch and Effects of Colorant on Metal Leaching Rates, Technical Report #0332003-05". Submitted to the *Florida Center for Solid and Hazardous Waste Management*, Gainesville, FL.
- 19. Solo-Gabriele, H., Townsend, T., Durbin, M., Jacobi, G, Dubey, B., (2005). "Educational Outreach and Stain Distribution Project for Identifying Copper-Treated Wood, Technical Report #0232003-05". Submitted to the *Florida Center for Solid and Hazardous Waste Management*, Gainesville, FL.

- 20. Townsend, T., Mutha, S., Ko, J., Pearson, B., Spalvins, E. and Dubey, B. (2004) "PBDE Flame Retardants in Florida: Import, Fate and Environmental Implications" Submitted to United States Environmental Protection Agency
- 21. Solo-Gabriele, H., Townsend, T., Khan, B., Song, J-K, Jambeck, J., Dubey, B., Jang, Y-C, (2003). "Arsenic and Chromium Speciation of Leachates from CCA-Treated Wood, Technical Report #03-07". Submitted to the *Florida Center for Solid and Hazardous Waste Management*, Gainesville, FL.
- 22. Solo-Gabriele, H., Townsend, T., Sakura, D., Dubey, B., Jambeck, J., (2002). "Quantities of Arsenic within the State of Florida, Technical Report #03-06." Submitted to the *Florida Center for Solid and Hazardous Waste Management*, Gainesville, FL.

Other Studies/Reports

- 1. Experimental Investigation of Change in Solution pH within Concrete Pipes, Data report submitted to Water Care, Auckland, New Zealand, July 2009.
- 2. Municipal Solid Waste Treatment Using Thermal Technologies Summary of Current Trends and Issues, Submitted to Citrus County Solid Waste Management Division, Lecanto, Florida, 2007.
- 3. Evaluation of Groundwater Issues for the Section 7 Lined Landfill Unit at the Hillsborough County Southeast Landfill, Report submitted to Jones Edmunds and Associates Inc., Gainesville, Florida, January 2006.
- 4. Analysis of Surface Coating Samples on Structures Scheduled for Demolition at the Kennedy Space Center, Report submitted to Jones Edmunds and Associates Inc., Gainesville, Florida, May 2004.
- 5. Comparison of Arsenic Concentrations in Recovered Screened Material and Soil Measured Using two Different Methodologies: Inductively Coupled Plasma Atomic Emission Spectroscopy (ICP-AES) and Graphite Furnace Atomic Absorption Spectroscopy (GF-AAS), Report submitted to Sun Recycling, Dania Beach, Florida, August 2004.
- 6. Leaching of Milled Asphalt Pavement Amended with Waste to Energy Ash, Report submitted to Recyclable 100, Inc., Leesburg, FL 34749-0180, March 2003.
- 7. Data Report on RCRA Metal Analysis on Contaminated Soil Samples from Ft. Ord, CA, submitted to Concurrent Technologies Corporation, Largo, Florida, March 2003.
- 8. Leachability of Printed Wire Boards Containing Leaded and Lead-Free Solder, Report submitted to Abt Associates Inc. Cambridge, MA, August 2003.