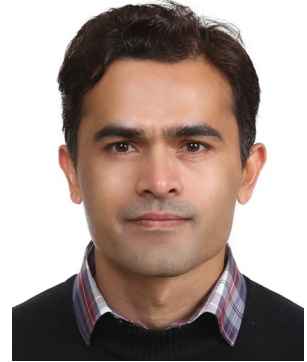


Curriculum Vitae

GENERAL INFORMATION

Name : Rajib Pokhrel
Current Position : Associate Professor, PU (Since Oct. 2018)
(**Coordinator:** Public Health and Disaster Engineering Program)
Date of birth : 1980-06-02
Nationality : Nepalese
Address (Permanent) : Sangam Marga, House No. 53, Chhinedanda, Ward no. 14
Pokhara Lekhnath Metropolitan City, Kaski, Nepal
Tel. phone : + 977 – 98512 -21795 (Mobile)
Email : rajibpokhrel@gmail.com, rajibp@nec.edu.np



ACADEMIC INFORMATION

Research Interests: Air Quality Management, Air Dispersion Modeling,
Indoor Air, Climate Change

<u>Year of Completion</u>	<u>Level (Degree)</u>	<u>Affiliation</u>
Feb. 2013	Ph. D. (Atmospheric Environment, Civil and Env. Engineering)	University of Incheon (Incheon National University)
Aug. 2007	M.S. / M.E. (Atmospheric Environment, Civil and Env. Engineering)	University of Incheon (Incheon National University)
Aug. 2003	Bachelor in Engineering (Civil Engineering)	Pokhara University (Pokhara Engineering College)
Dec. 1998	Intermediate in Science (I. Sc.)	Tribhuvan University (Prithvi Narayan Campus)
Jun. 1996	School Leaving Certificate (S.L.C.)	Board of Nepal

OTHERS

A. IT Knowledge / Training

- Computational Fluid Dynamics (CFD) Simulation (ANSYS 13.0)
- HOTMAC/RAPTAD (*Higher Order Turbulence Model for Atmospheric Circulation*)
- AERMOD (Air Dispersion Modeling)
- Auto CAD (2D and 3D)
- MATLAB (2012a)
- Origin
- SigmaPlot 8.0
- GIS – (Remote sensing – basic)
- SPSS Statics – 20

B. Thesis

- Study on the Impact of Breeze Pattern on Dispersion Characteristics of Air Pollution (*Doctoral thesis*)
- Algorithm Development of Visibility Monitoring Technique Using Digital Image Analysis (*Master thesis*)
- Environmental Study and Landfill Site Selection for Solid Waste Disposal in Pokhara Municipality (*Bachelor thesis*)

C. Patents

- Environment-friendly air purification system using air purification plant and mineral filter (발명의 명칭 공기정화식물과 광물필터를 이용한 친환경 공기정화시스템) 2016, *Patent number 10-2016-0148170*.
- Visibility monitoring system and method (시정 계측 장치 및 그 방법) 2010, *Patent number 10-0958210*.

D. Awards

- **Young Scientist Award** (05 Nov. 2015) *Korean Society for Atmospheric Environment (KOSAE), Republic of Korea*
 - **Best Presentation Award** (23 Oct. 2008) Impact of sea breeze event on air pollution
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dispersion at east coast of South Korea. *Korean Society for Atmospheric Environment (KOSAE)*.

- **Best Presentation Award** (24 Apr. 2008) 지하철 터널 및 자연환기구에서 열차풍 특성에 관한 연구 (Study on the characteristics of train-induced wind in subway tunnel and ventilation opening). *Korean Society for Atmospheric Environment (KOSAE)*. 2nd author.

E. Publications

Journals

- Rajib Pokhrel and Heekwan Lee (2015) Air pollution from the OGVs and its dispersion in a coastal area. *Ocean Engineering*, Vol. 101, pp. 275-284.
<http://dx.doi.org/10.1016/j.oceaneng.2015.04.023>.
- Jihan Song*, Rajib Pokhrel*, Heekwan Lee and Shin-Do Kim (2014) Box model approach for indoor air quality (IAQ) management in a subway station environment. *Asian Journal of Atmospheric Environment (AJAE)*, Vol. 8, No. 4, pp. 184-191 (* - **Equally contributed as a First Author**)
- Rajib Pokhrel and Heekwan Lee (2014) Integrated environment impact assessment of brick kiln using environmental performance scores. *Asian Journal of Atmospheric Environment (AJAE)*, Vol. 8, No. 1, pp. 15-24.
- Sharma R.K., Bhattarai B.K., Sapkota B.K., Gewali M.B., Kjeldstad B., Lee H., Pokhrel R. (2013) Chemical Characterization of Airborne Particulates of Kathmandu, Nepal. *Research Journal of Chemical Sciences*, Vol. 3(10), 88-96, October.
- Jihan Song, Rajib Pokhrel and Heekwan Lee (2013) A study on the formation of train induced wind from the subway tunnel and its ventilation tower. *Journal of Urban and Environmental Engineering*, Incheon National University. (Title translated in English)
- Rajib Pokhrel, Inhyeong Cho, Ram K. Sharma and Heekwan Lee (2011) Study on the Air Dispersion Characteristics along the West Coast of Korean Peninsula. *Journal of Institute of Engineering*, Vol. 8, No. 3. Pp. 94-104.
- Rajib Pokhrel and Heekwan Lee (March 2011) Algorithm Development of Visibility Monitoring Technique Using Digital Image Analysis. *Asian Journal of Atmospheric Environment (AJAE)*, Vol. 5-1, pp. 8~20.

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- Rajib Pokhrel and Heekwan Lee (January 2011) Estimation of the effective zone of sea/land breeze in a coastal area. *Atmospheric Pollution Research (APR)*, Vol. 2, pp. 106~115.
 - Chang Hoon Jung, Rajib Pokhrel and Heekwan Lee (2009) The Impacts of Power Plants on the Environment and Region -Focus on Incheon Area according to the 3rd Electric Support Action Plan. *Korean Society for Environment Impact Assessment (KEIA)*, Vol.18, No. 4 pp. 259~270.
 - Rajib Pokhrel, Heekwan Lee (2006) Characteristics of Urban Air Pollution and Aesthetic Quality of Landscape Using Digital Imaging Technique. (*Journal of engineering and technology, University of Incheon*, Vol. 21, No. 2, pp. 57~63.

International Conferences

- Rajib Pokhrel, Ram Kumar Sharma, Heekwan Lee (2015) Assessment of air pollution and its forcing on climate change in the high altitude region, Nepal. *1st International conference of disaster reduction, May 8~9, Suwon, Republic of Korea*, pp. 191. (*Invited Speaker*)
- Heekwan Lee¹, Rajib Pokhrel¹, Shindo Kim² and Mohsen Aboulnaga³ (2014) PAQman – Suez: Air emission control system for Ocean-Going Vessels thru Suez Canal. *57th Japanese Society for Atmospheric Environment (JASAE) Conference, Sep. 17~19*, pp. 110-113. (*Invited Speaker*)
- Rajib Pokhrel, Jiwon Jeong, Heekwan Lee (2013) Impact of the anthropogenic heat flux on breeze pattern and dispersion of air pollution. *16th IUAPPA World Clean Air Congress, 29 Sep – 4 Oct, Cape Town, South Africa. ISBN: 978-0-620-58320-6. (Oral Presentation)*
- Rajib Pokhrel, Inhyeong Cho, Heekwan Lee (2013) Study on the characteristics of the activity data and calculation of GHGs emission from the marine vessels. *16th IUAPPA World Clean Air Congress, 29 Sep – 4 Oct, Cape Town, South Africa. ISBN: 978-0-620-58320-6. (Oral Presentation)*
- Rajib Pokhrel, Yunsub Kim, Heekwan Lee (2013) Study on the impact of breeze pattern on dispersion characteristics of air pollution. *International Conference on Environmental and Hazardous Substance Management towards a Green Economy, May 21-23, Bangkok, Thailand. (Oral Presentation)*
- Rajib Pokhrel, Inhyeong Cho, Byunghoon Lee, Heekwan Lee (2013) Study on the

characteristics of the activity data for general vessels in the maritime sector. *International Conference on Environmental and Hazardous Substance Management towards a Green Economy, May 21-23, Bangkok, Thailand. (Oral Presentation)*

- Rajib Pokhrel, Indira Parajuli, Adarsha P. Pokhrel, Heekwan Lee (2013) Climate change and its impacts on the wetland environment of the Himalayan region. *2013 International Symposium on Wetlands, 13th Conference on Korean Wetlands Society, May 9-10, Upo Wetland Ecological Park, ROK. (Invited Speaker)*
- Ram K. Sharma, B.K. Bhattarai, B.K. Sapkota, M.B. Gewali, Berit Kjeldstad, Rajib Pokhrel and Heekwan Lee (2012) Chemical Composition of Particulates Matters of Kathmandu Valley, Nepal. *International Conference on Emerging Trends in Physics For Environmental Monitoring & Management (ETPEMM-12), Dec. 17-19, Punjabi University, Patiala University, Patiala, India. (Oral session)*
- In-Hyeong Cho, Jongheum Jeong, Rajib Pokhrel, Jihan Song, Seong-Kyu Park, Choon-Keun Bong and Heekwan Lee (2011) A study on GHGs emission calculation from marine vessels using Tier3 method. *Air & Waste Management Association's Annual Conference and Exhibition, to be held in Orlando, FL on June 21-24, Control No. 2011-A-1241-AWMA. (Poster session)*
- Inhyeong Cho, Rajib Pokhrel, Jiwon Jeong, Heekwan Lee (2011) Evaluation of Clean System for Classroom Indoor Air Quality Enhancement. *Air & Waste Management Association's Annual Conference and Exhibition, to be held in Orlando, FL on June 21-24, Control No. 2011-A-1240-AWMA. (Poster session)*
- Rajib Pokhrel, Inhyeong Cho, Ram K. Sharma, Heekwan Lee (2011) Study on the Air Dispersion Characteristics Along the West Coast of Korean Peninsula. *International Conference on Solar Radiation and Aerosol (ICSRA), April 14~15, Kathmandu Nepal, pp. 29. (Oral session)*
- I. Cho, J. Song, R. Pokhrel, H. Lee (2010) Comparison analysis of the marine air emissions using Tier 1 and Tier 3 methods in a port area. *15th International Union of Air Pollution Prevention Associations' (IUAPPA) World Clean Air Congress, Sep. 12~16, Vancouver British Columbia, Canada, pp. 49~50. (Oral session)*
- Rajib Pokhrel, Heekwan Lee (2010) Estimation of effective zone by pure sea/land breeze around Incheon coastal area using numerical simulation technique. *A&WMA'S 103rd Annual Conference & Exhibition, June 22-25, Paper#814. (Oral session)*

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- Rajib Pokhrel, Jihan Song, Joonseok Oh, Choonkeun Bong, Heekwan Lee (2009) IAQ Monitoring Technique in an Irregular Indoor Space: Case Study for a Long-Shaped Underground Mall. *A&WMA'S 102th Annual Conference & Exhibition, Michigan Cobo Center, Detroit, June 16-19, Paper# 409. (Oral session)*
 - Rajib Pokhrel, Jihan Song, Heekwan Lee (2009) Characterization of airborne particles ventilated thru ventilation opening in a subway tunnel. *11th International Conference on Air Distribution in Rooms (RoomVent), May 24~27, pp. 723~729. (Poster session)*
 - R. Pokhrel, H. Lee, C. Bong, S. Kim, K Chung, B. Choi (2008) Algorithm Development of Visibility Monitoring Technique Using Digital Image Analysis. *A&WMA'S 101th Annual Conference & Exhibition, Oregon Convention center, Portland, Oregon, June 24-27, Paper#317. (Oral session)*

Domestic Conferences

- Rajib Pokhrel, Indira Parajuli, Jihye Hong, Hyunsik Kim, Heekwan Lee (2014) Environmental Impact Assessment for Integrated Environment Management. *Proceeding of the 57th Meeting of KOSAE, 2014, Oct. 30~31, pp. 86. (Oral Presentation – Special Session)*
- Rajib Pokhrel, Yunsup Kim, Jihye Hong, Myounggyu Lee, Heekwan Lee (2014) Climate change and its impact on Himalayan Countries – case study of Nepal. *Korean Society for Disaster Information (KOSDE), May 30, pp 121-122.*
- Jihye Hong, Hyunsik Kim, Yunsup Kim, Myounggyu Lee, Rajib Pokhrel, Heekwan Lee (2014) A study on the fugitive dust generation mechanism from the paved road. *Korean Society for Disaster Information (KOSDE), May 30, pp 123-124.*
- Yunsup Kim, Yongseon Nam, Jihye Hong, Myounggyu Lee, Rajib Pokhrel, Heekwan Lee (2014) A study on the GHGs inventory and development of management system. *Korean Society for Disaster Information (KOSDE), May 30, pp 125-126.*
- Rajib Pokhrel, Jihye Hong and Heekwan Lee (2013) Comparison of the sampling locations on the mobile monitoring vehicle for paved road dust. *Proceeding of the 56th Meeting of KOSAE, 2013, Sep 5~6, pp. 24. (Oral Presentation)*
- Rajib Pokhrel, Yunsup Kim, Hankyu Park and Heekwan Lee (2013) A numerical study on the air dispersion mechanism in the south-east coastal area of Korean Peninsula. *Proceeding of the 56th Meeting of KOSAE, 2013, Sep 5~6, pp. 37. (Oral Presentation)*

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- 홍지혜, 이하영, 김윤섭, Rajib Pokhrel, 이희관, 정창훈, 신정섭, 윤영봉, 김동중 (2013) Analysis of humidity effect for airborne particle monitoring using optical method. *Proceeding of the 56th Meeting of KOSAE, 2013, Sep 5~6, pp. 135. (Poster Presentation)*
 - 김윤섭, 홍지혜, 이병현, Rajib Pokhrel, 이희관, 오준석 (2013) Study on the methane oxidation using the biofilter for landfill cover system. *Proceeding of the 56th Meeting of KOSAE, 2013, Sep 5~6, pp. 231. (Poster Presentation)*
 - Rajib Pokhrel, Byuncheon Lee, Yunsup Kim and Heekwan Lee (2012) Parametric study of air flow pattern at the coastal area of subtropic region - Karachi City, Pakistan. *Proceeding of the 55th Meeting of KOSAE, 2012, Oct 25~26, pp. 60.*
 - Byuncheon Lee, Rajib Pokhrel, Yunsup Kim and Heekwan Lee (2012) Study on the development of algae-photo bioreactor using LED-light wave. *Proceeding of the 55th Meeting of KOSAE, 2012, Oct 25~26, pp. 92.*
 - Yunsup Kim, Rajib Pokhrel, Byuncheon Lee and Heekwan Lee (2012) Study on the development of methane gas treatment technology using methane oxidizing bacteria for methane gas from landfill cover. *Proceeding of the 55th Meeting of KOSAE, 2012, Oct 25~26, pp. 91.*
 - Rajib Pokhrel and Heekwan Lee (2012) Study on the Estimation of Thermal Internal boundary Layer (TIBL) using numerical Technique. *Proceeding of the 54th Meeting of KOSAE, 2012, May, 10~12, pp. 20.*
 - Rajib Pokhrel, Inhyeong Cho, Jeongheum Jung, Jihan Song, Heekwan Lee (2011) A parametric study about air flow profile at the coastal area. *Proceeding of the 53st meeting of KOSAE, Oct. 27~29.*
 - Inhyeong Cho, Jihan Song, Rajib Pokhrel, Jeongheum Jung, Sangchin Choi, Seongkyou Park, Cheongkeum Bong, Heekwan Lee (2011) Comparative analysis of the GHGs emissions from marine vessels based on Tier3 standard using AIS system and field survey. *Proceeding of the 53st meeting of KOSAE, Oct. 27~29.*
 - Jihan Song, Rajib Pokhrel, Jeongheum Jung, Inhyeong Cho, Heekwan Lee (2011) Study about the detailed characteristics of train induced wind based on numerical simulation. *Proceeding of the 53st meeting of KOSAE, Oct. 27~29.*
 - Inhyeon Cho, Jihan Song, Rajib Pokhrel, Jeongheum Jung, Heekwan Lee (2011) Study about GHGs emission calculation from marine vessels based on Tier 3 standard using AIS receiver system. 4-KSCC (Korean Society of Climate Change Research), 2011, 6, 10.

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- Inhyeong Cho, Rajib Pokhrel, Jiwon Jeong, Heekwan Lee (2011) A study about the IAQ of school classroom with/without the installation of mechanical ventilation system. *Proceeding of the 52st meeting of KOSAE, May. 12~14.*
 - Rajib Pokhrel, Inhyeong Cho, Heekwan Lee (2011) A parametric study on the pollutants dispersion mechanism in the coastal region using Gaussian plume model & Lagrangian particle dispersion model. *Proceeding of the 52st meeting of KOSAE, May. 12~14.*
 - Rajib Pokhrel, Inhyeong Cho, Heekwan Lee (2010) A study on the air dispersion from ocean going vessels around a port area. *Proceeding of the 51st meeting of KOSAE, Oct. 28~30, pp. 333.*
 - Ram K. Sharma, B.K. Bhattarai, B.K. Sapkota, M.B. Gewali, Berit Kjeldstad, Rajib Pokhrel, Heekwan Lee (2010) Variation of black carbon aerosol in monsoon and autumn of Kathmandu Valley. *Proceeding of the 51st meeting of KOSAE, Oct. 28~30, pp. 159.*
 - Rajib Pokhrel, Heekwan Lee (2010) Formation of Vortex of Sea/Land Breeze in a Coastal Area. *Proceeding of the 50th Meeting of KOSAE, 189~191.*
 - Rajib Pokhrel, Jihan Song, Heekwan Lee (2009) Parametric Study of Air Dispersion Mechanism on Coastal Area. *Proceeding of the 49th Meeting of (KOSAE) Korean Society of Atmospheric Environment, October pp.539~540.*
 - Jihan Song, Rajib Pokhrel, Heekwan Lee (2009) Characterization of Train Induced Wind in Subway Tunnel Using CFD Simulation. *Proceeding of the 49th Meeting of (KOSAE) Korean Society of Atmospheric Environment, October pp.631~632.*
 - Rajib Pokhrel, Jihan Song, Joonseok Oh, Choonkeun Bong and Heekwan Lee (2009) Air quality monitoring technique in indoor space: a case study for a long-shaped underground shopping complex. *Proceeding of the 48th Meeting of KOSAE, pp. 467~469.*
 - Jihan Song, Rajib Pokhrel, Choonkeun Bong, Heekwan Lee (2009) Study on the analysis of coastal air emission from on-going marine vessels. *Proceeding of the 48th Meeting of KOSAE, pp. 122~123.*
 - R. Pokhrel, J. Song, J. Jeong, H. Lee (2009) Characterization of the air dispersion of ocean-going vessel (OGV) emission in a coastal area. *Proceeding for the The Korean Society For Marine Environmental Engineering (KSME) May 28~29, pp. 306.*
 - Jihan Song, Rajib Pokhrel, Choonkeun Bong, Heekwan Lee (2009) Estimation of air emission impact from on-going marine vessels at Incheon coastal area. *Proceedings for the Korean Society for Marine Environmental Engineering (KSME), May 28~29.*

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- Rajib Pokhrel, Jiwon Jeong, Heekwan Lee (2009) Study of air dispersion phenomena in Incheon coastal area using mesoscale modeling technique. *Proceeding of Korean society of environmental engineers (KSEE), April 30~May 01, pp. 93.*
 - Rajib Pokhrel & Heekwan Lee (2008) Estimation of Effective Zone by Pure Sea/Land Breeze Using Numerical Mesoscale Modeling. *Proceeding of the 47th Meeting of (KOSAE) Korean Society of Atmospheric Environment, pp. 92~94.*
 - Rajib Pokhrel, Choon Keun Bong, Byoung-Cheol Choi, Kwan-Young Chung, Soung-Bum Kim, Heekwan Lee (2008) An Introduction of Perceptual Visibility Monitoring Technique and Its Adjustment Using Meteorological Parameters. *Proceeding of the 46th Meeting of KOSAE, pp. 95~97.*
 - Rajib Pokhrel, Doohyun Song, Heekwan Lee (2008) Impact of Sea Breeze Event on Air Pollution Dispersion at East Coast of South Korea. *Proceeding of the 46th Meeting of KOSAE, pp. 224~226.*
 - Rajib Pokhrel, Mi-Jeong Kim, Heekwan Lee (2007) Evaluation of Visual Range in Incheon Area Using Image Analysis Technique. *Proceeding of the 45th meeting of KOSAE (Korean Society of Atmospheric Environment), pp. 397 ~ 399.*
 - Jihan Song, Rajib Pokhrel, Doohyun Song, Heekwan Lee (2007) Study on the Characteristics of Train-induced Wind in Subway Tunnel and Ventilation Opening. *Proceeding of the 45th meeting of KOSAE, pp. 75 ~ 76.*
 - Rajib Pokhrel, Mi-jeong Kim, Hyun-Sub Ha, Tae-Sun Um, Kweon Jung, Hong Gi Kim, Heekwan Lee (2007) Evaluation of Visibility Using Image Analysis Technique. *The 2007 Environmental Societies Joint Conference. Busan, Bexco, pp. 341 ~ 344.*
 - Jihan Song, Jiwon Jeong, Rajib Pokhrel, Mi-jeong Kim, Sanghwa Jo, Heekwan Lee (2007) Algorithm development of air emission from marine vessels. *Proceeding of Korean Society of Urban Environment (KSUE), Summer science and technology conference, pp. 3~5.*
 - R. Pokhrel & H. Lee (2006) Visibility Estimation Using Contrast based on Digital Image Analysis Technique. *Proceeding of KSSE (Korean Society of Environmental Engineers), Autumn Conference), pp. 514-518.*

Research Projects

- Integrated service of industrial classification system for Integrated management service (통합허가제도 시행을 위한 통합매체 산업분류체계마련), Korea Environmental Corporation (한국환경공단), 2014.
- Research to review the practical application of remote monitoring technique for mobile vehicle emissions for different fuels (운행차 배출가스 원격측정기 경유분야 활용검토를 위한 연구), Korea Environmental Corporation (한국환경공단), 2014.
- Study on the GHG characteristics of ocean-going vessels in Incheon harbor (인천항만 운항선박으로부터의 온실가스 배출 특성에 관한 연구), INU, 2014.
- Study on the impact of comfort in the classroom for the performance of student (교실 공간에서의 쾌적도가 학생의 집중력에 미치는 영향에 관한 연구), INU, 2014.
- Study on the air dispersion mechanism using Gaussian plume model and Lagrangian puff model (해안지역에서의 가우시안 모델과 Puff 모델을 이용한 확산특성에 관한 연구), INU, 2014.
- Development plan for Incheon Port towards the GREEN Port (인천항 GREEN Port 구축 종합계획 수립용역), Incheon Port Authority (인천항만공사), 2013.
- Kagati Gaun Water Supply Project, Seoul Sangrok Rotary Club, 3650 District, Rotary International, South Korea, 2013.
- Research on the paved road dust measurement data reliability confirmation and the preparation of analysis system (도로 재비산먼지 측정데이터 신뢰성 확보 및 분석체계 마련 연구), Korea Environmental Corporation (한국환경공단), 2013.
- Estimation of Thermal Internal Boundary Layer (TIBL) of sea / land breeze at Karachi City, Pakistan (커라지시 (Karachi City, Pakistan)해안 해륙풍의 TIBL 산정 연구), INU, 2013.
- Characterization of Train Induced Wind in Subway station Using CFD Simulation & Scale Model (축소모형실험과 CFD 를 이용한 지하철역사내 열차풍 제어방안에 관한 연구), INU, 2012.
- Research on the indoor air quality of Anyang Basement Shopping Complex (안양 지하상가 실내공기질 관련 연구), AEMC (주)동양에이엠시, 2012.
- A study on air pollution and visibility in Himalaya region using image analysis technique

(영상 시정모니터링 기술을 이용한 히말라야 지역의 대기오염과 시정변화에 대한 연구), INU, 2011.

- Project on greenhouse gas emission assessment of local government (Incheon Chung-Gu) 지자체 온실가스 배출량 산정사업 (인천중구), Korea Environmental Corporation (한국환경공단), 2011.
- Project on greenhouse gas emission assessment of local government (Incheon Dong-Gu) 지자체 온실가스 배출량 산정사업 (인천동구) Korea Environmental Corporation (한국환경공단), 2011.
- Analysis of indoor air quality improvement efficiency based on the implementation of Clean Room in Elementary, Middle and High School (초.중.고교 클린교실 설치에 따른 실내공기질 개선효과에 대한 분석), Incheon Green Environment Center (인천녹색환경지원센터), 2011.
- A development project for Green House Gas inventory of Incheon National University (인천대학교에서의 온실가스 인벤토리 구축사업), Incheon Green Environment Center (인천녹색환경지원센터), 2011.
- Development of carbon green growth and environmental friendly clean projects (저탄소 녹색성장과 연계한 환경친화적 청정산업 아이템 발굴), Fund for management for Han river (한강수계관리위원회), 2010.
- Climate change impact assessment, effect analysis and adaptation plan development for Incheon area (인천지역의 기후변화 영향평가, 취약성 분석 및 적응방안 수립), Incheon Green Environment Center (인천녹색환경지원센터), 2009.
- Research on understanding the vessels emissions status in Incheon port area and develop the management plan (인천 항만지역 선박대기배출 현황과악 및 관리대책 수립에 관한 연구), Incheon Green Environment Center (인천녹색환경지원센터), 2008.
- A feasibility project to investigate the road dust reduction (도로 재비산먼지 저감 시범사업 타당성 조사 연구), Ministry of Environment (환경부), 2008.
- Algorithm development of image analysis for distant visibility monitoring (원격시정관측을 위한 영상처리 알고리즘의 개발), INU, 2008.
- Reduction measures of scattering dusts generated from scrap iron and iron works at

Eastern Incheon (인천동구지역 철제부두 및 고철야적장 비산먼지 발생저감방안),
Incheon Green Environment Center (인천녹색환경지원센터), 2007.

- Research on the ventilation improvement for basement area (지하공간 환기구 개선방안 연구), Ministry of Environment (환경부), 2007.
- Housing development plan in coastal area by considering upper layer meteorology (해안지역에서 국지기상을 고려한 단지 계획의 수립방안), Incheon Green Environment Center (인천녹색환경지원센터), 2006.
- Research on air pollution emission assessment of Incheon area (인천지역에서의 대기오염배출 산정에 관한 연구), Ministry of Environment (환경부), 2006.

F. Professional Experiences

July 2017 ~ June 2019	Subject Committee of Environmental Management, Pokhara University
August 2016 ~ Nov 2018	Associate Professor , Nepal Engineering College, Kathmandu, Nepal <u>Main duties</u> <ul style="list-style-type: none">- Teaching environmental related subjects such as EIA, Sanitary Engineering, Water Supply Engineering, Solid Waste Management, etc.- Research guide to Graduate students, etc.
May 2013 ~ July 2016	Research Professor , (A.ENERGY, Incheon National University, South Korea. <u>Main duties</u> <ul style="list-style-type: none">- Guiding junior researcher for research work- Preparing the research proposals- Data analysis and reporting, etc.- Giving lecture to BE students
May 2014 ~ Feb 2016	Post-Doc Researcher , Incheon National University, South Korea <u>Main duties</u> <ul style="list-style-type: none">- Conducting researches both academic and non-academic

- researches, reporting, publishing papers, etc. (Part time)
- Mar. ~ Sep. 2014 **Researcher**, Urban Science Institute, INU.
Main duties
- Conducting research activities, seminar, and conferences for Urban Science Institute, INU.
- March 2013 ~ July 2016 **Lecturer**, School of Urban and Environmental Engineering, Incheon National University, South Korea
Main duties (Lectured on)
- Environmental and Climate Change Engineering
 - Air Pollution Dispersion Engineering
 - Indoor Environmental Engineering
 - Environmental Engineering Practice (Air)
- Feb 2012 ~ April 2013 **Senior Researcher** in “Asian iNstitute for Environmental Research and enerGY (A.NERGY)”, South Korea
Main duties
- Preparing the research proposals
 - Environmental modeling (Indoor and outdoor air modeling)
 - Data analysis and reporting, etc.
- Sep 2005 ~ Feb. 2013 **Teaching Assistant** under with Prof. Heekwan Lee
Main Field
- Advanced engineering mathematics, Atmospheric environment engineering, climate change, etc.
- Sep 2005 ~ Feb. 2013 **Researcher in Air Group**, University of Incheon, South Korea.
Main duties
- Environmental modeling (Indoor and outdoor air modeling)
 - Data monitoring,
 - Data management and analysis
 - Reporting, etc.

Jan. 2004 ~ Aug 2005

Engineering Consultant (Deurali Consulting Engineers, Pokhara)

Main duties

- Planning of infrastructure (Landscape and civil structure)
- Design, supervision, and guidance of civil construction
- Evaluation of property (Land and civil structures)
- Reporting, etc.

G. Professional/ Academic membership

- The Institution of Engineers (India) – **Chartered Engineer [India] : M – 1561930** since October 2016
- Member of Asian iNstitute for Environmental Research and enerGY (**A.NERGY**) since March 2012
- Nepal Engineering Council “**Registered Engineer since August 2004**” (**3312 Civil, A - Category**)
- Member of Korean Society of Atmospheric Environment (**KOSAE**) since 2007
- Member of Korean Society of Environmental Engineers (**KSEE**) since 2006

H. Language Proficiency

- Nepali : Native
 - English : Good
 - Hindi : Medium
 - Korean : General
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