RANU GADI

Professor and Dean (Industrial Res. & Development and Res. &Consultancy)
Indira Gandhi Delhi Technical University for Women (Govt. of NCT of Delhi)
New Delhi - 110006, India
Email:ranugadi@igdtuw.ac.in

AREAS OF INTEREST

Atmospheric Chemistry and Climate Change; Characterization and Source Apportionment of Atmospheric Aerosols;Biomass burning emissions;Speciation and Bioremediation of trace metals in water/wastewater;Synthesis, Characterization and Application of Nano-materials; Green Corrosion Inhibitors.

ACADEMIC QUALIFICATION

Doctor of Philosophy (Ph.D.),IIT Roorkee (formerly Univ. of Roorkee)
Topic of Ph.D. Thesis: *Metal Speciation in the Yamuna River Water and Sediments.*

Master of Science (M.Sc.) in Chemistry, IIT Roorkee (formerly Univ. of Roorkee)

EXPERIENCE

Indira Gandhi Delhi Technical University for Women (formerly Indira Gandhi Institute of Technology)

Dept. of App. Sciences& Humanities	Professor	*May 2017-Present*
	Associate Professor	*May 2014-May 2017*
	Reader	*Oct 2009-May 2014*
	Senior Asst. Professor	*Oct 2006-Oct 2009*
	Asst. Professor	*Oct 2002-Oct 2006*

National Physical Laboratory, New Delhi

Centre on Global Change (Radio & Atmospheric Science Division)	Sen. Research Associate	*Aug 1997 - Oct 2002*

Oil and Natural Gas Corporation, Dehradun

KDMIPE (Energy Research Division)	Research Associate	*Jul 1993 - Jul 1997*

Lancaster University, U.K.

Environmental Science Division	Post-Doctoral Fellow	*Oct 1994 - Jul 1995*

ADMINISTRATIVE ASSIGNMENTS

Indira Gandhi Delhi Technical University for Women (formerly Indira Gandhi Institute of Technology)

Dean, Industrial Research & Development	*Nov 2020 – present*
Dean, Research & Consultancy	*Nov 2020 – present*
Member, University Court	*Oct 2021 - Present*

Member, Finance Committee, IGDTUW	Apr *2021 - Present*
Grievance Redressal Officer	*Dec 2018 - Present*
Director, Incubation Centre, IGDTUW	*May 2017 - Present*
Member, Academic Council, IGDTUW	May *2017 - Present*
Member, Proctorial Board, IGDTUW	*Apr 2017 – Present*
Member, DRC	*Jul 2014 – Present*
Link Officer to DR (GA)	*Nov 2019 – Nov 2020*
Dy. Dean, Industrial Research & Development	*Mar 2018 – Nov 2020*
Chief Warden (Hostels)	*Mar 2017 - Nov 2020*
HOD, Dept. of Applied Sciences	*Jan 2013-Jan 2016*

PROFESSIONAL RECOGNITION

- Third **Best Researcher Award** for 2011-12 at GGSIP University, Delhi.
- **Thomas Kuhn Honour Pin** on the paper entitled "SO_2, NO_2, organic and elemental carbon emission studies from biofuels used in India", presented at the Third Int. Symposium on Non-CO_2Green house Gases (NCGG-3), Jan 21st-23rd, 2002, Maastricht, The Netherlands.
- **Life Member**, Indian Association of Air Pollution Control (Delhi Chapter)
- **Life Member**, Indian Society of Analytical Scientists (Delhi Chapter)

FUNDED RESEARCH

- Funding Agency: DST, "Consolidation of University Research for Innovation and Excellence in Women Universities (CURIE)" Grant for Artificial Intelligence labs at IGDTUW, Project duration: Jan 2021-continued, Funding sanctioned ~ INR 800 lacs, **Co-PI/Nodal Officer** **(Ongoing)**
- Funding Agency: DST, "Consolidation of University Research for Innovation and Excellence in Women Universities (CURIE)" Grant for Artificial Intelligence labs at IGDTUW-Phase I, Project duration: April2019-July 2021, Funding sanctioned ~ INR 70 lacs, **Co-PI/Nodal Officer** **(Completed)**
- MOES, India and NERC, U.K. Collaborative Research Project: "Megacity Delhi Atmospheric Emission Quantification, Assessment and Impacts (Delhi Flux)", Project duration: June 2017-May 2021, Funding sanctioned : INR 25 lacs, **Collaborator** **(Completed)**
- Funding Agency: DST, "Consolidation of University Research for Innovation and Excellence in Women Universities (CURIE)" Grant for IGDTUW, Project duration: April 2018-Continued, Funding sanctioned ~ INR 363 lacs, **Co-PI//Nodal Officer** **(Ongoing)**
- Funding Agency: DST, Research project entitled, "Spatio-Temporal Variability of Aerosols Over National Capital Region (NCR), India", Project duration: Four years (January 2015-December 2018), Funding received ~INR 54 lacs, **PI**. **(Completed)**
- CSIR Research Project entitled, "Estimates of Indoor Air Pollutants Emitted from fuels used in residential sector of Northern India", Project duration: Three years(January 2007-December 2010), Funding received ~ INR 18 lacs, **PI**. **(Completed)**

PATENT FILED

Dr. Ranu Gadi, Dr Vijay Bahadur Yadav, and Dr Sippy Kalra, Clay-CNT nanocomposite for heavy metals removal From wastewater and process thereof, final application filed on 1-10-2021.

SUPERVISION OF DOCTORAL STUDENTS

- D.P. Singh, 2014, "Estimates of Polycyclic Aromatic Hydrocarbons and Other Indoor Air Pollutants Emitted from Biomass Fuels Used in Residential Sector of Northern India".
- Trailokya Saud, 2015, "Studies Of Aerosols And Trace Gas Emissions From Biomass Fuels Used In India".
- Neha Singh, 2016, "Bioremediation of Heavy Metals by Nonliving Biomasses for the Treatment of Waste Water".
- ManpreetBagga, 2017, "Corrosion inhibition of mild steel by green inhibitors in acidic medium".
- Sarika Gupta, 2018, "Characterization of Organic Molecular Markers in Aerosols over Delhi-NCR, India".
- Vijay B Yadav, 2020, "Synthesis and development of Clay-CNT Nanocomposites for the treatment of waste water".
- Shivani, 2020, "Chemical Characterization and Source Analysis of Ambient Aerosols over National Capital Region (NCR), India".
- Roopa Kumari, "Synthesis and development of Nanocomposite material for the treatment of waste water" (pursuing).
- Shobhna Shankar, "Studies on Chemical And Morphological Characteristics of Ambient Aerosols over National Capital Region of India" (pursuing).
- Narmada, "Characterization of Organic Molecular Markers in emissions from accidental fires" (pursuing).

LIST OF PUBLICATIONS

A. Research Publications in international refereed journals:

1) Nelson, B. S., Stewart, G. J., Drysdale, W. S., Newland, M. J., Vaughan, A. R., Dunmore, R. E., Edwards, P. M., Lewis, A. C., Hamilton, J. F., Acton, W. J. F., Hewitt, C. N., Crilley, L. R., Alam, M. S., Şahin, Ü. A., Beddows, D. C. S., Bloss, W. J., Slater, E., Whalley, L. K., Heard, D. E., Cash, J. M., Langford, B., Nemitz, E., Sommariva, R., Cox, S., Shivani, **Gadi, R.**, Gurjar, B. R., Hopkins, J. R., Rickard, A. R., and Lee, J. D.: In situ Ozone Production is highly sensitive to Volatile Organic

Compounds in the Indian Megacity of Delhi, ***Atmos. Chem. Phys.*** (EGU), https://doi.org/10.5194/acp-2021-278, 21, 13609–13630, September **2021**.

2) Reyes-Villegas, E., Panda, U., Darbyshire, E., Cash, J. M., Joshi, R., Langford, B., Di Marco, C. F., Mullinger, N., Acton, W. J. F., Drysdale, W., Nemitz, E., Flynn, M., Voliotis, A., McFiggans, G., Coe, H., Lee, J., Hewitt, C. N., Heal, M. R., Gunthe, S. S., Shivani, **Gadi, R.**, Singh, S., Soni, V., and Allan, J. D.: PM1 composition and source apportionment at two sites in Delhi, India across multiple seasons, ***Atmos. Chem. Phys.*** (EGU), https://doi.org/10.5194/acp-2020-894, 21, 11655–11667, August **2021**.

3) Ritu Jangirh, Sakshi Ahlawat, Rahul Arya, Arnab Mondal, Lokesh Yadav, Garima Kotnala, Pooja Yadav, Nikki Choudhary, Martina Rani, Rubiya Banoo, Akanksha Rai, Ummed Singh Saharan, Neeraj Rastogi, Anil Patel, Shivani Shivani, **Ranu Gadi**, Priyanka Saxena, Narayanasamy Vijayan, Chhemendra Sharma, Sudhir Kumar Sharma, Tuhin Kumar Mandal, Gridded distribution of total suspended particulate matter (TSP) and their chemical characterization over Delhi during winter, ***Env. Sci Poll. Research*** (Springer), DOI: 10.21203/rs.3.rs-167612/v1, July **2021.**

4) Gareth J Stewart, Beth S Nelson, Will S Drysdale, W Joe F Acton, Adam R Vaughan, James R Hopkins, Rachel E Dunmore, C Nicholas Hewitt, Eiko Nemitz, Neil Mullinger, Ben Langford, Shivani, Ernesto Reyes-Villegas, Ranu Gadi, Andrew R Rickard, James D Lee, Jacqueline F Hamilton, Using highly time-resolved online mass spectrometry to examine biogenic and anthropogenic contributions to organic aerosol in Beijing, ***Faraday Discuss***. (Royal Soc. Of Chem.), DOI: 10.1039/D0FD00079E, 226, 409–431, March **2021**.

5) Gareth J. Stewart, Beth S. Nelson, W. Joe F. Acton, Adam R. Vaughan, James R. Hopkins, Siti S.M. Yunus, C. Nicholas Hewitt, Oliver Wild, Eiko Nemitz, **Ranu Gadi** et al., Emission estimates and inventories of non-methane volatile organic compounds from anthropogenic burning sources in India, ***Atmospheric Environment: X*** (Elsevier), 11, 100115, https://doi.org/10.1016/j.aeaoa.2021.100115, **2021**.

6) Shivani, **Gadi, Ranu** Oxidative potential of ambient fine particulate matter for ranking of emission sources: an insight for emissions reductions, ***Air Qual. Atmos. Health*** (Springer), 14, 1149–1153, https://doi.org/10.1007/s11869-021-01005-x, March **2021.**

7) Gareth J Stewart, Beth S Nelson, W Joe F Acton, Adam R Vaughan, James R Hopkins, Siti SM Yunus, C Nicholas Hewitt, Eiko Nemitz, Tuhin K Mandal, **Ranu Gadi**, Lokesh K Sahu, Andrew R Rickard, James D Lee, Jacqueline F Hamilton, Comprehensive organic emission profiles, secondary organic aerosol production potential, and OH reactivity of domestic fuel combustion in Delhi, India, DOI: 10.1039/d0ea00009d, ***Environ. Sci.: Atmos.*** (Royal Society of Chem.), 1, 104–117, **2021**.

8) Stewart, G. J., Acton, W. J. F., Nelson, B. S., Vaughan, A. R., Hopkins, J. R., Arya, R., Mondal, A., Jangirh, R., Ahlawat, S., Yadav, L., Sharma, S. K., Dunmore, R. E., Yunus, S. S. M., Hewitt, C. N., Nemitz, E., Mullinger, N., **Gadi, R**., Sahu, L. K., Tripathi, N., Rickard, A. R., Lee, J. D., Mandal, T. K., and Hamilton, J. F.: Emissions of non-methane volatile organic compounds from combustion of domestic fuels in Delhi, India, ***Atmos. Chem. Phys.***. (EGU), https://doi.org/10.5194/acp-21-2383-2021, 21(4), 2383-2406, **2021**.

9) Stewart, G. J., Nelson, B. S., Acton, W. J. F., Vaughan, A. R., Farren, N. J., Hopkins, J. R., Ward, M. W., Swift, S. J., Arya, R., Mondal, A., Jangirh, R., Ahlawat, S., Yadav, L., Sharma, S. K., Yunus, S. S. M., Hewitt, C. N., Nemitz, E., Mullinger, N., **Gadi, R**., Sahu, L. K., Tripathi, N., Rickard, A. R., Lee, J. D., Mandal, T. K., and Hamilton, J. F.: Emissions of intermediate-volatility and semi-volatile organic

compounds from domestic fuels used in Delhi, India, ***Atmos. Chem. Phys***., (EGU), 21(4), 2407–2426, https://doi.org/10.5194/acp-21-2407-2021, **2021**.

10) Cash, J. M., Langford, B., Di Marco, C., Mullinger, N., Allan, J., Reyes-Villegas, E., Joshi, R., Heal, M. R., Acton, W. J. F., Hewitt, N., Misztal, P., Drysdale, W., Mandal, T. K., Shivani, **Gadi, R.**, and Nemitz, E.: Seasonal analysis of submicron aerosol in Old Delhi using high resolution aerosol mass spectrometry: Chemical characterisation, source apportionment and new marker identification, ***Atmos. Chem. Phys***. (EGU), https://doi.org/10.5194/acp-2020-1009, 21 (13), 10133-10158, July **2021**.

11) G. Stewart, B. S. Nelson, W. Drysdale , W. J. Acton, A. Vaughan, J. R. Hopkins, R. E. Dunmore, C. N. Hewitt, E. Nemitz, N. Mullinger, B. Langford, S. Shivani, E. Reyes-Villegas, **R. Gadi**, A. R. Rickard, J. D. Lee and J. F. Hamilton, Sources of non-methane hydrocarbons in surface air in Delhi, India, ***Faraday Discuss.*** (Royal Soc. of Chem.), 226, 409–431, DOI:10.1039/D0FD00087F, **2021.**

12) Y. Chen, G. Beig, S. Archer-Nicholls, W. Drysdale , J. Acton, D. Lowe, B. S. Nelson, J. D. Lee, L. Ran, Y. Wang, Z. Wu, S. K. Sahu, R. S. Sokhi, V. Singh , **R. Gadi**, C. N. Hewitt, E. Nemitz, A. Archibald, G. McFiggins and O. Wild, Avoiding high ozone pollution in India, ***Faraday Discuss***. (Royal Soc. Of Chem.), DOI: 10.1039/D0FD00079E, 226, 502–514, **2021**.

13) Elzein, A., Stewart, G. J., Swift, S. J., Nelson, B. S., Crilley, L. R., Alam, M. S., Reyes-Villegas, E., **Gadi, Ranu**, Harrison, R. M., Hamilton, J. F., and Lewis, A. C.: A comparison of PM2.5-bound polycyclic aromatic hydrocarbons in summer Beijing (China) and Delhi (India), ***Atmos. Chem. Phys***.(EGU), 20, 14303–14319, https://doi.org/10.5194/acp-20-14303-2020, **2020**.

14) Rubiya Banoo, Sudhir Kumar Sharma, **Ranu Gadi**, Sarika Gupta, Tuhin Kumar Mandal, Seasonal Variation of Carbonaceous Species of PM10 Over Urban Sites of National Capital Region of India, ***Aerosol Science and Engineering*** (Springer), 4:111–123, **2020.**

15) Shivani, **Ranu Gadi**, Sudhir Kumar Sharma, Tuhin Kumar Mandal, Seasonal variation, source apportionment and source attributed health risk of fine carbonaceous aerosols over National Capital Region, India, ***Chemosphere*** (Elsevier), https://doi.org/10.1016/j.chemosphere.2019.124500, **2019.**

16) **Ranu Gadi**, Shivani, Sudhir Kumar Sharma, Tuhin Kumar Mandal, Source apportionment and health risk assessment of organic constituents in fine ambient aerosols (PM2.5): a complete year study over National Capital Region of India ***Chemosphere*** (Elsevier), 221: 583-596, **2019**.

17) Yadav V. B., **Ranu Gadi**, Kalra, S. , Adsorption of lead on clay-CNT nanocomposite in aqueous media by UV-Vis-spectrophotometer: kinetics and thermodynamic studies, ***Emergent Materials (Springer Link)*** , 2(4), 1-11, **2019**

18) Vijay Bahadur Yadav, **Ranu Gadi,** Sippy Kalra,Clay based nanocomposites for removal of heavy metals from water: A Review, ***J. of Environmental Management***(Elsevier), 232 803–817, **2019**.

19) Shivani, **Ranu Gadi**, Mohit Sharma, S.K. Sharma, T.K. Mandal, Short Term Degradation of Air Quality during Major Firework Events in Delhi, India, ***Meteorology and Atmospheric Physics*** (Springer), 131(4):753-764**,** DOI : 10.1007/s00703-018-0602-9, **2019**.

20) Shivani, **Ranu Gadi**, Ravi Kumar, Mona Sharma, Sudhir Kumar Sharma, T.K. Mandal, Sachin Kumar, Sanchit Kumar, Levels and Sources of organic compounds in Fine Particulate Matter (PM2.5) over Delhi and National Capital Region of India. ***Environ Sci Pollut Res*** (Springer) 25(31): 31071-90, **2018**.

21) Sarika Gupta and **Ranu Gadi**, Temporal variation of Phthalic acid esters (PAEs) in ambient atmosphere of Delhi, ***Bull. Environmental Cont. Toxicology*** (Springer), DOI : 10.1007/s00128-018-2337-1, **2018**.

22) Sarika Gupta, **Ranu Gadi**, T.K. Mandal, S.K. Sharma, Characterization and source apportionment of organic compounds in PM10 using PCA and PMF at a traffic hotspot of Delhi, ***Sust. Cities Society*** (Elsevier), 39, 52-67, **2018**.

23) Vijay Bahadur Yadav, **Ranu Gadi**, Sippy Kalra, Synthesis and characterization of novel nanocomposite by using kaolinite and carbon nanotubes, ***Applied Clay Science*** (Elsevier), 155, 30-36, **2018**.

24) Sarika Gupta, **Ranu Gadi**, T.K. Mandal, S.K. Sharma, Seasonal Variations and Source profile of n-alkanes in particulate matter (PM10) at a heavy traffic site, Delhi, ***Env. Monit. Assess*** (Springer), 189: 43, DOI 10.1007/s10661-016-5756-7, **2017**.

25) A. Sen , A.S. Abdelmaksoud, Y. NazeerAhammed, Mansour A. Alghamdi, Tirthankar Banerjee, Mudasir Ahmad Bhat, A. Chatterjee, Anil K. Choudhuri, Trupti Das, Amit Dhir, Pitamber Prasad Dhyani, **Ranu Gadi**, et al., Variations in particulate matter over Indo-Gangetic Plains and Indo-Himalayan Range during four field campaigns in winter monsoon and summer monsoon: Role of pollution pathways, ***Atmospheric Environment*** (Elsevier), 154, 200-224, **2017**.

26) Manpreet Kaur Bagga, **RanuGadi** and Gurmeet Singh, FicusRacemosa as Corrosion inhibitor for Mild steel in Acid medium, ***Emerging Materials Research***, 6(1), 117-123, **2017**.

27) Manpreet Kaur Bagga, **Ranu Gadi** , Ompal Singh Yadav, Raman Kumar, Rashi Chopra, Gurmeet Singh, Investigation of phytochemical components and corrosion inhibition property of Ficusracemosa stem extract on Mild steel in H2SO4 medium, ***Journal of Environmental Chemical Engineering*** (Elsevier), 4(4), 4699–4707, **2016**.

28) Manish Saraswat, **Ranu Gadi**, A. Arora, M. Bansal, Assessment of Different Alternative Fuels For Internal Combustion Engine: A Review, ***Int. J. of Engg Res.& Management Technology***, ISSN: 2348-4039, 103-109, 2(3), **2015**.

29) Mohit Saxena, D.P. Singh, T.Saud,**Ranu Gadi**, S. Singh, S.K. Sharma, T.K. Mandal, Study on particulate bound polycyclic aromatic hydrocarbons over Bay of Bengal in winter season,**inpress**,***Atmospheric Research***(Elsevier),145-146, 205-213,**2014**.

30) Avirup Sen , T.K. Mandal, S.K. Sharma, MohitSaxena, N.C. Gupta, R. Gautam, Anita Gupta, Tanvi Gill, Shalu Rani, T. Saud, D.P. Singh, **Ranu Gadi**, Chemical properties of emission from biomass fuels used in the rural sector of the western region of India ***Atmospheric Environment*** (Elsevier), 99, 411-424, **2014**.

31) Neha Singh and **Ranu Gadi**, Bioremediation of ZincAnd Cadmium from wastewater by the nonliving biomass of *Pseudomonas Oleovorans*,***Pollution Research***, 33(1), 65-72, **2014**.

32) Neha Singh and **Ranu Gadi**, Removal of Zinc And Cadmium from wastewater by the nonliving biomass of *BrevundimonasVesicularis*,***Pollution Research***, 33(2), 419-425, **2014**.

33) D.P. Singh, **Ranu Gadi**, T.K. Mandal, T. Saud, M. Saxena, S.K. Sharma, Emissions estimates of PAH from biomass fuels used in rural sector of Indo-Gangetic Plains of India, ***Atmospheric Environment*** (Elsevier), 68, 120-126, **2013**.

34) T. Saud, M. Saxena, D.P. Singh, Saraswati, Manisha Dahiya, S.K. Sharma,A. Dutta,**Ranu Gadi**, T.K. Mandal, Spatial Variation of Chemical Constituents from the Burning of Commonly used Biomass Fuels in Rural Areas of the Indo-Gangetic Plain (IGP), India, ***Atmospheric Environment*** (Elsevier), 71, 158-169, **2013**.

35) T. Saud, R. Gautam, T.K. Mandal, **Ranu Gadi**, D.P. Singh, S.K. Sharma, Manisha Dahiya and M. Saxena, Emission estimates of elemental and organic carbon from household biomass fuel used over the Indo-Gangetic-Plain (IGP), India, ***Atmospheric Environment*** (Elsevier), 61, 212-220, **2012.**

36) D.P. Singh, **Ranu Gadi** and T.K.Mandal, Levels, Sources and Toxic potential of Polycyclic Aromatic Hydrocarbons in Urban Soil of Delhi, India, ***International Journal of Human and Ecological Risk Assessment*** (Taylor and Francis, USA), 18: 393–411, **2012**.

37) **Ranu Gadi**, D.P. Singh, T.K. Mandal, TrailokyaSaudandMohitSaxena. Emission estimates of PAH and PM from biomass fuels used in Delhi, India, ***International Journal of Human and Ecological Risk Assessment*** (Taylor and Francis, USA), 18, 871–887, **2012**.

38) D.P. Singh, **Ranu Gadi** and T.K.Mandal,Characterization of Gas-Bound and Particulate-Bound Phase Polycyclic Aromatic Hydrocarbons in Ambient air of Delhi, India, ***Polycyclic Aromatic Hydrocarbons***, (Taylor and Francis, USA), 32, 556-579, **2012**.

39) Neha Singh and **Ranu Gadi**, Studies on Biosorption of Pb(II) by the nonliving biomasses of Pseudomonas oleovorans and Brevundimonasvesicularis and its removal from Wastewater samples, ***European Journal of Scientific Research*,** 69 (2), **2012**.

40) Neha Singh and **Ranu Gadi**, Bioremediation of Ni(II) and Cu(II) from wastewater by the nonliving biomass of *Brevundimonas vesicularis*.***J. of Environ. Chem and Ecotoxicol.***, 4(8), 137-142, **2012.**

41) Singh Neha, **Gadi Ranu**, Removal of Ni (II) and Cu (II) from their Solutions and Waste Water by Nonliving Biomass of *Pseudomonas Oleovorans*. ***Hydrol.Current Res*** 3:126. doi:10.4172/2157-7587.1000126, **2012**.

42) T. Saud, D.P. Singh, T.K.Mandal, **Ranu Gadi**, H.Pathak, M. Saxena, S.K. Sharma, R. Gautam, A. Mukherjee, R.P. Bhatnagar, Spatial distribution of biomass consumption as energy in rural areas of the Indo-Gangetic Plain, ***Biomass and Bioenergy***(Elsevier), 35, 932-941, **2011**.

43) D.P. Singh, **Ranu Gadi**, T.K Mandal, Characterization of Atmospheric Particulates, Particle bound transition metals and Polycyclic Aromatic Hydrocarbons in Delhi (India), ***Atmospheric Environment*** (Elsevier), 45, 45 7653-7663, **2011**.

44) Rajesh Agnihotri, T.K. Mandal, S. G. Karapurkar, Manish Naja, **Ranu Gadi**, Y. NazeerAhammmed, Animesh Kumar, Stable (C and N) isotopic composition of bulk aerosol particles over India and northern Indian Ocean during the pre-monsoon season: Indications to significant mixing of marine nitrogenous compounds from the Arabian Sea, ***Atmospheric Environment*** (Elsevier), 45, 2828-2835, **2011**.

45) T. Saud, T.K Mandal, **Ranu Gadi**, D.P. Singh, S.K. Sharma, M. Saxena, A. Mukherjee, Emission estimates of particulate matter (PM) and trace gases (SO_2, NO and NO_2) from biomass fuels used in rural sector of Indo-Gangeticplain, India, ***Atmospheric Environment***(Elsevier),45, 5913-5923, **2011**.

46) D.P. Singh, **Ranu Gadi**, T.K. Mandal, C.K. Dixit, K. Singh, Trailokya Saud, Nahar Singh, Prabhat K. Gupta, Study of temporal variation in ambient air quality during Diwali festival in India, ***Environmental Monitoring and Assessment*** (Springer, USA),Volume 169, Pages 1-13, **2010**.

47) D.P. Singh, **Ranu Gadi**, T.K. Mandal, Emissions of Polycyclic aromatic hydrocarbons in the Atmosphere: An Indian Perspective, ***International Journal of Human and Ecological Risk Assessment***(Taylor and Francis, USA), Volume 16, No. 5, Pages 1145-1168, **2010.**

48) Neha Singh and **Ranu Gadi**, Biological Methods for Speciation of Heavy Metals: Different Approaches, 29(4), 307-312, DOI 10.3109/07388550903284462, ***Critical Reviews in Biotechnology*** (Taylor and Francis, USA), **2009**.

49) T.K.Mandal, Trailokya Saud, MohitSaxena, R.P.Bhatnagar, Dharam Pal, **Ranu Gadi**, RishuGautam, Sudhir Sharma, Alok Mukherjee, A. Datta, Study on district level emission of carbonaceous aerosol from biofuels used in rural sector as energy over Indo Gangetic Plain, ***Geochimica et CosmochimicaActa***, Volume 73, Issue 13 Supplement 1, A825, June **2009**.

50) D C Parashar, **Ranu Gadi**, T.K. Mandal, S.C. Garg and A.P. Mitra, Emissions of organic and elemental carbon from biofuels in India,39,7861-7871, ***Atmospheric Environment*** (Elsevier), **2005**.

51) **Ranu Gadi**, U.C. Kulshrestha, A.K. Sarkar, S.C. Garg and D.C. Parashar, Emission of SO2 and NOx from Biofuels in India, ***Tellus-B*** (Kluwer Publ.), 55B, 787-795, **2003**.

52) **Ranu Gadi**, D.C. Parashar, A.K. Sarkar, B.S. Gera and A.P. Mitra, Chemical Composition of Atmospheric Aerosols at New Delhi, India, ***Ind. J. of Radio & Space Phy***., 31, 93-97, **2002**.

53) H. Zhang, W. Davison, **Ranu Gadi** and Takahiro Kobayashi, Insitu Measurement of Phosphate in Natural Waters, ***Anal. Chim. Acta***. (Elsevier), Vol.370, pg.29-38, **1998**.

54) **Ranu Gadi**, S.N. Tandon, O.V. Singh and R.P. Mathur, The State of Environment of Yamuna from Dakpathar to Agra, ***Encology***, Vol.9, No.1, June **1994**.

55) **Ranu Gadh**, S.N.Tandon, R.P. Mathur and O.V.Singh, Speciation of Metals in Yamuna River Sediments, ***The Science of The Total Environment*** (Elsevier), Vol.136, pg. 229-242, **1993**.

56) **Ranu Gadh**, R.P. Mathur, S.N. Tandon and O.V. Singh, Determination of Different Soluble Species in Yamuna River Waters, ***Environmental Technology***, Vol. 12, pg. 363-369, **1991**.

57) **Ranu Gadh**, S.N. Tandon, R.P. Mathur and O.V. Singh, A Study of Water Quality and Metal Speciation of Yamuna River, ***Asian Environment***, Vol. 13(2), pg.3-10, **1991**.

B. Papers presented in International/National Conferences:

1) Beth Nelson, Gareth Stewart, Will Stephen Drysdale, Mike Newland, Adam Vaughan, Rachel Dunmore, Jacqueline Hamilton, James R Hopkins, Andrew R Rickard, James D Lee, W Joe F Acton, C Nick Hewitt, Leigh Crilley, Mohammed Salim Alam, William Bloss, Lisa Whalley, Eiko Nemitz, **Ranu Gadi**, Understanding in-situ ozone production in Delhi, India, AGU Fall Meeting Abstracts, A146-0016, December **2020**.

2) **Ranu Gadi**, Atmospheric aerosols over Indo-Gangetic plains of India, presented "9th World Conference on Climate Change", London, UK (webinar) held on October 12-13, **2020**

3) Shobhna Shankar, Shivani, **Ranu Gadi**, Study on effect of firecrackers, stubble burning and air mass trajectory on levels of particulate matters in ambient air of Delhi,*International Conference on Advances in Smart Materials and Emerging Technologies 2020*, Indira Gandhi Delhi Technical University for Women, Delhi, 23rd -24th January **2020**.

4) Yadav, V. B., **Gadi, Ranu** Kalra, S. Removal of As (III) from wastewater using clay-CNT nanocomposite, *International Conference on Advances in Smart Materials and Emerging Technologies 2020*, Indira Gandhi Delhi Technical University for Women, Delhi, 23rd -24th January **2020**.

5) Manpreet Kaur Bagga, **RanuGadi**, Inhibition of mild steel using FicusRacemosa (FR) leaves extract and investigation of phytochemical components, *International Conference on Advances in Smart Materials and Emerging Technologies 2020*, Indira Gandhi Delhi Technical University for Women, Delhi, 23rd -24th January **2020**.

6) Rutambhara Joshi, Dantong Liu, Ernesto Reyes Villegas, James Allan, Hugh Coe, Michael Flynn, Ben Langford, EikoNemitz, Neil Mullinger, Chiara Di Marco, Freya Squires, Will Drysdale, James Lee, Adam Vaughan, Yele Sun, Simone Kotthaus, Shivani and **Ranu Gadi**, Concentrations and fluxes of black carbon in Beijing and Old Delhi using single particle soot photometry measurements. *European Aerosol Conference 2019*, Gothenburg, Sweden on 25th -30th Aug **2019**.

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C. Books Authored:

1) "**ENVIRONMENTAL STUDIES**", KatariaPubl., January 2008.

2) "**TEXTBOOK OF ENVIRONMENTAL STUDIES**", Kataria Publ., January 2014.

INVITED TALKS / PRESENTATIONS - INTERNATIONAL

- **Ranu Gadi**, *Emissions from biofuels in India*, Invited talk at **Max Planck Institute for Biogeochemistry, Mainz, Germany** on June 17th, 2002.

- Presented a research paper at the **Third Int. Symposium on Non-CO_2Green house Gases** (NCGG-3), Scientific understanding, control and implementation from 21st-23rd January, 2002 at **Maastricht, The Netherlands**.

- Presented a research paper at the **International Workshop on Carbonaceous Aerosol Inventory Estimates** from June 10-11, 2002 held at **Toulouse, France**.

- Presented a research paper at the **XIII World Clean Air & Environment Congress** held at **London, U.K**. from August 22nd-27th, 2004.

- Presented a research paper at the **Workshop on Agricultural Air Quality: State of the Science, Maryland, USA**, June 5-7, 2006.

- Presented a research paperat the **29thAnnual Conference of American Association for Aerosol Research, Portland, Oregon, USA**, October 25-29, 2010.

- Invited talk on S*ource analysis and health risk assessment of organic constituents in ambient aerosols over the National Capital Region, India*, at **Centre for Ecology and Hydrology, Edinburgh, UK**, July 17th, 2019.

- Invited talk on *Sources and health effects of fine organic aerosols over the NCR, India*, at **Dept. of Geography, Earth & Environmental Sciences, University of Birmingham, UK,** July 19th, 2019.