

VIRENDER K. SHARMA

Professor and Director of the Program of Environment and Sustainability
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EDUCATION:

- 1989 Rosenstiel School of Marine and Atmospheric Sciences, University of Miami, Florida. Ph.D., Marine and Atmospheric Chemistry.
1984 Indian Institute of Technology, New Delhi, India. M. Tech., Modern Methods of Chemical Analysis and Control.
1982 University of Delhi, Delhi, India. M.Sc., Physical Chemistry.
1980 University of Delhi, Delhi, India. B.Sc (Honors)., Chemistry.

TEACHING EXPERIENCE:

- 2014-Present **Professor** at Texas A&M University, College Station, Texas.
2017-2019 **Visiting Professor**, Western Sydney University, Australia.
2017-2021 **Distinguished Foreign Professor**, Nanjing University, Nanjing China.
2016-2017 **Distinguished Foreign Professor**, Huaqiao University, Xiamen, China.
2013-2019 **Guest Professor**, Dalian University of Technology, Dalian, China.
2014-2019 **Guest Professor**, Harbin Institute of Technology, Harbin, China.
2014-2019 **Guest Professor**, Northeast Electric Power University, Jilin City, China.
2005-2013 **Professor of Chemistry** at Florida Institute of Technology, Melbourne, Florida.
1999-2005 **Associate Professor of Chemistry** at Florida Institute of Technology, Melbourne, Florida.
1997-1999 **Associate Professor of Chemistry** at Texas A&M University-Corpus Christi, Texas.
1992-1997 **Assistant Professor of Chemistry** at Texas A&M University- Corpus Christi, Texas.
Summer, 1992 **Visiting Faculty:** "Fundamentals of Chemistry" at Drury College, Springfield, Missouri.
Summer, 1991 **Visiting Faculty:** "Fate of pollutants in the Aquatic Environment" at Instituto De Ciencias Del Mar Y Limnologia, UNAM, Mexico City, Mexico.
1989-1990 **Lecturer I:** Undergraduate courses, CHE 101 (General Chemistry) and CHE 123 (Analytical Chemistry) at Millard Fillmore College, affiliated with S.U.N.Y. at Buffalo, Buffalo, New York.
1986-1989 **Teaching Assistant:** Graduate and Undergraduate Chemical Oceanographic laboratories (MAC 504 and MSC 216) at University of Miami, Florida.

TEACHING COURSES:

- Undergraduate Analytical Chemistry; Instrumental Analysis; Environmental Chemistry; Chemical Oceanography; General Chemistry II; Environment & Public Health
Graduate Green Chemistry; Advanced Analytical Chemistry; Special Topics in Analytical Chemistry; Advanced Environmental Chemistry; Aquatic

Chemistry; Environmental Aquatic Kinetics; Environmental Instrumental Analysis; Chemistry of Natural Waters; Reactive Species in Treatment of Water and Wastewater; Water and Environmental and Occupational Health; Environmental Sustainability and Public Health

RESEARCH EXPERIENCE:

- Summer, 2019 **Invited Professor**, University of Paris-Est, Paris, France.
- 2013-2017 **Visiting Scientist**, Regional Center of Advanced Technology and Materials, Palacky University, Olomouc, Czech Republic
- 2017 **Visiting Scientist**, under Chinese Academy of Sciences President's International Fellowship Initiative (PIFI)
- Summer, 2013 **Invited Researcher/Professor**, University of Paris-Est, Paris, France.
- 2006 **Visiting Research Scholar** at Chemistry Department, Stanford University, Palo Alto, California. Advisor: E. I. Solomon
- 1990-1992 **Research Associate** at Chemistry Department, Brookhaven National Laboratory, Upton, Long Island, New York. Advisor: B.H.J. Bielski
- 1989-1990 **Research Associate** at Center of Biosurfaces, State University of New York at Buffalo, Buffalo, New York. Advisor: G.H. Nancollas
- 1985-1989 **Graduate Research Assistant** while pursuing Ph.D. degree in Marine and Atmospheric Chemistry at RSMAS, University of Miami, Florida. Advisor: F.J. Millero Dissertation Research: The Oxidation of Copper(I) in Natural Waters.

ADMINISTRATIVE:

- 2016-Present **Director**, Program of the Environment and Sustainability, Department of Environmental and Occupational Health, School of Public Health, Texas A&M University, College Station, Texas.
- 2015-2016 **Director**, Water Sustainability and Public Health Program, Department of Environmental and Occupational Health, School of Public Health, Texas A&M University, College Station, Texas.
- 2014-2015 **Interim Head**, Department of Environmental and Occupational Health, School of Public Health, Texas A&M University, College Station, Texas.
- 2010-2013 **Director**, Center of Ferrate Excellence, Florida Institute of Technology, Melbourne, Florida.
- Summer, 1992 **Director of Research for undergraduates** at Chemistry Department, Drury College, Springfield, Missouri.

FELLOWS:

- American Association for the Advancement of Science (AAAS) (2022-)
- American Chemical Society (ACS) (2021-)
- Royal Society of Chemistry (RSC) (2018-)
- International Association of Advanced Materials (IAAM) (2020-)
- The Center for Health Systems & Design (CHSD-TAMU) (2020-2023)

HONORS/AWARDS:

Highly Cited Researcher (Top 1%) – Clarivate Analytics, Web of Science (2022).

World Expert in Water Pollutants - Expertscape's PubMed-Based Algorithms Place in the Top 0.1% of Scholars Writing about Water Pollutants over the Past 10 Years (2021).

2020 ES&T Super Reviewer Award – American Chemical Society Journal, Environmental Science & Technology (2021).

Steven K. Dentel AEESP Award for Global Outreach - Association of Environmental Engineering and Science Professors (2020).

Highly Cited Researcher (Top 1%) – Clarivate Analytics, Web of Science (2020).

Most-Cited World Scientist - Ranked Top 0.15% Globally among ~ 8 million Researchers Across 22 Fields and #23 Globally among the Scientist under "*Environmental Science*" sub-field, Mendley (2020).

Program Chair – Environmental Chemistry Division, Fall National American Chemical Society Meeting (2021 - Present).

Assistant Program Chair – Environmental Chemistry Division, Fall National American Chemical Society Meeting (2020 - 2021).

Bush Excellence Award for International Research - George H W Bush Presidential Library Foundation (2019).

Sigma Xi Outstanding Distinguished Scientist Award – Texas A&M University Chapter of Sigma Xi (2019).

President Initiative International Fellowship – Chinese Academy of Science (2019-2020).

Nomination – Fellow, American Chemical Society, 2019, 2020.

Invited Professor – University of Paris-Est, Paris, France (Summer, 2019).

Certificate of Excellence in Reviewing (Chemosphere) – 2017.

Visiting Scientist – under Chinese Academy of Sciences President's International Fellowship Initiative (PIFI) (2017).

President Initiative International Fellowship – Chinese Academy of Science (2017).

Member at Large - Division of Environmental Chemistry, American Chemical Society (2016-2020).

Certificate of Merit - Awarded by American Chemical Society (Division of Environmental Chemistry), for co-authorship of the Oral Paper titled "*Degradation of Naphthylazo Anionic Dye by Fenton and Fenton-like Processes: A Case Study with Fast Sulphon Black-F'*" at 251st National

Meeting in San Diego, California, 2016.

Certificate of Merit - Awarded by American Chemical Society (Division of Environmental Chemistry), for co-authorship of the Oral Paper titled "*Mechanism of the Formation of Silver Nanoparticles in the Aquatic Environment*" at 247th National Meeting in Dallas, Texas, 2014.

Visiting Scientist – Regional Center of Advanced Technology and Materials, Palacky University, Olomouc, Czech Republic (2013-2017).

Invited Professor – University of Paris-Est, Paris, France (Summer, 2013).

Excellence in Review Award – *Environmental Science & Technology*, 2012.

Paper Review Award – *Journal of Sulfur Chemistry*, 2010.

Faculty Excellence in Research Award – Florida Institute of Technology (2008).

Faculty of the Year Award – Awarded by Student Affiliation of the American Chemical Society, (2008).

Outstanding Chemist Award – Orlando Section, American Chemical Society (2006).

Nomination - Florida Tech Faculty Excellence Research Award (2006).

Visiting Research Scholar – Chemistry Department, Stanford University, Palo Alto, California (2006).

Secretary - American Chemical Society (Geochemistry Division) (2000-2002).

Symposium Award - The best ACS (Geochemistry Division) symposium in honor of Frank J. Millero (1999).

Certificate of Merit - Awarded by American Chemical Society (Division of Environmental Chemistry), for presentation entitled "*Oxidation of Thiourea by Ferrate(VI)*" at Orlando, Florida (1996).

Member - Risk management plan third party review for port industries of Corpus Christi (1998).

Diploma - Awarded by Universidad Nacional Autonoma De Mexico, Mexico for presentation entitled "*Ferrate(VI) and the Wastewater Treatment*" 1996.

Member - Advisory Committee, EPA Pollution Prevention Project (1996).

Diploma - Awarded by Universidad Nacional Autonoma De Mexico, Mexico for presentation entitled "Speciation of Trace Metals in Natural waters" (1992).

Indian Institute of Technology Fellowship - Obtained during Master of Technology degree (1982-1984).

National Merit Scholarship - Obtained during High School and University Education given by the Government of India ((1974-1982).

ASSOCIATE EDITORS – JOURNALS

Environmental Chemistry Letters (2017-Present)

Journal of Advanced Oxidation Technologies (2017-Present)

EDITORIAL BOARD MEMBER - JOURNALS

Chemical Engineering Journal Advances, 2020-Present

Journal of Hazardous Materials, 2019-Present

Chemosphere, 2018-Present

Water-Energy Nexus, 2017-Present

Environmental Nanotechnology, Monitoring and Management (ENMM), 2014-Present

Journal of Environmental Science and Health Part A: Toxic/Hazardous Substances and Environmental Engineering, 2008-Present

SPECIAL ISSUES GUEST EDITORS - JOURNALS

Guest Co-Editor – A special Journal issue on “Chemical Reactions at Solid-Water Interfaces of Natural and Built Environment” in the *Science of the Total Environment*, 2020

Guest Co-Editor – A special Journal issue on “SEGH 2017- Environmental Health and Pollution Control” in the *Ecotoxicity and Environmental Safety*, 2018

Guest Co-Editor – A special journal issue on “*Metals – Advanced Oxidation Processes in Honor of Professor Jun MA*” in the *Journal of Hazardous Materials*, 2018

Guest Editor – A special journal issue in *the ACS Sustainable Chemistry and Engineering Honoring Rajender S. Varma*, 2016.

Guest Co-Editor – A special journal issue on “*Emerging Electrochemical Water Remediation Technologies in Honor of Professors Eric Brillas and Mehmet Oturan*” in the *Journal of Hazardous Materials*, 2016.

Guest Co-Editor – A special journal issue on “*Environmental Nanotechnology and Sustainability in Water Treatment in Honor of Professor Chin-Pao Huang*” in the *Separation and Purification Technology*, 2015.

Guest Co-Editor – A special journal issue “Photocatalytic Processes for Environmental

Remediation in Honor of Professor Jincai Zhao" in the *Catalysis Today*, 224, 2013.

Guest Editor – A special journal issue "Advanced Oxidation Processes – Fundamentals and Applications Professor Xiang-Zhong Li" in the *Separation and Purification Technology*, 91(3), 2012.

Guest Editor – A Special journal issue "Speciation and Kinetics in Natural Waters in Honor of Professor Frank J. Millero" in the "*Aquatic Geochemistry*", 16(3), 2010.

Guest Editor – A special journal issue "Thermodynamics and Kinetics in Natural Waters in Honor of Frank J. Millero", *Marine Chemistry*, 70(1-3), 2000.

PROFESSIONAL SOCIETY MEMBERSHIPS:

American Chemical Society
American Association for the Advancement of Science
Association of Environmental Engineers and Science Professors Society of Environmental Toxicology and Chemistry
American Geophysical Union
International Water Association
Sigma Xi
Material Research Society

PUBLICATIONS: (Total Citations: >34,500; H-Index 89; Source: Google Scholar)
Patents (National/International): 5 (Issued); 3 (Under Examination)
Journals (Peer-Reviewed): 423
Book (Author): 1
Books (Edited): 7
Book Chapters: 60
Proceedings/Preprints: 37
Abstracts 205
Presentations (Invited/Keynote) 227

PATENTS:

Apparatus and Method for Producing Liquid Ferrate - US Patent No. 8,961,921 B2;
WO Application No. 2012044358; India Patent No. 313290; South Korea Patent No. 10-1879598

Method and Apparatus for Desulfurization of Heavy Oil using Ferrate(VI) - US Patent No. 9,200,212 B2.

Ferrate Composition for Surface Disinfection - US Patent No. 11,523,613

Compositions and Method of Preparing and Using Activated Ferrate Solution to Accelerate and Enhance Oxidation Capacity for Disinfecting and Purifying Water Activated Ferrate Compositions– US and Europe Filled- US201862644274P

Activated Ferrate Solution as Disinfectant, Pesticide, Oxidant, Coagulant and to Prolong Shelf

Life of Produce, Meats, Poultry, Seafood and other Edible items. 2021/63/224550

Visible Light Enabled Catalyst Free Oxidation of Environmental Pollutants and Disinfection of Pathogenic Microorganisms by Peroxydisulfate-US Patent Office - Provisional Filled

Biochar supported atomically dispersed metal catalysts for efficient removal of per- and polyfluoroalkyl substances (PFAS)- Disclosure

PEER-REVIEWED JOURNAL PUBLICATIONS:

1. "Enhanced Pollutants Removal by Phenolic Moiety-mediated Fenton-like Reaction: Formation of Fe(III) Hydroperoxide Complex and Two-step Self-catalytic Mechanism" C. Chen, Y. Wang, D. Xia, J. Hua, W Qu, Y. Huang, C. He, **V.K. Sharma**, D. Shu, *Appl. Catal. B: Chem.*, 321, Article 122062 (2023).
2. "Efficient Micropollutants Degradation by Ferrate(VI)-Ti/Zn LDH Composite Under Visible Light: Activation of Ferrate(VI) and Self-Formation of Fe(III)-LDH Heterojunction" J. Shu, K. Wang, **V.K. Sharma**, X. Xu, N. Nesnas, H. Wang, *Chem. Eng. J.*, 456, Article I 141127 (2023).
3. "Nanoplastics are Potentially More Dangerous Than Microplastics" **V.K. Sharma**, X. Ma, E. Lichtfouse, and D. Robert, *Environ. Chem. Lett.*, In Press 10.1007/s10311-022-01539-1 (2023).

2022

4. "Peracetic Acid Enhances Micropollutant Degradation by Ferrate(VI) through Promotion of Electron Transfer Efficiency" J. Wang, J. Kim, D.C. Ashley, **V.K. Sharma**, and C-H. Huang, *Environ. Sci. Technol.*, 56(16), 11683–11693 (2022).
5. "Enhanced Degradation of Micropollutants in Peracetic Acid-Fe(III) System with Picolinic Acid" J. Kim, J. Wang, D.C. Ashley, **V.K. Sharma**, and C-H. Huang, *Environ. Sci. Technol.*, 56(7), 4437-4446 (2022).
6. "High-Valent Iron-Oxo Intermediates in Enhancing Treatment of Water by Ferrate" **V.K. Sharma**, M. Feng, D.D. Dionysiou, H-C, Zhou, C. Jinadatha, K. Manoli, M. Smith, R. Luque, X. Ma, and C-H. Huang, *Environ. Sci. Technol.*, 56(1), 30-47 (2022).
7. "Visible Light-Induced Catalyst-Free Activation of Peroxydisulfate: Pollutant-Dependent Production of Reactive Species" Y. Wen, C.-H. Huang, D. Ashley, D.D. Dionysiou, **V.K. Sharma**, and X. Ma, *Environ. Sci. Technol.*, 56(4), 2626–2636 (2022).
8. "Comparative Study on the Oxidation Mechanisms of Substituted Phenolic Pollutants by

- Ferrate(VI) through Experiments and Density Functional Theory Calculations”
N. Wu, M. Liu, B. Tian, Z. Wang, **V.K. Sharma**, and R. Qu,
Environ. Sci. Technol., In Press (2022).
9. “Integrated Photocatalytic Reduction and Oxidation of Perfluorooctanoic Acid by Metal-Organic Frameworks: Key Insights in the Degradation Mechanisms”
Y. Wen, A. Rentería-Gómez, G.S. Day, M. Smith, T-H. Yan, O. Ozdemir, O. Gutierrez,
V.K. Sharma, X. Ma, and H-C, Zhou,
Am. J. Chem. Soc., 144(26), 11840–11850 (2022).
 10. “Activation of Peroxymonosulfate by Phosphate and Carbonate for the Abatement of Atrazine: Elucidating Roles of Radical and Non-Radical Species”
Y. Wen, **V.K. Sharma**, and X. Ma,
ACS EST Water., 2(4), 635-643 (2022).
 11. “Overlooked Role of Chromium(V) and Chromium(IV) in Chromium Redox Reactions of Environmental Importance”
J. Bell, X. Ma, T.J. McDonald, C-H. Hunag, and **V.K. Sharma**,
ACS EST Water., 2, 932-942 (2022).
 12. “Total Organic Carbon as a Quantitative Index of Micro- and Nano-Plastics Pollution”
P. Li, Y. Lai, Q, Li, L. Dong, Z. Tan, S. Yu, Y. Chen, **V.K. Sharma**, J-F, Liu, and
G. Jiang,
Anal. Chem., 94(2), 740–747 (2022).
 13. “Abiotic Transformation of Polycyclic Aromatic hydrocarbons via Interaction with Soil Components: A Systematic Review”
J. Liu, C. Zhang, H. Jia, E. Lichtfouse, and **V.K. Sharma**,
Crit. Rev. Environ. Sci. Technol., DOI: [10.1080/10643389.2022.2083897](https://doi.org/10.1080/10643389.2022.2083897) (2022).
 14. “Enhanced Removal of Ammonia in Fe(VI)/Br⁻ Oxidation System: Kinetics, Transformation Mechanism and Theoretical Calculations”
Y. Qia, N. Wua, Z. Tua, **V.K. Sharma**, Z. Weia, D. Zhoua, Z. Wang, and R. Qu,
Water Res., 222, Article 118953 (2022).
 15. “Degradation of Organic Contaminants by Reactive Iron/Manganese Species: Limitations and Prospect”
B. Shao, H. Dong, G. Zhou, J. Ma, **V.K. Sharma**, and X. Guan,
Water Res., 221, Article 118765 (2022).
 16. “Making Waves: Defining Advanced Reduction Technologies (ARTs) from the Perspective of Water Treatment”
S. Waclawek, X. Ma, **V.K. Sharma**, R. Xiao, K. O'Shea, and D.D. Dionysiou,
Water Res., 212, Article 119101 (2022).
 17. “Ferrate(VI) Oxidation of Bisphenol E: Kinetics, Removal Performance, and Dihydroxylation Mechanism”
B. Tian, N. Wu, X. Pan, Z. Wang, C, Yan, **V.K. Sharma**, and R. Qu,

- Water Res.*, 210, Article 118025 (2022).
18. "Ferrate(VI) Pre-Treatment and Subsequent Electrochemical Advanced Oxidation Processes: Recycling Iron and Enhancing Oxidation and Mineralization of Organic Pollutants"
M. El Kateb, C. Trelu, N. Oturan, N. Bellakhal, N. Nesnas, **V.K. Sharma**, and M. Oturan, *Chem. Eng. J.*, 431(2), Article 134177 (2022).
 19. "Ferrate(VI)-Peracetic Acid Oxidation Process: Rapid Degradation of Pharmaceuticals in Water"
K. Manoli, R. Li, M. Feng, J. Kim, C-H. Huang, and **V.K. Sharma**, *Chem. Eng. J.*, 429, Article 132384 (2022).
 20. "Iron(V)/Iron(IV) Species in Graphitic Carbon Nitride-Ferrate(VI)-Visible Light System: Enhanced Oxidation of Micropollutants"
B. Pan, M. Feng, J. Qin, A.A. Dar, C. Wang, X. Ma, and **V.K. Sharma**, *Chem. Eng. J.*, 428, Article 132610 (2022).
 21. "Biochar as a Novel Carbon-Negative Electron Source and Mediator: Electron Exchange Capacity (EEC) and Environmentally Persistent Free Radicals (EPFRs): A Review"
J. Yuan, Y. Wen, D. Dionysiou, **V.K. Sharma**, and X. Ma, *Chem. Eng. J.*, 429, Article 132313 (2022).
 22. "Interaction of Peracetic Acid with Chromium(III): Understanding Degradation of Coexisting Organic Pollutants in Water"
J. Bell, Y. Wen, X. Ma, T.J. McDonald, C-H. Huang, and **V.K. Sharma**, *J. Hazard. Mater.*, 438, Article 129537 (2022).
 23. "Overlooked Environmental Risks Deriving from Aqueous Transformation of Bisphenol Alternatives: Integration of Chemical and Toxicological Insights"
L. Niu, S. Zhang, S. Wang, L. An, K. Manoli, **V.K. Sharma**, X. Yu, and M. Feng, *J. Hazard. Mater.*, 427, Article 128208 (2022).
 24. "The Viral Phoenix: Enhanced Infectivity and Immunity Evasion of SARS-CoV-2 Variants"
H. Choi, P. Chatterjee, M. Hwang, E. Lichtfouse, **V.K. Sharma**, and C. Jinadatha, *Environ. Chem. Lett.*, 20(3), 1539–1544 (2022).
 25. "Bisphenols Promote the Transfer of Antibiotic Resistance Genes without Damaging Cell Membrane"
M. Feng, C. Ye, S. Zhang, **V.K. Sharma**, K. Manoli, and X. Yu, *Environ. Chem. Lett.*, 20, 1553–1560 (2022).
 26. "Overlooked Involvement of Phosphate Radical in the Degradation of Atrazine by Sulfate Radical in presence of Phosphate ion"
Y. Wen, E. Lichtfouse, **V.K. Sharma**, and X. Ma, *Environ. Chem. Lett.*, In Press (2022).

27. "Effect of Permanganate Oxidation on the Photoreactivity of Dissolved Organic Matters for Photodegradation of Typical Pharmaceuticals"
D. Wan, Y. Kong, X. Wang, S. Selvinsimpson, **V.K. Sharma**, Y. Zuo, and Yong Chen, *Sci. Total Environ.*, 813, Article 152647 (2022).
28. "Unveiling the Mechanism of Imidacloprid Removal by Ferrate(VI): Kinetics, Role of Oxidation and Adsorption, Reaction Pathway and Toxicity Assessment"
K. Wang, J. Shu, **V.K. Sharma**, C. Liu, X. Xu, N. Nesnas, and H. Wang, *Sci. Total Environ.*, 805, Article 150383 (2022).
29. "Revegetation of Native Desert Plants Enhances Food Security and Water Sustainability in Arid Regions"
M.M. Abdullah, A. Assi, W.K. Zubari, R. Mohtar, H. Eidan, Z. A. Ali, **V.K. Sharma**, and X. Ma, *Sci. Total Environ.*, 806, Part 4, Article 151295 (2022).
30. "Reactivity of Nitrogen Species with Inorganic and Organic Compounds in Water"
V.K. Sharma, K. Manoli, and X. Ma, *Chemosphere.*, 302, 134911 (2022).
31. "Oxidation of Organic Micropollutants by Visible Light Activated Graphite Carbon Nitride: Delineating the Role of Surface Delocalized Electrons"
B. Pan, L. Zhou, J. Qin, C. Wang, X. Ma, and **V.K. Sharma**, *Chemosphere.*, 307(2), Article 135886 (2022).
32. "Automation in Quantifying Phenoxy Herbicides and Bentazon in Surface Water and Groundwater using Novel Solid Phase Extraction and Liquid Chromatography Tandem Mass Spectrometry"
Á. Tölgyesi, G. Korozs, E. Tóth, M. Bálint, X. Ma, and **V.K. Sharma**, *Chemosphere.*, 286, Article 131927 (2022).
33. "Revisit the Alkaline Activation of Peroxydisulfate and Peroxymonosulfate"
S. Waclawek, H.V. Lutze, **V.K. Sharma**, R. Xiao, and D.D. Dionysiou, *Curr. Op. Chem. Eng.*, 37, Article 100854 (2022).
34. "Unexpected Sensitivity Enhancement in Analyzing Aflatoxin M1 in Food using LC-IDMS Separation"
Á. Tölgyesi, B.T. Kovács, E. Tóth, A. Simon, M. Bálint, and **V.K. Sharma**, *Microchem. J.*, 179, Article 107469 (2022).
35. "An Alternative Strategy for Screening and Confirmation of 330 Pesticides in Ground- and Surface Water Using Liquid Chromatography Tandem Mass Spectrometry"
E. Tóth, Á. Tölgyesi, A. Simon, M. Bálint, X. Ma, and **V.K. Sharma**, *Molecules*, 27, 1872 (2022).
36. "Magnesium Ferrite-Nitrogen Doped Graphene Oxide Nanocomposite Effective Adsorptive Removal of Lead(II) and Arsenic(III)"
M. Kaur, M. Kaur, D. Singh, M. Feng, C Oliveira, V. Garg, and **V.K. Sharma**,

Environ. Sci. Pollut. Res., 29, 48260–48275 (2022).

37. "Effect of Ferrate Pretreatment on Anaerobic Digestibility of Primary Sludge Spiked with Resin Acids"
S. Das, K. Manoli, **V.K. Sharma**, M. Dagnew, and M.B. Ray,
Environ. Sci. Pollut. Res., 10.1007/s11356-022-21599-8 (2022).
38. "Separation of Fosetyl and Phosphonic Acid in Food Matrices with Mixed-Mode HPLC Column Coupled with Tandem Mass Spectrometric Detection and Method Application to Other Highly Polar Pesticides"
E. Tóth, Á. Tölgyesi, M. Bálint, X. Ma, and V.K. Sharma,
J. Chromatogr. B., I189, Article 123083 (2022).
39. "Opportunities and Challenges for Establishing a Resource Nexus Community of Science and Practice"
R.H. Mohtar, **V.K. Sharma**, B. Daher. C. Laspidou, H. Kim. E.N. Pistikoulou,
I. Nuwayhid, R. Lawford, A. Rhouma, M.A. Najm,
Front. Environ. Sci. Engg., In Press (2022).
40. "Plant Communities and Potential Native Phytoremediator Species in Petroleum Hydrocarbon-Polluted Desert Systems"
S. Al-Ateeqi, K. Murphy, L.I. Al-Musawi, **V.K. Sharma**, M. Abdullah, and X. Ma,
Land Degrad. Develop., 333(10), 1745-1757 (2021).
41. "Hierarchical Nanoflowers of MgFe₂O₄, Bentonite and B-,P- Co-Doped Graphene Oxide as Adsorbent and Photocatalyst: Optimization of Parameters by Box–Behnken Methodology"
M.K. Ubhi, M. Kaur, D. Singh, M. Javed, A.C. Oliveira, V.K. Garg, and **V.K. Sharma**,
Int. J. Mol. Sci., 23, Article 9678 (2022).
42. "Carbon Quantum Dots-Titanium Doped Strontium Ferrite Nanocomposite: Visible Light Active Photocatalyst to Degrade Nitroaromatics"
J.K. Grewal, M. Kaur, K. Mandal, and **V.K. Sharma**,
Catalysts, 12, Article 1126 (2022).
43. "Structural and Photocatalytic Studies on Oxygen Hyperstoichiometric Titanium Substituted Strontium Ferrite Nanoparticles"
J.K. Grewal, M. Kaur, R.K. Sharma, A.C. Oliveira, V.K. Garg, and **V.K. Sharma**,
Magnetochemistry, 8, Article 120 (2022).
44. "Enhancing Visible-Light Photocatalytic Activity of Hard-Biotemplated TiO₂: From Macrostructural Morphology Replication to Microstructural Building Units Design"
L. Jiang, Y. Yanga, J. He, W. Wang, Y. Chena, **V.K. Sharma**, and J. Wang,
J. Alloys Compd., 898, Article 162886 (2022).

2021

45. "Revelation of Fe(V)/Fe(IV) Involvement in Fe(VI)-ABTS System: Kinetic, Modeling, and

- Product Analysis”
C. Luo, M. Sadhasivan, J. Kim, **V.K. Sharma**, and C-H. Huang,
Environ. Sci. Technol., 55(6), 3976–3987 (2021).
46. “Reduction of Silver ion by S(IV): A New Source of Silver Nanoparticles in Environment”
F-S. Li, R. Liu, X-X. Zhou, **V.K. Sharma**, and J.F. Liu,
Environ. Sci. Technol., 55(8), 5569-5578 (2021).
47. “Effect of Metal Ions on Oxidation of Micropollutants by Ferrate(VI): Enhancing Role of Fe^{IV} Species”
X. Zhang, M. Feng, C. Luo, N. Nesnas, C-H. Huang, and **V.K. Sharma**,
Environ. Sci. Technol., 55(1), 623-633 (2021).
48. “Elucidating the Role of Dissolved Organic Matter and Sunlight in Mediating the Formation of Ag—Au Bimetallic Alloy Nanoparticles in the Aquatic Environment”
B. Guo, T. Alivio, N.A. Fleeer, Y. Li, S. Banerjee, and **V.K. Sharma**,
Environ. Sci. Technol., 55(3), 1710-1720 (2021).
49. “Mechanistic Investigation of Enhanced Photoreactivity of Dissolved Organic Matter after Chlorination”
D. Wan, H. Wang, **V.K. Sharma**, S. Selvinsimpson, H. Dai, F. Luo, C. Wang, and Y. Chen,
Environ. Sci. Technol., 55(13), 8937–8946 (2021).
50. “Peracetic Acid-Ruthenium(III) Oxidation Process for the Degradation of Micropollutants in Water”
R. Li, K. Manoli, J. Kim, M. Feng, C.H. Huang, and **V.K. Sharma**,
Environ. Sci. Technol., 55(13), 9150–9160 (2021).
51. “Metal Organic Frameworks (MOFs) as Photocatalysts for the Degradation of Agricultural Pollutants in Water”
Y. Wen, M. Feng, P. Zhang, H-C. Zhou, **V.K. Sharma**, and X. Ma,
ACS EST Engg., 1(5), 804–826 (2021).
52. “Ferrate(VI) Oxidation of Pharmaceuticals in Hydrolyzed Urine: Enhancement by Creatinine and the Role of Fe(IV)”
C. Liu, M. Feng, **V.K. Sharma**, C-H, Huang,
ACS EST Water., 1(4), 969-979 (2021).
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Abstract, ACS Fall Meeting 2022 at Chicago, Illinois (2022).
 4. "Mechanism of Formation and Stability of Bimetallic Nanoparticles in Aquatic
Environment"
V.K. Sharma and C-H. Huang,
Abstract, ACS Fall Meeting 2022 at Chicago, Illinois (2022).
 5. "High-Valent Iron Intermediates in Enhanced Oxidation of Pollutants by Ferrate"
V.K. Sharma,
Abstract, European assembly of Advanced Materials Congress (AMC), Stockholm,
Sweden (28 - 31 August 2022).
 6. "Fate of Microplastics Under Environmental Relevant Conditions"
V.K. Sharma,
Abstract, International Webinar on Microplastics in Environment, Bangkok, August 3,
2022 (2022).
 7. "Oxidation of Chromium(III) by Peracetic Acid: Potential Role of Chromium(IV/V) in
Degradation of Pollutants in Water"
J. Bell and V.K. Sharma,
Abstract, ACS Spring Meeting 2022 at San Diego, California (2022).
 8. "Enhancing Water Sustainability by Activated Ferrate(VI): Role of High-Valent Iron
Intermediates"
V.K. Sharma,
Abstract, ACS-MENA Meeting, Doha, Qatar (March 10. 2022).
 9. "Agricultural Practices by Enhanced Water Quality through Iron-Based (Ferrate)
Technology: Improved Population Health"
V.K. Sharma,
Abstract, International Water Resources Association (IWRA) Online Conference
"One Water, One Health: Water, Food and Public Health in a Changing World"
7-9 June 2021 (2021).
 10. "Light-Induced Changes in Microplastics and Dissolved Organic Matter in their
Co-existence"
V.K. Sharma, X. Ma, and B. Guo,

- Abstract**, ACS Fall Meeting 2021 at Atlanta, Georgia (2021).
11. "Aliphatic Amines Enhanced Oxidation of Pharmaceuticals by Ferrate^{VI}: Density Function Theory Strategy to Elucidate the Generation of Fe^{IV} Species"
M. Feng, J.C. Baum, C-H. Huang, and V.K. Sharma,
Abstract, ACS Fall Meeting 2021 at Atlanta, Georgia (2021).
 12. "Ferrates(Fe^{VI}, Fe^V, and Fe^{IV}) Oxidation of Pharmaceuticals in Hydrolyzed Urine: Underlying Mechanisms"
C-H. Huang, C. Luo, M. Feng, and V.K. Sharma,
Abstract, ACS Fall Meeting 2021 at Atlanta, Georgia (2021).
 13. "Exploring Degradation of Trimethoprim by Chromium(III/VI)-Peracetic Acid and Chromium(III/VI)-Ascorbic Acid Systems"
J. Bell, B. Guo, and V.K. Sharma,
Abstract, ACS Fall Meeting 2021 at Atlanta, Georgia (2021).
 14. Investigation on the Altered Plant Uptake of Poly- and Per-Fluorinated Substances (PFAS) by Co-Present Microplastics"
X. Ma, X. Wang, W. Zhang, and V.K. Sharma,
Abstract, ACS Fall Meeting 2021 at Atlanta, Georgia (2021).
 15. "Phosphorous- Doped Graphene Oxide as an Efficient Photocatalyst for Degradation of Organic Pollutants"
M.K. Ubhi, M. Kaur, and V.K. Sharma,
Abstract, ACS Fall Meeting 2021 at Atlanta, Georgia (2021).
 16. "Mechanistic Insight into Structural, Magnetic, Optical, and Photocatalytic Properties of Core-Shell Reversal of Tri-Metallic Titanium Strontium Ferrite (Ti-Sr ferrite)-Silica (SiO₂) Nanocomposites"
J.K. Grewal, M. Kaur, and V.K. Sharma,
Abstract, ACS Fall Meeting 2021 at Atlanta, Georgia (2021).
 17. "NGO@MgFe₂O₄@SiO₂ Dual Core Composite as an Efficient Photocatalyst for the Degradation of Organic Pollutants"
M. Kaur, M. Kaur, D. Singh, A.C. Oliveira, V.K. Garg, and V.K. Sharma,
Abstract, ACS Fall Meeting 2021 at Atlanta, Georgia (2021).
 18. "Mossbauer Spectroscopy in Environmental Applications of Ferrates"
V.K. Sharma,
Abstract, International Conference on the Applications of the Mossbauer Effect, Dalian, China, September 1-6, 2019.
 19. "Activated Ferrate: Accelerated Oxidation of Organic Pollutants in Water"
V.K. Sharma,
Abstract, International Symposium on Nanoscience and Nanotechnology-2019, Xian, China (2019).

20. "Nanofabrication Of N-doped Graphene Oxide With Magnesium Ferrite For Effective Pb(II) and As(III) Sequestration And Photocatalytic Applications"
M. Kaur, M. Kaur, D. Singh, A.C. Oliveira, V.K. Garg, and V.K. Sharma,
Abstract, 257th ACS National Meeting at Orlando, Florida (2019).
21. "Drinking Water Chlorination and Chloramination in Water Distribution System: Release of Lead, Formation of Disinfection Byproducts (DBPs) and Toxicity of Tap Water"
J. Liu, W. Li, Y. Li, X. Zhang, H. Lujan, C.H. Sayes, and V.K. Sharma,
Abstract, 257th ACS National Meeting at Orlando, Florida (2019).
22. "Phototransformation of Halophenolic Disinfection Byproducts (DBPs) in Receiving Seawater: Kinetics, Products, and Toxicity"
J. Liu, X. Zhang, Y. Li, W. Li, C. Hang, and V.K. Sharma,
Abstract, 257th ACS National Meeting at Orlando, Florida (2019).
23. "Enhanced Oxidation of Organic Pollutants in Water by Activated Ferrate(VI): Electron Transfer Versus Oxygen-Atom Transfer Reductants"
V.K. Sharma,
Abstract, 257th ACS National Meeting at Orlando, Florida (2019).
24. "Toxicological Studies of Drinking Water Disinfection Byproducts (DBPs): Challenges and Solutions"
J. Liu and V.K. Sharma,
Abstract, Annual Meeting of Lone Star Society of Toxicology (LSSOT), Austin, Texas.
25. "Degradation of Glyphosate by Ferrate, Chlorine and Monochloramine: Effects of Hardness, Bromide, and Natural Organic Matter"
J. Liu and V.K. Sharma,
Abstract, 256th ACS National Meeting at Boston, Massachusetts, (2018).
26. "Release of Lead (Pb) and Formation of Disinfection Byproducts during Drinking Water Disinfection in the Water Distribution System"
Abstract, 256th ACS National Meeting at Boston, Massachusetts, (2018).
27. "Formation and Stabilization of Ag, Au, and Ag-Au Bimetallic Nanoparticles in Natural Environment: Role of Dissolved organic Matter"
V.K. Sharma and S. Banerjee,
Abstract, 256th ACS National Meeting at Boston, Massachusetts, (2018).
28. "Activation of Ferrate(VI) in Treatment of Organic Contaminants in Water: Current Status"
V.K. Sharma,
Abstract, 256th ACS National Meeting at Boston, Massachusetts, (2018).
29. "Natural Noble Metals Nanoparticles: Formation, Stabilization, and Toxicity in the Environment"
V.K. Sharma,
Abstract, The 2018 International Conference on Nanogeosciences", Guiyang,

- China (2018).
30. "Combined Cytotoxic Effects of Lead (Pb) and Disinfection Byproducts (DBPs) on Chinese Hamster Ovary (CHO) Cells and Heterogeneous Human Epithelial Colorectal Adenocarcinoma (Caco-2) Cells"
J. Liu and V.K. Sharma,
Abstract, Society of Toxicology (SOT) 57th Annual Meeting, San Antonio, Texas (2018).
 31. "Effects of Titanium Dioxide and Zinc Oxide Nanoparticles on Disinfection Byproduct Formation in Synthetic Freshwater"
C. Gray, V.K. Sharma, L. Chen, and L. Cizmas,
Abstract, 255th ACS National Meeting at New Orleans, Louisiana (2018).
 32. "Formation, Fate and Toxicity of Natural Silver Nanoparticles in the Environment"
V.K. Sharma,
Abstract, 255th ACS National Meeting at New Orleans, Louisiana (2018).
 33. "Role of Ferrate Technology in the Food, Energy, and Water Nexus"
V.K. Sharma,
Abstract, 255th ACS National Meeting at New Orleans, Louisiana (2018).
 34. "Activation of Ferrate(VI) by Acid to Enhance the Oxidative Transformation of Organics in Aqueous Solution"
K. Manoli, G. Nakhla, A.K. Ray and V.K. Sharma
Abstract, 100th Canadian Chemistry Conference and Exhibition, Toronto, Canada (2017).
 35. "Natural Inorganic Nanoparticles: Formation, Fate, and Toxicity in Environment"
V.K. Sharma
Abstract, 33rd International Conference of the Society for Environmental Geochemistry and Health (SEGH 2017), Guangzhou, China (2017).
 36. "Toxicity of Complex Environmental Polycyclic Aromatic Hydrocarbon Mixtures"
L. Cizmas and V.K. Sharma,
Abstract, 33rd International Conference of the Society for Environmental Geochemistry and Health (SEGH 2017), Guangzhou, China (2017).
 37. "Synergetic Effect of the Oxidation of Fluoroquinolone Antibiotics by a Combined Use of Ferrate(VI) and Peroxymonosulfate"
M. Feng, Z. Wang, and V.K. Sharma,
Abstract, 252nd ACS National Meeting, San Francisco, California (2017).
 38. "Ferrate Technology: Green and Sustainable in Water Treatment"
V.K. Sharma,
Abstract, *Workshop on Environmental Iron Chemistry*, Tongji University, Shanghai, China (2016).

39. "Role of Iron in the Formation of Natural Inorganic Nanoparticles"
V.K. Sharma,
Abstract, *Workshop on Environmental Iron Chemistry*, Tongji University, Shanghai, China (2016).
40. "Acid Activation of Ferrate(VI) for Oxidation of Organic Compounds in Aqueous Solution"
K. Manoli, G. Nikhala, A. Ray, and V.K. Sharma,
Abstract, *46th Annual WEAO Technical Symposium*, Ottawa, Ontario, Canada (2017).
41. "Degradation of Atrazine by Solar Light/ $Zn_xCu_{1-x}Fe_2O_4$ /Sulfite"
Y. Huang, C. Han, M. Nadagouda, K.E. O'Shea, V.K. Sharma, and D.D. Dionysiou,
Abstract, *Ohio American Water Works Association*, Cincinnati, Ohio (2016).
42. "Understanding One-Electron Transfer Mechanisms of Oxidation of Cyanide by Ferrates (Fe^{VI} , Fe^V , and Fe^{IV}): Density Functional Theory Calculations,
C.A. Huerta-Aguilar¹, V.K. Sharma, and T. Pandiyan,
Abstract, *251st ACS National Meeting*, Philadelphia, Pennsylvania (2016).
43. "Application of Ferrate Oxidation for Eliminating Pharmaceuticals in Source Separation Human Urine"
C. Luan, V.K. Sharma, and C. Huang,
Abstract, *251st ACS National Meeting*, Philadelphia, Pennsylvania (2016).
44. "Elucidating Electron Transfer Mechanisms of Oxidation of Inorganic Pollutants by Ferrate(VI): Density Functional Theory Computations Approach"
V.K. Sharma, C.A. Huerta-Aguilar, and T. Pandiyan,
Abstract, *251st ACS National Meeting*, Philadelphia, Pennsylvania (2016).
45. "Acid Activation of Ferrate(VI) for Oxidation of Organic Compounds in Aqueous Solution"
K. Manoli, G. Nakhla, A.K. Ray and V.K. Sharma
Abstract, *2016 AIChE Annual Meeting*, San Francisco, California (2016).
46. "Ferrites in Sustainable Energy and Environmental Remediation: Mössbauer Spectroscopy Characterization"
Abstract, *Mediterranean Conference on the Applications of the Mössbauer Effect*
Cavtat, Croatia (2016).
47. "Preliminary Study of Oxidation of Selected Aliphatic Amino Acids and Dipeptides by Ferrate(VI)"
L. Chen and V.K. Sharma,
Abstract, *The International Chemical Congress of Pacific Basin Societies: Pacificchem 2015*, December 15-20, 2015, Honolulu, Hawaii, USA.
48. "Recyclable Iron-based Catalysts for Environmental Remediation"
D. Hermosilla, B. Ren, Y. Huang, C. Han, V. K. Sharma, K. O'Shea and D. D. Dionysiou,
Abstract, *The International Chemical Congress of Pacific Basin Societies: Pacificchem 2015*, December 15-20, 2015, Honolulu, Hawaii, USA.

49. "Use of Chemical and Biological Characterization to Evaluate the Toxicity of Drinking Water Disinfection By-Products following Chloramination, Chlorination, or A Novel Ferrate Disinfection Process"
L. Cizmas, C. Gray, V.K. Sharma, and L. Chen,
Abstract, *The International Chemical Congress of Pacific Basin Societies: Pacificchem 2015*, December 15-20, 2015, Honolulu, Hawaii, USA.
50. "Recent Advances Made in Understanding Mechanisms of Oxidation by Ferrate(VI)"
V.K. Sharma,
Abstract, *The International Chemical Congress of Pacific Basin Societies: Pacificchem 2015*, December 15-20, 2015, Honolulu, Hawaii, USA.
51. "Ferrate(VI)-Promoted Removal of Metals by Ferrate(VI): Mechanism Studies using Mössbauer Spectroscopy"
V.K. Sharma, L. Machala, K. Siskova, and R. Zboril,
Abstract, *The International Chemical Congress of Pacific Basin Societies: Pacificchem 2015*, December 15-20, 2015, Honolulu, Hawaii, USA.
52. "Role of Ferrate in Controlling Disinfection Byproducts"
V.K. Sharma, X. Yang, and L. Cizmas,
Abstract, *Gordon Research Conference-Disinfection By-Products*, Mount Holyoke College, South Hadley, Massachusetts (2015).
53. "Unusual kinetics of oxidation of aliphatic amino acids by ferrate(VI)"
L. Chen and V.K. Sharma,
Abstract, *Gordon Research Conference-Disinfection By-Products*, Mount Holyoke College, South Hadley, Massachusetts (2015).
54. "A Research Plan for Accessing the Toxicity of Drinking Water Disinfection Byproducts following Chlorination or A Novel Ferrate Disinfection Process"
L. Cizmas, C. Gray, V.K. Sharma, T.J. McDonald, and L. Chen,
Abstract, *Gordon Research Conference-Disinfection By-Products*, Mount Holyoke College, South Hadley, Massachusetts (2015).
55. "Adverse Reproductive Outcomes of Brominated Disinfection Byproducts in Epidemiological Studies: A Review"
C.M. Gray, A.B. Trueblood, V.K. Sharma, T.J. McDonald, and L. Cizmas,
Abstract, *Gordon Research Conference-Disinfection By-Products*, Mount Holyoke College, South Hadley, Massachusetts (2015).
56. "Transformation products of oxidation of microcystin-LR by ferrate(V) and ferrate(IV): similarities and differences with ferrate(VI)"
L. Chen, Y.H. Rezenom, D.H. Russell, D.D. Dionysiou, K.E. O'Shea, B. Marsalek, R. Zboril, and V.K. Sharma
Abstract, *250th ACS National Meeting*, Boston, Massachusetts (2015).
57. "Ferrate (VI) Mediated Degradation and Detoxification of the Potent Cyanotoxin, Cylindrospermopsin,

- C. Zhao, V.K. Sharma, D.D. Dionysiou, and K.E. O'Shea,
Abstract, *250th ACS National Meeting*, Boston, Massachusetts (2015).
58. "Multimodal Actions of Ferrate Treatment Technology in Removing Metals, Pharmaceuticals, and Cyanotoxins in Water"
Abstract, *2015 International Symposium on Environmental Science and Technology*, Chongqing, China (2015).
59. "Noble Metals Natural Nanoparticles: Formation and Stability in the Environment:
Abstract, *2015 International Symposium on Environmental Science and Technology*, Chongqing, China (2015).
60. "Iron Based Sustainable Greener Technologies to Treat Cyanobacteria and Microcystin-LR in Water"
Abstract, IWA, *2015 International Workshop on Occurrence and Control of Taste, Odours, and Algal Toxins in Waters*, Xiamen, China (2015).
61. "Ferrate and Ferryl Species: Mossbauer Spectroscopy Investigations"
V.K. Sharma, L. Machala, K.M. Siskova, and R. Zboril,
Abstract, *MECAME 2015, Mediterranean Conference on the Applications of the Mossbauer Effect*, Zadar, Croatia (2015).
62. "Oxidation of Iodide by Potassium Ferrate(VI)"
R. P. Kralchevska, V. K. Sharma, and L. Machala,
Abstract, *IWA Nano & Water Regional Conference*, Dalian, China (2015).
63. "Advances made in Understanding the Mechanism of Reactions of Ferrates in Water Treatment"
V.K. Sharma,
Abstract, *248th ACS National Meeting*, San Francisco, California (2014).
64. "Removal of Arsenic Compounds from Water using Iron-Based Materials"
J. Kolarik, R. Prucek, T. Tucek, J. Filip, Z. Marusal, V.K. Sharma, and R. Zboril,
Abstract, *NanoSD2014*, Avila (2014).
65. "Oxidation of Cylinderospermopsin and its Model Compounds 6-Hydroxymethyl Uracil by Ferrate(VI),
C. Zhao, V.K. Sharma, D.D. Dionysiou, and K.E. O'Shea,
Abstract, *248th ACS National Meeting*, San Francisco, California (2014).
66. "Mechanism of Formation of Silver Nanoparticles in Aquatic Environment"
N. F Adegboyega, V.K. Sharma, K. Siskova, R. Zbořil, B.J. Schultz, and S. Banerjee,
Abstract, *24⁷th ACS National Meeting*, Dallas, Texas (2014).
67. "Ferrate(VI) Oxidation of Selected Amino Acids"
L. Chen and V.K. Sharma,
Abstract, *24⁷th ACS National Meeting*, Dallas, Texas (2014).

68. "Ferrate Technology: An Environmentally-Friendly Approach in Water Reuse"
V.K. Sharma,
Abstract, 24⁷th ACS National Meeting, Dallas, Texas (2014).
69. "Oxidation of Microcystin-LR by ferrate(VI): Intermediates, Degradation Pathways, and Toxicity Assessments"
W. Jiang, L. Zhu, V.K Sharma, S.R. Batch, P.R Gardinali, D.D Dionysiou, and K.E. O'Shea,
Abstract, 24⁷th ACS National Meeting, Dallas, Texas (2014).
70. "Ferrate(VI): A green molecule in odorous gas treatment"
V.K. Sharma, C. He, and R. Zboril,
Abstract, 24⁶th ACS National Meeting, Indianapolis, Indiana (2013).
71. "Oxidation of Compounds by High-Valent Iron Species: One- and Two-Electron Transfer Steps"
V.K. Sharma,
Abstract, 24⁵th ACS National Meeting, New Orleans, Louisiana (2013).
72. "Oxidative Transformation of Microcystin-LR by Ferrate"
A. Rakha, V.K. Sharma, D.D. Dionysiou, K.E. O'Shea, and J. Westrick,
Abstract, 24⁵th ACS National Meeting, New Orleans, Louisiana (2013).
73. "Importance of Types of Silver Nanoparticles Coating"
K.M. Šišková, P. Cieslárová, V.K. Sharma, and R.Zbořil,
NANOCON 2013, Brno, Czech Republic (2013).
74. "Photocatalytic Oxidation of Amino Acids"
V.K. Sharma,
Abstract, 2013 International Symposium on Environmental Science and Technology, Dalian, China (2013).
75. "Advances Made in Ferrate Technology to Treat Water and Wastewater"
V.K. Sharma,
Abstract, 2013 International Symposium on Environmental Science and Technology, Dalian, China (2013).
76. "Ferrate(VI) Oxidation of Ampicillin in Water"
S. Tolan and V.K. Sharma,
Abstract, 2013 International Symposium on Environmental Science and Technology, Dalian, China (2013).
77. "Oxidation of Sulfamethoxazole by Mn(VII)"
L. Chen and V.K. Sharma,
Abstract, 2013 International Symposium on Environmental Science and Technology, Dalian, China (2013).
78. "Mossbauer Spectroscopy of High-Valent Iron Species: Industrial and Environmental

- Applications”
V.K. Sharma, L. Machala, K. Siskova, and R. Zboril,
Abstract, *XIII Latin American Conference on the Applications of the Mössbauer Effect - LACAME 2012*, Medellín, Colombia (2012).
79. “Influence of Light on the Formation of Silver Nanoparticles in Aquatic Environment”
 N. Adegboyega, V.K. Sharma, K. Siskova, and M. Sohn,
Abstract, *244th ACS National Meeting*, Philadelphia, Pennsylvania (2012).
80. “Potassium Ferrite (KFeO₂): Synthesis, Decomposition, and Application in Removing Arsenic and Copper”
 L. Machala, J. Filip, R. Prucek, J. Tucek^a, J. Frydrych, V.K. Sharma, and R. Zboril
Abstract, *244th ACS National Meeting*, Philadelphia, Pennsylvania (2012).
81. “Mossbauer Spectroscopy in Studying of Synthesis and Environmental Applications of Ferrate(VI)”
V.K. Sharma,
Abstract, *Mossbauer Spectroscopy in Material Science 2012, Olomouc, Czech Republic* (2012).
82. “Water Consumption and Water Treatment: Regional Aspects”
V.K. Sharma,
Abstract, *Sustainability 2012: Regional Aspects, International Interdisciplinary Sustainability Forum, Eger, Hungary* (2012)
83. “Novel Ferrate Technology in Water Treatment”
V.K. Sharma,
Abstract, *243rd ACS National Meeting*, San Diego, California (2012).
84. “Formation and stability of silver nanoparticles in aquatic environment”
V.K. Sharma, M. Sohn, N. Akaighe, N. Adegboyega, and S. Benerjee,
Abstract, *243rd ACS National Meeting*, San Diego, California (2012).
85. “Novel Ferrate Treatment Technology for Water Supply Sustainability”
V.K. Sharma,
Abstract, *2011 IUPAC General Assembly and World Congress*, San Juan, Puerto Rico (2011).
86. “Silver Nanoparticle Formation in Natural Environment: A Role of Humic Acids”
 N. Akaighe, R.I. MacCuspie, D.A. Navarro, D.S. Aga, S. Banerjee, M. Sohn, and V.K. Sharma,
Abstract, *2011 IUPAC General Assembly and World Congress*, San Juan, Puerto Rico (2011).
87. “Mössbauer spectroscopy of ¹⁵¹europium (II, III) chlorides”
 C.I. Wynter, M. Takahashi, V.K. Sharma, B. Hilleryd, M. Walterse, E.E. Alp, and G. K. Shenoy,
Abstract, *2011 IUPAC General Assembly and World Congress*, San Juan, Puerto Rico

- (2011).
88. "Mössbauer effect of complexes of ^{151}Eu with transition metal (2+) glutarates and nitrogen donors"
C.I. Wynter, M. Takahashi, M. Aronson, Y. Yiu, V.K. Sharma, B. Hillery, L. May, S.G. Sobel, and D. Semiek,
Abstract, *2011 IUPAC General Assembly and World Congress, San Juan, Puerto Rico* (2011).
 89. "Kinetics of the Oxidation of Antibiotics: A Review"
V.K. Sharma,
Abstract, *2011 International Symposium on Environmental Science and Technology*, Dongguan, Guangdong Province, China (2011).
 90. "Ferrate Technology in Water Supply Sustainability"
V.K. Sharma,
Abstract, *2011 International Symposium on Environmental Science and Technology*, Dongguan, Guangdong Province, China (2011).
 91. "Ferrate(VI) Oxidation of Trimethoprim: A Kinetics Study"
G. Anquandah and V.K. Sharma,
Abstract, *Florida Academy of Science 2011*, Melbourne, Florida (2011).
 92. "Suwannee River humic Acid-Mediated Silver nanoparticle formation under Environmentally Relevant Conditions"
N. Akaighe, V.K. Sharma, and M. Sohn,
Abstract, *Florida Academy of Science 2011*, Melbourne, Florida (2011).
 93. "Kinetics of the Oxidation of Tryptophan by ferrate(VI) in Alkaline Media"
E. Casbeer, V.K. Sharma, and J.C. Baum,
Abstract, *Florida Academy of Science 2011*, Melbourne, Florida (2011).
 94. "Characterization of Humic Acids by Fluorescence Spectroscopy"
M. Erhayem, V.K. Sharma, and M. Sohn,
Abstract, *Florida Academy of Science 2011*, Melbourne, Florida (2011).
 95. "Oxidation of L-Proline and Hydroxyproline by Ferrate(VI)"
M. Strouse and V.K. Sharma,
Abstract, *Florida Academy of Science 2011*, Melbourne, Florida (2011).
 96. "Concentration of Iodinated-Disinfection Byproducts in Water"
A. Garbou and V.K. Sharma,
Abstract, *Florida Academy of Science 2011*, Melbourne, Florida (2011).
 97. "Oxidation of Aliginic Acid, benzoic Acid, Related Humic Acids by Ferrate(VI)"
T. Hoang, M. Sohn, and V.K. Sharma,

- Abstract**, *Florida Academy of Science 2011*, Melbourne, Florida (2011).
98. "Ferrate(VI) oxidation of Glycine Derivatives in Alkaline Media: A Kinetics Study"
R.E. Gilman, B. Patel, V.K. Sharma, and J.C. Baum,
Abstract, *Florida Academy of Science 2011*, Melbourne, Florida (2011).
 99. "Ferrate: Historic and Cultural Aspects"
V.K. Sharma,
Abstract, *7th Workshop of the Forum on Sustainable Technological Development in a Globalization World-Sustainability 2010: The Cultural Dimension*, Berlin, Germany.
 100. "Oxidation of Antibiotics in Water by Ferrate(VI)"
G. Anquandah and V.K. Sharma,
Abstract, *86th Annual Florida Meeting and Exposition, American Chemical Society*, Tampa, Florida (2010).
 101. "Adsorption of Soil and Riverine Humic Acids on Titanium Dioxide nanoparticles"
M. Erhayem, V.K. Sharma, M.L. Sohn, and R-A. Doong,
Abstract, *86th Annual Florida Meeting and Exposition, American Chemical Society*, Tampa, Florida (2010).
 102. "The use of Synchronous Scan Fluorescence Spectroscopy and Ferrate(VI) Addition as a Characterization Tool for Sedimentary and Soil Humic Acids"
C.M. Horst, M.L. Sohn, V.K. Sharma, and C. Baum,
Abstract, *86th Annual Florida Meeting and Exposition, American Chemical Society*, Tampa, Florida (2010).
 103. "Use of LC-PDA Technique in Monitoring Antibiotics and their Products in Oxidative Treatment by Ferrate"
G. Anquandah and V.K. Sharma,
Abstract, *Pittsburgh Conference 2010*, Orlando, Florida (2010).
 104. "Iron in High Oxidation States: Solid State and Frozen Solution Mössbauer Spectroscopy"
V.K. Sharma, Y.D. Perfiliev, R. A. Yngard, R. Zboril, and Z. Homonnay ,
Abstract, *239th ACS National Meeting, San Francisco, California* (2010).
 105. "Silver nanoparticles: Green Synthesis Approaches"
V.K. Sharma, R.A. Yngard, Y. Lin and R. Zboril,
Abstract, *239th ACS National Meeting, San Francisco, California* (2010).
 106. "Oxidative Transformations of Micropollutants by Ferrate(VI)"
V.K. Sharma,
Abstract, *86th Annual Florida Meeting and Exposition, American Chemical Society*, Tampa, Florida (2010).
 107. "Ferrate(VI) and Ferrate(V) Oxidation of Nitrogen-Containing Pollutants"
E.M. Casbeer, V.K. Sharma, and J.C. Baum,

- Abstract**, *Pacificchem 2010, International Chemical Congress of Pacific Basin Societies*, Honolulu, HI (2010)
108. "Reactivity of Oxyiron(VI, V, and VI) with Inorganic and Organic Compounds in Aqueous Solution: Pulse Radiolysis Studies"
V.K. Sharma,
Abstract, *26th Miller Conference on Radiation Chemistry*, Keszthely, Hungary (2009).
 109. "Mossbauer Study of Peroxo Complex Formation of the Fe^{III}-HEDTA-H₂O₂ System"
Z. Homonnay, P. Klapetkova, L. Machala, K. Kovács, N. Csuvár, V.K. Sharma,
E. Kuzmann,
Abstract, *XI International Conference "Mössbauer Spectroscopy and Its Applications*, Ekaterinburg, Russia (2009).
 110. "Spectroscopic Study of the Interaction of Iron(III)-EDTA Complex with Peroxynitrite"
V.K. Sharma, R.A. Yngard, and Z. Homonnay,
Abstract, *237th ACS National Meeting*, Salt Lake City, Utah (2009).
 111. "Dissociation Constants of Protonated Oxidized Glutathione in Seawater Media"
P. Crea, C.De Stefano, F.J. Millero, S. Sammartano and V.K. Sharma,
Abstract, *237th ACS National Meeting*, Salt Lake City, Utah (2009).
 112. "Environmentally-Friendly Ferrate(VI) Technology for Treatment of Nonylphenol, Octylphenol, and Bisphenol-A"
V.K. Sharma,
Abstract, *1st IWA Development Congress*, Mexico City, Mexico (2009).
 113. "Degradation of Amino Acids in Water by Ferrate(VI)"
E. Casbeer, N. Noorhasan, B. Patel, and V.K. Sharma,
Abstract, *2009 International Symposium of Environmental Science and Technology*, Shanghai, China (2009).
 114. "Removal of Cyanide by Ferrate(VI): Effect of Metals and ethylenediaminetetraacetate"
K. Osathaphan, P. Tlyanont, R.A. Yngard, and V.K. Sharma,
Abstract, *2009 International Symposium of Environmental Science and Technology*, Shanghai, China (2009).
 115. "Ferrate(VI) Technology in Treating Endocrine Disruptors and Pharmaceuticals in Water"
V.K. Sharma,
Abstract, *International Conference on Water Scarcity, Global Changes and Groundwater Management Responses*, Irvine, California (2008).
 116. "Research Progress in the Use of Potassium Ferrate(VI) (K₂FeO₄) in the Oxidation of Endocrine Disruptors and Pharmaceuticals in Water"
V.K. Sharma,
Abstract, *235th ACS National Meeting*, New Orleans, Louisiana (2008).
 117. "Ferrate(VI) Technology and Mossbauer Spectroscopy in Innovative Water and Waste

- Water Treatment Technology”
V.K. Sharma, R.A. Yngard, Z. Homonnay, R. Zboril, J. Filip, L. Machala, E. Kuzmann,
 and A. Vértés,
Abstract, *International Conference on the Applications of the Mossbauer Effect (ICAME 2008)*, Budapest, Hungary (2008).
118. “Oxidation of Endocrine Disruptors and Pharmaceuticals by Ferrate(VI) ($\text{Fe}^{\text{VI}}\text{O}_4^{2-}$)”
V.K. Sharma,
Abstract, *84th Annual Florida Meeting and Exposition, American Chemical Society*,
 Kissimmee, Florida (2008).
119. “Future of Ferrates Chemistry”
V.K. Sharma,
Abstract, *5th Workshop on the Forum on Sustainable Technological Development in a
 Globalization World*, Budapest, Hungary (2007).
120. “Reactivity of Aqua Ferrate(VI, V, and IV) with Inorganic and Organic Substrates”
V.K. Sharma and D.E. Cabelli,
Abstract, *233^d ACS National Meeting*, Chicago, Illinois (2007).
121. “Iron Chelates: a challenge to chemists and Mossbauer Spectroscopists”
 Z. Homonnay, P.A. Szilagyi, A. Vertes, E. Kuzmann, V.K. Sharma, G. Molnar,
 A. Bousseksou, J.-M. Greneche, A. Brausam, and R. van Eldik,
Abstract, *International Conference on the Applications of the Mossbauer Effect
 (ICAME 2007)*, Kanpur, India (2007).
122. “The Effects of Humic Acids on the Oxidation of As(III) by Chemical Oxidants in Water”
 R. Gurung, V.K. Sharma, and M. Sohn,
Abstract, *83^d Annual Florida Meeting and Exposition, American Chemical Society*,
 Orlando, Florida (2007).
123. “Reactivity of Metal Cyanides in the presence of Ferrate(VI)”
 R. Yngard and V.K. Sharma,
Abstract, *83^d Annual Florida Meeting and Exposition, American Chemical Society*,
 Orlando, Florida (2007).
124. “Mossbauer Spectroscopy: Characterization of Iron-Containing Compounds with Different
 Valence States and Coordinations”
V.K. Sharma, Z. Homonnay, R. Zboril, Y. Perfiliev, L. Machala, E. Kuzmann, and
 A. Vertez,
Abstract, *83^d Annual Florida Meeting and Exposition, American Chemical Society*,
 Orlando, Florida (2007).
125. “Kinetics of Chemical and Photocatalytical Oxidation of Arsenic(III) as Influenced by pH”
V.K. Sharma, P.K. Dutta, and A.K. Ray,
Abstract, *83^d Annual Florida Meeting and Exposition, American Chemical Society*,
 Orlando, Florida (2007).
126. “Ferrate(VI) in a Molten NaOH-KOH system”

- J. Hives, M. Benova, K. Bouzek, and V.K. Sharma,
Abstract, *232nd ACS National Meeting*, San Francisco, California (2006).
127. "Synthesis of Ferrate(VI) by Ozonation"
 Y.D. Perfiliev, E. Benko, D. Pankratov, V.K. Sharma, and S. Dedushenko,
Abstract, *232nd ACS National Meeting*, San Francisco, California (2006).
128. "Photocatalytic oxidation of arsenic(III): evidence of hydroxyl radicals"
 S.O. Penkonen, A. Ray, V.K. Sharma, and P. Dutta,
Abstract, *232nd ACS National Meeting*, San Francisco, California (2006).
129. "Aqueous High Oxidation State Iron: Generation and Reactivity"
 D.E. Cabelli and V.K. Sharma,
Abstract, *232nd ACS National Meeting*, San Francisco, California (2006).
130. "Insight into the Aqueous Chemistry of Ferrate(VI) and Ferrate(III): A Frozen Solution Mossbauer Study"
 Z. Homonnay, N. Smith, V.K. Sharma, P.A. Sziliagy, and E. Kuzman,
Abstract, *232nd ACS National Meeting*, San Francisco, California (2006).
131. "New view on the thermal behavior of K₂FeO₄ in Static Air"
 L. Machala, R. Zboril, V.K. Sharma, J. Filip, and O. Schneeweiss,
Abstract, *232nd ACS National Meeting*, San Francisco, California (2006).
132. "Ferrate(VI) Oxidation of Recalcitrant Organic Compounds"
V.K. Sharma, N. Noorhasan-Smith, S.K. Mishra, and N. Nesnas,
Abstract, *232nd ACS National Meeting*, San Francisco, California (2006).
133. "Evaluation of ferrate(VI) as an alternative conditioner of Wastewater Biosolids"
 H. Kim, V.K. Sharma, L.L. McConnell, A. Torents, P. Milliner, C.P. Rice, and M. Ramirez,
Abstract, *232nd ACS National Meeting*, San Francisco, California (2006).
134. "Ferrate(VI) oxidation of 2-Chloroethyl Ethyl Sulfide"
 B.M. O'Brien and V.K. Sharma,
Abstract, *232nd ACS National Meeting*, San Francisco, California (2006).
135. "Heterogeneous Photocatalytic Reduction of Fe(VI) in UV-irradiated Titania Suspensions: Effect of Ammonia and Formic Acid"
 B.V. Chenay and V.K. Sharma,
Abstract, *232nd ACS National Meeting*, San Francisco, California (2006).
136. "Degradation of Cationic Surfactant by Ferrate(VI)"
 Y.Y. Eng, V.K. Sharma and A.K. ray,
Abstract, *232nd ACS National Meeting*, San Francisco, California (2006).
137. "Ferrate(VI) and Ferrate(V) Oxidation of Cyanide, Thiocyanate, and Copper(I) Cyanide"
V.K. Sharma, R. Yngard, and D. Cabelli,
Abstract, *PACIFICHEM 2005*, Honolulu, Hawaii (2005).

138. "Mossbauer Investigation of Iron(III)EDTA-H₂O₂ and Iron(III)-Indole-3-Alkanoic Acids Systems in frozen aqueous solutions"
A. Vertes, P.A. Szilagyi, K. Kovacs, Z. Homonnay, E. Kuzmann, A.A. Kamnev, and V.K. Sharma,
Abstract, *PACIFICHEM 2005*, Honolulu, Hawaii (2005).
139. "The convergence of New Technologies to Improve Water Quality"
V.K. Sharma,
Abstract, *Converging Technologies-Promises and Challenges-Forum on Sustainable Technological Development in a Globalising World, 3rd workshop of the Forum*, BME, Budapest (2005).
140. "Iron(VI) [Ferrate]: Environmentally-Friendly Oxidant for Removal of Estrogens and Pharmaceuticals in Water and Wastewater"
V.K. Sharma,
Abstract, *International Symposium of Wastewater Reclamation and Reuse for Sustainability (WRRS) 2005*, Jeju, Korea (2005)
141. "A Review of Disinfection Performance of Fe(VI) in Water and Wastewater"
V.K. Sharma,
Abstract, *International Symposium of Wastewater Reclamation and Reuse for Sustainability (WRRS) 2005*, Jeju, Korea (2005)
142. "Environmentally Friendly Coagulants of Contaminants by Iron(VI)"
V.K. Sharma,
Abstract, *1st IWA-SPIRE Conference*, Singapore (2005).
143. "Innovative Ferrate(VI) Technology for Dewatering, Stabilization, Disinfection, and Treatment of Hazardous Substances"
V.K. Sharma,
Abstract, *IWA Conference on Sustainable Management of Residues Emanating from Water and Wastewater Treatment*, Johannesburg, South Africa (2005).
144. "Combined Chemical and Biological in-situ Treatment of Mature Landfill Leachate"
E. Batareseh, D. Reinhart, V.K. Sharma, and T. Townsend,
Abstract, *10th Annual SWANA Landfill Symposium*, Boulder, Colorado (2005).
145. "Application of Ferrates in Biosolids and Manure Management with respect to Disinfection and Stabilization"
R.S. Reimers, V.K. Sharma, S.D. Pilai, and D. Reinhart, G.R. Boyd, and K.B. Fitzmorris,
Abstract, *WEF Joint Residuals and Biosolids Management Conference – Advancing the State of Technology*, Nashville, Tennessee (2005).
146. "Environmental-Friendly Solution to Chemical Pollution in Hungary"
V.K. Sharma,
Abstract, *Sustainability's New Age, Preservation and Planning (SNAP) – An International Sustainability Forum*, Melbourne, Florida (2005).

147. "Iron Complexes in Aqueous Solution – Mössbauer Characterization"
A. Vertez, P.A. Szilagyi, K. Kovacs, Z. Homonnay, E. Kuzmann, A.A. Kamnev, and V.K. Sharma,
Abstract, *Sustainability's New Age, Preservation and Planning (SNAP) – An International Sustainability Forum*, Melbourne, Florida (2005).
148. "Iron(VI): Green Chemistry"
V.K. Sharma,
Abstract, *Sustainability's New Age, Preservation and Planning (SNAP) – An International Sustainability Forum*, Melbourne, Florida (2005).
149. "Solid Iron(VI): Thermal and Spectroscopic Characterization"
J. Madarasz, V.K. Sharma, and G. Pokol,
Abstract, *Sustainability's New Age, Preservation and Planning (SNAP) – An International Sustainability Forum*, Melbourne, Florida (2005).
150. "Effect of Ferrate on Sludge Dewaterability"
H. Kim, S. Hong, Y. Kim, J. Li, A. Torrents, L. Mcconnell, V.K. Sharma, and M. Ramirez,
Abstract, *Sustainability's New Age, Preservation and Planning (SNAP) – An International Sustainability Forum*, Melbourne, Florida (2005).
151. "Oxidation of Aminocarboxylates by Ferrate(VI)"
V.K. Sharma and N. Noorhasan,
Abstract, *228th ACS National Meeting*, Philadelphia, Pennsylvania (2004).
152. "Dissociation Constants of Cysteine in Seawater Media"
V.K. Sharma, A. Moulin, F.J. Millero, and C. De Stefano,
Abstract, *Mediterranean Conference on Chemistry of Aquatic Systems*, Reggio Calabria, Italy (2004).
153. "Mossbauer study of the reaction of Fe^{III}EDTA and hydrogen peroxide"
V.K. Sharma, P.A. Szilagyi, Z. Homonnay, E. Vertes, and A. Vertes,
Abstract, *Eotvis Workshops and Conferences in Sciences 2004*, Budapest, Hungary (2004).
154. "Ferrate the environmentally friendly emerging treatment chemical"
D. Reinhart, L. Daly, A. Rios, and V.K. Sharma,
Abstract, *Florida Remediation Conference 2004*, Orlando, Florida (2004).
155. "Ferrate(VI) Oxidation of Aminocarboxylates"
V.K. Sharma and N. Noorhasan,
Abstract, *2nd IWA Leading-Edge Conference on Water and Wastewater Treatment Technologies*, Prague, Czech Republic (2004).
156. "Coagulation of Industrial and Radionuclides Effluents Utilizing Environmentally Friendly Iron(VI) Ion"
V.K. Sharma,

- Abstract**, *4th International Conference for Conveying and Handling of Particulate Solids*, Budapest, Hungary (2003).
157. "Innovative Sludge Practices Using Ferrate [Iron(VI)]"
V.K. Sharma and H. Kim,
Abstract, *Environmental Technology: Advancement on Water and Wastewater Applications in the Tropics* (2003).
 158. "Mossbauer Study of Chemical State of Iron in the Fenton Reaction"
 Z. Homonnay, V.K. Sharma, P. Á. Szilágyi, E. Kuzmann, and A. Vértes
Abstract, *Condensed Matter Studies with Nuclear Methods, Zakopane*, Poland (2003).
 159. "Iron(VI) and Iron(V): Environmentally Friendly Oxidants In Water and Wastewater Treatment"
V.K. Sharma,
Abstract, *3rd Conference on Oxidation Technologies for Water and Wastewater Treatment*, Goslar, Germany (2003).
 160. "Photocatalytic Reduction of Fe(VI) in Aqueous Solutions"
 Y. Kransnova, V.K. Sharma, C. Winkelmann, and K. Winkelmann,
Abstract, *6th Annual Meeting, Florida Academy of Science*, Orlando, Florida (2003).
 161. "Ferrates (Fe(VI) and Fe(V)): Environmentally Friendly Oxidants in Water Quality Security"
V.K. Sharma,
Abstract, *Florida Section AWWA Conference*, Palm Harbor, Florida (2002).
 162. "Pulse Radiolysis of Reactions of Fe(VI) and Fe(V) with Cyanide, Thiocyanate, Bisulfite, and Thiosulfate"
V.K. Sharma, C.R. Burnett, D.B. O'Connor, and D. Cabelli,
Gordon Conference on Radiation Chemistry, Colby College, Waterville, ME (2002).
 163. "Effect of Ferrate(VI) on the TiO₂-assisted Photodegradation of Ammonia and Cyanate"
V.K. Sharma, K. Winkelmann, and Y. Krasnova,
Abstract, *2nd European Meeting on Solar Chemistry and Photocatalysis: Environmental Application*, Saint-Avold, France (2002).
 164. "Potential Role of Ferrates (Fe(VI), Fe(V), and Fe(IV)) in Wastewater Treatment"
V.K. Sharma,
Abstract, *Special Seminar Series at Research Center for Environmental Quality Control*, Kyoto University, Japan (2002).
 165. "Reactivity of Higher Oxidation States of Iron (Fe(VI), Fe(V), and Fe(IV)) with Cyanide and Thiocyanate: Stopped-Flow and Premix Pulse Radiolysis Study"
V.K. Sharma and C.R. Burnett,
Abstract, *Fifth International Conference on Chemical Kinetics*, Gaithersburg, MD (2001).

166. "Radiation Chemistry of Higher Oxidation States of Iron (Fe(VI), Fe(V), and Fe(IV))"
V.K. Sharma,
Abstract, *International Symposium on Utilization of Accelerators*, São Paulo, Brazil (2001).
167. "Ferrate(V) oxidation of Sulfur-Containing Compounds: Pulse Radiolysis Study"
V.K. Sharma and D.B. O'Connor,
Abstract, *International Chemical Congress of Pacific Basin Societies*, Honolulu, Hawaii (2000).
168. "Ferrate(VI) and Ferrate(V) Oxidation of Thiocyanate"
V.K. Sharma, C.R. Burnett, and D.B. O'Connor,
Abstract, *220th ACS National Meeting*, Washington, D.C. (2000).
169. "Variability of the Texas "Brown Tide" in Relation to Environmental Parameters and Metals"
V.K. Sharma,
Abstract, *XIII National Oceanography Meeting Mexico*, Huatulco, Oaxaca (2000).
170. "Potassium Ferrate(VI): Properties and Applications"
V.K. Sharma,
Abstract, *219th ACS National Meeting*, San Francisco, California (2000).
171. "Oxidation of Sulfur-Containing Compounds by Ferrate(VI) in the Aquatic Environment"
V.K. Sharma, R.A. Rendon and F.J. Millero,
Abstract, *217th ACS National Meeting*, Anaheim, California (1999).
172. "Reactivity of Ferrate(VI) with Thiocyanate in Alkaline Medium"
V.K. Sharma and W. Rivera,
Abstract, *Fifth Chemical Congress of North America*, Cancun, Mexico (1997).
173. "Reactivity of Ferrate(VI) and Ferrate(V) with Cyanide in Alkaline Medium"
V.K. Sharma, W. Rivera and D. O'Connor,
Abstract, *Fourth International Conference on Chemical Kinetics*, Gaithersburg, Maryland (1997).
174. "Removal of Cyanide in Rinse Water by Ferrate(VI)"
V.K. Sharma, B. O'Brien and J.O. Smith,
Abstract, *213th ACS National Meeting*, San Francisco, California (1997).
175. "Removal of Sulfur Containing Pollutants from Wastewater Effluents by Fe(VI)"
V.K. Sharma,
Abstract, *5th Annual South Texas Environmental Conference*, Corpus Christi, Texas (1997).
176. "Diurnal Role of Environmental Parameters in Texas "Brown Tide"
K.B. Rhudy, S. Hatch, W. Rivera and V.K. Sharma,
Abstract, *5th Annual South Texas Environmental Conference*, Corpus Christi, Texas

- (1997).
177. "Spectrophotometric Determination of pH in Hypersaline Environment"
W. Rivera, K.B. Rhudy and V.K. Sharma,
Abstract, *5th Annual South Texas Environmental Conference*, Corpus Christi, Texas (1997).
 178. "Ferrate(VI) Oxidations of Inorganic Contaminants in Aqueous Solution"
V.K. Sharma,
Abstract, *Fifth Eurasia Conference on Chemical Sciences*, Guangzhou, China (1996).
 179. "Trace Metal Species in Aquatic Samples of Tabasco Lagoons, Mexico"
G.F. Vazquez and V.K. Sharma,
Abstract, *Fifth Eurasia Conference on Chemical Sciences*, Guangzhou, China (1996).
 180. "Oxidation of Thiourea by Ferrate(VI)"
V.K. Sharma and W. Rivera,
Abstract, *212th ACS National Meeting*, Orlando, Florida (1996).
 181. "Ferrate(VI) Oxidations of Inorganic Substrates"
V.K. Sharma, W. Rivera and A.T. Baggett,
Abstract, *6th Annual Meeting, Council of Undergraduate Research*, Durham, North Carolina (1996).
 182. "Trace Metals in Baffin Bay, Texas water"
K. Rhudy and V.K. Sharma,
Abstract, *4th South Texas Environmental Conference*, Corpus Christi, Texas (1996).
 183. "Preliminary Investigation of Petroleum Hydrocarbon Degradation in a Coastal Stream"
S. Hicks, W. Rivera and V.K. Sharma,
Abstract, *4th South Texas Environmental Conference*, Corpus Christi, Texas (1996).
 184. "Photocatalysis Treatment of Water Contaminated with Organic Chemicals"
W. Rivera, S. Peters and V.K. Sharma,
Abstract, *4th South Texas Environmental Conference*, Corpus Christi, Texas (1996).
 185. "The Alkalinity and pH before the Oppal Hurricane in the South of Gulf of Mexico"
G.F. Vazquez, V.K. Sharma, C.A. Frausto, R.J. Marmolejo, O.R. Magallenez, V. Olan,
Abstract, *4th South Texas Environmental Conference*, Corpus Christi, Texas (1996).
 186. "Contamination in Nueces Estuary Sediments"
V.K. Sharma, S.S. Hicks, A.T. Baggett and S. Hollyfield,
Abstract, *4th South Texas Environmental Conference*, Corpus Christi, Texas (1996).
 187. "Removal of Inorganic Contaminants in Wastewater Effluents by Advanced Oxidation Process"
V.K. Sharma,
Abstract, *4th South Texas Environmental Conference*, Corpus Christi, Texas (1996).

188. "Characterization and Preliminary Quantification of Effluent Load from Three Coastal Aquaculture facilities in South Texas"
M.A. Lopez-Ivich, T.M. Samocha, A.L. Lawrence, E.R. Jones, D.A. McKee, V.K. Sharma
Abstract, *4th South Texas Environmental Conference*, Corpus Christi, Texas (1996).
189. "Petroleum Hydrocarbons in Sediments of Upper Laguna Madre, Texas"
V.K. Sharma, K. Rhudy, R. Brooks, S. Hollyfield and F.G. Vazquez,
Abstract, *Texas Academy of Science 99th Annual Meeting*, Galveston, Texas (1996).
190. "Characterization and Preliminary Quantification of Effluent Load from Three Coastal Aquaculture facilities in South Texas"
M.A. Lopez-Ivich, T.M. Samocha, A.L. Lawrence, D.A. McKee, V.K. Sharma,
Abstract, *Aquiculture Conference '96*, Arlington, Texas (1996).
191. "Hydrocarbon Contamination in Gum Hallow Creek Sediments"
S. Hicks and V.K. Sharma,
Presentation, *7th Annual South Texas Bays and Estuarine Meeting*, Port Aransas, Texas (1995).
192. "Metals in Oso Bay Sediments"
V. K. Sharma, S. Hollyfield and A.T. Baggett,
Abstract, *ERFS 13th Biennial International Conference*, Corpus Christi, Texas (1995).
193. "Removal of Cyanide by Ferrate(VI) ion"
V.K. Sharma and J.O. Smith,
Abstract, *Sur/Fin'95 Annual Meeting*, Baltimore, Maryland (1995).
194. "Ferrate(VI) Oxidation of Aniline and Substituted Anilines"
V.K. Sharma and S. Hollyfield,
Abstract, *210th ACS National Meeting*, Chicago, Illinois (1995).
195. "Ferrate(VI) Oxidations of Inorganic Contaminants. 1. Hydrogen Sulfide"
V.K. Sharma, J.O. Smith and F.J. Millero,
Abstract, *International Chemical Congress of Pacific Basin Societies*, Honolulu, Hawaii (1995).
196. "Ferrate(VI) Oxidations of Inorganic Contaminants. 2. Cyanide"
V.K. Sharma and J.O. Smith,
Abstract, *International Chemical Congress of Pacific Basin Societies*, Honolulu, Hawaii (1995).
197. "Ferrate(VI) Oxidations of Inorganic Contaminants. 3. Ammonia"
V.K. Sharma and J.T. Bloom,
Abstract, *Emerging Technologies in Hazardous Waste Management VIII*, Atlanta, Georgia (1995).
198. "Organochlorine Pesticides in Sediments of the Nueces Bay Estuary"
V.K. Sharma and S. Hicks,

- Abstract**, *3rd Gulf of Mexico Symposium*, Corpus Christi, Texas (1995).
199. "Contamination in Playon de Mexiquillo, Mexico Turtles"
F.G. Vazquez, M.C.H. Reyes and V.K. Sharma,
Abstract, *ERFS 13th Biennial International Conference*, Corpus Christi, TX (1995).
200. "Contamination in Cayo del Oso Bay, Texas Sediments"
V.K. Sharma,
Presentation, *6th Annual South Texas Bays and Estuarine Meeting*, Port Aransas, Texas (1994).
201. "Ferrate(VI) Oxidation of Hydrogen Sulfide"
V.K. Sharma and J.O. Smith,
Abstract, *ACS 49th Southwest Regional Meeting*, Austin, Texas (1993).
202. "Hydrocarbons in Cayo Del Oso Bay, Texas Sediments"
S. Hollyfield and V.K. Sharma,
Abstract, *ACS 49th Southwest Regional Meeting*, Austin, Texas (1993).
203. "Heavy Metals in Mexican Lagoons"
V.K. Sharma,
Presentation, *5th Annual South Texas Bays and Estuarine Meeting*, Port Aransas, Texas (1993).
204. "Fe(VI) and Fe(V) Oxidations of Pollutants in the Aquatic Environment"
V.K. Sharma,
Presentation, *Environmental Sciences-Water Gordon Research Conference*, New Hampton, New Hampshire (1992).
205. "Reactivity of Ferrate(VI) and Ferrate(V) with Carboxylic Acids"
V.K. Sharma, G. Czapski and B.H.J. Bielski,
Abstract, *203rd ACS National Meeting*, San Francisco, California (1992).
206. "Phosphocitrate and Citrate Influence on Calcium Phosphate Crystal Growth"
M. Johnsson, C.F. Richardson, V.K. Sharma, J.D. Sallis and G.H. Nancollas,
Abstract, *IADR/AADR General Session*, Cincinnati, Ohio (1990).
207. "The Rate of reduction of Cu(II) with H₂O₂ in seawater"
F.J. Millero, V.K. Sharma and B. Karn,
Abstract, *ACS Symposium on Rates of Geochemical Processes in the Oceans*, Miami, Florida (1989).
208. "The Effect of Ionic Interaction on the Rate of Oxidation of Cu(I) in Natural waters"
V.K. Sharma,
Abstract, *Dissertation symposium on Chemical Oceanography*, Honolulu (1988).
209. "The Oxidation Kinetics of Cu(I) in Natural waters"

F.J. Millero and V.K. Sharma,
Abstract, 193rd ACS National Meeting, Denver, Colorado (1987).

210. "Temperature Dependence of Heat Capacities and Volume of Micellization of Sodium Dodecyl Sulfate in water"
V.K. Sharma, R. Bhat and J.C. Ahluwalia,
Abstract, 5th International Conference on Surface and Colloid Science, Potsdam, New York, June, 1985.
211. "Calorimetric Studies on the Interaction of Salts and Ureas with the Triton-X-100 in Aqueous solutions"
V.K. Sharma and R. Bhat,
Abstract, 6th International Symposium on the Surfactants in solution, New Delhi, India (1986).
212. "The Role of Physicochemical Properties in Energy Conservation of an Industry"
V.K. Sharma and R. Bhat,
Presentation, International Conference on Chemical Education, Tokyo, Japan (1985).
213. "Calorimetric Studies on the Interaction of some Sugars and Polyols with the Non-Ionic Detergent Triton-X-100"
V.K. Sharma and R. Bhat,
Presentation, 30th IUPAC Congress, Manchester, United Kingdom (1985).

PRESENTATIONS (INVITED/KEY NOTE):

1. "High-Valent Iron Intermediates in Enhanced Oxidation of Pollutants by Ferrate"
V.K. Sharma,
Invited Presentation, European assembly of Advanced Materials Congress (AMC), Stockholm, Sweden (28 - 31 August 2022).
2. "Fate of Microplastics Under Environmental Relevant Conditions"
V.K. Sharma,
Keynote Speaker, International Webinar on Microplastics in Environment, Bangkok, Thailand (August 3, 2022).
3. "Ferrate-Based Enhanced Oxidation of Micropollutants in Water: Delineating the Multi-Oxidants Mechanisms"
Invited Seminar, Ariel University, Ariel (May 25, 2022).
4. "Activated Ferrate(VI): Rapid Degradation of Micropollutants in Water"
Invited Webinar, Nanjing University, Nanjing, China (May 30, 2022).
5. "High-Valent Iron Intermediates in Enhanced Oxidation of Pollutants by Ferrate"
Invited Webinar, Le Mans University, Le Mans, France (March 15, 2022).
6. "Enhancing Water Sustainability by Activated Ferrate(VI): Role of High-Valent Iron

Intermediates”

V.K. Sharma,

Invited Speaker, ACS-MENA Meeting, Doha, Qatar (March 10, 2022).

7. “Ferrate in Population Health Care: Enhanced Hospital Disinfection and Water Purification”
Invited Seminar, Department of Chemical and Environmental Engineering, University of Cincinnati, Ohio (August 28, 2020).
8. “Ferrates: Advanced Materials in Enhanced Hospital Disinfection and Water Purification”
Invited Seminar, International Association of Advanced Materials, Sweden (June 8, 2020).
9. “Ferrate Technology in Population Health: Enhanced Hospital Disinfection and Water Purification”
Invited Seminar, Department of Material Science and Engineering, University of Texas, Arlington, Texas (February 21, 2020).
10. “Ferrate Technology in Population Health: Enhanced Hospital Disinfection and Water Purification”
Sigma Xi Outstanding Distinguished Scientist Lecture, Texas A&M University, College Station, Texas (February 10, 2020).
11. “High-Valent Iron Species (Ferrates): Multimodal Action in Water Treatment”
Invited Seminar, Department of Environmental Science and Engineering, Georgia Institute of Technology, Atlanta, Georgia (January 24, 2020).
12. “Current Status of Ferrate Treatment in Water and Wastewater”
Inviting Seminar, Department of Environmental Science, Peking University, Beijing, China (November 29, 2019).
13. “High-Valent Species (Ferrates) in Oxidation of Micropollutants in Water and Hydrolysed Urine”
Inviting Seminar, Shaanxi University of Science and Technology, Xian, China (November 28, 2019).
14. “High-Valent Species (Ferrates) in Oxidation of Micropollutants in Water and Hydrolysed Urine”
Inviting Seminar, Institute of Earth Environment, Chinese Academy of Science, Xian, China (November 28, 2019).
15. “Natural Nanoparticles: Mechanism of Formation, Stability, and Toxicity in Aquatic Environment”
Inviting Seminar, Faculty of Environmental Science and Engineering, Kunming University of Science and Technology, Kunming, China (November 27, 2019).
16. “Ferrate Technology: Current Status to Oxidize Pollutants in Water”

- Inviting Seminar**, Department of Environmental Engineering, Chulalongkorn University, Bangkok, Thailand (October 2, 2019).
17. "High-Valent Iron Species (Ferrates) in Environmental Remediation"
Inviting Seminar, Department of Biological and Environmental Chemistry, Faculty of Humanity-oriented Science and Engineering Kindai University, Fukuoka, Japan (September 30, 2019).
 18. "Advances in Ferrate Technology: Elucidating Role of Activated Ferrate to Remove Organic Pollutants Rapidly"
Inviting Seminar, College of Environmental Science, Zhejiang University of Technology, Hangzhou, China (September 27, 2019).
 19. "Advances in Ferrate Technology: Elucidating Role of Activated Ferrate to Remove Organic Pollutants Rapidly"
Pleenary Presentation, 2019 International Symposium of Environmental Science and Technology, Hangzhou, China (September 26, 2019).
 20. "Ferrate Technology: Current Status to Oxidize Pollutants in Water"
Inviting Seminar, College of Environmental Science, Jiexiang University, Jiexiang University, China (September 25, 2019).
 21. "Advances in Ferrate Technology: Elucidating Role of Activated Ferrate to Remove Organic Pollutants Rapidly"
Inviting Seminar, College of Environmental Science, Shanghai University of Technology, Shanghai, China (September 24, 2019).
 22. "Advances in Ferrate Technology: Elucidating Role of Activated Ferrate to Remove Organic Pollutants Rapidly"
Inviting Seminar, College of Environmental Science, Xiamen University, Xiamen, China (September 23, 2019).
 23. "Current Status of Ferrate Technology in Oxidizing Micropollutants and Natural Nanoparticles in Environment"
Inviting Seminar, Dalian University of Technology, Dalian, China (September 4, 2019).
 24. "Conducting Scientific Research and Publishing Research"
Inviting Seminar, North Electric Power University, Jilin City, China (July 26, 2019).
 25. "Activated Ferrate to Rapidly Oxidize organic pollutants in water"
Inviting Seminar, North Electric Power University, Jilin City, China (July 26, 2019).
 26. "High-Valent Iron Species (Ferrates): Energy and Environmental Applications"
Inviting Seminar, Chemistry Department, Inner Mongolia University, Hohhot, China (July 23, 2019).

27. "Advances in Ferrate Technology: Elucidating Role of Activated Ferrate to Remove Organic Pollutants Rapidly"
Inviting Seminar, College of Environmental Science and Sustainable Resources, Nanjing Agricultural University, Nanjing, China (July 19, 2019).
28. "Advances in Ferrate Technology: Elucidating Role of Activated Ferrate to Remove Organic Pollutants Rapidly"
Inviting Seminar, Department of Environmental Engineering, Nankai University, Tianjin, China (July 18, 2019).
29. "Advances in Ferrate Technology: Elucidating Role of Activated Ferrate to Remove Organic Pollutants Rapidly"
Inviting Seminar, Department of Environmental Engineering, Sichuan University, Chengdu, China (July 12, 2019).
30. "Advances in Ferrate Technology: Elucidating Role of Activated Ferrate to Remove Organic Pollutants Rapidly"
Inviting Seminar, Department of Environmental Engineering, Polytechnic University, of Technology, Hong Kong, China (July 11, 2019).
31. "Advances in Ferrate Technology: Elucidating Role of Activated Ferrate to Remove Organic Pollutants Rapidly"
Inviting Seminar, Department of Environmental Engineering, Southern University of Science and Technology, Shenzhen, China (July 9, 2019).
32. "Natural Noble Metal Nanoparticles: Formation, Stabilization, and Toxicity in Aquatic Environment"
Inviting Seminar, Institute of Geochemistry, Chinese Academy of Science, Guiyang, China (July 4, 2019).
33. "Role of Natural Organic Matter in Formation of Disinfection Byproducts and Natural Nanoparticles"
Plenary Speaker, NOM and Environment, Kunming, China (June 29, 2019).
34. "Advances in Ferrate Technology: Elucidating Role of Activated Ferrate to Remove Organic Pollutants Rapidly"
Invited Seminar, Université Paris-Est Marne la Vallée, Institut Francilien des Sciences Appliquées, Paris, France (May 22, 2019)
35. "High-Valent Iron Species in Super Iron, Organic Synthesis, and Purification of Water"
Invited Seminar, National Center of Scientific Research, Athens, Greece (May 10, 2019).
36. "Ferrates in Purification of Water and Wastewater"
Invited Seminar, College of Urban and Environmental Sciences, Peking University, Beijing, China (April 29, 2019).

37. "Activated Ferrate: Accelerated Oxidation of Organic Pollutants in Water"
Plenary Talk, International Symposium of Nanoscience and Nanotechnology, Xian, China (April 27, 2019).
38. "Ferrate Treatment Technology: Oxidation and Coagulation of Pollutants and Inactivation of Microorganisms"
Invited Seminar, Chemistry Department, Kunming University of Science and Technology, Kunming, China (April 26, 2019).
39. "Activated Ferrate to Rapidly Oxidize Organic Pollutants in water"
Invited Seminar, Dalian University of Science and Technology, Dalian, China (April 24, 2019).
40. "Natural Nanoparticles: Mechanism of Formation and Toxicity in Aquatic Environment"
Invited Seminar, Guangdong Institute of Soil Science, Guangzhou, China (March 16, 2019).
41. "Activated Ferrate: Accelerated Oxidation of Organic Pollutants in Water"
Invited Seminar, Guangdong University of Technology, Guangzhou, China (March 15, 2019).
42. "Activated Ferrate(VI): Involvement of Fe^V and Fe^{IV} in Rapid Oxidation of Organic Pollutants in Water"
Invited Seminar, Sun-Yat Sun University, Guangzhou, China (March 15, 2019).
43. "Natural Noble Metal Nanoparticles: Formation, Stabilization, and Toxicity in Aquatic Environment"
Invited Seminar, Guangdong Institute of Soil Science, Guangzhou, China (March 14, 2019).
44. "Ferrates in Purification of Water and Wastewater"
Invited Seminar, Fuzhou Normal University, Fuzhou, China (March 13, 2019).
45. "High-Valent Iron Species in Super Iron, Organic Synthesis, and Purification of Water"
Invited Seminar, Fuzhou University, Fuzhou, China (March 13, 2019).
46. "Ferrates: Green Materials in Energy Storage, Organic Synthesis, and Purification of Water"
Invited Seminar, Urban Environmental Institute, Chinese Academy of Science, Xiamen, China (March 12, 2019).
47. "Ferrate Treatment Technology: Oxidation and Coagulation of Pollutants and Inactivation of Microorganisms"
Invited Seminar, Department of Chemistry, Texas A&M University-Corpus Christi, Corpus Christi, Texas (March 4, 2019).
48. "Ferrates: Green Materials in Energy Storage, Organic Synthesis, and Purification of

Water”

Invited Seminar, Department of Chemistry, Texas A&M University-Kingsville, Kingsville (March 4, 2019).

49. “High-Valent Iron Species in Supper Iron, Organic Synthesis, and Purification of Water”
Invited Seminar, Department of Chemistry, University of Texas-Rio Grande Valley, Texas (March 5, 2019).
50. “Ferrate Technology: Current Status in Treatment of Water and Wastewater”
Invited Seminar, Department of Chemical and Biochemical Engineering, Western University, London, Canada (2018)
51. “Natural Noble Metals Nanoparticles: Formation, Stabilization, and Toxicity in the Environment”
Keynote Speaker, The 2018 International Conference on Nanogeosciences”, Guiyang, China (2018).
52. “Natural Noble Metals Nanoparticles: Formation, Stabilization, and Toxicity in the Environment”
Invited Seminar, Faculty of Agricultural and Food Sciences, American University of Beirut, Beirut, Lebanon (2018).
53. “Ferrates: Emerging Advanced Materials in Biomedical, Environmental, Energy, and Industrial Applications”
Invited Seminar, School of Public Health, American University of Beirut, Beirut, Lebanon (2018).
54. “Ferrates: Emerging Advanced Materials in Energy, Biomedical, Industrial Synthesis, and Environmental Remediation”
Invited Seminar, International Research Center of Renewable Energy, Xian Jiaotong University, Xian (2018).
55. “Current Status of Ferrate Technology in Treatment and Natural Nanoparticles in Environment”
Invited Seminar, Lanzhou Institute of Chemical Physics, Lanzhou (2018).
56. “Ferrate Technology in Treatment of Contaminated Water”
Invited Seminar, Department of Environmental Engineering, Chongqing University, Chongqing, China (2018).
57. “Ferrate Technology in Treatment of Contaminated Water”
Invited Seminar, School of Environmental Science, Chongqing Jiaotong University, Chongqing, China (2018).
58. “Ferrate Technology in Treatment of Contaminated Water”
Invited Seminar, Department of Environmental Engineering, Sichuan University,

- Chengdu, China (2018).
59. "Treatment of Contaminants using Ferrate Technology: Current Status"
Invited Seminar, Department of Environmental Engineering, The University of Hong Kong, Hong Kong (China).
 60. "Natural Nanoparticles: Formation, Stabilization and Toxicity in Aquatic Environment"
Invited Seminar, Northwest A&F University, Yangling, China (2018).
 61. "Collaborations in China in Environmental Science and Technology"
Invited Seminar, Shaanxi University of Science and Technology, Xian, China (2018).
 62. "Conducting Scientific Research and Publishing Research"
Invited Seminar, Shaanxi University of Science and Technology, Xian, China (2018).
 63. "Treatment of Contaminants using Ferrate Technology: Current Status"
Invited Seminar, Department of Environmental Engineering, Harbin Institute of Technology-Weihai, Weihai (2018)
 64. "Ferrates: Emerging Advanced Materials in Energy, Biomedical, Industrial Synthesis, and Environmental Remediation"
Invited Seminar, College of Environmental Science, Zhejiang University, Hangzhou (2018).
 65. "Current Status of Ferrate Technology in Treatment and Natural Nanoparticles in Environment"
Invited Seminar, Zhejiang University of Science and Technology, Hangzhou (2018).
 66. "Ferrate Technology in Treatment of Contaminated Water"
Invited Seminar, Department of Environmental Science, Jilin Agricultural University, Changchun, China (2018).
 67. "Ferrate Technology in Treatment of Contaminated Water"
Invited Seminar, Northeast Electric Power University, Jilin, China (2018).
 68. "Natural Nanoparticles: Formation, Stabilization and Toxicity in Aquatic Environment"
Invited Seminar, Department of Environmental Science, Northeast Electric Power University, Jilin, China (2018).
 69. "High-Valent Iron Species (Ferrates) in Sustainable Water Treatment: Underlying Reaction Mechanisms"
Invited Seminar, *Department of Chemistry, University of Texas, Arlington, Texas* (2017).
 70. "Ferrate Technology: Green and Sustainable in Water Treatment"
Invited Seminar, *College of Environmental Science, Baylor University, Waco, Texas* (2017).

71. "Activation of Ferrate in Treatment of Micropollutants: Current Knowledge and Future Outlook"
Key Note Plenary Presentation, *2017 International Symposium on Environmental Science and Technology*, Beijing, China (2017).
72. "Ferrate Treatment Technology in Sustainable Water Environment"
Invited Presentation, International Conference in Sustainability, Seoul, South Korea (2017).
73. "Collaboration in Environmental Science in China"
Invited Presentation, *2017 International Symposium on Environmental Science and Technology*, Beijing, China (2017).
74. "Natural Inorganic Nanoparticles: Formation, Fate, and Toxicity in Environment"
Key Note Lecture, *33rd International Conference of the Society for Environmental Geochemistry and Health (SEGH 2017)*, Guangzhou, China (2017).
75. "Advances Made in Ferrate Technology to Treat Water and Wastewater"
Invited Presentation, North China Electric Power University, Beijing, China (2017).
76. "Natural Nanoparticles: Formation, Fate, and Toxicity in Environment"
Invited Seminar, Department of Environmental Science & Engineering, Xian Jiaotong University, China (2017).
77. "Ferrates: Emerging Advanced Materials for Energy, Environment, Biomedical and Industrial Organic Synthesis"
Invited Seminar, College of Environmental Science and Technology, Shaanxi University of Science and Technology, Xian, China (2017)
78. "Natural Nanoparticles: Formation, Fate, and Toxicity in Environment"
Invited Seminar, Regional Center for Eco-Environmentally Sciences, Chinese Academy of Science, Beijing, China (2017).
79. "Ferrate Treatment Technology in Sustainable Water Environment"
Invited Seminar, Environmental Science and Technology, Dalian University of Technology, Dalian, China (2017).
80. "Natural Nanoparticles: Formation, Fate, and Toxicity in Environment"
Invited Seminar, College of Environmental Science, Zhejiang University, Hangzhou, China (2017).
81. "Ferrates(Fe^{VI} , Fe^{V} , and Fe^{IV}) as Green Materials in Multimodal Action to Treat Water"
Invited Seminar, *Chemistry Department, Ewha Women University, Seoul, South Korea, China* (2017).
82. "Ferrate Treatment Technology in Sustainable Water Environment"
Invited Seminar, Department of Environmental Engineering, Nanyang Technical

University, Singapore (2017).

83. "Ferrate Treatment Technology: Oxidation and Coagulation of Pollutants and Inactivation of Microorganisms"
Invited Seminar, Department of Environmental Science and Engineering, National University of Singapore, Singapore (2017).
84. "Ferrate Treatment Technology in Sustainable Water Environment"
Invited Seminar, Department of Environmental Engineering, Zhejiang University, Hangzhou, China (2017).
85. "Ferrates(Fe^{VI} , Fe^{V} , and Fe^{IV}) as Green Materials in Multimodal Action to Treat Water"
Invited Seminar, Dalian Institute of Chemical Physics, Dalian, China (2017).
86. "High-Valent Iron Based Materials in Water Treatment"
Invited Presentation, International Workshop of Advanced Materials, Urumqi (China).
87. "Natural Nanoparticles: Formation, Fate, and Toxicity in Environment"
Invited Seminar, Environmental Science, Nanjing University, China (2017).
88. "Ferrate Technology in Water Sustainable Environment"
Invited Seminar, Central South University, Changsha, China (2017).
89. "Ferrate Treatment Technology in Sustainable Water Environment"
Invited Seminar, Chemistry Department, Wuhan University, Wuhan, China (2017).
90. "Ferrate Treatment Technology in Sustainable Water Environment"
Invited Seminar, Department of Environmental Engineering, Hanzhong University of Science and Technology, Wuhan, China (2017).
91. "Ferrate Treatment Technology in Sustainable Water Environment"
Invited Seminar, Institute of Urban Environment, Chinese Academy of Science, Xiamen, China (2017).
92. "Nanoparticles in the Environment: Formation, Fate, and Toxicity"
Invited Seminar, Xiamen University, Xiamen, China (2017).
93. "Collaboration in Environmental Science and Technology in China"
Invited Seminar, Sun Yat Sen University, Guangzhou, China (2017).
94. "Iron-, Silver-, and Carbon- Based Materials in Environmental and Energy Applications"
Invited Seminar, University of North South Wales, Sydney, Australia (2017).
95. "Purification of Water using Iron Oxides: Green and Sustainable Ferrate Technology in Water Treatment"
Invited Seminar, Western Sydney University, Sydney, Australia (2017).

96. "Ferrate Technology: Green and Sustainable in Water Treatment"
V.K. Sharma,
Key Note Speaker, *Workshop on Environmental Iron Chemistry*, Shanghai, China (2016).
97. "Iron-, Silver-, and Carbon- Based Materials in Environmental and Energy Applications"
Invited Seminar, Xiamen University, Xiamen, China (2016).
98. "Ferrate as a Greener Compound: Oxygen Evolution from Water, Organic Synthesis, and Oxidative Transformation of Contaminants"
Invited Seminar, Shaanxi University of Science and Technology, Xian, China (2016).
99. "Reactive Species in Treatment of Water and Wastewater"
Invited Workshop, Kunming University of Science and Technology, Kunming, China (2016).
100. "Advances Made in Ferrate Technology to Treat Water and Wastewater"
Invited Seminar, Nanjing University, Nanjing, China (2016).
101. "Ferrate as a Greener Compound: Oxygen Evolution from Water, Organic Synthesis, and Oxidative Transformation of Contaminants"
Invited Seminar, Nanjing University of Technology, Nanjing, China (2016).
102. "Ferrate Technology: Advances made in Treating Water and Wastewater"
Invited Seminar, Jiatong Xian University, Xian, China (2016).
103. "Reactive Species in Treatment of Water and Wastewater"
Invited Workshop, Western University, London, Ontario, Canada (2016)
104. "Iron-, Silver-, and Carbon- Based Materials in Environmental and Energy Applications"
Invited Seminar, Sun Yat Sen University, Guangzhou, China (2016).
105. "Advances Made in Ferrate Technology to Treat Water and Wastewater"
Invited Seminar, Chinese Academy of Science, Urumqi, China (2016).
106. "Natural Nanoparticles in the Environment: Formation, Fate, and Toxicity"
Invited Seminar, Chinese Academy of Science, Urumqi, China (2016).
107. "Inorganic Nanoparticles in Natural Environment: Formation and Fate"
Invited Seminar, Shandong University, Jinan, China (2016)
108. "Ferrites in Sustainable Energy and Environmental Remediation: Mössbauer Spectroscopy Characterization"
Invited Presentation, Mediterranean Conference on the Applications of the Mössbauer Effect" Cavtat, Croatia (2016).

109. "Conducting Research and Publishing Scientific Research"
Invited Presentation, Center of Cyanobacteria and Toxins, Chinese Academy of Science, Brno, Czech Republic (2016).
110. "Iron-, Silver-, and Carbon-Based Nanomaterials in Environmental and Energy Applications"
Invited Seminar, University of Texas at Arlington, Arlington, Texas (2016).
111. "**Invited Seminar**, Nanjing Institute of Technology, Nanjing, China (2016). "Advances Made in Ferrate Technology in Treating Water and Wastewater"
Invited Seminar, Dalian University of Technology, Dalian, China (2016).
112. "Iron-, Noble Metals-, and Carbon-Based Nanomaterials in Environmental and Energy Applications"
Invited Seminar, Institute of Urban Environment, Chinese Academy of Science, Xiamen, China (2016).
113. "Pulse Radiolysis Studies of Ferrates"
Invited Seminar, Tongji University, Shanghai, China (2016).
114. "Advances Made in Ferrate Technology to Treat Water and Wastewater"
Invited Seminar, Nanjing University, Nanjing, China (2016).
115. "Iron-, Silver-, and Carbon-Based Nanomaterials in Environmental and Energy Applications"
Invited Seminar, Nanjing Institute of Technology, Nanjing, China (2016).
116. "Advances Made in Ferrate Technology to Treat Water and Wastewater"
Invited Seminar, Huaqiao University, Xiamen, China (2016).
117. "Iron- and Carbon-Based Materials in Energy and Environmental Applications"
Invited Seminar, Xiamen Institute of Technology, Xiamen, China (2016).
118. "Ferrate and Ferryl Species: Mossbauer Spectroscopy Investigations"
Invited Speaker, *MECAME 2015, Mediterranean Conference on the Applications of the Mossbauer Effect*, Zadar, Croatia (2015).
119. "Ferrate(VI)-Promoted Removal of Metals by Ferrate(VI): Mechanism Studies using Mössbauer Spectroscopy"
Invited Speaker, *The International Conference on the Applications of the Mössbauer Effect (ICAME)*, Hamburg, Germany (2015).
120. "Multimodal Actions of Ferrate Treatment Technology in Removing Metals, Pharmaceuticals, and Cyanotoxins in Water"
Plenary Presentation, *2015 International Symposium on Environmental Science and Technology*, Chongqing, China (2015).

121. "Iron Based Sustainable Greener Technologies to Treat Cyanobacteria and Microcystin-LR in Water"
Keynote Presentation, *IWA, 2015 International Workshop on Occurrence and Control of Taste, Odours, and Algal Toxins in Waters*, Xiamen, China (2015).
122. "Ferrates(VI, V, and IV): Oxidants/Disinfectants/Coagulants in Water Treatment Technologies"
Invited Seminar, Harbin Institute of Technology, Shenzhen Graduate School, Shenzhen, China (2015).
123. "Ferrates(VI, V, and IV): Multimodal Action in Sustainable Water Treatment Technologies"
Invited Seminar, Kunming University of Science and Technology, Faculty of Environmental Science and Engineering, Kunming, China (2015).
124. "Natural Particles in Environment"
Invited Seminar, Yunan Agricultural University, Kunming, China (2015).
125. "Ferrates: Green Oxidants with Multimodal Actions in Sustainable Treatment Technologies"
Invited Seminar, Research Center of Environmental Eco-Friendly Sciences, Chinese Academy of Science, Beijing, China (2015).
126. "Iron Oxides (Ferrates) as Green Materials for Sustainable Water Treatment"
Invited Speaker, The 10th Asia Pacific Conference on Sustainable Energy & Environmental Technologies, Seoul, Korea (2015).
127. "Water Supply Sustainability and Treatment Strategies: Challenges in Coming Decades"
Invited Seminar, School of Public Health, Peking University, Beijing, China (2015).
128. "High-Valent Iron Species (Ferrates) in Sustainable Water Treatment: Underlying Reaction Mechanisms"
Invited Seminar, Institute of Chemistry, Chinese Academy of Science, Beijing, China (2015).
129. "Formation and Fate of Natural Inorganic Nanoparticles: Underlying Mechanisms"
Invited Seminar, College of Environmental Science and Engineering, Peking University, Beijing, China (2015).
130. "Ferrate (Iron-Based Material): A Broad Portfolio of Applications"
Invited Seminar, Lisbon, Faculty of Pharmacy, Lisbon, Portugal (2015).
131. "Ferrates: Green Oxidants with Multimodal Actions in Treatment Technologies"
Invited Seminar, Department of Civil and Environmental Engineering, Rice University, Texas (2015)

132. "Ferrates (Iron-Based Material): A Broad Portfolio of Applications"
Invited Presentation, Earth Day Texas 2015, Dallas, Texas (2015).
133. "Emerging Issues- Climate Change and Water Pollution – Diseases"
Invited Presentation, Bush China-US Conference, Houston, Texas (2015).
134. "Ferrates and Ferryl Species: Mössbauer Spectroscopy Investigations"
Invited Presentation, Mediterranean Conference on the Applications of the Mössbauer Effect" 2015, Zadar, Croatia (2015).
135. "Ferrates (Iron-Based Material): A Broad Portfolio of Applications"
Invited Seminar, Institute for Medicines and Pharmaceutical Sciences, Lisbon University, Lisbon, Portugal (2015).
136. "High-Valent Iron Species: Greener Materials in Sustainable Treatment Technologies"
Invited Seminar, Chemistry Department, Osaka University, Osaka, Japan (2015).
137. "Novel Ferrate Technology in Treating Emerging Pollutants and Toxins in Water"
Invited Seminar, Chemistry Department, Tokyo Metropolitan University, Tokyo, Japan (2015).
138. "Water Structure and Ferrates as Green Material in Treating Water"
Invited Lecture, Chemistry Department, Toho University, Chiba, Japan (2015).
139. "Ferrates: Green Materials in Treating Water and Natural Silver Nanoparticles in the Environment"
Invited Seminar, Department of Chemistry, Hohai Univeristy, Nanjing (2015).
140. "Ferrates: Greener Oxidants with Multimodal Action in Treatment Technologies"
Invited Seminar, Department of Environmental Engineering, Tongji University, Shanghai, China (2014).
141. "Ferrates: Green Materials in Treating Water and Natural Silver Nanoparticles in the Environment"
Invited Seminar, School of Public Heath, Shandong University, Jinan, China (2015).
142. "Ferrates: Green Materials in Treating Water and Natural Silver Nanoparticles in the Environment"
Invited Seminar, Department of Environmental Engineering, Zhejiang University, Hongzhou, China (2015).
143. "Ferrates: Greener Oxidants with Multimodal Action in Treatment Technologies"
Invited Seminar, Institute of Geochemistry, Chinese Academy of Science, Guangzhou, China (2014).
144. "Ferrates: Disinfecting and Detoxifying Agents"
Invited Seminar, Department of Environmental Engineering, Sun-Yat Sen University,

- Guangzhou, China (2014).
145. "High-Valent Iron-Based Green Materials in Purifying Air and Water"
Invited Lecture, *Workshop on Green Chemistry on Environmental Technology and Materials*, Tunghai University, Department of Environmental Science and Engineering, Taichung City, Taiwan (2014).
 146. "Silver Nanoparticles: Formation, Fate, and Toxicity in Aquatic Environment"
Invited Seminar, Hung Kuang University, Taichung City, Taiwan (2014).
 147. "Ferrates- Chemistry and Applications"
Invited Seminar, National Chi Nan University, Nantou County, Taiwan (2014)
 148. "High-Valent Iron Species as Green Materials for Disinfection and Detoxification"
Invited Seminar, Veterinary Medicine & Biomedical Sciences, Texas A&M University, College Station, Texas (2014)
 149. "Ferrates(VI, V, and IV): Oxidants/Disinfectants/Coagulants in Water Treatment Technologies"
Invited Seminar, Swiss Federal Institute of Aquatic Science and Technology (EAWAG), Dübendorf, Switzerland (2014).
 150. "Ferrites and Ferrates: Green Materials in Energy and Environmental Applications"
Invited Seminar, Ruđer Bošković Institute, Zagreb, Croatia (2014).
 151. "Ferrates and Ferrites: Decomposition and Application Studies using Mossbauer Spectroscopy"
Invited Speaker, Conference on Mossbauer Spectroscopy in Materials Science (MSMS 2014), Hlohovec, Czech Republic (2014).
 152. "Mossbauer Spectroscopy: Applications in Biology, Chemistry, Nanotechnology, and Industry"
Invited Seminar, Technical University of Warsaw, Warsaw, Poland (2014).
 153. "Reactive Intermediates in Treatment of Water and Wastewater"
Invited Lecture, Harbin Institute of Technology, Harbin, China (2014).
 154. "Ferrates as Disinfectant and Green Chemical to Treatment Pollutants in Water"
Invited Seminar, Northeast Dailin University, Jilin City, China (2014).
 155. "Conduct Scientific Research and Publish Results"
Invited Lecture, Northeast Dailin University, Jilin City, China (2014).
 156. "Ferrates (VI, V, and IV): Fundamentals and Applications"
Invited Seminar, Notre Dame Radiation Center, Notre dame, Indiana (2013).
 157. "Ferrate as Disinfectant and Green Chemical to Treat Pollutants in Water"

- Invited Seminar**, Barry University, Miami, Florida (2013).
158. "Ferrates(IV,V, and VI): Fundamental and Applications in Treatment of Water and Wastewater"
Invited Seminar, State Key Laboratory of Pesticides & Chemical Biology, Ministry of Education, Hua Zhong Normal University, Wuhan, China (2013).
159. "Ferrate Technology in Treatment of Water and Wastewater"
Invited Seminar, Harbin Institute of Technology, Harbin, China (2013).
160. "Ferrites and Ferrates as Environmental Friendly Materials in Photocatalytic Remediation And Energy Processes"
Invited Seminar, Dalian Institute of Chemical Physics, Dalian, China (2013).
161. "Photocatalytic Oxidation of Amino Acids"
Invited Presentation, *2013 International Symposium on Environmental Science and Technology*, Dalian, China (2013).
162. "Advances Made in Ferrate Technology To Treat Water and Wastewater"
Plenary Presentation, *2013 International Symposium on Environmental Science and Technology*, Dalian, China (2013).
163. "Ferrites and Ferrates as Environmental Friendly Materials: Mössbauer Spectroscopy Investigation"
Invited Seminar, Institute of Molecules and Materials of Le Mans, CNRS, University of Maine, France (2013).
164. "Ferrates(IV, V, and VI): Fundamentals and Applications"
Invited Seminar, School of Architecture, Civil and Environmental Engineering (ENAC), Ecole Polytechnique Fédérale Lausanne, Switzerland (2013).
165. "Ferrate Technology in Water and Wastewater Treatment"
Invited Seminar, KWR Watercycle Research Institute, Nieuwegein, Netherlands (2013).
166. "Oxidation of compounds by high-valent iron species: one- and two-electron transfer Steps"
Invited Presentation, *245th ACS National Meeting*, New Orleans, Louisiana (2013).
167. "Oxidative transformation of microcystin-LR by ferrate"
Invited Presentation, *245th ACS National Meeting*, New Orleans, Louisiana (2013).
168. "Ferrates(VI, V, and IV): Fundamentals and Applications"
Invited Seminar, Chemistry Department, Florida International University, Miami, Florida (2013).
169. "Oxidation of Pharmaceuticals by Ferrate(VI)"

- Invited Seminar**, Department of Environmental Engineering, University of Seoul, Seoul, Korea (2013).
170. "Ferrate(VI): Fundamentals and Applications"
Invited Seminar, Department of Environmental Engineering, Yonsei University, Wonju, Korea (2013).
171. "Mossbauer Spectroscopy of High-Valent iron Species: Industrial and Environmental Applications"
Invited Speaker, *XIII Latin American Conference on the Applications of the Mössbauer Effect - LACAME 2012*, Medellín, Colombia (2012).
172. "Ferrate(VI), V, and IV): Fundamentals and Applications"
Invited Seminar, Institute of Chemistry, Chinese Academy of Science, Beijing, China (2012).
173. "Novel Ferrate Technology in Purifying Air and Water"
Invited Seminar, Environmental Engineering, Shandong University, Jinan, China (2012).
174. "Mossbauer Spectroscopy in Studying of Synthesis and Environmental Applications of Ferrate(VI)"
Plenary Presentation, *Mossbauer Spectroscopy in Material Science 2012*, Olomouc, Czech Republic (2012).
175. "Water Consumption and Water Treatment: Regional Aspects"
Invited Presentation, *Sustainability 2012: Regional Aspects, International Interdisciplinary Sustainability Forum*, Eger, Hungary (2012)
176. "Formation and Stability of Silver Nanoparticles in Aquatic Environment"
Invited Seminar, *Research Center for Toxic Compounds, Masaryk University*, Brno, Czech Republic (2012).
177. "Oxidation of Emerging Contaminants by Novel Ferrate Technology"
Invited Seminar, *Laboratoire Géomatériaux et Environnement (LGE), Université Paris-Est*, Paris (2012).
178. "Oxidation of Emerging Contaminants by Novel Ferrate Technology"
Invited Seminar, *Institute of Chemical Engineering and Environmental Technology, Graz University of Technology*, Graz, Austria (2012).
179. "Safe and Efficient Cleaning of Polluted Water by Novel Ferrate Technology"
Invited Seminar, *Department of Chemical Engineering, University of Western Ontario, London*, Canada (2012).
180. "Novel Ferrate Technology in Water and Wastewater Treatment"

- Invited Seminar**, *Department of Civil and Environmental Engineering, University of Toronto, Toronto, Canada* (2012).
181. "Ferrates(VI, V, and IV): Fundamentals and Applications"
Invited Seminar, *Federal Institute of Hydrology, Koblenz, Germany* (2012).
182. "Silver Nanoparticles: Synthesis, Characterization, and fate in the Aquatic Environment"
Invited Seminar, *Regional Center of Advanced Technologies and Materials, Palacky University, Olomouc, Czech Republic* (2012).
183. "Oxidation of Pollutants by Novel Ferrate Technology"
Invited Seminar, *School of Environmental Science and Engineering, Sun Yat-sen University, Guangzhou, China* (2011).
184. "Chemistry of Ferrates(VI, V, and IV): Fundamentals and Applications"
Invited Seminar, *Regional Center of Advanced Technologies and Materials, Palacky University, Olomouc, Czech Republic* (2011).
185. "Oxidation of Pollutants by Novel Ferrate Technology"
Invited Seminar, *Vienna Institute of Technology, Vienna, Austria* (2011).
186. "Oxidation of Pollutants by Novel Ferrate Technology"
Invited Seminar, *Tunghai University, Taichung, Taiwan* (2011).
187. "Water Splitting to Generate Hydrogen using Visible Light Photocatalysts"
Invited Seminar, *National Tsing Hua University, Hsinchu, Taiwan* (2011).
188. "Oxidation of Pollutants by Novel Ferrate Technology"
Invited Seminar, *Graduate Institute of Environmental Engineering, National Taiwan University, Taipei, Taiwan* (2011).
189. "Ferrates(Fe(VI), V, and IV): Green Chemistry Oxidants"
Invited Seminar, *VERFIN Finnish Institute for Verification of the Chemical Weapons Convention, University of Helsinki, Finland* (2011).
190. "Fate, Effects, and Control of Sea-Dumped Chemical Weapons"
Invited Seminar, *International Seminar on Environmental Effects Related to Waste Originating from Sea-Dumped Chemical Munitions, Vilnius, Lithuania* (2011)
191. "Ferrate Technology in Water Supply Sustainability"
Plenary Presentation, *2011 International Symposium on Environmental Science and Technology, Dongguan, Guangdong Province, China* (2011).
192. "Oxidation of Pollutants by Novel Ferrate(VI) Process: Fundamentals and Applications"
Invited Presentation, *International Workshop on Frontiers in Environmental Chemical Research, POSTECH, Korea* (2011)

193. "Ferrates(VI, V, and IV): Green Chemistry Oxidants"
Invited Seminar, *Long Island ACS Section*, New York (2011).
194. "Reactivity of Aqua Ferrate (VI, V, and IV) with Inorganic and Organic Compounds: Green Chemistry"
Invited Seminar, *Maria Sklodowska-Curie Polish Radiation Research Society*, Lodz, Poland (2010).
195. "Ferrates(VI, V, and IV): Green Chemistry Oxidants in Water Treatment"
Invited Seminar, *Water Research Institute, National Research Council*, Rome, Italy (2010).
196. "Ferrates [Iron(VI) and Iron(V)] – Environmentally-Friendly Oxidants, Coagulants and Disinfectants"
Invited Seminar, *Instituto Catalana de Recerca I Estudis Avancats, IDEAE*, Barcelona, Spain (2009).
197. "Ferrate (Iron(VI)): Environmental-Friendly Oxidant, Coagulant, and Disinfectant"
Invited Lecture, *The Ukrainian State Chemical Institute, Dnepropetrovsk*, Ukraine (2009).
198. "Reactivity of Oxyiron (VI, V, and IV) with Inorganic and Organic compounds in Aqueous Solution: Pulse Radiolysis studies"
Invited Lecture, *26th Miller Conference in Radiation Chemistry*, Keszthely, Hungary, 2009.
199. "Ferrate(VI)-Oxidant, Disinfectant, and Coagulant"
Invited Seminar, *Institute of Colloidal Chemistry and Environmental Science*, Kiev, Ukraine (2009).
200. "Ferrate (Iron(VI)) – Environmentally-Friendly Oxidant, Coagulant and Disinfectant"
Invited Seminar, *UNESCO-IHE Institute of Water Education, Delft*, Netherlands (2008).
201. "Ferrates: Synthesis, Properties, and Applications in Water Treatment"
Invited Lecture, *M.V. Lomonosov Moscow State University*, Moscow, Russia (2008).
202. "Ferrate(VI) Technology in Treating Emerging Contaminants and Toxins in Water"
Special Seminar, *Chiang Mia University*, Chiang Mia, Thailand (2008).
203. "Chemistry of Higher Oxidation States of Iron (Ferrates)"
Invited Lecture, *Konan University, Shobe*, Japan (2008).
204. "Aqua Ferrate(VI, V, and IV): Properties and their Potential in Remediation Processes"
Invited Lecture, *Kinki University, Iizuka*, Japan (2008).

205. "Ferrate(VI) Technology in Treating Emerging Contaminants and Toxins in Water and Wastewater"
Invited Seminar, *Kyoto University, Kyoto, Japan (2008).*
206. "Ferrate(VI) Technology in Treating Emerging Contaminants and Toxins in Water and Wastewater"
Invited Seminar, *Yamanashi University, Kofu, Japan (2008).*
207. "Ferrate(VI) oxidation of Endocrine Disruptors and Pharmaceuticals: Kinetics and Products Formation,
Invited Lecture, *University of Seoul, Seoul, South Korea (2008).*
208. "Ferrates(VI)-Environmentally-Friendly Oxidants, Disinfectants, and Coagulants) in Water and Wastewater Treatment"
Invited Seminar, *Chulalongkorn University, Bangkok, Thailand (2007).*
209. "Ferrate(VI) Technology in Treating Emerging Contaminants and Toxins in Water and Wastewater"
Invited Seminar, *Eötvös Loránd University, Budapest, Hungary (2006).*
210. "Aqua Ferrate(VI, V, and IV) and their Potential in Remediation Processes"
Invited Seminar, *Institute of Isotopes, Hungarian Academy of Science, Budapest, Hungary (2006).*
211. "Ferrates(Iron(VI) and Iron(V))-Environmentally-Friendly Oxidants, Disinfectants , and Coagulants) in Water and Wastewater Treatment"
Invited Seminar, *Bren School of Environmental Science and Management, University of California-Santa Barbara (2006).*
212. "Ferrates(Iron(VI) and Iron(V))-Environmentally-Friendly Oxidants, Disinfectants , and Coagulants) in Water and Wastewater Treatment"
Seminar, *University of California-Berkeley (2006).*
213. "Ferrates(Iron(VI) and Iron(V))-Environmentally-Friendly Oxidants, Disinfectants , and Coagulants) in Water and Wastewater Treatment"
Seminar, *California Institute of Technology (2006).*
214. "Ferrates(Iron(VI) and Iron(V))-Environmentally-Friendly Oxidants, Disinfectants , and Coagulants) in Water and Wastewater Treatment"
Invited Seminar, *University of Seoul, Korea (2005).*
215. "Ferrates(Iron(VI) and Iron(V))-Environmentally-Friendly Oxidants, Disinfectants , and Coagulants) in Water and Wastewater Treatment"
Seminar, *EAWAG, Swiss Federal Institute of Aquatic Science and Technology, Dübendorf, Switzerland (2005).*
216. "Ferrates(Iron(VI) and Iron(V))-Environmentally-Friendly Oxidants, Disinfectants , and

- Coagulants) in Water and Wastewater Treatment”
Seminar, *Imperial College, London, United Kingdom*, (2005).
217. “Ferrates (Iron(VI) and Iron(V)): Environmentally-Friendly Oxidants and Disinfectants”
Invited Seminar, *Hong Kong Polytechnic University, Hong Kong* (2004).
218. “Chemistry and Applications of High Oxidation States of Iron (Fe(VI), Fe(V), and Fe(IV))”
Invited Seminar, *Budapest University of Science and Technology, Budapest, Hungary* (2003).
219. “Chemistry and Applications of High-Valent Oxy-Iron Compounds”
Invited Seminar, *Institute of Inorganic Technology, Bratislava, Slovakia* (2003).
220. “Higher Oxidation States of Iron (Fe(VI), Fe(V), and Fe(IV)): Properties and Applications”
Invited Seminar, *Chemistry Department, Yonsei University, Seoul, Korea* (2003).
221. “Higher Oxidation States of Iron (Fe(VI), Fe(V), and Fe(IV)): Environmentally-Friendly Oxidants”
Special Seminar *hosted by Thai Chemical Society at Chulalongkorn University, Bangkok, Thailand* (2003).
222. “Higher Oxidation States of Iron (Fe(VI), Fe(V), and Fe(IV)): Environmentally Friendly Oxidants in Wastewater Treatment”
Invited Seminar, *Institute of Chemical Technology, Prague, Czech Republic* (2002).
223. “Higher Oxidation States of Iron in Aqueous Solution: Thermodynamics and Kinetics”
Seminar, *J. Heyrovsky Institute of Physical Chemistry, Prague, Czech Republic* (2002).
224. “Studies of Hypervalent iron (Fe(VI), Fe(V), and Fe(IV) in Aqueous solution”
Seminar, *Max Planck Institute Festkörperforsch, Stuttgart, Germany* (2002).
225. “Studies of High Oxidation States of Iron (Fe(VI), Fe(V), and Fe(IV)) in Aqueous Solutions”
Invited Seminar, *Eötvös Loránd University, Budapest, Hungary* (2002).
226. “Ferrates (Fe(VI), Fe(V), and Fe(IV)): Properties and Applications”
Invited Seminar, *Royal Institute of Technology (KTH), Stockholm, Sweden* (2002).
227. “Reactivities of Ferrates (Fe(VI), Fe(V), and Fe(IV)) with compounds of Environmental and Biological interests”
Invited Seminar, *Pohang University of Science and Technology, Korea* (2002).
228. “Ferrates (Fe(VI), Fe(V), and Fe(IV)) in Wastewater Treatment”
Invited Seminar, *Research Center for Water Environmental Technology, University of Tokyo, Japan* (2002).

229. "Reactivities of Ferrates (Fe(VI), Fe(V), and Fe(IV)) with Compounds of Biological Interests"
Invited Seminar, *Kyushu University, Fukuoka, Japan* (2002).
230. "The Chemistry of Higher Oxidation States of Iron (Fe(VI), Fe(V), and Fe(IV))"
Invited Seminar, *Jet Propulsion Laboratory, Pasadena, California* (2001).
231. "Potassium Ferrate(VI): An Environmentally-Friendly Oxidant"
Invited Seminar, *National University of Mexico, Mexico City, Mexico* (2001).
232. "Higher Oxidation State of Iron (Fe(VI), Fe(V), and Fe(IV)): Environmentally Friendly Oxidants"
Invited Seminar, *Chulalongkorn University, Bangkok, Thailand* (2001).
233. "Ferrates (Fe(VI), Fe(V) and Fe(IV)): Alternate Oxidants in Wastewater Treatment"
Invited Seminar, *National University of Singapore, Singapore* (2001).

ORGANIZER-CONFERENCES/SYMPOSIA:

Organizer – Symposium "Impact of Engineered & Natural Nanomaterials on the Environment: A Symposium in Honor of Dr. Michael F. Hochella" at 260th ACS National Meeting at Philadelphia, Pennsylvania (2021).

Organizer – Symposium "Chemistry of Water Reuse Processes toward Water Sustainability" at 258th ACS National Meeting at San Francisco, California (2019).

Organizer – Symposium "Chemistry of Water Reuse Processes toward Water Sustainability" at 258th ACS National Meeting at San Francisco, California (2019).

Organizer - Symposium "Photocatalytic and Electrochemical Processes: Fundamentals and Applications in Green Energy and Environmental Remediation: A Symposium in Honor of Professor Krishnan Rajeshwar" at 257th ACS National Meeting at Orlando, Florida (2019).

Co-Chair – Mediterranean Conference on the Applications of the Mössbauer Effect (MECAME2016) in Honor of Professor Frank Berry, Zadar, Croatia, 2018.

Organizer - Symposium "Environmental Behaviors and Health Effects of Pollutants: A Symposium in Honor of Professor Guibin Jiang" at 256th ACS National Meeting at Boston, Massachusetts (2018).

Organizer – Symposium "Chemical Reactions at Solid-Water Interfaces of the Natural and Built Environment, at 256th ACS National Meeting at Boston, Massachusetts (2018).

Organizer - Symposium "Shaping Activity through Structure Modification: from Small Molecule to Nanoparticle: A Symposium in Honor of Professor Bing Yan" at 255th ACS National Meeting at

New Orleans, Louisiana (2018).

Co-Chair – *Mediterranean Conference on the Applications of the Mössbauer Effect (MECAME2018) in Honor of Professor Frank Berry, Zadar, Croatia, 2018.*

Organizer - Symposium "*Oxidation Processes, Nanoparticles, and Membranes in Water and Wastewater Treatment in Honor of Professor Jun Ma*" at 253rd ACS National Meeting at San Francisco, Pennsylvania (2017).

Organizer – Session "*Nanoparticles: Formation, Fate, and Toxicity in Aquatic Environment*" at 33rd International Conference of the Society of Environmental Geochemistry and Health (SEGH 2017), Guangzhou, China (2017).

Co-Chair – *Mediterranean Conference on the Applications of the Mössbauer Effect (MECAME2018) in Honor of Professors Rivka Bauminger and Rolfe Herber, Jerusalem, Israel 2017*

Organizer – Symposium "*Formation and Transformation of Atmospheric Aerosols: Air Pollution to Climate Change*" in Honor of Professor Renyi Zhang" at 252nd ACS National Meeting at Philadelphia, Pennsylvania (2016).

Organizer – Symposium "*Greener Pathways to Organic and Nanomaterials: Sustainable Applications of Magnetic Nanocatalysts*" in Honor of Dr. Rajender S. Varma" at 251st ACS National Meeting at San Diego, California (2016).

Co-Chair – *Mediterranean Conference on the Applications of the Mössbauer Effect (MECAME2016) in Honor of Professor Philipp Gütlich, Dubrovnik, Croatia, 2016.*

Organizer – *Symposium "Ferrites and Ferrates: Chemistry and Applications in Sustainable Energy and Environmental Remediation"* at the International Chemical Congress of Pacific Basin Societies 2015, Honolulu, Hawaii (2015).

Organizer – *Symposium "Nuclear Probes in Nanoscale Characterization"* at the International Chemical Congress of Pacific Basin Societies 2015, Honolulu, Hawaii (2015).

Co-Organizer – Symposium "*Emerging Electrochemical Water Remediation Technologies: A symposium in Honor of Professor Enric Brillas and Professor Mehmet A. Oturan*" at 250th ACS National Meeting at Boston, Massachusetts, 2015.

International Advisory Board member - 2015 *International Symposium on Environmental Science and Technology*, Chongqing, China.

Co-Organizer – *Mediterranean Conference on the Applications of the Mössbauer Effect (MECAME2015) in Honor of Professor Svetozar Music, Zadar, Croatia, 2015.*

Co-Organizer – Symposium "*Thermodynamics and Kinetics in Treatment Processes: Past, Present, and Future*" 248th ACS National Meeting at San Francisco, California, 2014.

Co-Organizer – Symposium “*Chemistry and Application of Green Catalysts for Energy Transformation and Emission Control*” 246th ACS National Meeting at Indianapolis, Indiana, 2013.

International Advisory Board member - 2013 *International Symposium on Environmental Science and Technology*, Dalian, China.

Session Chair – Symposium “*Chemistry and Applications of Advanced oxidation processes for removal of Contaminants of Emerging Concern: Chemical oxidation and Free Radicals*” 245th ACS National Meeting, New Orleans, Louisiana (2013).

Co-Organizer – Symposium “*Interactions of Nanomaterials with Emerging Environmental Contaminants*” 244th ACS National Meeting at Philadelphia, 2012.

Co-Organizer – Symposium “*Nanotechnology and the Environment: Green Technology*” in 243rd ACS National Meeting at San Diego, 2012.

Session Chair – 27th *Miller Conference in Radiation Chemistry*, Tallsberg, Sweden, 2011.

Co-Organizer – “*6th Biannual Nassau Argonne International Mössbauer Symposium*” at Nassau Community College in Garden City, New York, January 13-14, 2011.

International Advisory Board member – *International Conference on Advances in Environmental Chemistry*, Aizwal, India, November 16-18, 2011.

International Advisory Board member - 2011 *International Symposium on Environmental Science and Technology*, Dongguan, Guangdong Province, China.

Special Session Chair – “*Advanced Oxidation Processes- Environmental Applications*” at 2011 *International Symposium of Environmental Science and Technology*, China.

Organizer – Symposium “*Chemical Applications of Mössbauer Spectroscopy*” in 239th ACS National Meeting in San Francisco, California, 2010.

Session Chair – Symposium “*Emerging Environmental Technologies towards a Cleaner and Sustainable Society*” in 2009 ACS Fall National meeting at Washington DC, 2009.

Organizer – Symposium “*Speciation and Kinetics in Natural Waters in honor of Frank Miller*” in 2009 ACS Spring National meeting at Salt Lake City, Utah, 2009.

Organizer - Symposium “*Ferrates: Synthesis, Properties, and Applications in Water and Wastewater Treatment*” in spring 2006 ACS National meeting at San Francisco, California, 2006.

Organizing Committee Member – 3rd International Conference and Exhibition on Ballast Water Management (ICBWM 2006), Singapore, 2006

Session Chair – “*Role of Iron in the Environment*” at the Sustainability’s New Age, Preservation and Planning (SNAP): An International Sustainability Forum in Melbourne, Florida, 2005.

Organizer - International Symposium “*Innovative Ferrate(VI) Technology in Water and Wastewater Treatment*” Prague, Czech Republic, 2004.

Organizing Committee Member – Mediterranean Conference on Chemistry of Aquatic Systems, Reggio Calabria, Italy, 2004

Session Chair – “*Fundamentals and Modelling*” at the 4th International Conference of Conveying and Handling Solids Particles” in Budapest, Hungary, 2003.

Alternate Councilor - Orlando Section, American Chemical Society at 246th Spring National ACS meeting, San Diego, CA, 2001.

Session Chair - “*Specialty Chemicals in the Environment*” symposium (Environmental Chemistry Division) at the Spring 2000 ACS meeting in San Francisco, California, 2000.

Organizer - Symposium “*Thermodynamics and Kinetics in Natural Waters*” in honor of Frank J. Millero in Spring 1999 ACS meeting at Anaheim, California, 1999.

Session Chair - South Texas Environmental Conference, Corpus Christi, Texas, 1996.

POSTDOCTORATE ADVISOR:

Dr. Ria Yngard	2007-2009
Dr. Zhiyong Luo	2009-2010
Dr. George Anquandah	January, 2012 – August, 2012
Dr. Chansik Kim	March 2013-January, 2016
Dr. Radina P. Kralchevska	April 2014-March 2015
Dr. Min Liu	October 2015 - September 2016
Dr. Jashanpreet Singh	September 2015-February, 2017
Dr. Jing Zhang	July, 2016-December, 2016
Dr. Mingbao Feng	February, 2017-Present
Dr. Jiaqui Liu	July, 2017-Present
Dr. Kyriakos Manoli	October, 2019-Present

GRADUATE ADVISOR:

Ph.D. Dissertation (Advisor)

Long Chen	Ferrate(VI), Ferrate(V), and Ferrate(IV) Oxidation of Microcystin-LR, Sulfadiazine, and Flumequine: Oxidized Product, 2017
Nathaniel Adegboyega	Interactions of Ag ⁺ with Fulvic Acids in Aquatic Environment, 2014
Erik Casbeer	Ferrate(VI) Oxidation of Aromatic Amino Acids, 2012
George Anquandah	Oxidative Destruction of Pharmaceuticals by Ferrate(VI), 2011

Ria Yngard Ferrate(VI) and Ferrate(V) Oxidation of Weak-Acid Dissociable Cyanides, 2007
Nadine Noorhasan Reactivity of Ferrate(VI) and Ferrate(V) with Glycine and EDTA, 2006

M.S. Thesis (Advisor)

Joshua Bell Overlooked Significance of Chromium(V) and Chromium(IV) in Environmental Chemistry and Influence of Peroxyacetic Acid On Chromium in Wastewater, 2022
Beatrice Darko Investigation of the Interaction between Ferrate(VI) and Natural Organic Matter (NOM), 2013
Long Chen Permanganate Oxidation of Sulfamethoxazole and Ferrate(VI) Oxidation of Selected Aliphatic Amino Acids, 2013
Fei Liu Oxidation of Amoxicillin and 6-Aminopenicillic Acid, 2012
Tameka E. Rolle Exploring the Capacity of a Set of Low Molecular Weight Compounds to form Silver Nanoparticles under Environmentally Relevant Conditions, 2012
Meagan Strouse Ferrate(VI) Oxidation of Model Compounds of Microcystins, 2012
Thao Hoang The oxidation of Alginic acid, Benzoic acid and Maltose by ferrate(VI) including a TiO₂ catalysis study, 2012
Abdullah El Abduly Oxydesulfurization of Benzothiophene, Dibenzothiophene, and Methylbenzothiophene by Ferrate(VI), 2010
Bhavesh Patel Reactivity of Ferrate(VI) with Iminodiacetate, Nitriloacetate, and Gly-Gly, 2008
Chenay Benoit Heterogeneous Photocatalytic Reduction of Fe(VI) in UV-Irradiated Titania Suspensions: Effect of Ammonium Ions, 2005
Santosh K. Mishra Reactivity of Ferrate(VI) with Sulfamethoxazole and Ibuprofen , 2005
Anthony Zinger The Interaction of Methionine with the Major Constituents of Natural Waters at Different Ionic Strengths and Temperatures, 2002
Christopher Burnett Ferrate(VI) Oxidation of Thiocyanate, Cyanide, and Copper(I) Cyanide with Emphasis on Gold Mill Wastewater, 2001
Fabien Casteras Dissociation Constants of Cysteine in Natural Water Media, 2001
Steven Hicks Characterization and Degradation of Selected Petroleum Hydrocarbons following an Oil Spill into a South Texas Coastal Stream, 2000
Wayne Rivera Degradation of Pollutants by Advanced Oxidation Processes, 1999
Kurtis Rhudy Assessment of the Physical and Chemical Water Quality Parameters Pertaining to Brown Tide Bloom in Baffin Bay, Texas, 1999
Brandon O'Brien Ferrate(VI) oxidation of Potassium Ferrocyanide, Potassium Ferricyanide, and Zinc Cyanide, 1998
Shari Hollyfield Contamination in Oso Bay, Texas Sediments and Oxidation of Aniline by Ferrate(VI), 1996
Jeremy Smith Ferrate(VI) Oxidation of Cyanide and Sulfide in Wastewater Effluents, 1996

Dissertation/Thesis Examiner (Foreign Universities)

Li Zhengtao Fabrication of Bbioinspired Super-Hnanofibrous Membrane for Oil-Water Separation and Directional Water Transportation, 2019

Yingying Sun Iron-Mediated Oxidant Production under Conditions Relevant to Both Natural Aquatic and Neurological Environments, University of New South Wales, Sydney, Australia, 2017

Qin Detao Novel Nanocomposite Forward Osmosis Membrane for Treating Highly Saline and Oily Wastewater with Low Fouling, High Water Flux and High Selectivity, Nanyang Technological University, 2016

Manish Gupta Synthesis of Some Metal Ferrites by Chemical Routes, Guru Nanak Dev University, Amritsar, Punjab, India, 2016

Liu Lei TiO₂ Nanocomposites Photocatalysts for Water Disinfection and Decontamination under Solar Irradiation, Nanyang Technological University, 2013

Bai Hongwei Hierarchically Structured TiO₂ Nanorod Spheres for Clean Water and Energy Production, Nanyang Technological University, 2013

Guowei Xing Reactions of Cu(I) and Cu(II) with H₂O₂ in Natural Waters: Kinetics, Mechanism and the Generation of Reactive Oxidizing Intermediates, University of New South Wales, Sydney, Australia, 2012

Manik Gupta Synthesis of Nanosized Ferrites by Solution Combustion Method and Investigation of their Magnetic and Electrical Properties, Guru Nanak Dev University, Amritsar, Punjab, India, 2012

Xu Shiping Copper Incorporated Titanium Dioxide Photocatalyst for Hydrogen Production, Nanyang Technological University, 2011

Ana Judith Rodriguez Geochemistry of Major and Trace Elements in Coastal Sediments. The Tropical River-Estuary System of Marabasco (Mexico) and the Temperate System of the Galician Rias (Spain), Institute of Marine Investigation, Vigo, Spain, 2008

Li Cong Mechanism and Performance of Ferrate in Drinking Water Treatment, Hong Kong Polytechnic University, Hong Kong, 2005

Ph.D. Dissertation (Committee Member)

Yinghao Wen Advanced Oxidation and Reduction Processes for the Removal of Recalcitrant Pollutants in Water, 2022

Xiaoxuan Wang Plant Uptake and Impact of Engineered Metallic Nanoparticles in Soil Plant Systems, 2022

Alexandra Folcik Electron Beam Technology for the Removal of the Cyanotoxin, Microcystin-LR, and the Cyanobacteria, Microcystis Aeruginosa in Contaminated Water, 2021

Rebecca Owens Effect of Urbanization on Morphology of Rivers in Texas, 2020

Kyriakos Manoli Enhanced Oxidation of Organic Contaminants by Ferrate: Acid-activated and Silica gel-enhanced Ferrate(VI) Oxidation Processes, 2017

Nelson Akaighe Fate of Silver Nanoparticles in Natural Environment, 2012

Yannick Ouedraogo Synthesis and Computational Studies of Photoreactive Caged Molecules, 2012

Vivek Patel Design and Synthesis of 5-Oxo-ETE Receptor Antagonist and Total Synthesis of Isoprostane D2, 2010

Pranav Patel Design and Synthesis of Affinity Chromatography Ligands for the Isolation of 5-HEDH Enzyme: Synthesis of Prostanoids and their Identification in

Human Urine, 2008
 Chih-Tsung Chang Synthesis and Identification of EPA-derived Isoprostanes. Discover of DHA-derived Neurofuranes in *Vivo*, 2008
 Shiela M.H. Jacobo Prostanoids: Synthesis, Identification and Involvement in Biological Systems, 2005
 Carl F. Richardson The influence of Biologically Related Additives on the Mineralization Properties of Hydroxyapatite, SUNY at Buffalo, New York, 1991

M.S. Thesis (Committee Member)

Manasa Sadhasivan Kinetic Modelling to Probe the Advanced Oxidation Processes in a Fe(II)-PAA-ABTS, a Fe(VI)-PAA, and a Fe(VI)-Amine Systems, 2021 (Georgia Institute of Technology)
 Corinne Kowald Electron Beam Technology for the Destruction of Perfluorooctanoic Acid and perfluorooctane Sulfonate in Soil and Water Samples, 2020
 Shreyas Mirji An Improved Unsteady Maxwell-Stefan Model for Predicting Spacecraft Propellant Evaporation in Microgravity, 2013
 Andrea Rios Dewatering of Sludge by Sodium Ferrate, 2004
 Mareva Chanson Factors affecting Turbidity and Total Suspended Solids and the Relationship between these Parameters in Crane Creek, Melbourne, Florida, 2003.
 Sasan Hosein Investigations for the Remediation of Corrosion in the Florida Institute of Technology Wave Tank, 2002
 Michelle McElvaine Mineral Controls of Iron and Manganese Concentrations in the Interstitial Waters of Gulf of Mexico Sediments, 2001
 Ketan Vyas Phosphate Removal by Ion Exchange Resin, 2001
 Khalid Alhooshani Selenium Analysis by Gas Chromatography/Mass Spectrometry, 2001
 Nichlos Ricano Water Quality Parameters in the Coastal Environment of Corpus Christi, 1999
 Vinod Dasyam Interactive Tool for Computing Total Alkalinity and Total Carbon Dioxide in Natural Waters, 1998
 Shekhar Kontoru Characterization of Potential Treatment Strategies of Effluent Water from Intensive Shrimp Farms, 1996
 Marco Lopez Characterization and preliminary quantification of effluent load from three coastal aquaculture facilities in South Texas, 1996

M.S. Nonthesis (Advisor)

Kiran Agarwal - 1998
 Scott Rhodes - 1998
 Olin Moore - 1998
 Bonnie Hardie - 1996
 Scott Peters - 1996
 Kathy Camponova - 1996

M.S. Nonthesis (Committee Member)

Sylvia Scott - 1999
 Cameron Isaacs - 1999
 Robyn McGilloway - 1997
 Ana Liza Gallegos - 1997
 Lon Langley - 1995
 John Bloom - 1995
 Sherri Hatch - 1995
 Bruce Jonason - 1995
 Royce Kemp - 1994
 Cornado Gallegos - 1994
 Tim Pritchard - 1994
 Diane Breckenridge - 1994
 Judy Roberson - 1993

COLLABORATIONS:

Ching-Hua Huang	Georgia Institute of Technology, Atlanta, Georgia
Sylwia Ptasinska	Notre Dame Radiation Laboratory, Indiana
Frank J. Millero	University of Miami, Florida
George W. Luther III	University of Delaware, Delaware
Piero Gardinali	Florida International University, Miami, Florida
Kevin O'Shea	Florida International University, Miami, Florida
Mary Sohn	Florida Institute of Technology, Melbourne, Florida
Dionysios D. Dionysiou	University of Cincinnati, Cleveland.
Zuzana Zajickova	Barry University, Miami Shores, Florida
Jason Parson	University of Texas, Rio Grande Valley
Christie Sayes	Baylor University, Waco, Texas
Ajay K. Ray	University of Western Ontario, London, Canada
Mita Ray	University of Western Ontario, London, Canada
Thangarasu Pandiyan	National University of Mexico, Mexico City
Ana Judith Rodríguez	Instituto Politécnico Nacional La Paz, México
José Roberto Vega-Baudrit	Laboratorio Nacional Nanotecnología LANOTEC, Costa Rica
Vijayendra Garg	University of Brasilia, Brazil
Maurizio Pettine	The Water Research Institute (IRSA), Italy
Concetta De Stefano	Universita di Messina, Italy
Jia-Qian Jiang	Glasgow Caledonian University, U.K.
Nigel Graham	Imperial College, London, U.K.
Enric Brillas	Universitat de Barcelona, Spain
Mehmet Oturan	University of Est Paris, France
Karel Bouzek	Institute of Inorganic Technology, Prague, Czech Republic
Radek Zboril	Nanomaterial Center, Palacky University, Olomouc, Czech Republic
Jan Hives	Slovakia Institute of Technology, Bratislava, Slovakia
Georgy Pokol	Budapest University of Technology and Economics, Hungary
Zoltan Homonnay	Eötvös Loránd University, Budapest, Hungary
Khemarath Osathaphan	Chulalongkorn University, Bangkok, Thailand
Rajasekhar Balasubramanian	National University of Singapore, Singapore
X.-Z. Li	Hongkong Polytechnic University
Hyunook Kim	University of Seoul, Korea
Shiro Kubuki	Tokyo Metropolitan University, Japan
Tetsuaki Nishida	Kindai University, Osaka, Japan
Ruey-An Doong	National Tsing Hua University, Taiwan
Walter den	Tunghai University, Taiwan
Chun He	Sun Yat-sen University, Guangzhou, China
Xin Yang	Sun Yat-sen University, Guangzhou, China
Baoling Yuan	Huaqiao University, Xiamen, China
Junhu Wang	Dalian Institute of Chemical Physics, Dalia, China
Xuhui Sun	Dianli University, Jilin City, China
Hui Zhang	Wuhan University, China
Zunyao Wang	Nanjing University, China
Jun Ma	Harbin Institute of Technology, China
Shuguang Lu	East China University of Science & Technology, Shanghai, China

VISITING SCHOLARS AT TAMU:

Jan Kolařík	Palacky University, Olomouc, Czech Republic (2014)
Ariana Fargašová	Palacky University, Olomouc, Czech Republic (2014)
Martina Karlikova	Palacky University, Olomouc, Czech Republic (2014)
Guilin He	Zhejiang University, Hangzhou, China (2015-2016)
William Trujillo Herrera	National University of San Marcos, Peru (2015)
Carlos Alberto Herta Aguillar	National University of Mexico, Mexico City, Mexico (2015)
Min Lu	Northeast Dalian University, Jilin City, China (2015-2016)
Alex Dantas da Silva	LeTourneau University, Longview, Texas (2015)
Camila Caroline Zeni Silva	State University of New York, Plattsburgh, New York (2015)
Eric Lichthouse	French National Institute for Agricultural Research, Dijon, France (2015)
Radina Petrova Kralchevska	Palacky University, Olomouc, Czech Republic (2015-2016)
Jong Yeon Hwang	Soil and Groundwater Research Division, National Institute of Environmental Research, Environment Research Complex, Incheon, Republic of Korea (2016)
Xiaori Fu	East China University Science & Technology, Shanghai, China (September 2016-October, 2016)
Shiro Kubuki	Tokyo Metropolitan University, Japan (2016)
	Hyunook Kim University of Seoul, Republic of Korea (2016)
Pavla Plachtová	Masaryk University, Brno, Czech Republic (2016-2017)
Walter Den	Tunghai University, Taichung, Taiwan (2017)
Ranhong Li	Jilin Agricultural University, Jilin, China (2017-2018)
Xianbing Zhang	Chongqing Jiaotong University, Chongqing, China (2017-2018)
Bo Pan	Shaanxi University of Science and Technology, China (2019-2020)
Ruobai Li	Guadong University of Technology, Guangzhou, China (2019-2020)

VISITING SCHOLARS AT FLORIA INSTITUTE OF TECHNOLOGY:

Petra Á. Szilágyi	Eötvös Loránd University, Budapest, Hungary (2004)
Krisztina Kovács	Eötvös Loránd University, Budapest, Hungary (2004)
János Madarász	Budapest University of Technology and Economics, Budapest (2005)
Zuzana Macova	University of Chemistry and Technology Prague, Czech Republic (2005)
Zoltan Homonnay	Eötvös Loránd University, Budapest, Hungary (2005)
Attila Vértes	Eötvös Loránd University, Budapest, Hungary (2005)
Erno Kuzmann	Eötvös Loránd University, Budapest, Hungary (2005)
György Pokol	Budapest University of Technology and Economics, Budapest (2005)
JiaQian Jiang	University of Surrey, Guildford, United Kingdom (2005)
Václav Bumbálek	University of Chemistry and Technology Prague, Czech Republic (2007)
Jan Hives	Slovak University of Technology in Bratislava, Slovakia (2008)

Karel Bouzek	University of Chemistry and Technology Prague, Czech Republic (2008)
Hyunook Kim	University of Seoul, Republic of Korea (2010)
Goestar Klingelhofer	University of Mainz, Germany (2011)
José Francisco Marco Sanz	Consejo Superior de Investigaciones Científicas, Madrid, Spain (2011)
Libor Machala	Palacky University, Olomouc, Czech Republic (2012)
Karolina Siskova	Palacky University, Olomouc, Czech Republic (2012)

UNDERGRADUATE RESEARCH ADVISOR:

Shavi Tolan (Undergraduate Student) – Sept 2011-Dec 2013 – Undergraduate credit hours- 10 hrs/wk
 Monica Moreno Munoz (Undergraduate Student) – Fall 2013 –Undergraduate Credits hours- 5 hrs/wk
 Maria Huba (Undergraduate Student) – Fall 2013 –Undergraduate Credits hours- 5 hrs/wk
 Aalekhyat Tenali (High School student) – Summer 2013 – FIT Summer Program
 Bob Merill (High School Student) – Summer 2002– FIT Summer Program
 Mathew Brunstein (High School Student) – Summer 2002– FIT Summer Program

REVIEWER For JOURNALS:

<i>Journal of Physical Chemistry</i>	<i>Journal of the American Chemical Society</i>
<i>Environmental Science and Technology</i>	<i>Environmental Science and Technology Letter</i>
<i>Inorganic Chemistry</i>	<i>Langmuir</i>
<i>Industrial & Engineering Chemistry Res.</i>	<i>Journal of Chemical Engineering Data</i>
<i>ACS Applied Materials and Interfaces</i>	<i>Analytical Chemistry</i>
<i>Chemical Reviews</i>	<i>ACS Sustainable Chemistry & Engineering</i>
<i>Water Research</i>	<i>Canadian Journal of Chemistry</i>
<i>Electrochimica Acta</i>	<i>Journal of the Applied Electrochemistry</i>
<i>Chemosphere</i>	<i>Journal of Solution Chemistry</i>
<i>Hydrobiologia</i>	<i>Environmental Engineering Science</i>
<i>Journal of Environmental Management</i>	<i>Journal of Colloid and Interface Science</i>
<i>The Science of Total Environment</i>	<i>Colloids and Surfaces A</i>
<i>Electrochemistry Communications</i>	<i>Journal of Material Chemistry</i>
<i>Fluid Phase Equilibria</i>	<i>Journal of Biological Inorganic Chemistry</i>
<i>Journal of Molecular Catalysis A Chemical</i>	<i>Process Biochemistry</i>
<i>Analytica Chimica Acta</i>	<i>Catalysis Today</i>
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<i>Journal of Biomedical Materials Research</i>	<i>Journal of Environmental Science and Engineering</i>

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