

MICHAEL A. JANUSA, Ph.D.

Work: Department of Chemistry and Biochemistry
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EDUCATION:

Ph.D., Inorganic/Analytical Chemistry
Louisiana State University, Baton Rouge, Louisiana May 1993

B.S., Agricultural Engineering
Louisiana Tech University, Ruston, Louisiana November 1985

Online Instructor Certification
Stephen F. Austin State University, Nacogdoches, TX December 2011

WORK EXPERIENCE:

2021 – present *Professor, Chemistry and Biochemistry Department, Stephen F. Austin State University*
Courses taught: General Chemistry, Quantitative Analysis, Inorganic Chemistry, Research Problems, Industrial/Laboratory Internship, Spectra Interpretation, and Environmental Chemistry.

2003 – 2021 *Professor and Chair, Chemistry and Biochemistry Department, Stephen F. Austin State University*
Responsibilities: Manage the curriculum, budget, and faculty for Chemistry and Biochemistry.

2019 – 2020 *Interim Chair, Physics, Engineering, and Astronomy Department, Stephen F. Austin State University*
Responsibilities: Manage the curriculum, budget, and faculty for Physics, Engineering, and Astronomy.

2018 – 2020 *Coordinator, College of Sciences and Mathematics Undergraduate Research, Stephen F. Austin State University*
Responsibilities: Develop a college undergraduate research program that enhances undergraduate research and increases the retention and recruitment of students.

2012 – 2014 *Director, Discovery & Research Center, Stephen F. Austin State University*
Responsibilities: Manage the facility, budget, and researchers.

2003 – present *Graduate Faculty Full Member, Stephen F. Austin State University*

2002 – 2003 *Interim Dept Head, Dept. of Physical Sciences, Nicholls State University*
Responsibilities: Manage the curriculum, budget, and faculty for Chemistry, Geology, and Physics

- 2001 – 2003 *Adjunct Professor*, Louisiana State University-CAMD
Responsibilities: Conduct environmental research using synchrotron radiation at the Center for Advanced Microstructures and Devices (CAMD).
- 2001 – 2003 *Director of Chemical Technician Associate degree program*, Nicholls State University
Responsibilities: Advising, recruiting, coordinating newly approved degree.
- 1998 – 2003 *Associate Professor of Chemistry (tenured)*, Nicholls State University
- 1993 – 2003 *Graduate Faculty Member*, Nicholls State University
- 1993 – 1998 *Assistant Professor of Chemistry*, Nicholls State University
Courses taught: General Chemistry, Quantitative Analysis, Inorganic Chemistry, Research Problems, Industrial/Laboratory Internship, Spectra Interpretation, and Environmental Chemistry.
- 1988 – 1993 *Teaching Assistant*, Louisiana State University
Courses taught: General Chemistry lab, Quantitative Analysis lab, Physical Chemistry Lab, and Instrumentation Lab.
- 1987 – 1988 *Teaching Assistant*, Louisiana Tech University
Courses taught: General Chemistry lab I & II
- 1986 – 1987 *Assistant Manager*, Aaron Rents and Sells Office Furniture

RESEARCH/SCHOLARLY ACTIVITY EXPERIENCE:

Patent:

Janusa, M.A. “Processes for Immobilizing Waste Using Bagasse”, Patent Number 6174275, issue date – 1/16/01.

On-Line Homework System (chem.nicholls.edu/ohw, phsc-server.nicholls.edu/assign.htm, i-assign.com)

Co-developed three Internet accessible computer programs that allow instructors to assign, collect, grade, and develop homework questions.

Textbooks:

Janusa, M.A.; Lo, G.V. *Chemistry: The Core Concepts: Part II*, Kona Publishers, **2011**, ISBN 1935987208, eISBN 9781935987208

Lo, G.V.; Janusa, M.A. *Chemistry: The Core Concepts*, Kona Publishers, **2010**, ISBN 1935987178, eISBN 9781935987178

Lamberty, C.; Lo, G.; Newchurch, M; Janusa, M; Dou, Y. “CER – CHEM 110 Freshman Chemistry Laboratory Manual for Nicholls State University” Thomson Publishers, **2006**, ISBN 0495264369

Publications (*undergraduate, +graduate):

Janusa, M.A. "Undergraduate Research Transforms a Department: One University's Story", The Division of Chemistry for Council on undergraduate Research Blog (CURchem), June 5, **2019**, <https://curchem.wordpress.com/2019/06/05/undergraduate-research-transforms-a-department-one-universitys-story/>

Janusa, M.A.; Onchoke, K.K.; *Hanes, J.; Weatherford, W.; "Analysis of Trace and Major Metals in the Drinking Water from Nacogdoches Surface Water Treatment Facility in Nacogdoches, TX (USA)" manuscript in progress.

+Taiwo, O.; Janusa, M.A.; "Evaluation of Metal Concentration in Water and Soil in the Southern Region of Lake Nacogdoches", manuscript in progress.

Onchoke, K. K.; Janusa, M.A.; +Ojeda, J.J.; "Polycyclic Aromatic Hydrocarbons in Soil Samples from Diboll, East Texas (USA)", *Analytical Chemistry Letters*, **2019**, 9(3), 273-290. DOI: 10.1080/22297928.2019.1644195.

Onchoke, K. K.; Janusa, M.A.; +Sasu, S. A.; "Evaluation of the Performance of a Rural Municipal Wastewater Treatment Plant in Nacogdoches, East Texas (USA) " *Chemistry and Ecology*, **2015**, 31(6), 567-582, DOI: 10.1080/02757540.2015.1029463.

Janusa, M.A.; Beck, J.N. "Recent Applications of Flame Atomic Absorption Spectrometry to Environmental Measurements" *Applied Spectroscopy Reviews* **2002**, 37 (2), 137-185.

Janusa, M.A. "Processes for Immobilizing Waste Using Bagasse" U.S. Patent 6,174,275, **2001**.

Janusa, M.A.; *Laine, P.L.; *Fanguy, J.C.; *Champagne,C.A. "An Alternative Use for Bagasse: Stabilizing Agent for Lead Waste" *Sugar Journal* **2001**, 63, 19-23.

Janusa, M.A.; Lamberty, C.M.; Lo, G. "Aqueous Equilibria: Acids, Bases, Solubility" *The Chemical Educator* **2000**, 5, 312 – 314.

Janusa, M.A.; *Champagne,C.A.; *Fanguy, J.C.; *Heard, G.E.; *Laine, P.L.; *Landry, A.A. "Stabilization/Solidification of Lead with the Aid of Bagasse as an Additive to Portland Cement" *Microchemical Journal* **2000**, 65, 255-259.

Janusa, M.A.; *Heard, G.H., *Bourgeois, J. C.; *Kliebert, N.M.; *Landry, A.A. "Effects of Curing Temperature on the Leachability of Lead Undergoing Stabilization/Solidification with Cement" *Microchemical Journal* **1998**, 60 (2), 193-197.

Janusa, M.A.; *Andermann, L.J.; *Kliebert, N.M.; *Nannie, M.H. "The Determination of the Concentration of Common Inorganic Anions Using Capillary

Zone Electrophoresis: An Analytical Chemistry Laboratory Experiment” *J. Chem. Ed.* **1998**, *75*, 1463-1466.

Janusa, M.A.; *Bourgeois, J. C.; *Heard, G.H., *Kliebert, N.M.; *Landry, A.A. “Effects of Particle Size and Contact Time on the Reliability of Toxicity Characteristic Leaching Procedure for Stabilized/Solidified Waste” *Microchemical Journal* **1998**, *59*, 326-332.

Janusa, M.A.; Wu, X.; Cartledge, F.K.; Butler, L.G. “Solid-State Deuterium NMR Spectroscopy of d5-Phenol in White Portland Cement: A New Method for Assessing Stabilization/Solidification” *Environ. Sci. Technol.* **1993**, *27*, 1426-33.

Janusa, M.A. “Development of New Methods for Assessing Stabilization/Solidification of Hazardous Waste Using Solid-State Nuclear Magnetic Resonance Techniques”, Ph.D. thesis, Louisiana State University, Baton Rouge, LA, 1993.

Cartledge, F.K.; Butler, L.G.; Tittlebaum, M.E.; Akhter, H.; Chalassani, D.; Janusa, M.A.; Yang, S. “Solid-State NMR Characterization of Organics in Cement” *Proceedings of the Cement Industry Solutions to Waste Management, 1st Intl. Symp., Canadian Portland Cement Association* Toronto, **1992**, 289-305.

Janusa, M.A.; Jeansonne, M.S.; Fronczek, F.R.; Watkins, S.F. “Structure of the Eudesmanolide Gazaniolide” *Acta Cryst.* **1990**, *C46*, 2474-2476.

Presentations / Abstracts Published (*undergraduate, +graduate):

Janusa, M.A.; *Harper, J.; *Vacula, N.; *Newsome, I.; *Villas, C. *Stephen F. Austin State University Showcase Saturday*, **Feb. 2020**.

Janusa, M.A.; *Harper, J.; *Vacula, N.; *Newsome, I.; *Villas, C. *Stephen F. Austin State University Women in STEM Conference*, **April 2019**.

Janusa, M.A.; *Harper, J.; *Vacula, N.; *Newsome, I.; *Villas, C. *ACS East Texas Local Section Conference*, **April 2019**.

Janusa, M.A.; *Hanes, J.; *Turner, R.; +Kadakova, P.; Clack, B. *Stephen F. Austin State University Women in STEM Conference*, **April 2018**.

Janusa, M.A.; *Villas, C.; *Harper, J.; *Hanes, J. *Stephen F. Austin State University Women in STEM Conference*, **April 2018**.

Janusa, M.A.; *Hanes, J.; *Turner, R.; +Kadakova, P.; Clack, B. *ACS East Texas Local Section Conference*, **April 2018**.

Janusa, M.A.; *Villas, C.; *Harper, J.; *Hanes, J. *ACS East Texas Local Section Conference*, **April 2018**.

Onchoke, K.K.; ⁺Ojeda, J.J.; Janusa, M.A. *Stephen F. Austin State University SOAR Conference*, **April 2017**.

Janusa, M.A.; *Garcia, E.; * Hanes J.; *Sharp, P.; * Kadakova, P. *Stephen F. Austin State University Undergraduate Research Conference*, **March 2016**.

Janusa, M.A.; *Benavides, T., *Hanson, G.; *Sharp, P. *Stephen F. Austin State University Undergraduate Research Conference*, **April 2015**.

Janusa, M.A.; *Benavides, T. *Stephen F. Austin State University Undergraduate Research Conference*, **April 2014**.

Janusa, M.A.; *Blanchette, M.; *Collins, R. *Stephen F. Austin State University Undergraduate Research Conference*, Top Scholar presentation, **April 2012**.

Janusa, M.A.; ⁺Baugh, K. *67th Southwest Regional ACS Conference*, **Nov. 2011**.

Janusa, M.A.; Lo, G. *American Chemical Society National Conference, CHED Newsletter* **2008**, 1588.

Janusa, M.A.; Lo, G. *THE (Teaching in Higher Education) Forum* **2003**.

Janusa, M.A.; Lo, G. *THE (Teaching in Higher Education) Forum* **2002**.

Janusa, M.A.; *Champagne, C.A. *Environmental Research Consortium of Louisiana (ERCLA) Conference* **2001**, 16.

Janusa, M.A.; *Champagne, C.A.; *Fanguy, J.C. *Pittsburgh Conference* **2000**, 382.

Janusa, M.A.; *Heard, G.H., *Landry, A.A. *Pittsburgh Conference* **1998**, 1893.

Janusa, M.A.; *Heard, G.H., *Kliebert, N.M.; *Landry, A.A. *Louisiana Academy of Sciences 71st Annual Conference* **1998**, 76.

Janusa, M.A.; *Andermann, L.J.; *Nannie, M.H.; *Sandras, D.A. *American Chemical Society Conference, CHED Newsletter* **1996**, 174.

Janusa, M.A.; *Bourgeois, J. C.; *Kliebert, N.M.; *Sandras, D.A. *American Chemical Society Conference, CHED Newsletter* **1996**, 203.

Janusa, M.A.; *Andermann, L.J.; *Nannie, M.H. *Louisiana Academy of Sciences 70th Annual Conference* **1996**, 19.

External Proposals Funded:

Welch Foundation - June 2019-May 2022 – \$135,000

“Enhancing Departmental Chemical Research for Undergraduate and Graduate Students”

Welch Foundation - June 2016-May 2019 – \$125,000
“Enhancing Departmental Chemical Research for Undergraduate and Graduate Students”

Welch Foundation - June 2013-May 2016 – \$120,000
“Enhancing Departmental Chemical Research for Undergraduate and Graduate Students”

Welch Foundation - June 2012-May 2013 – \$35,000
“Enhancing Departmental Chemical Research for Undergraduate and Graduate Students”

Welch Foundation - June 2011-May 2012 – \$35,000
“Enhancing Departmental Chemical Research for Undergraduate and Graduate Students”

Welch Foundation - June 2010-May 2011 – \$35,000
“Enhancing Departmental Chemical Research for Undergraduate and Graduate Students”

Welch Foundation - June 2007-May 2010 – \$120,000
“Enhancing Departmental Chemical Research for Undergraduate and Graduate Students”

Welch Foundation - June 2004-May 2007 – \$120,000
“Enhancing Departmental Chemical Research for Undergraduate and Graduate Students”

Louisiana Distance Education Initiative (DEI) - Jan. 2003 – Dec. 2003 - \$29,422
“Distance Delivery of Chemistry Laboratory Courses” Co-PI: Dr. Glenn Lo, Nicholls State University

Southern Regional Research Center (USDA) - Sept. 2002 – Sept. 2004 - \$23,000
Joint project between Nicholls State University and the SRRC dealing with
“Utilization and Determination of Binding Sites of Agricultural By-Products as Adsorbents in the Stabilization of Heavy Metals”

LSU-CAMD - Summer 2002 - \$30,000
“Use of X-ray Spectroscopy for the Analysis of Heavy Metals Stabilized/Solidified in Cement”.

Louisiana Education Quality Support Fund (LEQSF) - June 2000 – June 2001 - \$15,831
“Designing a Better Matrix for Stabilization/Solidification of Hazardous Waste with the Aid of Bagasse as an Additive to Cement”.

American Sugar Cane League - April 1999 - April 2000 - \$5,000
Industrial funds for stabilization/solidification of hazardous waste project.

LEQSF (Research Industrial Ties) - June 1997 - June 1999 - \$44,000
This project deals with designing a better matrix for stabilization/solidification of hazardous waste with the aid of bagasse as a polymer additive to cement.

American Sugar Cane League - April 1997 - April 1998 - \$5,000
Industrial funds for stabilization/solidification of hazardous waste project.

American Sugar Cane League - April 1996 - April 1997 - \$5,000
Industrial funds for stabilization/solidification of hazardous waste project.

Nicholls State University Research Council - Sept. 1995 - May 1996 - \$7,820
Funds to begin the long-term stabilization/solidification of hazardous waste project.

LEQSF (Elementary and Secondary Education) - June 1995 - Aug. 1995 - \$7,648.
Funds for Nicholls State University CEPUP (Chemical Education for Public Understanding Program).

Internal Proposals Funded:

Higher Education Fund, SFASU- Fall 2021 - \$35,000
"Fermentation Science" funds to purchase instrumentation for newly developed fermentation science program.

Comprehensive Research Program, SFASU- Summer 2021 - \$55,000
"Fermentation Science" funds to purchase instrumentation for newly developed fermentation science program.

Comprehensive Research Program, SFASU- Spring 2020 - \$62,000
"CD" funds to purchase circular dichroism spectrometer for departmental research.

Comprehensive Research Program, SFASU- Spring 2019 - \$35,000
"HPLC" funds to purchase high performance liquid chromatography for research.

Comprehensive Research Program, SFASU- Fall 2018 - \$5,000
"Gas Chromatography" funds to help purchase gas chromatography for research.

Higher Education Fund, SFASU- Fall 2017 - \$40,000
"Start-up funds" funds to setup initial research lab for two new faculty member.

Comprehensive Research Program, SFASU- Summer 2014 - \$4,000
"Multiparameter meter" funds to purchase meter for water quality study of La Nana Creek in Nacogdoches, TX.

Research Development Program, SFASU- Fall 2015 - \$15,000
"Scientific Computing & Modeling" funds to setup initial research lab for new faculty member.

Research Development Program, SFASU- Summer 2015 - \$6,000
"DigiPREP block digestion system" funds to purchase digestion system for research projects.

Research Development Program, SFASU- Spring 2015 - \$3,500
"Oxygen sensor" funds to purchase equipment for research project.

Research Development Program, SFASU- Fall 2014 - \$38,000
"Biochemistry lab upgrade" funds to update equipment in biochemistry lab.

Research Development Program, SFASU- Fall 2014 - \$34,000
"Glove box" funds to setup initial research lab for new faculty member.

Mini Travel Grant, SFASU – Fall 2014 - \$750
"Travel for training on ICP-MS"

Research Development Program, SFASU- Spring 2014 - \$26,000
"Inductively Coupled Plasma Mass Spectrometry" funds to setup donated equipment.

Research Development Program, SFASU- Spring 2014 - \$14,000
"Scanning Electron Microscope" funds to setup donated equipment.

STEM Research and Learning Center, SFASU- Summer 2013 - \$2,200
"Circulating Water bath"

Research Development Program, SFASU- Spring 2013 - \$54,000
"Ion Chromatograph"

Research Development Program, SFASU- Fall 2012 - \$64,000
"SFASU East Texas Core Repository"

Research Development Program, SFASU- Fall 2011 - \$40,000
"START Milestone Microwave Laboratory System"

Research Development Program and HEF Funds, SFASU- Fall 2010 - \$150,000
"Fast Protein Liquid Chromatography, Raman Spectrometer, Fourier Transform Infrared Spectroscopy"

Research Development Program, SFASU- Fall 2009 - \$120,000
"Gas Chromatography Mass Spectrometer"

Research Development Program, SFASU- Spring 2007 - \$300,000
"400 MHz Nuclear Magnetic Resonance Spectrometer"

SFASU- Summer 2007 - \$3,500
"Refrigerated Recirculating System"

Research Development Program, SFASU- Spring 2007 - \$50,000
"Atomic Absorption Spectrometer"

Curriculum Focus Panel funded by SFA – Spring 2004 - \$2,000
"Institutional Effectiveness Committee"

OTHER:

Editorial Board Member – Scientific Journals International

2009 Who's Who Registry Among Executives and Professionals

2006 Who's Who Among America's Teachers 9th edition

2004 Who's Who Among America's Teachers 8th edition

1998 Presidential Award for Teaching Excellence at Nicholls State University

1998 Who's Who Among America's Teachers 5th edition

1996 Who's Who Among America's Teachers 4th edition