### J. WILLIAM (Bill) LOUDA

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(561) 791-9241 - Residence (561) 297-3309 - Office phone (561) 297-3998 - Laboratory phone (561) 297-2759 - FAX blouda@fau.edu - Work email http://www.science.fau.edu/chemistry/faculty/loudaw.htm http://wise.fau.edu/~blouda/index.html Date of Birth: April 20, 1947 Place of Birth: Cincinnati, Ohio Married (Deborah W. Louda, Ph.D.) **Marital Status: Education**: High School, 1965 Cardinal Gibbons High School Ft. Lauderdale, Florida Wright State University B.S. (Biology) 1971 Dayton, Ohio M.S. (Biology) 1978 Florida Atlantic University Boca Raton, Florida University of South Florida Ph.D. (Marine Science) 1993 Tampa, Florida

#### **Professional Organizations, Honors:**

Address<sup>.</sup>

Member	- American Chemical Society
Member	- Division of Geochemistry, American Chemical Society
Member-elect	- Phi Eta Tau Scholastic Society (Wright State University), Ohio
Member	- European Association of Organic Geochemists
Member-elect	- American Institute of Chemists
Member	- Florida Academy of Sciences
	Chair (2000-2001); Environmental and Chemical Sciences Section
Member	- American Society of Limnology and Oceanography
Member	- Estuarine Research Federation
Member	- Coastal Education and Research Foundation
Listed	- Who's Who in America, 60 <sup>th</sup> . Ed.
Listed	- Who's Who in the World, 2007.
Member	- Board of Advisors, Today's Environment (Five Star Television Productions)

# **Major Research Interests:**

**Chemotaxonomy** (photoautotrophic community structure), Organic Geochemistry, Environmental Chemistry, Marine Natural Products, Polyaromatic Hydrocarbons, Analytical Chemistry, Biological Markers, Lake Okeechobee, Florida Bay, <u>Periphyton in the Florida</u> <u>Everglades and the Comprehensive Everglades Restoration Plan.</u>

### MARINE AND AQUATIC BIOGEOCHEMISTRY.

The flux of biochromes (viz. tetrapyrrole, tetraterpenoid) in aquatic/marine environments. That is, the pre-, syn- and post-depositional alteration of chlorophyll-derivatives and carotenoids as these processes pertain to bio-organic geochemistry. The diagenesis/catagenesis of tetrapyrrole pigments and elucidation of pathways which evolve "fossil pigments" in order to employ these compounds as geochemical markers (viz. paleo-environment, thermal history of host environment).

Utilization of pigments as indicators of primary productivity and water mass characterization (e.g. mixed layer dynamics).

### **Professional Experience**:

1/03 – **Present** Associate Scientist, non-tenure track faculty, 5-year contracts: 7/99 - 1/03Assistant Scientist, non-tenure track faculty: Florida Atlantic University Teaching Duties: Teach CHM-6610 Environmental Boca Raton, Florida Chemical Analysis, CHM3080 Environmental Chemistry, and represent the Department in the Environmental Sciences Program. Assist in the teaching of other courses as needed. Assigned to CHM4139 (Bioanalytical Laboratory) also. **Research Duties:** Perform biogeochemical / environmental research (see Research Interests above). Direct graduate students (see full list following publications / presentations) in research towards M.S.T., M.S. and Ph.D. Degrees in Chemistry and the M.S. in Environmental Sciences. Administrative Duties: Oversee departmental non-secretarial staff; Responsible for stockroom and teaching laboratory budgets. Direct supervisor for the Senior Laboratory Technician in the operation of the stockroom and lab sales. Responsible for Chemical Hygiene Plan implementation and the safe operation of all teaching and research laboratories. Other duties include Property Accountability Officer, Public Liaison Officer, Space Planning, Building(Hurricane / Emergency) Office-Bldg.#55 &43) inter alia.

1/95 – 7/99 Florida Atlantic University Boca Raton, Florida Adjunct Assistant Professor, Department of Chemistry and Biochemistry: \*Active overlap with position given below.

5/88 – 7/99 Florida Atlantic University Boca Raton, Florida

6/87 - 5/88 Florida Atlantic University Boca Raton, Florida

1/78 - 5/87 Florida Atlantic University Boca Raton, Florida

6/72 - 9/74 Florida Atlantic University Boca Raton, Florida

1/72 - 5/72 Aquatic Sciences Boca Raton, Florida

9/71 - 12/71 Florida Atlantic University Boca Raton, Florida

12/70 - 9/71 Wright State University Dayton, Ohio Senior Laboratory Specialist (SUS Code #5083) manager of teaching laboratories, instruct and maintain instrumentation (UV/VIS, NMR, IR), perform mass spectral analysis (MS), order & maintain chemistry stockroom (chemicals hardware and instruments), oversee laboratory coordinators, train and assist graduate students in research, *et cetera*.

Visiting Instructor, Department of Chemistry. Develop and teach General Chemistry Laboratory I & II CHM 2045L, CHM 2046L).

Research Associate with Dr. Earl W. Baker. Chlorophyll Diagenesis in, Deep Sea Sediments.

Teaching Assistant in Marine Biology, Invertebrate Zoology, Animal Physiology.

Research Assistant to Dr. J. Valenti: Assess feasibility of increasing somatic coloration via dietary experimentation with pteridine and carotenoid pigments.

Research Assistant to Dr. F. Kalber: Osmoregulation in zoeae (larvae) of the blue-crab, <u>Callinectes sapidus</u>.

Research Associate to Dr. P. P. Batra: <u>De novo</u> carotenogenesis in the mycobacteria.

#### **Committee and Other Assigned Responsibilities (FAU)**

#### University Level

Building Supervisor, College of Science – PS (#55) and SE (#43) Buildings.
Member, University Hazardous Waste Sub-Committee
Member, University Safety Committee and Lab-Safety Sub-Committee
Member, University Research Safety Committee
Member, Florida Atlantic University – Harbor Branch Oceanographic Institution Marine Science Building Committee (2004-6)
Speaker, BioScience Week-2006 (Seminole-Ridge High School)
<u>College Level</u>

Member, College Infrastructure Committee Member, College Salary Equity Committee Representative, College of Science: Florida Oceans Day, 2000 – 2003

#### <u>Departmental Level</u>

Member, Departmental PhD criteria Committee Member, Departmental Graduate Regulations Committee Departmental Representative (Renovation of Building #1, Planning Buildings #43 and #55) Coordinator, "CHEMATHON": Annual 3-County High School Competition, 1996 - 2004

## **Civic Activities:**

Councilman, Town of Loxahatchee Groves, Florida (March 2007-April 2010) Mission / Education Chair, (2007-2009) American Cancer Society, Acreage - Loxahatchee Groves Relay for Life. President (1996-2004), Loxahatchee Groves Landowners' Association, Loxahatchee Groves, FL Board Member (2005-7) Loxahatchee Groves Landowners' Association, Loxahatchee Groves, FL Member, Loxahatchee Groves Neighborhood Planning Committee, (1993-6) Loxahatchee Groves. Chairman, Loxahatchee Groves Steering Sub-Committee to Palm Beach County, Department of Environmental Resource Management on the Royal Palm Beach Pines Natural Area, Palm Beach County (Ad hoc: 1994-1995). Member: Friends of Arthur R. Marshall National Wildlife Refuge. Member, Sierra Club. Member, Audubon Society Member, Audubon of the Everglades Member, Sierra Club Member, National Geographic Society Member, Nature Conservancy Member, The Ocean Conservancy Member, The Grand Canyon Association

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### **Courses:**

Environmental Analytical Chemistry (CHS-6610): graduate core course in Environmental Sciences Program. Fall terms (2000 - present)

Environmental Chemistry (CHM-3080): undergraduate chemistry majors, others by permission; Spring terms (2004 - present).

Bioanalytical Laboratory (CHML-4139): Upper division undergraduate laboratory team

Taught in 'Round-Robin' fashion. I teach the high performance liquid chromatography section of this laboratory course. Spring Terms (2005-present).

Chemistry in Modern Life (CHM-2020): Spring and Summer 2002 & 2003 only.

Guest lecturer is various courses on requested basis (e.g. Biochemistry, Marine Botany &c.)

### A. <u>Refereed Publications (28 plus 1 in-press, 2 accepted resubmitted following revision,</u> 2 submitted -in review (I was primary and was the corresponding author on all except the 5 indicated by an asterisk\*)

- \*Batra, P. P., Gleason, R. M., and Louda, J. W. (1973) Cyclization of Lycopene in the Biosynthesis of β-Carotene. *Phytochemistry* **12**, 1309-1313.
- Louda, J. W., Palmer, S. E. and Baker, E. W. (1980) Products of Chlorophyll Diagenesis in Japan Trench Sediments. I. Deep Sea Drilling Project Sites 434, 435, and 436. <u>In</u>: E. Honza, and the Shipboard Party. Initial Reports of the Deep Sea Drilling Project-LVI, U.S. Govt. Printing Office, Washington, v. 56-57, part II, 1391-1396.
- Baker, E. W. and Louda, J. W. (1980) Products of Chlorophyll Diagenesis in Japan Trench Sediments. II. DSDP / IPOD Sites 438, 439 and 440. <u>In</u>: E. Honza and the Shipboard Party. Initial Reports of the Deep Sea Drilling Project-LVII, U.S. Govt. Printing Office, Washington, v. 56-57, part II, 1397-1408.
- Baker, E. W. and Louda, J. W. (1980) Geochemistry of Tetrapyrrole Pigments in Sediments of the North Philippine Sea: DSDP/IPOD Leg. 58. <u>In</u>: E. Honza, and the Shipboard Party. Initial Reports of the Deep Sea Drilling Project-LVIII, U.S. Govt. Printing Office, Washington, v. 58, 737-739.
- Baker, E. W. and Louda, J. W. (1980) Organic Geochemistry: Highlights in the Deep Sea Drilling Project. <u>In</u>: A. G. Douglas and J. R. Maxwell (eds.) Advances in Organic Geochemistry-1979. Pergamon Press, Oxford, 295-319.
- Baker, E. W. and Louda, J. W. (1981) Chlorophyll Derivatives in Sediments of the South Philippine Sea, Deep Sea Drilling Project Leg 60. <u>In</u>: D. Hussong, S. Uyeda and the Scientific Party, Initial Reports of the Deep Sea Drilling Project-LX, U.S. Govt. Printing Office, Washington, v. 60, 497-500.
- Baker, E. W. and Louda, J. W. (1981) Geochemistry of Chlorophyll Derivatives: DSDP / IPOD Leg 61, Site 462, Northern Nauru Basin. In: R. L. Larson, S. O. Schlanger

and the Scientific Party, Initial Reports of the Deep Sea Drilling Project-LXI, U.S. Govt. Printing Office, Washington, v. 61, 619-620.

- Louda, J. W. and Baker, E. W. (1981) Geochemistry of tetrapyrrole, carotenoid and perylene pigments in sediments from the San Miguel Gap (Site 467) and Baja California Borderlands (Site 471): DSDP/IPOD Leg 63. <u>In</u>: Yeats, R. S., Haq, B., and the Shipboard Party, Initial Reports of the Deep Sea Drilling Project, U.S. Govt. Printing Office, Washington, v. 63, 785-818.
- Palmer, S. E., Baker, E. W., Charney, L. S. and Louda, J. W. (1982) Tetrapyrrole Pigments in United States Humic Coals. *Geochim. Cosmochim. Acta*. 47, 1233-1241.
- Baker, E. W. and Louda, J. W. (1982) Geochemistry of Tetrapyrrole, Tetraterpenoid and Perylene Pigments in Sediments from the Gulf of California: DSDP/IPOD Leg 64; Sites 474, 477, 479 and 481 and Guaymas Basin Survey Cruise (S. I. O.) Leg 3; Sites 10G and 18G. <u>In</u>: Scientific Party, Initial Reports of the Deep Sea Drilling Project-LXIV, U.S. Government Printing Office, Washington, v. 64, part 2, 789-814.
- Baker, E. W. and Louda, J. W. (1983) Thermal Aspects in Chlorophyll Geochemistry. <u>In</u>: M. BjorOy (ed.) <u>Advances in Organic Geochemistry-1981</u>, J. Wiley and Sons, Chichester, 401-421.
- Louda, J. W. and Baker, E. W. (1984) Perylene in Deep Ocean Sediments; Occurrence, Source and Alkylation. *Geochim. Cosmochim. Acta* **48**, 1043-1058.
- Baker, E. W. and Louda, J. W. (1984) Highly Dealkylated Copper- and Nickel-Etioporphyrins in Marine Sediments. *Org. Geochem.* 6, 183-192.
- Baker, E. W. and Louda, J. W. (1986) Porphyrin Geochemistry of Atlantic Jurassic Cretaceous Black Shales. *Org. Geochem.* **10**, 905-914.
- Baker, E. W., Louda, J. W. and Orr, W. H. (1987) Application of metalloporphyrin biomarkers as petroleum maturity indicators; the importance of quantitation. Org. Geochem. 11: 303-309.
- \*Popp, B. N., Takigiku R., Hayes, J. M., Louda, J. W. and Baker, E. W. (1989) The Post-Paleozoic Chronology and Mechanism of <sup>13</sup>C Depletion in Primary Marine Organic Matter. Amer. J. Sci. 289, 436-454.
- Winfree, N. M., Louda, J. W., Baker, E. W., Steinman, A., and Havens, K. E. (1997) Application of Chlorophyll and Carotenoid Pigments for the Chemotaxonomic Assessment of the Waters and Surficial Sediments of Lake Okeechobee, Florida. <u>In</u>:

Eganhouse R. (Ed.) <u>Application of Molecular Markers in Environmental</u> <u>Geochemistry</u>. ACS Symposium Series #671, American Chemical Society, Washington, D.C. pp. 77-91.

- \*Steinman, A., Havens, K. E., Louda, J. W., Winfree, N. M. and, Baker, E. W. (1998) Characterization of the Photoautotrophic Bacterial Communities in a Sub-Tropical Lake (Lake Okeechobee, Florida). *Can. J. Fish. Aquat. Sci.* <u>55</u>, 206 - 219:
- Louda, J. W., Li J., Liu L., Winfree, M. N., and Baker, E. W. (1998) Chlorophyll degradation during senescence and death. *Org. Geochem.* **29**, 1233 1251.
- \*Havens, K. E., Steinman, A. D., Carrick H. J., Louda, J. W. and Baker, E. W. (1999) A Comparative analysis of periphyton communities in a subtropical lake using HPLC pigment analysis and microscopic cell counts. *Aquatic Sciences*. 61 (4): 307 – 322.
- Louda, J. W., Loitz, J. W., Rudnick, D. T. and Baker, E. W. (2000) Early diagenetic alteration of chlorophyll-*a* and bacteriochlorophyll-*a* in a contemporaneous marl ecosystem. *Org. Geochem.* **31** (12): 1561 1580.
- Louda, J. W., Liu, L., and Baker, E. W. (2002) Senescence- and death-related alteration of chlorophylls and carotenoids in marine phytoplankton. *Org. Geochem.* 33, 1635 – 1653.
- Louda, J. W. and Monghkonsri, P. (2004) Comparison of spectrophotometric estimates of chlorophylls-*a*, -*b*, -*c* and 'pheopigments' in Florida Bay seston with that obtained by high performance liquid chromatography-photodiode array analyses. *Fla. Sci.* **67**(4): 281–292.
- Louda, J. W., Loitz, J. W., Melisiotis, A. and Orem, W.H. (2004) Potential Sources of Hydrogel Stabilization of Florida Bay Lime Mud Sediments and Implications for Organic Matter Preservation. J. Coastal Res. 20, 448 – 463.
- Neto, R.R., Mead, R.N., Louda, J.W. and Jaffe, R. (2006) Organic biogeochemistry of detrital flocculent material (floc) in a subtropical, coastal, wetland. *Biogeochem.* 77: 283 – 304.
- \*Hagerthey, S. E., Louda, J. W. and Mongkronsri, P. (2006) Evaluation of pigment extraction methods and a recommended protocol for periphyton chlorophyll *a* determination and chemotaxonomic assessment. *J. Phycology* **42**: 1125 1136.
- Moretzaei-Rad, M. and Louda, J. W. (2007) Polystyrene-Divinylbenzene (PS-DVB), a mild stationary phase for the chromatographic purification of the unstable 13<sup>2</sup>, 17<sup>3</sup>-cyclopheophorbide-a-enol. *J. Liquid Chromatogr. & Rel. Technol.* **30**: 1361-1369.

- Szymczak-Żyła, M., Louda, J. W. and Kowalewska, G. (2008) Influence of microorganisms on chlorophyll-a degradation in the marine environment. *Limnol. Oceanogr.* **58**: 851-862.
- Louda, J. W. (2008) Pigment-Based Chemotaxonomy of Florida Bay Phytoplankton; Development and Difficulties. J. Liquid Chromatogr. & Rel.Tech. 31: 295-323.
- Szymczak-Żyła, M., Louda, J. W. and Kowalewska, G. (2008) Comparison of extraction and HPLC methods for marine sedimentary chloropigment-*a* determinations. *J. Liquid Chromatogr. and Rel. Tech.* **31**, 1162-1180.
- Louda, J.W., Neto, R.R., Magalhaes, A. R. M., and Schneider, V.F. (2008) Pigment alterations in the brown mussel *Perna perna. Comparative Biochemistry and Physiology* (ms# 15043: Accepted, in press).
- Stanaway, K. E., Boyer, J. N., and Louda, J. W. (2008) The Effects of Flocculent Microbial Mats and Seagrass Rhizomes on Sediment Nutrient fluxes in a Shallow Estuary. \* *Estuaries and Coasts* (ms# 440uj: provisionally accepted; revision resubmitted 09/07)

### B. <u>Non-referred publications (7). (I wrote and was the corresponding author on all</u> <u>except the 1 indicated by an asterisk\*)</u>

- Louda, J. W. (1978) Carotenoid Pigmentation and Metabolism in the Blue-Crab, *Callinectes* sapidus Rathbun, M.Sc. Thesis, Florida Atlantic University, Boca Raton, Fl., 93 pp.
- Louda, J. William and Baker, Earl W. (1986) The Biogeochemistry of Chlorophyll. <u>In</u>: <u>Organic Marine Geochemistry</u>. M. Sohn (Ed.) ACS Symposium Series #305, American Chemical Society, Washington, D.C., pp. 107-126.
- Baker, E. W. and Louda, J. W. (1986) Porphyrins in the Geologic Record. <u>In</u>: R. B. Johns (Ed.) <u>Biological Markers</u>, Elsevier, Amsterdam. pp. 125-225.
- \*Carraher, C. E., Sterling, D., Ridgway, T. and Louda, J. W. (1991) Structural characterization of organostannane - Kraft lignin. <u>In</u>: Biotechnology and Polymers, pp. 111-118, Plenum.

Louda, J. W. (1993) The Biogeochemistry of Tetrapyrrole Pigments, Emphasizing

Chlorophyll. Ph.D. dissertation, University of South Florida, 638 pp.

- Carraher, C. E., Louda, J. W., Sterling, D., Rivalta, A., Zhang, Q. and Baker, E. W. (1994) Electron impact mass spectrometry of condensation organometallic polymers. Polymeric Materials, Sci. Eng., <u>71</u>:386-387 A.C.S., Washington, D.C.
- Baker E. W. and Louda J. W. (2002) *The Legacy of the Treibs' Samples* <u>In:</u> A. Prashnowsky (Ed.) <u>Alfred Treibs Memorial Volume</u>. Wurzburg. pp. 3–128.

### C. <u>Published invited reviews (1).</u>

Louda, J. W. (1999) *Chemical Fungal Taxonomy*: (Book review). *J. Amer. Chem. Soc.* **121 (39)** 9251 - 9252.

### D. <u>Academic Speeches and Formal Papers. Underlined indicates personal presentation</u>. <u>Asterisk indicates participation at meeting. (>100), 98 with published abstracts</u>.

- Gleason, R. M., Louda, J. W. and Batra, P. P. (1971) Lycopene accumulation induced by nicotine and by 2-(4-chlorophenylthio)-triethylamine hydrochloride in <u>Mycobacterium marinum</u>. 62nd Annual Meeting of the American Society of Biological Chemists, San Francisco, June 13-18, 1971. Fed. Proc. <u>30</u>(3) 1123 abs.
- \*Murphy, D. L., Louda, J. W., Nishimura M., and Baker, E. W. (1979) Geochemistry of Tetrapyrrole Pigments in Neogene Marine Sediments: Recent Advances. 1979 Meeting-in-Miniature, American Chemical Society, Florida Section, Ft. Lauderdale, Florida, 10-12 May 1979.
- \*Louda, J. W. and Baker, E. W. (1979) Chlorophyll Diagenesis: Tetrapyrrole Pigments from Deep Sea Drilling Project Core Samples. 178th National C. S. Meeting, Division of Geochemistry, Washington, D.C., Sept. 9-14, 1979. Abs. Geoc. II.
- \*Baker, E. W. and Louda, J. W. (1979) Organic Geochemistry; Highlights in the Deep Sea Drilling Project, 9th International Meeting on Organic Geochemistry, 17-20 September, 1979, University of Newcastle-Upon-Tyne, U.K
- Katz, B. J., Harrison, C. G. A., Man, E. H., Baker, E. W. and Louda, J. W. (1979) Potential Organic Indicators of Diagenesis and Early Catagenesis. Geol. Soc. Am., November 1979, San Diego.
- \*Louda, J. W. and Baker, E. W. (1980) Chlorophyll Biogeochemistry in Marine and Estuarine settings. 1980 Meeting-in-Miniature, American Chemical Society, Florida

Section, Tampa, Florida, 8-10 May, 1980.

- \*Baker, E. W. and Louda, J. W. (1980) Chlorophyll Diagenesis: Review of the "Treibs Scheme" in Light of Recent Developments: Thermal Aspects. 1980 Meeting-in-Miniature, American Chemical Society, Florida Section, Tampa, Florida, 8-10 May, 1980.
- \*Louda, J. W. and Baker, E. W. (1980) Incorporation of the Various Chlorophylls into Marine Sediments and Terrestrial Peats. 179th National A.C.S. Meeting, Division of Geochemistry, Houston, Texas, March 23-28, 1980, Abs. Geoc. 14.
- Baker, E. W. and Louda, J. W. (1980) Thermal Reactions in the Diagenesis of Chlorophyll.
   180th National A.C.S. Meeting, Division of Geochemistry, Las Vegas, Nevada, 24-29 August, 1980. Abs. Geoc. 32.
- \*Louda, J. W. and Baker, E. W. (1980) Gordon Conference on Organic Geochemistry Holderness, New Hampshire, 18-22 August, 1980 (Poster Session). Geochemistry of Chlorophyll; Recent Directions.
- Baker, E. W. and Louda, J. W. (1981) Perylene in Marine Sediments: A Potentially Useful Geothermal Stress Indicator of Problematic Source. 181st National A.C.S. Meeting, Division of Geochemistry, Atlanta, Ga., March 29 - April 3, 1981, Abs. Geoc. 27.
- Baker, E. W. and Louda, J. W. (1981) Thermal Aspects in Chlorophyll Geochemistry. 10<sup>th</sup> International Meeting on Organic Geochemistry, 14-18 September, 1981, University of Bergen, Norway.
- \*Louda, J. W. and Baker, E. W. (1982) Gordon Conference on Organic Geochemistry, Holderness, New Hampshire, August 23-27, 1982 (Poster Session), Perylene distribution in marine sediments.
- \*Louda, J. W. and Baker, E. W. (1983) Carotenoid Pigments in Marine Sediments: Biogeochemistry and Utility as Paleoenvironment Indicators. 1983 Florida Section Meeting, A.C.S., Jacksonville, Florida. May 4-7, 1983. Paper 53.
- \*Baker, E. W. and Louda, J. W. (1983) Benzoporphyrins: A Minor Series of Geologic Vanadyl Tetrapyrroles in Bitumen of Marine Origins. 1983 Florida Section Meeting, A.C.S., Jacksonville, Florida. May 4-7, 1983, Paper 51.
- \*Baker, E. W. and Louda, J. W. (1983) Nickel Porphyrins in Selected Samples from the Green River Formation. 186th National A.C.S. Meeting, Division of Geochemistry, Washington, D.C., Aug. 28-Sept. 2, 1983. Geoc. Abs.

- \*Louda, J. W. and Baker, E. W. (1983) Chlorophyll Geochemistry: Comparative Analytical Techniques. 186th National A.C.S. Meeting, Division of Geochemistry, Washington, D.C., Aug. 28-Sept. 2, 1983. Geoc. Abs.
- \*Louda, J. W. and Baker, E. W. (1983) Theoretical Tetrapyrrole Pigment Geochemistry: Biotic Precursors and Expected Geologic Projects. 186th National A.C.S. Meeting, Division of Geochemistry, Washington, D.C., Aug. 28-Sept. 2, 1983. Geoc. Abs.
- \*Baker, E. W. and Louda, J. W. (1983) Highly Dealkylated Copper- and Nickel Etioporphyrins in Marine Sediments. 11th International Meeting of Organic Geochemistry, 12-16 Sept., 1983, The Hague, Netherlands.
- \*Louda, J. W. Baker, E. W. and Orr, W. L. (1984) Maturation of Petroleum Metalloporphyrins. Gordon Conference on Organic Geochemistry, Poster Session, 20-24 August 1984, Holderness, New Hampshire.
- Baker, E. W., Louda, J. W. and Orr, W. L. (1984) Porphyrins in Monterey Crude Oils.
  187th National A.C.S. Meeting, Division of Geochemistry, St. Louis, Mo., April 8-13, 1984, Abs. Geoc.
- \*Baker, E. W. and Louda, J. W. (1985) Tetrapyrrole Pigments in Jurassic and Cretaceous "Black Shales" of the Atlantic. 189th National A.C.S. Meeting, Division of Geochemistry, Miami, Fl., April 29-May 3, 1984, Abs. Geoc.
- \*Louda, J. W. and Baker, E. W. (1985) The Biogeochemistry of Chlorophyll. 189th. National A.C.S. Meeting, Division of Geochemistry, Miami, FL., April 29-May 3, 1985, Abs. Geoc.
- \*Louda, J. W. and Baker, E. W. (1985) Tetrapyrrole Pigments in the Geologic Record. 1985 Annual Meeting of the Geological Society of America, Orlando, October 27, Abs. #79455. (Invited contribution)
- \*Louda, J. W. and Baker, E. W. (1985) Techniques and Applications of Geoporphyrin Analysis. 194th. National A.C.S. Meeting, Division of Geochemistry, New Orleans, August 30-September 4, 1987 Geoc. Abs. #47.
- \*Baker, E. W. and Louda, J. W. (1987) Porphyrins as Biomarkers a Current View, 194th. National A.C.S. Meeting, New Orleans, August 30-September, 1987.Abs. Geoc. #48.
- \*Attendee, 1988, Gordon Conference on Organic Geochemistry, August 15-19, 1988. Holderness, N. H.

- Carraher, C. E., Sterling, D. C., Butler, C., Ridgeway, T. H. and Louda, J. W. (1990) Synthesis of tin containing lignin. Proc. A.C.S. Div. Polymeric Materials: Science and Engineering. <u>62</u>: 241-245.
- Carraher, C. E. and Louda, J. W. (1991) Application of mass spectrometry to metal containing polymers. Proc.A.C.S. Div. Polymeric Materials: Science and Engineering <u>64</u>: 85-86.
- Carraher, E. C., He, F., Sterling, D. C, Nounou, F., Pennesi, R., Louda, J. W. and Sperling, L.H. (1990) Synthesis and characterization of ionomers derived from the condensation with organostannane chloride. A.C.S. Polymer Preprints <u>31</u>(2): 430-431.
- \*Baker, E. W. and Louda, J. W. (1990) Qualitative and Quantitative Geoporphyrin Analyses -II. Mass Spectrometric Characterization, Indices and Organic Maturity Trends. 199th Natl. A.C.S. Meeting, Div. Geochemistry, Boston, April 22-27, Abs. Geoc. 77.
- \*Louda, J. W. and Baker, E. W. (1990) Qualitative and Quantitative Geoporphyrin Analyses
   -I: Isolation and Quantitative Estimation of Nickel and Vanadyl Geoporphyrins.199th Natl. A.C.S. Meeting, Div. Geochemistry, Boston, April 22-27. Abs. Geoc. 76.
- Magnier, C., Louda, J. W. and Baker, E. W. (1992) Comparison of vanadyl porphyrin distributions in biodegraded and nonbiodegraded crude oils. 203rd National A.C.S. Meeting, Geochemistry, San Francisco, April 5-10, 1992. Abs. Geoc. No. 41.
- Zeng, S., Louda, J. W. and Baker, E. W. (1992) HPLC Separation of nickel geoporphyrins. 204th National A.C.S. Meeting, Geochemistry, Washington, D.C., August 23-28, 1992. Abs. Geoc.
- Baker, E. W. and Louda, J. W. (1993) Aspects of chlorophyll diagenesis. National G.S.A. Meeting, OGD: Abs. No. 9370, GSA Abstracts, Vol. 25, No. 6, 24 October.
- \*Louda, J. W., Baker, E. W., Winfree, N., Havens, K. and Steinman, A. (1996) Chlorophyll and carotenoid pigments as chemotaxonomic markers for the pelagic and benthic photoautotrophs in Lake Okeechobee, Florida. Florida Academy of Sciences, 60th Ann. Meeting, Melbourne, March 30, 1996.
- \*Louda, J. W., and Baker, E. W. (1996) The Geochemistry of Porphyrin Pigments: An overview. 212th. National ACS Meeting, Orlando, Div. Geoc., August 25-29, 1996. Abs. Geoc., 33.

- \*Louda, J. W., and Baker, E. W. (1996) Mass Spectral Derived Metalloporphyrin Indices as a Proxy for Thermal Maturity. 212th. National ACS Meeting, Orlando, Div. Geoc., August 25-29, 1996. Abs. Geoc., 37.
- \*Baker, E. W., and Louda, J. W. (1996) Geologically Measured Kinetics and Activation Energies in Tetrapyrrole Diagenesis. 212th. National ACS Meeting, Orlando, Div. Geoc., August 25-29, 1996. Abs. Geoc., 34.
- \*Winfree, N. M., Louda, J. W., Baker, E. W., Steinman, A., and Havens, K. E. (1996) Application of Chlorophyll and Carotenoid Pigments for the Chemotaxonomic Assessment of the Waters and Surficial Sediments of Lake Okeechobee, Florida. 212th. National ACS Meeting, Orlando, Div. Geoc., August 25-29, 1996. Abs. Envr., 21.
- \*Louda, J. W., Winfree, N. M., Li, J., and Baker, E. W. (1996) Input, Recycling and Early Diagenesis of Chlorophylls and Chlorophyll Derivatives in Lake Okeechobee, Florida. 212th. Natl ACS Meeting, Orlando, Aug. 25-29, 1996. Abs. Geoc., 62.
- \*Louda, J. W., and Baker, E. W. (1996) HPLC/PDA characterization of pigments in Florida Bay Water Samples. Report to and round table discussion on "Interlaboratory comparison of chlorophyll measurements", 2nd Annual Florida Bay Science Conference, Key Largo, Florida. Dec. 1996.
- \*Li, J., Zheng, J., Baker, E. W., and Louda, J. W. (1997) Senescence, death and early diagenetic alterations of chlorophyll- in pure algal cultures and Recent sedimentary environments. 61st. Annual Meeting, Florida Academy of Sciences, ENV-26. Punta Gorda, Fla. March 14, 1997.
- \*Louda J. W., Loitz, J. W., Baker, E. W., and Rudnick, D. T. (1997) Characterization of productivity and photosynthetic taxa using chlorophyll and carotenoid biomarker studies on the waters and sediments of Florida Bay. 61 st. Annual Meeting, Florida Academy of Sciences, ENV-25. Punta Gorda, Fla. March 14, 1997.
- Li, J., Zheng, J., Louda, J. W., and Baker, E. W. (1997) Senescent/early diagenetic changes in the photoshynthetic pigments of diatoms. 213th. Annual Meeting American Chemical Society, Geoc-027. San Francisco, Calif. April 13-17, 1997.
- Louda, J. W., Li, J., Winfree, M. N., and Baker, E. W. (1997) Chlorophyll degradation during senescence and death. 18.th. International Meeting on Geochemistry, Maastricht, Netherlands. Abs. II-A71. Sept. 22-26, 1997.
- \*Louda, J. W., Li, J., Liu, L., Winfree, M. N., and Baker, E. W. (1997) Chlorophyll-*a* degradation during cellular senescence and death of algae. Poster Session. Ist.

Annual Industry/Academe Symposium on Marine and Environmental Chemistry. So. Florida A.C.S., Highland Beach, Fla. Nov. 15, 1997.

- \*Loitz, J. W., Louda, J. W., and Baker, E. W. (1997) The Isolation and characterization of scytonemin; the dimeric indole-phenolic sunscreen present in the sheaths of certain cyanobacteria. Poster Session. 1st. Ann. Industry/Academe Symposium on Marine and Environmental Chemistry. So. FL A.C.S., Highland Beach, Fla. Nov. 15, 1997.
- \*Louda, J. W., Loitz, J. W., Rudnick, D. T., and Baker, E. W. (1997) Studies on the present and past photoautotrophic populations of Florida Bay using chlorophyll-*a* and carotenoid-based chemotaxonomy. Poster Session. !st. Annual Industry/Academe Symp. Mar. Envir. Chem., So. Florida A.C.S., Highland Beach, Fla. Nov. 15, 1997.
- Carraher, C. E., Molloy, H. M., Louda, J. W. and Baker, E. W. (1998) Coupled pyroprobe -mass spectrometry and thermogravimetric-mass spectrometry. Proc. A.C.S. Div. Polymeric Materials. **78**, 102 – 103.
- \*Loitz, J. W., Louda, J. W., and Baker, E. W. (1998) The Isolation and characterization of scytonemin; the dimeric indole-phenolic sunscreen present in the sheaths of certain cyanobacteria. Poster Session. 62nd Annual Meeting, Florida Academy of Sciences. Winter Park, Fla. Mar. 24-26, 1998.
- \*Louda, J. W., Loitz, J. W., Rudnick, D. T., and Baker, E. W. (1998) Studies on the present and past photoautotrophic populations of Florida Bay using chlorophyll-*a* and carotenoid-based chemotaxonomy. Poster Session. 62nd. Annual Meeting, Florida Academy of Science. Winter Park, Fla. Mar. 24-26, 1998.
- \*Louda, D. W., and <u>Louda, J. W</u>. (1998) Comparative techniques in the undergraduate biochemistry laboratory: The chromatographic separation of plant pigments. 62nd. Annual Meeting, Florida Academy of Sciences. Winter Park, Fla. Mar. 24-26, 1998.
- \*Liu, L., Louda, J. W., and Baker, E. W. (1998) Studies on species-specific Type-I Chlorophyll-*a* degradation. 62nd. Annual Meeting, Florida Academy of Sciences. Winter Park, Fla. Mar. 24-26, 1998.
- \*Loitz, J. W., Louda, J. W., Baker, E. W., and Rudnick, D. T. (1998) Early chlorophyll-*a* diagenesis and paleoecological evaluation of the lime-muds of Florida Bay. 62nd. Annual Meeting, Florida Academy of Sciences. Winter Park, Fla. Mar. 24-26, 1998.
- \*Louda, J. W., Loitz, J. W., Rudnick, D. T. and Baker, E.W. (1998) Studies on the present and past photoautotrophic communities of Florida Bay using chlorophylland carotenoid-based chemotaxonomy. Poster session; Paleoecology and

ecosystem history workshop, Florida Bay Program Management Committee. January 22 – 23, 1998. Key Largo, Florida.

- \*Louda, J. W. (1998) Application of Chlorophylls, Chlorophyll Derivatives, and Carotenoids as Chemotaxonomic Biomarkers in the Marine and Fresh Waters of Southern Florida. Guest Lecture, Florida International University, Southeast Environmental Research Program and Department of Chemistry, Miami, Florida, April, 1998.
- \*Louda, J. W., Loitz, J. W., Rudnick, D. T. and Baker, E.W. (1998) Paleoecological considerations of the sediment-water interface of Florida bay as derived from chlorophylls, chlorophyll derivatives, and carotenoids. Poster session with extended abstract. 1998 (3<sup>rd</sup>.) Florida Bay Science Conference. May 12 – 14, 1998. Miami, Florida. Abs. pp. 47 – 49.

Louda, J. W., Loitz, J. W., Rudnick, D. T., and Baker, E. W. (1998) Senescent, heterotrophic, and early diagenetic alteration of chlorophyll-*a* and bacteriochlorophyll

-*a* in a contemporaneous carbonate marl ecosystem (Florida Bay). Poster presentation; Gordon Conference on Organic Geochemistry. Holderness, N. H.

- \*Loitz, J. W., <u>Louda, J. W.</u> and Baker, E.W. (1999) Diagenesis of chlorophyll-*a* and bacteriochlorophyll-*a* in Florida Bay Sediments. 63<sup>rd</sup>. Annual Meeting Florida Academy of Sciences, March 11 13. Tampa, Florida.
- \*Liu, L., Louda, J. W. and Baker, E. W. (1999) Phytoplankton senescence and deathrelated degradation of chlorophylls and carotenoids. 63<sup>rd</sup>. Annual Meeting Florida Academy of Sciences, March 11 - 13. Tampa, Florida.
- \*Louda, J. W. and Baker, E.W. (1999) The History of organic geochemistry: Globally and at FAU. 63<sup>rd</sup>. Annual Meeting Florida Academy of Sciences, May. Tampa, Florida.
- \*Louda, J. W. (1999) Carotenoid Geochemistry. 63<sup>rd</sup>. Annual Meeting Florida Academy of Sciences, May. Tampa, Florida.
- Baker E. W. and Louda J. W. (1999) The Legacy of the Treibs' Samples. Symposium in Honor of the 100<sup>th</sup>. Anniversary of the Birth of Alfred Treibs, the Father of Organic Geochemistry. Germany.
- Louda, J. W., Loitz, J. W., Rudnick, D. T. and Baker, E. W. (1999) Early diagenetic alteration of chlorophyll-*a* and bacteriochlorophyll-*a* in a contemporaneous marl ecosystem, Florida Bay. 19<sup>th</sup>. International Meeting on Organic Geochemistry, European Association of Organic Geochemists. Ankara, Turkey. Sept. 6 – 10, 1999.

\*Louda, J. W., Loitz, J. W., Baker, E. W. and Rudnick D. T. (1999) Photosynthetic Pigment

-Based Chemotaxonomy as Applied to Florida Bay Phytoplankton, Water, Macrophytes and Sediments. 1999 Florida Bay and Adjacent Marine Systems Conference. Key Largo, Florida. Nov. 1–5, 1999. Extended Abstract, pp. 133–135.

- \*Louda, J. W., Loitz, J. W. and Baker, E. W. (2000) Chlorophyll geochemistry in Florida Bay. 64th. Annual Meeting Florida Academy of Sciences, March 9-11. Melbourne, Florida.
- \*Louda, J. W., Loitz, J. W., Baker, E. W., Orem, W. H. and Rudnick, D. T. (2000) Organic gelation within Florida Bay sediments. 64th. Annual Meeting Florida Academy of Sciences, March 9-11. Melbourne, Florida.
- \*Louda J. W. (2001) Photosynthetic-based chemotaxonomy of microalgal communities in Lake Okeechobee and Florida Bay. 65<sup>th</sup>. Annual Meeting Florida Academy of Sciences, March 8 –10. St. Leo, Florida. (J-3)
- Louda J. W., Liu L. and Baker E. W. (2001) Senescence- and Death-Related Alteration of Chlorophylls and Carotenoids in Marine Phytoplankton. 20<sup>th</sup>. International Meeting on Organic Geochemistry. University of Nancy, France. Sept. 10- 14, 2001.
- \*Louda J. W., Liu L. and Baker E. W. (2001) Chlorophyll and Carotenoid Breakdown During the Senescence and Death of Various Marine Phytoplankton. 65<sup>th</sup>. Annual Meeting Florida Academy of Sciences, March 8 –10. St. Leo, Florida. (ENV-12)
- \*Louda J. W., Orem W. H., Melisiotis A., Loitz J. W. and Baker E. W. (2001) Quasi-Stabilization of Recent Carbonate Marl Sediments in Florida Bay by Weak Hydrogel Formation. 65<sup>th</sup>. Annual Meeting Florida Academy of Sciences, March 8 –10. St. Leo, Florida. (Poster).
- \*Louda J. W. (2001) Pigment-Based Chemotaxonomic Assessment of Florida Bay Phytoplankton and Periphyton. Florida Bay and Adjacent Marine Systems Science Conference. Key Largo. April 23 –26.
- \*Louda J. W., Orem W. H., Melisiotis A., Loitz J. W. and Baker E. W. (2001) Quasi-Stabilization of Recent Carbonate Marl Sediments in Florida Bay by Weak Hydrogel Formation. Florida Bay and Adjacent Marine Systems Science Conference. Key Largo. April 23 –26.
- \*Louda J.W. (2002) Pigment-based chemotaxonomy of phytoplankton in north-central Florida Bay. 66<sup>th</sup>. Annual Meeting, Florida Academy of Sciences, Miami, Florida. March 7-9.
- \*Singh A. and Louda J. W. (2002) Utilization of "epiphytometers" for the estimation of epiphytic productivity and community structure in conjunction with HPLC pigment analysis. 66<sup>th</sup>. Annual Meeting, Florida Academy of Sciences, Miami, Florida. March

- \*Skoog K. and Louda J. W. (2002) Effects of Light Field upon the Chemotaxonomic Estimation of Cyanobacteria in Lake Okeechobee, Florida. 66<sup>th</sup>. Annual Meeting, Florida Academy of Sciences, Miami, Florida. March 7-9.
- \*Louda J. W. (2003) The wax and wane of cyanobacterial blooms in north-central Florida Bay as discerned by pigment-based chemotaxonomy. 67<sup>th</sup>. Annual Meeting of the Florida Academy of Sciences. Orlando, Fl., March 21-22, 2003. Abstract # BIO-12.
- \*Skoog K. and Louda J. W. (2003) Chemotaxonomic assessment of Lake Okeechobee phytoplankton: natural samples and *in vitro* experimentation into the effects of light levels. 67<sup>th</sup>. Annual Meeting of the Florida Academy of Sciences. Orlando, Fl., March 21-22, 2003. Abstract # SS-6.
- \*Singh A. and <u>Louda J. W.</u> (2003) "Epiphytometry" in the study of epiphyte productivity and taxonomic makeup in north-central Florida Bay. 67<sup>th</sup>. Annual Meeting of the Florida Academy of Sciences. Orlando, Fl., March 21-22, 2003. Abstract # BIO-13.
- \*Louda J. W., Hagerthey S. and Monghkronsri P. (2003) Pigment-based chemotaxonomic studies of Everglades periphyton. 67<sup>th</sup>. Annual Meeting of the Florida Academy of Sciences. Orlando, Fl., March 21-22, 2003. Abstract # BIO-14.
- \*Louda J. W. (2003) Chemotaxonomic Assessment of Microalgal Communities in North-Central and Western Florida Bay. Joint Conference on the Science and Restoration of the Greater Everglades and Florida Bay Ecosystem. Palm Harbor, Fl. April 13–18, 2003. Florida Bay Abstracts, pp. 129-131.
- \*Hagerthey S. E., Jacoby M., Louda J. W. and Monghkronsri P. (2003) Development of a High Performance Liquid Chromatography (HPLC) Protocol for Monitoring Periphyton in the Florida Everglades. Joint Conference on the Science and Restoration of the Greater Everglades and Florida Bay Ecosystem. Palm Harbor, Fl. April 13 –18, 2003. GEER Abstracts, pp. 235 – 236.
- Neto R.R., Mead R., Louda J.W. and Jaffe R. (2003) Source assessment of organic matter In flocculent material from a subtropical wetland and its incorporation into sediments: A biomarker approach. 2003 LTER All Scientists Meeting, Estuarine Research Federation, Seattle, Washington, 18-21 September 2003.
- \*Osetek, J. and <u>Louda, J. W.</u> (2004) Water quality analyses of canals in the agricultural / residential community of Loxahatchee Groves, Florida. 68<sup>th</sup>. Annual Meeting of the

Florida Academy of Sciences. Orlando, Fl., March 12-13, 2004. Abstract ENV-10.

- \*Louda, J. W. and Monghkronsri, P. (2004) Comparison of spectrophotometric and HPLC estimations of chlorophylls-a, -b, -c and pheopigments in Florida Bay seston. 68<sup>th</sup>. Annual Meeting of the Florida Academy of Sciences. Orlando, Fl., March 12-13, 2004. Abstract # ENV.
- \*Louda, J. W. (2004a) Pigment-based chemotaxonomic studies of Florida Bay microalgae. Southeastern Estuarine Research Society, Spring Meeting, Ft. Pierce, FL., April 15 – 17. Abstracts, p. 28-29.
- \*Louda, J. W. (2004b) Pigment-based chemotaxonomic evaluation of north-central and western Florida Bay phytoplankton. American Society of Limnology and Oceanography, Summer Meeting. Savannah, GA. June 13-18.
- \*Louda, J. W. (2004c) Photosynthetic Pigments as Probes for Microalgal Community Structure and Flux. South Florida-Caribbean Cooperative Ecosystems Studies Unit (SFC-CESU) Meeting, Davie, Fl. July 9.
- Stanway, K. E., Boyer, J. N., Louda, J. W. and Mongkronsri, P. (2005) The effect of microbial mats on sediment nutrient fluxes in Florida Bay, USA. Estuarine Research Federation Annual Meeting, Norfolk, Virginia, Oct. 16-20, 2005.
- Grant, C. and Louda, J. W. (2005) Photosynthetic pigments in relation to photic flux. South Florida ACS Chemical Sciences Symposium, Nova University, Davie, Florida. Nov. 12, 2005. (Poster).
- Mortezaei-Rad, M. and Louda, J. W. (2005) Synthesis and characterization of novel cyclopheophorbides. South Florida ACS Chemical Sciences Symposium, Nova University, Davie, Florida. Nov. 12, 2005. (Poster).
- Conway J. and Louda J. W. (2005) Drinking water analysis. South Florida ACS Chemical Sciences Symposium, Nova University, Davie, Florida. Nov. 12, 2005. (Poster).
- \*Louda J. W. (2005) Resuspended sediments and effects on chemotaxonomy in north-Central and western Florida Bay. 2005 Florida Bay and Adjacent Marine Systems Science Conference. Hawks Key, Florida. Dec. 11 – 14, 2005. (Poster).
- \*Louda J. W., Hagerthey S. E., and Mongkhronsri, P. (2006) Pigment-Based Chemotaxonomic Evaluation of Everglades Periphyton Communities. Greater Everglades Ecosystem Restoration Conference. Lake Buena Vista, Florida. June 5-9.
- \*Grant C. S. and Louda J. W. (2007) Photosynthetic pigment ratios in relation to photic flux. 71<sup>st</sup>. Annual Meeting of the Florida Academy of Sciences. St. Petersburg, FL. March 16-17. Abstr. ENV.

- \*Mongkhronsri P., Hagerthey S. and Louda J. W. (2007) Utilization of pigment-based chemotaxonomy for rapid spatial-temporal assessment of Everglades periphyton. 71<sup>st</sup>. Annual Meeting of the Florida Academy of Sciences. St. Petersburg, FL. March 16-17. Abstr. ENV.
- \*Mortezaei-Rad. M. and Louda J. W. (2007) Synthesis, purification and characterization of the unstable chlorophyll-a derivative 13<sup>2</sup>, 17<sup>3</sup>-mesocyclopheophorbide *a-e*nol. 71<sup>st</sup>. Annual Meeting of the Florida Academy of Sciences. St. Petersburg, FL. March 16-17. Abstr. ENV.
- \*Cintron C. and Louda J. W. (2007) Extractability of phosphorous from horse manure and implications for the pollution of the surficial waters and aquifers of southern Florida. 71<sup>st</sup>. Annual Meeting of the Florida Academy of Sciences. St. Petersburg, FL. March 16-17. Abstr. ENV.
- \*Louda J. W. (2007) The utilization of pigments in the assessment of periphyton assembly changes during CERP. Report to the Comprehensive Everglades Restoration Project – Monitoring and Assessment Project (CERP-MAP) Team. Pubic advertised forum, Hollywood, Florida, June 27, 2007.
- \*Louda J.W. (2007) Application of pigment-based chemotaxonomy to the evaluation and monitoring of Florida's estuarine, coastal and open ocean waters. Florida Oceans and Coastal Council (oral presentation) Nov.14, Harbor Branch Oceanographic Institution, Ft. Pierce, Fla.
- \*Grant, C.S. and J. W. Louda, J.W. (2008) The effect of photic flux on biomarker pigment ratios used in chemotaxonomy. 72<sup>st</sup>. Annual Meeting of the Florida Academy of Sciences. Jacksonville, FL. March 14. Abstr. ENV.
- \*Louda J.W., Mongkhonsri P., and Hagerthey S.E. (2008) Pigment-based chemotaxonomic assessment of periphyton and the Comprehensive Everglades Restoration Plan (CERP). 72<sup>st</sup>. Annual Meeting of the Florida Academy of Sciences. Jacksonville, FL. March 14. Abstr. ENV.
- \*Mongkhonsri P., Louda J.W., and Hagerthey S.E. (2008) Reversed phase highperformance liquid chromatography (HPLC) coupled with photodiode array (PDA) spectroscopy for the separation and identification of complex lipophilic pigment mixtures. 72<sup>st</sup>. Annual Meeting of the Florida Academy of Sciences. Jacksonville, FL. March 14. Abstr. ENV.

Louda, J. W. (2008) Spatial and temporal monitoring of phytoplankton in waters affected by or within open pit mining operations using pigment-based chemotaxonomy. 1<sup>st</sup>. International Conference on Mining Impacts to the Human and Natural Environments. Punta Gorda, Fl., Mar.15, 2008. Poster.

### E. <u>Symposia activities.</u>

- Louda, J. W. (1990) Session Chairman: <u>Symposium on Porphyrin Geochemistry: The</u> <u>Quest for Analytical Reliability.</u> 199th. Natl. A.C.S. Meeting, April 27, Boston.
- Louda, J. W. (2002-2003) Organizer and symposium chair. 225<sup>th</sup>. Natl. A.C.S. Meeting, March 2003, New Orleans.

### F. Graduate Students Supervised as Major Professor (12).

### <u>F.1. Doctoral</u> F.1.a. Ph.D. Completed (1):

Mortezaei-Rad, Mitra (2007) Hemisynthesis and characterization of cyclopheophorbides. (Ph.D. Chemistry and Biochemistry).

#### F.1.b. Ph.D., in progress (2):

- Grant, Cydia (2009-2010 expected) Effect of photic flux on microalgal pigment ratios, carbon and protein biomass in microalgae. (Ph.D. Chemistry and Biochemistry).
- West, Maria (2012-13, expected) Effect of microbial activities on the breakdown of chlorophylls and carotenoids during organic diagenesis. (Ph.D. Chemistry and Biochemistry).

### F.2. Masters [9] (M.S. and M.S.T.):

Browne, Jaime (2007-9 expected) Application of the algorithm 'CHEMTAX' to chemotaxonomic studies of periphyton and phytoplankton in southern Florida. (M.S. Environmental Sciences).

- Prize-Bolter, Karen (2007-2009 expected) Effects of nutrients, emphasizing iron, on the photosynthetic pigment ratios and quantities in marine phytoplankton. (M.S., Environmental Sciences).
- Cintron, Charmaine (2007) Speciation of phosphorous in horse manure and its interactions with water and sediment components. M.S.T. Chemistry and Biochemistry.
- Grant, Cydia (2006) Effect of light on microalgal pigment ratios. (M.S. Chemistry and Biochemistry).
- Skoog, Kathryn O. (2003) Pigment-Based Chemotaxonomy of Phytoplankton Communities in Lake Okeechobee, Florida. (M.S., Environmental Sciences).
- Singh, Alya G. (2003) Epiphyte Productivity and Community Structure in Conjunction with HPLC Pigment Analysis. (M.S. Environmental Sciences).
- Padney, M. (2003) Low Pressure High Performance Liquid Chromatography of Plant Pigments. (M.S.T., Chemistry and Biochemistry)
- Liu, Lei (2000) Senescence- and death-related alterations of chlorophylls and carotenoids in marine phytoplankton. (M.S. Chemistry and Biochemistry).
- Loitz, Joseph W. (1999) Isolation and Characterization of Chlorophyll and Carotenoids in Florida Bay; Phytoplankton, Microphytobenthos and Sediments. (M.S., Chemistry and Biochemistry).

#### Co-Advisor (5):

- Li, Jie (1997) Senescent and early diagenetic changes in chlorophyll. (M.S., Chem.)
- Winfree, Mary Nancy (1996) Pigment Analysis of Benthic and Pelagic Algae in Lake Okeechobee, Florida. (M.S., Chem.)
- Huang, Xiaoxue (1994) High performance liquid chromatographic separation of sedimentary vanadyl porphyrins. (M.S., Chem.)
- Zeng, Shaochuan (1992) HPLC separation and characterization of nickel geoporphyrins. (M.S. Chem.)
- Magnier, Clotilde (1991) Vanadyl and nickel geoporphyrin biodegradation study in high sulfur Monterey crude oils and Canadian tar sands. (M.S., Chem.)

Committee Member: Mr. James Goldberg (M.S., Chem., 2000), Mr. Omar Martinez (M.S., Chem.

1998), Mr. Rupert McCormick (M.S., Chem. 2002), Ms. Prajakta Kamthe (M.S., Env. Sci., 2002), Dr. Zuzana Zajickova (Ph.D., Chem., 2006), Ms. B. Hiassen (M.S., Env. Sci., 2003), Ms. Renuka Mohammed (M.S., Env. Sci., 2002), Ms. Sushma Ponukumati (M.S., Env. Sci., 2007), Dr. Ralph Mead (Ph.D. Chem. F.I.U., Miami, FL 2003), Dr. Renato Neto (Ph.D. Chem. F.I.U., Miami, FL, 2004), Ms. Angela Duque-Hersey (M.S., Env. Sci. 2007), Dr. Abhijeet Kate (Ph.D. Chem., 2007), Dr. Zhongliang Wan (Ph.D. Chem. 2007), amongst others.

#### Directed Independent Study (D.I.S.) Mentor (B.S. Chemistry track): Mr. Joe

Loitz (1996-1997), Mr. Athanasios Mellisiotis (2000-2001), Ms. Simi Marwaha (2003), Ms. Amanda Strom (2004), Mr. Andrew P. Bennett (2004), Mr. Andrew Bennett (2004), Ms. Judith Formul (2004), Mr. Jeff Osetek (2003-2004), Ms. Jennifer Conway (2005-6), Mr. Joseph Chamy (2005), Ms. Alissa Deming (2005), Francisca Ordonez (2005-2006), Mr. Josh Tabor (2007), Ms. Nancy Catlfumo (2007), Mr. Terios Efstathiou (2007), Ms. Nahid Ilyad (2007-8), amongst others.

### G. Internet materials:

Louda J. W. (2002) NOAA-SFERPM: Question #3 ALGAL BLOOMS "Chemotaxonomic Assessment of Phytoplankton and Epiphyte Succession in the Rankin Bight-Whipray Basin Areas of North Central Florida Bay". Progress Report (http:www.aoml.noaa.gov/ocd/sferpm/louda/louda\_algal\_blooms.html)

- Louda J. W., Loitz, J. W. Melisiotis A., Baker E. W. and Orem W. H. (2001) *Hydrogel* Stabilization of Florida Bay Marl Sediments. (htpp:www.aoml.noaa.gov/ocd/sferpm/louda/flabay\_hydrogel.html).
- Louda, J. W. and Monghkonsri, P. (2002) Comparison of spectrophotometric estimates of chlorophylls-*a*, -*b*, -*c* and 'pheopigments' in Florida Bay seston with that obtained by high performance liquid chromatography-photodiode array analyses. (http://www.aoml.noaa.gov/ocd/sferpm/louda)

# **GRANTS / CONTRACTS:** 12 years continual support (15, totaling \$ 545,371.96)

### Present Support and /or activity (PI/PD):

The utilization of pigments in the assessment of periphyton assembly changes during CERP. April 1, 2006 to March 30, 2009. **\$ 240,000.00** South Florida Water Management District (CERP / RECOVER Fund).

HPLC Analyses of pigments in sediment-water interfacial flocculent materials. Contractual. Florida International University (Dr. Joe Boyer) Southeast Regional Environmental Research Center. **§ 1,400.00,** 

### Pending Support (Co-PI status):

- Phycobilin analyses in conjunction with chemotaxonomic evaluation of marine phytoplankton in Florida Bay and Associated marine and brackish systems of southeastern Florida. South Florida Water Management District, Everglades Division. 1 Year, **§ 10, 548.50. (mid 2008-9)**
- SFP 2006 Cyanobacterial Blooms in Florida Bay, Department of the Interior-National

Oceanic and Atmospheric Administration. 2 years, <u>\$ 192,125.70</u>. Start date, 2008-?). M. S. Koch, C. Madden and J. W. Louda. (pending 3/10/08-?)

### Previous support (PI/PD):

- Visitor Support Program (VSP) United States Office of Naval Research, International Field Office. Travel and living expenses for visiting Ph.D. candidate, Malgorzata Szymczak-Zyla, from the Institute of Oceanology, Polish Academy of Sciences, Sopot, Poland. <u>\$ 4,000.00</u> (VSP# 4047, Grant # N00014-04-1-4047. 2004.
- The applicability of pigments to assess periphyton assembly changes-IV. October 1, 2004 to September 31, 2005. **<u>\$49,600.00</u>** South Florida Water Management District (Everglades TAG Fund).
- HPLC Analyses of pigments in sediment-water interfacial flocculent materials. Contractual. Florida International University (Dr. Joe Boyer) Southeast Regional Environmental Research Center. **§ 1,235.00,**
- The applicability of pigments to assess periphyton assembly changes-III. June 1, 2004 to December 31, 2004. <u>\$ 31,000.00</u> South Florida Water Management District.
- HPLC Analyses of oceanic phytoplankton. 2003-4. Rosentheil School of Marine and Atmospheric Sciences, University of Miami (Dr. G. Hitchcock), <u>\$ 1,000.00</u>.
- The applicability of pigments to assess periphyton assembly changes-II. July 1, 2003 to December 30, 2004. <u>\$ 23,000.00</u>. South Florida Water Management

District.

- The applicability of pigments to assess periphyton assembly changes. July 1, 2002 to June 30, 2003. **§ 23,000.00** South Florida Water Management District.
- Bioseston Response to Changing Environmental Conditions in Northern Florida Bay. August 1, 2001 to July 31, 2002. <u>\$ 20,827.28</u>. United States Department of Commerce, National Marine Fisheries Division (South Florida Ecosystem Restoration and Management Program).
- Florida Bay Epiphytes: Investigations of Seasonal and Spatial Succession. August 1, 2001 to July 31, 2002. <u>\$ 20,965.28</u>. United States Department of Commerce, National Marine Fisheries Division (South Florida Ecosystem Restoration and Management Program).
- Chemotaxonomic Assessment of Phytoplankton Succession Northern Florida Bay. February 16, 2001 to July 31, 2001. <u>\$ 21,013.70</u>. United States Department of Commerce, National Marine Fisheries Division (South Florida Ecosystem Restoration and Management Program).
- Photosynthetic Pigment Analyses of Macrophytes, Periphyton, and Microphytobenthos in Florida Bay. February 16, 2001 to July 31, 2001. <u>\$ 20,830.70</u>. United States Department of Commerce, National Marine Fisheries Division.
- Investigation of Florida Bay Algal Bloom History using Chlorophyll and Carotenoid Biomarkers. South Florida Water Management District. <u>\$25,000.00</u> (1997 - 1998).
- Pigment Analysis of Benthic and Pelagic Algae in Lake Okeechobee, Florida. Contract #DSR 93-313 from South Florida Water Management District. <u>\$62,500.00.</u> (1995-1997).