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Northwestern University, Evanston, IL; USPHS/NIH Postdoctoral Fellow, September 1984 – September 1986. Postdoctoral advisor: Prof. Brian M. Hoffman.

University of Florida, Gainesville, FL; Ph.D. in Inorganic Chemistry, December 1984. University of Illinois, Urbana, IL; graduate student in Inorganic Chemistry, 1980 – 1983. Thesis advisor: Prof. Russell S. Drago (deceased).

Joshua Telser, CV, page 2

9/84 – 9/86: Postdoctoral Fellow, Department of Chemistry, Northwestern University, Evanston, IL. Research on metalloenzyme structure and catalytic function using electron paramagnetic resonance (EPR) and ENDOR spectroscopy.

8/83 – 9/84: Graduate Research Assistant, Department of Chemistry, University of Florida, Gainesville, FL.

8/80 – 8/83: Graduate Teaching Assistant, Department of Chemistry, University of Illinois, Urbana, IL. Research on synthesis and spectroscopy of transition metal carboxylate dimers to understand metal-metal and metal-ligand interactions in potentially catalytically relevant complexes. Teaching assistant in General Chemistry and Physical Chemistry Laboratory courses.

Summer 1979: Dreyfus Foundation Summer Scholar, Department of Chemistry, University of Chicago, Chicago, IL.

Research in organometallic chemistry of lanthanide

7. Hamilton, D.E.; Drago, R.S.; Telser, J. "Spin-T

29. Telser, J.; Huang, H.; Lee, H.-I.; Adams, M.W.W.; Hoffman, B.M. "Site Valencies and Spin Coupling in the 3Fe and 4Fe ($S = 1/2$) Clusters of *Pyrococcus furiosus* Ferredoxin by ^{57}Fe ENDOR"; *J. Am. Chem. Soc.* **8**, 120, 861-870.
30. Staples, C.R.; Gaymard, E.; Stritt-Etter, A.-L.; Telser, J.; Hoffman, B.M.; Schürmann, P.; Knaff, D.B.; Johnson, M.K.; "Role of the $[\text{Fe}_4\text{S}_4]$ Cluster in Mediating Disulfide Reduction in Spinach Ferredoxin:Thioredoxin Reductase"; *Biochemistry* **8**, 37, 4612-4620.
31. Telser, J.; Lee, H.-I.; Smith, E.T.; Huang, H.; Brereton, P.; Adams, M.W.W.; Conover, R.C.; Johnson, M.K.; Hoffman, B.M. "Investigation by EPR and ENDOR Spectroscopy of the Novel 4Fe Ferredoxin from *Pyrococcus furiosus*";

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60. Lansky, D. E.; Mandimutsira, B.; Ramdhanie, B.; Clausen, M.; Penner-Hahn, J.; Zvyagin, S. A.; Telser, J.; Krzystek, J.; Zhan, R.; Ou, Z.; Kadish, K. M.; Zakharov, L.; Rheingold, A. L.; Goldberg, D. P.; "Synthesis, Characterization, and Physicochemical Properties of Manganese(III) and Manganese(V)-Oxo Corrolazines"; *Inorg. Chem.* , 44, 4485-4498.
61. Harvey, J. D.; Ziegler, C. J.; Telser, J.; Ozarowski, A.; Krzystek, J.; "High-Frequency and -Field EPR Investigation of a Manganese(III) N-Confused Porphyrin Complex, [Mn(NCTPP)(py)₂]" ; *Inorg. Chem.* , 44, 4451-4453. Addition and Correction: *Inorg. Chem.* **6**, 45, 8459.
62. Telser, J.; van Slageren, J.; Vongtragool, S.; Dressel, M.; Reiff, W. M.; Zvyagin, S. A.; Ozarowski, A.; Krzystek, J.; "High-frequency/high-field EPR spectroscopy of the high-spin ferrous ion in hexaaqua complexes"; *Magn. Reson. Chem.* , 43, S130-S139. (Special Issue: High-field EPR in Biology, Chemistry and Physics; DOI: 10.1002/mrc.1689)
63. Hakemian, A. S.; Tinberg, C. E.; Kondapalli, K. C.; Telser, J.; Hoffman, B. M.; Stemmler, T. L.; Rosenzweig, A. C.; "The Copper Chelator Methanobactin from *Methylosinus trichosporium* OB3b Binds Copper(I)"; *J. Am. Chem. Soc.* , 127, 17142-17143.
64. Krzystek, J.; Zvyagin, S. A.; Ozarowski, A.; Trofimenko, S.; Telser, J.; "Tunable-Frequency High-Field Electron Paramagnetic Resonance"; *J. Magn. Reson.* **6**, 178, 174-183.

70. Dey, M.; Telser, J.; Kunz, R. C.; Lees, N. S.;

79. Liptak, M. D.; Fleischhacker, A. S.; Matthews, R. G.; Telser, J.; Brunold, T. C. "Spectroscopic and Computational Characterization of the Base-off Forms of Cob(II)alamin"; *J. Phys. Chem. B*, *113*, 5245–5254.
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82. Jiang, Y.; Telser, J.; Goldberg, D.P. "Evidence for the formation of a mononuclear ferric–hydroperoxo complex via the reaction of dioxygen with an (N₄

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89. Tran, B. L.; Singhal, M.; Park, H.; Lam, O. P.; Pink, M.; Krzystek, J.; Ozarowski, A.; Telser, J.; Meyer, K.; Mindiola, D. J. "Reactivity Studies of a Masked Three-Coordinate Vanadium(II) Complex"; *Angew. Chem. Int. Ed.* , 49, 9871–9875.
90. Arion, V. B.; Rapta, P.; Telser, J.; Shova, S. S.; Breza, M.; Lušpai, K.; Kožišek, J. "Syntheses, Electronic Structures, and EPR/UV–Vis–NIR Spectroelectrochemistry of Nickel(II), Copper(II), and Zinc(II) Complexes with a Tetradentate Ligand Based on S-Methylisothiosemicarbazide"; *Inorg. Chem.* , 50, 2918–2931.
91. Yang, L.; Lin, G.; Liu, D.; Dria, K. J.; Telser, J.; Li, L. "Probing the Reaction Mechanism of Spore Photoproduct Lyase (SPL) via Diastereoselectively Labeled Dinucleotide SP TpT Substrates"; *J. Am. Chem. Soc.* , 133, 10434–10447. Correction: *J. Am. Chem. Soc.* , 134, 20858–20858.
92. Gale, E. M.; Simmonett, A. C.; Telser, J.; Schaefer, H. F., III; Harrop, T. C. "Toward Functional Ni-SOD Biomimetics: Achieving a Structural/Electronic Correlation with Redox Dynamics"; *Inorg. Chem.* , 50, 9216–9218.
93. Doan, P. E.; Telser, J.; Barney, B. M.; Igarashi, R. Y.; Dean, D. R.; Seefeldt, L. C.; Hoffman, B. M. "⁵⁷Fe ENDOR Spectroscopy and 'Electron Inventory' Analysis of the Nitrogenase E₄ Intermediate Suggest the Metal-Ion Core of FeMo-Cofactor Cycles Through Only One Redox Couple"; *J. Am. Chem. Soc.* , 133, 17329–17340.
94. Krzystek, J.; Smirnov, D.; Schlegel, C.; van Slageren, J.; Telser, J.; Ozarowski, A. "High-Frequency and -Field EPR Study of the [Fe(H₂O)₆]²⁺ Ion in Ferrous Fluorosilicate"; *J. Magn. Reson.* , 213, 158–165.
95. Smith, S. M.; Rawat, S.; Telser, J.; Hoffman, B. M.; Stemmler, T. L.; Rosenzweig, A. R. "Crystal Structure and Characterization of Particulate Methane Monooxygenase from *Methylocystis* species Strain M"; *Biochemistry* , 50, 10231–10240.
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109. Tran, B. L.; Krzystek, J.; Ozarowski, A.; Chen, C.-H.; Pink, M.; Karty, J. A.; Telser, J.; Meyer, K.; Mindiola, D. J. "Formation and Reactivity of the Terminal Vanadium Nitride Functionality"; *Eur. J. Inorg. Chem.* , 3916–3929. (DOI: 10.1002/ejic.201300178).
110. Zadrozny, J. M.; Telser, J.; Long, J. R. "Slow

Parameters for High-Spin Transition-Metal Ion Complexes"; *J. Phys. Chem. B* , 119, 13816–13824. (Wolfgang Lubitz *Festschrift*; DOI: 10.1021/acs.jpcc.5b08583).

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120. Colmer, H. E.; Margarit, C. G.; Smith, J. M.; Jackson, T. A.; Telser, J. "Spectroscopic and Computational Studies on the Electronic Structure of a High-Spin Oxidiron(IV) Complex in Solution"; *Inorg. Chem.* **53**, 14, 7507–7514 (2014).

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128. Xu, S.; Bucinsky, L.; Breza, M.; Krzystek, J.; Chen, C.-H.; Pink, M.; Telser, J.; Smith, J. M. "Ligand Substituent Effects in Manganese Pyridinophane Complexes: Implications for Oxygen-Evolving Catalysis"; *Inorg. Chem.* , 56, 14315–14325. (DOI: 10.1021/acs.inorgchem.7b02421).

129. Polezhaev, A. V.; Liss, C. J.; Telser, J.; Chen, C.-H.; Caulton, K. G. "A PNNH Pincer Ligand Allows Access to Monovalent Iron"; *Chem. – Eur. J.* **8**, 24, 1330–1341. (DOI: 10.1002/chem.201703795).

130. Carroll, T. G.; Garwick, R.; Telser, J.; Wu, G.; Ménard, G. "Synthesis, Characterization, and Electrochemical Analyses of *o*-Carboxylate and Phosphinate Derivatives"; *Organometallics* **8**, 37, 848–854. (DOI: 10.1021/acs.organomet.7b00797).

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Featured as NHMFL research highlight:

<https://nationalmaglab.gov/user-facilities/emr/emr-publications/highlights-emr/manipulating-ferryl-tilt>

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J. Braz. Chem. Soc., 21, 1139-1157. (Ícaro de Sousa Moreira memorial issue;
DOI: 10.1590/S0103-50532010000700002).

11. Telser, J.; Ozarowski, A.; Krzystek, J.; "High-frequency and -field electron paramagnetic resonance of transition metal ion (d block) coordin

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Paramagnetic Resonance of Metallobiomolecules; ACS Symposium Series, vol. 858; J. Telser, Ed.; Washington, DC: American Chemical Society, 2003. (ISBN: 0-8412-3832-4; DOI: 10.1021/bk-2003-0858).

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Template-Directed Ligation of DNA Probes. Cruickshank, K.A.; Netzel, T.L.; Telser, J.A. U.S. Patent Application filed December, 1989. Assigned to Amoco Corporation.

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- ! Florida Catalysis Conference, Palm Coast, FL; April, 1985.
- ! 190th ACS National Meeting, Chicago, IL; September, 1985; BIOL 47.
- ! Gordon Research Conference on "Metals in Biology", Santa Barbara, CA; January, 1986.
- ! 194th ACS National Meeting, New Orleans, LA; Septem

- ! Seminar at Ørsted Institute, Copenhagen, Denmark; August 5, 2002.
- ! Seminar, Inorganic Division, Department of Chemistry, Purdue University, West Lafayette, IN; November 12, 2002.
- ! Talk at workshop on Electron Magnetic Resonance, NHMFL, Tallahassee, FL; December, 2002.
- ! Seminar, Chemistry Department, Washington State University, Pullman, WA; April 14, 2003.
- ! Seminar, Inorganic Chemistry Division, University of Wisconsin, Madison, WI; April 28, 2003.
- ! Seminar, Chemistry Department, University of New Mexico, Albuquerque, NM; September 12, 2003.
- ! Seminar, Department of Chemistry and Biochemistry, University of Bern, Bern, Switzerland, January 8, 2004.
- ! Seminar, Institute of Physical Chemistry, University of Stuttgart, Stuttgart, Germany, January 12, 2004.
- ! Seminar, Max Planck Institut für Bioanorganische Chemie, Mülheim a.d. Ruhr, Germany, January 19, 2004.
- ! Seminar, Chemistry Department, University of Memphis, Memphis, TN; October 29, 2004.
- ! Seminar, Physical Chemistry Department, Slovak Technical University, Bratislava, Slovakia; January 21, 2005.
- !

- ! 8th European Conference on Biological Inorganic Chemistry (EUROBIC-8), Aveiro, Portugal; July, 2006.
- ! Talk at 13th Brazilian Meeting on Inorganic Chemistry (BMIC XIII), Fortaleza, CE, Brazil; September 5, 2006.
- ! Seminar, Chemistry Department, University of Miami, Coral Gables, FL; February 15, 2007.
- ! 233rd ACS National Meeting, Chicago, IL; March, 2007; INOR 1312 (also session chair).
- ! Talk in Symposium on "Concepts and Models in Bioinorganic Chemistry", 90th Chemical Society of Canada Meeting, Winnipeg, MB, Canada; May 30, 2007.
- ! Invited talk at 13th International Conference on Bi

- ! 241st ACS National Meeting, Anaheim, CA; March 27, 2011; INOR 131.
- ! Invited speaker, XVII Congreso Argentino de Fisicoquímica y Química Inorgánica, Córdoba, Argentina; May 5, 2011.
- ! Talk at 94th Canadian Society for Chemistry Meeting, Montréal, QC, Canada; June 8, 2011.
- ! Invited talk at 15th International Conference on Bioinorganic Chemistry (ICBIC-15), Vancouver, BC, Canada; August 10, 2011; Abstract 1072716.
- ! Seminar, Chemistry Department, University of Texas-Arlington, Arlington, TX; March 9, 2012.
- ! 243rd ACS National Meeting, San Diego, CA; March 25 – 29, 2012. Symposium Organizer and Introductory Remarks.
- ! Seminar, Chemistry Department, Miami University, Oxford, OH; April 26, 2012.
- ! Seminar, Chemistry Department, North Dakota State University, Fargo, ND; May 22, 2012.
- ! Vth International Conference on Molecular Materials (MolMat2012), Barcelona, Spain; July 3 – 6, 2012; PO 166.
- ! Keynote Lecture at 16th Brazilian Meeting on Inorganic Chemistry (BMIC XVI), Florianópolis, SC, Brazil; August 14, 2012.
- ! Talk at 41st Southeastern Magnetic Resonance Conference (part of Southeastern Regional ACS Meeting (SERMACS)), Raleigh, NC; November 15 – 17, 2012; Abstract 1094.
- ! Seminar, Chemistry Department, Illinois Institute of Technology, Chicago, IL; February 20, 2013.
- ! Talk at 12th International Symposium on Metal Ions in Biology and Medicine, Punta del Este, Uruguay; March 11 – 13, 2013. Abstract 033, in ISBN: 978-9974-0-0911-0.
- ! Seminar, Instituto de Química, Universidad de la República, Montevideo, Uruguay; March 15, 2013.
- ! 245th ACS National Meeting, New Orleans, LA; April 7 – 11, 2013; INOR 1234.
- ! 18th International Society of Magnetic Resonance (ISMAR) Meeting, Rio de Janeiro, RJ, Brazil, May 19 – 24, 2013; MO232, TU233.
- ! Seminars, Instituto de Química de São Carlos, Universidade de São Paulo, São Carlos, SP Brazil, August 21, 22, 2013.
- ! Seminar, Chemistry Department, University of Nevada, Reno, NV; September 13, 2013.
- ! Seminar, Chemistry Department, University of Akron, Akron, OH; January 22, 2014.
- ! Invited Participant, 5th Ringberg Workshop on Science with FELs [Free Electron Lasers], Schloss Ringberg, Kreuth, B ..479431(1)-0.95886(-)-0.956417(t)-12o

- ! Talk at 17th Brazilian Meeting on Inorganic Chemistry (BMIC XVII), Araxá, MG, Brazil; August 13, 2014. Abstract OP-8.
http://bmic2014.ufmg.br/arquivos/programacao.completa_3.pdf
- ! Seminar, Chemistry Department, University of Texas-El Paso (UTEP), El Paso, TX; November 14, 2014.
- ! Seminar, Inorganic Chemistry Division, Indiana University, Bloomington, IN; February 13, 2015.
- ! 249th ACS National Meeting, Denver, CO; March 22 – 26, 2015; INOR 384. Speaker in ACS Award in Organometallic Chemistry Symposium in Honor of William J. Evans.
- ! Seminar, Chemistry Department, University of Tennessee, Knoxville, TN; April 9, 2015.
- ! Seminar, Inorganic Chemistry Division, University of Georgia, Athens, GA; May 18, 2015.
- ! Seminar, Inorganic Chemistry Division, University of Pennsylvania, Philadelphia, PA; June 9, 2015.
- ! Talk at 98th Canadian Society for Chemistry Meeting, Ottawa, ON, Canada; June 16, 2015.
- ! Talk at 3rd EuCheMS Inorganic Chemistry Conference, 6125(e)3.158. 5pince,

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