

A. Articles in fully peer-reviewed journalsSubmitted, under review

- Adam P. Hitchcock, [Chunyang Zhang](#), [Haytham Eraky](#), Drew Higgins Rachid Belkhu, Niolas Mille, Sufal Swaraj Stefan Stanescu, Tianxiao Sun and Jian Wang, *Comparison of Soft X-ray spectroptychography and Scanning Transmission X-ray Microscopy*, Journal of Electron Spectroscopy and Related Phenomena (submitted March 2024)
- Pablo Ingino, [Haytham Eraky](#), [Chunyang Zhang](#), Adam P. Hitchcock and Martin Obst, *Soft X-ray spectromicroscopic proof of a reversible oxidation/reduction of individual microbial biofilm structures using a novel microfluidic in situ electrochemical device*, Scientific Reports (submitted 15 Mar 2024; review received 14-May-2024; resubmitted 19-Jun-2024)

In press or published(BOLD # – have pdf & may be available from <http://unicorn.mcmaster.ca>) (**STUDENTS; common CV = #**)

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- 1986-03 David C. Newbury (M.Sc., Chemistry) (1983-1986)
Inner-shell Electron Energy Loss Spectroscopy of Cyclic Organic Molecules
- 1990-xx Frank Esposto (M.Sc., Chemistry) (1988-1990)
EXAFS of $Pd_{40}Ni_{40}P_{20}$ Metallic Glass and Boron Doped Silicon

Adam P. Hitchcock	Publications	June 23, 2024
1992-xx	Alex T. Wen (Ph.D, Chemistry) <i>Core Excitation of Some Organometallic and Organosilicon Molecules</i>	(1988-1992)
1995-xx	James T. Francis (Ph.D., Chemistry) <i>Dipole and Non-dipole Core Electronic Excitation Spectroscopy</i>	(1990-1995)
1997-xx	Stephen G. Urquhart (Ph.D., Chemistry) <i>Core Excitation Spectroscopy of Molecules and Polymers</i>	(1992-1997)
1996-09	Cassia Cúran Turci (Ph.D. Inorganic Chemistry ; joint with UFRJ) <i>Molecular Inner-shell Excitation by Electron Energy Loss Spectroscopy</i>	(1994-1996)
1996-10	Jeff Aubry (M. Eng., Mat. Sci.) <i>X-ray Absorption Fine Structure Spectroscopy of Thin Film SiGe Alloys</i>	(1994-1996)
2000-xx	I.Gabriella Eustatiu (Ph.D. Chemical Physics) <i>Spectroscopy and Oscillator Strengths at High Momentum Transfer</i>	(1995-2000)
2004-12	Cynthia Morin (Ph.D., Chemistry) <i>Soft X-Ray Spectromicroscopy of Proteins on Patterned Polymer Films</i>	(1999-2004)
2005-09	Hua Jiang (M.Sc, Chemistry) <i>Inner Shell Excitation Spectroscopy of Amino Acids and Small Peptides</i>	(2002-2004)
2006-10	Li Li (PhD, Chemistry) <i>X-ray Spectromicroscopy Study of Protein Adsorption onto chemically patterned surfaces</i>	(2004-2006)
2008-02	Jian Wang (PhD, Chemistry) <i>Radiation chemistry studied by Soft X-ray microscopy</i>	(2002-2008)
2010-04	Karen Lam (M.Sc., Chemistry) <i>X-Ray Magnetic Circular Dichroism of Individual Magnetosomes in Magnetotactic Bacteria by Scanning Transmission X-Ray Microscopy</i>	(2007-2010)
2010-05	Bonnie O. Leung (Ph.D., Chemical Biology) <i>Protein Adsorption to Polymer Blend Films</i>	(2006-2010)
2010-12	Jian (Jeffrey) Li (co-supervised with H. Stöver) (PhD) <i>Synthesis, Characterization and Modification of Microcapsules</i>	(2005-2010)
2011-05	Ebrahim Najafi (PhD, Chemistry & Chemical Biology) <i>X-Ray and Electron Spectromicroscopy of Carbon Nanotube Systems</i>	(2006-2011)
2012-08	Adam F.G. Leontowich (PhD, Chemistry & Chemical Biology) <i>Tunable soft X-rays for patterning and lithography</i>	(2008-2012)
2012-09	Samanbir Kalarai (MSc., Chemistry & Chemical Biology) <i>Scanning Transmission X-ray Microscopy of Magnetotactic Bacteria</i>	(2010-2012)
2016-06	Jonathan D. West (MSc,Chemistry & Chemical Biology) <i>Scanning Transmission X-Ray and Fluorescence Microscopy of Lipid Bilayers</i>	(2014-2016)
2016-10	Xiaohui Zhu (PhD, Chemistry & Chemical Biology) <i>Studies of Magnetotactic Bacteria by Soft X-Ray Microscopy</i>	(2012-2016)
2017-07	Vinod Prabu (MSc, Chemistry & Chemical Biology) <i>In-situ Electrochemical Scanning Transmission X-ray Microscopy (STXM)</i>	(2015-2017)
2018-08	Lis Guimarães de Azeredo Melo (PhD, Chemistry & Chemical Biology) <i>Soft X-Ray Spectromicroscopy of Radiation Damaged Perfluorosulfonic Acid</i>	(2014-2018)
2018-08	Zhejia (Blossom) Yan (PhD, Chem. & Chem. Biology) (G. Goward main sup) <i>A Spectroscopic Study of Polymer Electrolyte Membranes</i>	(2014-2018)
2018-09	Lucas Le Nagard (MSc. Physics; co-supervised by Cecile Fradin) <i>Formation and Positioning of the Magnetosome Chain in <i>Magnetospirillum Magneticum AMB-1</i></i>	(2016-2018)
2018-09	Juan Wu (PhD, Materials Science and Engineering) <i>Nano-scale 4D mapping by Scanning Transmission X-ray Microscopy</i>	(2013-2018)
2023-09	Chunyang Zhang, (PhD, Chem. Engineering, cosupervised by Drew Higgins) <i>In Situ Soft X-Ray Spectro-Microscopic Characterization of Catalysts For Electrochemical CO₂ Reduction</i>	(2019-2023)
2024-03	Haytham Eraky (PhS, Chemistry & Chemical Biology)	(2020-2024)

Ex-situ and In-situ Soft X-Ray Spectro-Microscopy Studies of Manganese Oxide Electrodes for Energy Storage Applications

202x Robert Fathieh-Ngunjiri (PhD, Chem. Engineering, cosupervised by Drew Higgins) (2022-202x)

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- nr-88 A.P. Hitchcock, *Advances in soft X-ray spectromicroscopy*, Imaging & Microscopy, Feb issue (2019) 2-3.
- nr-87 A.P. Hitchcock, A. Khondker and M. Rheinstädter, *A new approach for finding Alzheimer's treatments*, CLSnews (2018) 1-3 (story written by C. MacPherson)
- nr-86 W. Eberhardt, A.P. Hitchcock and N. Kosugi, *Celebrating 43 years and 200 Volumes*, J. Electron Spectrosc. 200 (2015) 1. doi: /10.1016/j.elspec.2015.08.008
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