A. Articles in fully peer-reviewed journals

BLUE NUMBER – may be available at unicorn.mcmaster.ca
BLUE NAME – undergraduate or graduate student


327 L. Le Nagard, L. Yu, M. Rajkotwala, S. Barkley, D.A. Bazylinski, A.P. Hitchcock and C. Fradin, Misalignment between the magnetic dipole moment and the cell axis in the magnetotactic bacterium Magnetospirillum magneticum AMB-1, Physical Biology 16 (2019) 066008. doi:/10.1088/1478-3975/ab2858


325 Lis G.A. Melo and A.P. Hitchcock, Electron beam damage of perfluorosulfonic acid studied by soft X-ray spectromicroscopy, Micron 121 (2019) 8-20. doi.org/10.1016/j.micron.2019.02.006


azafullemer C$_{29}$N: Identifying surface absorbed water, Scientific Reports 6 (2016) 35605, pp 1-12 doi: 10.1038/srep35605


A.P. Hitchcock, M. Obst, J. Wang, Y.S Lu and T. Tyliszczak, Advances in the detection of As in environmental samples using low energy X-ray fluorescence in a scanning transmission X-ray microscope, Environmental Science and Technology 46 (2012) 2821–2829 doi:10.1021/es202238k


COVER


135. S.G. Urquhart, A.P. Hitchcock, J.F. Lehmann and M. Denk, *Probing Delocalization in Stable Silylenes: Core Excitation Spectra of Si(NRCH=CHNR), Si(NRCH₂CH₂NR), H₂Si(NRCH=CHNR) and H₂Si(NRCH₂CH₂NR) (R = 'Bu)*, Organometallics 17 (1998), 2352-2360.


98. G. Denes, Y.H. Yu, T. Tyliszczak and A.P. Hitchcock, Sn-K and Pb-L$_3$ EXAFS, X-ray Diffraction and $^{119}$Sn Mossbauer Studies of ordered $\beta$-PbS$_x$F$_{4-x}$, disordered Pb$_{1-x}$Sn$_x$F$_4$ ($x=0.3,0.4$) solid solutions, and PbSn$_x$F$_{10}$: High Performance Fluoride Ion Conductors, J. Solid State Chemistry 104 (1993) 239-252.


87. A.P. Hitchcock, R.S. DeWitte, J. Van Esbroeck, P. Aebi, C.L. French, N.P.C. Westwood and R.T. Oakley, A valence and inner-shell electronic and photoelectron spectroscopy study of the frontier orbitals of 2,1,3-Benzothiadiazole C$_6$H$_5$NS$_2$, 1,3,2,4-benzodithiadiazepine C$_6$H$_5$S$_2$N$_2$ and 1,3,5,2,4-benzotriothiadiazepine C$_6$H$_5$S$_3$N$_2$, J. Electron Spectroscopy 57 (1991) 165-187.


77. F. Edard, A.P. Hitchcock and M. Tronc, $\pi^*$ and $\sigma^*$ Shape Resonances in the Vibrational Excitation of HCN, CH$_3$CN and CH$_3$NC by Low-energy Electron Impact, Journal of Physical Chemistry 94 (1990) 2768-2774.


C. Refereed Conference Proceedings


C64 Cédric Gaillard, Chithra Karunakaran, Brigitte Bouchet, Alain Buleon, Adam P. Hitchcock, Analyse de surfaces biologiques par microscopie à balayage par transmission de rayons X mous, Materiaux2010 (October 2010). – NOT PUBLISHED


**Theses Supervised** (graduating in Chemistry, unless otherwise specified)


1990-xx Frank Esposto (M.Sc., Chemistry)  (1988-1990)  *EXAFS of Pd₄₀Ni₄₀P₃₀ Metallic Glass and Boron Doped Silicon*

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

D.1 Invited


143  A.P. Hitchcock, *Soft X-ray Spectromicroscopy in Scanning Transmission X-ray Microscopes*, EXAFS on line seminar series, ZOOM, March 26, 2020

142  A.P. Hitchcock, *Advanced Materials Analysis by Synchrotron-based Soft X-ray Microscopy*, ICFUTURE2020 Conference, Oulu, Finland 8-10 January 2020


140  A.P. Hitchcock, *Nanoscale materials analysis by soft X-ray Scanning Transmission Microscopy*, LNLS Users Meeting, Campinas, Brazil, Nov 6-9, 2018


135  A.P. Hitchcock, *Inner Shell Excitation Spectroscopy & Spectromicroscopy – Scientific and other Adventures with Eckart Rühl*, FU Berlin, April 18, 2018


A.P. Hitchcock, *Nanoscale characterization of polymers by soft X-ray spectromicroscopy*, 29th APS Spring meeting, Denver, Co, Mar **2015**.


A.P. Hitchcock, *Chemically selective spectromicroscopy by soft x-ray scanning transmission x-ray microscopy*, International Microscopy Congress 2014, Prague, Czech Republic, Sep 7-12 **2014**


A.P. Hitchcock, *Soft x-ray spectromicroscopy at the CLS*, Louis Delbaere Plenary Lecture, CLS Annual Users’ Meeting, Saskatoon, SK, 2 May **2014**.


A.P. Hitchcock, *A comprehensive overview of STXM*, Workshop on STXM, Umea, Sweden, 10,11 Dec **2013**.


A.P. Hitchcock, M. Obst, T. Tyliszczak, S. Kalirai and D. Bazylinski, *Chemically selective imaging and spectroscopy with Scanning Transmission X-ray Microscopy*, Microscopy and Microanalysis, Indianapolis, Aug 3-7, **2013**


97. A.P. Hitchcock, *Chemical imaging at 30 nm spatial resolution in 2-d and 3-d with Scanning Transmission X-ray Microscopy*, Canadian Association of Physicists, Toronto, Jun 7-11, 2010

96. A.P. Hitchcock and D. Bessarabov, *Chemical mapping of fuel cell membrane electrode assemblies by soft X-ray spectromicroscopy*, Symposium: Diagnostics and Characterization of
94. A.P. Hitchcock and E. Najafi, *Chemical characterization of nanomaterials with scanning transmission X-ray microscopy*, 4th Trinational Workshop on Standards for Nanotechnology, Ottawa, ON, Canada 3,4 Feb 2010
84. A.P. Hitchcock, *Chemical imaging with scanning transmission X-ray microscopy (STXM)*, Chemical Imaging Symposium at the American Chemical Sciences national meeting, Philadelphia Aug 17-21, 2008
79. A.P. Hitchcock and G.A. Johansson, *3-d chemical imaging using angle-scan tomography in soft X-ray scanning transmission X-ray microscopes: Current capabilities, challenges and
opportunities, Hyperspectral Imaging II Workshop, National Institute of Standards and Technology in Gaithersburg, MD, October 23-26, 2007


77. A.P. Hitchcock, X-ray microscopy of natural and synthetic polymers, lecture at the 1st Croatian Synchrotron Radiation Summer School, 3-7 September 2007, Rijeka, Croatia

76. A.P. Hitchcock, NEXAFS Spectroscopy, lecture at the 1st Croatian Synchrotron Radiation Summer School, 3-7 September 2007, Rijeka, Croatia


74. A.P. Hitchcock, Materials Analysis using synchrotron spectroscopy techniques, 5th Annual BIMR Advanced Materials Workshop McMaster University, 19 June 2007


66. A.P. Hitchcock, Materials analysis by soft X-ray spectromicroscopy, 51st ICASS, Quebec, 9-13 Oct 2005


63. Adam P. Hitchcock, Harald Stöver, Ron Childs, Li Li, James J. Dynes and John R. Lawrence, Quantitative chemical mapping of polymer and biological samples using synchrotron soft x-ray spectromicroscopy, Micropscopal Society of Canada, 32nd Annual Meeting, Hamilton, ON 18-20 May 2005.


58. A.P. Hitchcock, Soft X-ray Spectromicroscopy of Biological and Synthetic Polymer Systems, plenary lecture in 14th International Conference on Vacuum Ultraviolet Radiation Physics, Cairns, Australia, July 26-31, 2004
57. A.P. Hitchcock, Soft X-ray spectromicroscopy: current capabilities and future prospects, Keynote talk at Australian Synchrotron Radiation Project meeting, Canberra, Feb 7, 2004
56. A.P. Hitchcock, X-ray microscopy of Biomaterials, in Workshop on Applications of Synchrotron Radiation to Biomaterials, Canadian Light Source Users’ Meeting, November 14, 2003
55. A.P. Hitchcock, Studies of Protein - Polymer Interactions using Soft X-ray Microscopy in “Synchrotron based methods for the study of bio-interfaces” Symposium at the 50th American Vacuum Society meeting, Baltimore, Nov 5, 2003
54. A.P. Hitchcock, Methods and examples of quantitative chemical mapping by soft X-ray spectromicroscopy, Workshop on X-ray microscopy, ALS Users’ meeting Oct 9, 2003
52. A.P. Hitchcock, Studies of Protein - Biomaterial Interactions using Soft X-ray Microscopy, Biological Surfaces and Interfaces : Euroconference on Understanding and Improving Specific Interactions, Castelvecchio Pascoli, Italy, 21 - 26 June 2003.
49. A.P. Hitchcock, Inner-shell excitation by electrons and photons: from molecules to biofilms, Symposium on Cross-sections and Electron Momentum Distributions in honor of the career of Dr. C.E. Brion, CSC annual meeting, UBC, 4 June 2002.
45. A.P. Hitchcock, Soft X-ray Spectromicroscopy of polymers, biomaterials and biological systems, Int. Conf. On Vacuum Ultraviolet Radiation Physics, Trieste, Italy, 23-29th July 2001
41. A.P. Hitchcock, The Canadian Light Source: Scientific plans and industrial access, 16th Applications of Accelerators to Research and Industry, Denton, TX Nov. 1-4, 2000
24. in situ X-ray absorption spectroscopy of electrode surfaces, A.P. Hitchcock, T. Tyliszczak, S. Wu and J. Lipkowski, 79th CSC meeting, St. John's, Nfld, Jun 24, 1996.
7. "Core Excitation and Ionization of Molecules", July, 1989, 9th Int. Conf. on Vacuum Ultraviolet Radiation Physics (Honolulu, Hawaii).

D.2 Contributed (or other, invited) (T#=oral presentation, P#=poster) (underlined indicates presenter)


microscopy and tomography of polymer and biological samples, 40th International Conference on Vacuum Ultraviolet and X-ray Physics, San Francisco, CA, USA July 1-4, 2019

T394 Stefan Stanesescu, Adam Hitchcock and Dana Stanesescu, Origin of the low value onset potential in nanostructured hematite photoanodes, EMRS Spring meeting, Nice, May 27-31, 2019

T393 Stefan Stanesescu, Adam Hitchcock and Dana Stanesescu, Origin of the low value onset potential in nanostructured hematite photoanodes, Soleil Users Meeting, 20-22 Jan, 2019.


T391 D. Susac, V. Berejnov, J. Wu, A. P. Hitchcock and J. Stumper, Structural study of proton exchange membrane fuel cell (PEM-FC) catalyst layer by scanning transmission X-ray microscopy, Catalyst Society of South Africa (CATSA), Pretoria, SA, 11-14 Nov 2018

T390 L.G.A. Melo and A.P. Hitchcock, Comparison of electron and X-ray microscopies for characterizing perfluorosulfonic acid ionomer for fuel cell applications, International Microscopy Congress, Sydney, AU, 9-14 Sep 2018


P384 Yuya Maekawa, Carla Bittencourt, Adam Hitchcock and Peter Krüger, X-ray absorption and linear dichroism of individual Boron Nitride nanotubes experiment and theory, XAFS18, Krakow, Poland, July 22-27, 2018


L. Le Nagard, A. P. Hitchcock, C. Fradin and X.H. Zhu, Magnetic studies of Magnetotactic Bacteria with X-ray magnetic circular dichroism and optical microscopy, Canadian Society of Chemists, Annual Meeting, Toronto, 28 May - 01 Jun, 2017

X.H. Zhu, A. P. Hitchcock, D. A. Bazylinski, U. Lins, T. Tyliszczak and D. Shapiro, Biomineralization of magnetotactic bacteria studied by soft X-ray STXM and ptychography, Canadian Society of Chemists, Annual Meeting, Toronto, 28 May - 01 Jun, 2017

L.G.A. Melo and A.P. Hitchcock, Characterization of PFS ionomer thin films for fuel cell applications, Canadian Society of Chemists, Annual Meeting, Toronto, 28 May - 01 Jun, 2017


P. Krüger, X. Zhu, A. P. Hitchcock, P. Umek and C. Bittencourt, Phase Transformations and Dichroism of Titania Nanostructures, Japanese XAFS conference, Nagoya, Japan 4-8 Sep 2016


Juan Wu, A.P. Hitchcock, M. Lerotic, D. Shapiro, V. Berejnov, D. Susac and J. Stumper, 4d Imaging of Polymer Electrolyte Membrane Fuel Cell Cathodes by Scanning Transmission X-Ray
Microscopy, 2016 Collaborative Conference on 3D and Materials Research (CC3DMR), Incheon, Korea, 20-24 Jun 2016 (invited)


P358 L.Melo, V. Berejnov, D. Susac, J. Stumper and A.P. Hitchcock, Quantification of (i) ionomer thickness and (ii) dose-damage relationship using soft x-ray microscopy, CaRPE-FC Annual Technical meeting, Vancouver, 3-4 May 2016


T350 Lis G. de A. Melo, G.A. Botton and Adam P. Hitchcock, Quantification of the critical dose for radiation damage to perfluorosulfonic acid membranes using soft X-ray microscopy, Microscopy & Microanalysis Portland, July 2015.


T348 Lis G. de A. Melo, G.A. Botton and Adam P. Hitchcock, Quantification of the critical dose for radiation damage to perfluorosulfonic acid membranes using soft X-ray microscopy, Microscopical Society of Canada Annual Meeting, Hamilton, Canada, May 26-29, 2015.


P335  X. Zhu, A.P. Hitchcock, D.A. Shapiro, T. Tyliszczak and D.A. Bazylinski, Spectro-ptychography study of biomagnetism using soft X-ray microscopy, ALS Users Meeting, Berkeley, CA, 8 Oct, 2014


T333  X. Zhu, A.P. Hitchcock, T. Tyliszczak, P.E. Leão, D.A. Bazylinski and U. Lins, Characterization of the chemistry and magnetism of individual magnetotactic bacterial cells using X-ray
spectromicroscopy, 4th Int. Meeting on Magnetotactic Bacteria (MTB2014) Rio de Janeiro Sep 15-18, 2014


T331 D. Rossouw, M. Bugnet, E. Najafi, V. Lee, A. P. Hitchcock and G. A. Botton, Illuminating the electronic properties of individual carbon nanotubes with photons and electrons, International Microscopy conference (refereed abstract), Prague, Czech Republic, Sep 6-10, 2014


P328 J. Wu, V. Lee, A.P. Hitchcock and V. Berejnov, STXM tomography of PEM-FC, CaRPE-FC Annual Technical meeting, Vancouver, 6 June 2014


T326 A.P. Hitchcock, Imaging and Diagnostics, Annual Technical meeting of the Catalyst Research for Polymer electrolyte Fuel Cells (CaRPE-FC) network, Vancouver, 6 June 2014


P323 Z.Qin, S. Rosendahl, V. Lee, J. Wang, C. Karunakaran and A.P. Hitchcock, In situ electrochemical deposition of Cu with Scanning Transmission X-ray Microscopy, CLS Annual Users’ Meeting, Saskatoon, SK, 2 May 2014.


Adam P. Hitchcock  

**Publications**  

November 8, 2020

T315  

P314  

P313  
C. Karunakaran, J. Wang, Y. Lu, A.P. Hitchcock and S.G. Urquhart *Scientific capabilities of the spectromicroscopy facility at the Canadian Light Source*, 38th Int. Conf. Vac. Ultraviolet X-ray Physics, Hefei, China, 12-17 July 2013.

P312  

P311  

P310  

T309  

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T305  

T304  

T303  

T302  

T301  

T300  


T297 M. Obst, T. Lösekann-Behrens, S. Behrens, A. Kappler, T. Tyliszczak and A. P. Hitchcock, Spatial distribution of As(V) in cell-mineral aggregates formed by NO3-reducing Fe(II)-oxidizing bacteria, Goldschmidt, Montreal, June 24-29, 2012


T295 C. Karunakaran, S.G. Urquhart and A.P. Hitchcock, Magnetic Imaging with Soft X-ray Microscopy at the Canadian Light Source, Magnetic Noth III, Banff, AB June 8-10, 2012

T294 A.F.G. Leontowich and A.P. Hitchcock, Secondary electron deposition mechanism of carbon contamination, CLS Users’ Meeting, Saskatoon, May 4,5, 2012


T290 C. Gaillard, C. Karunakaran, B. Bouchet, J. Wang, A. Buléona, A.P. Hitchcock, Identification d’assemblages de protéines, lipides et polysaccharides par microscopie à balayage par transmission de RX mous, French Materials Society meeting, 2011

T289 E. Najafi, A.P. Hitchcock, D. Rossouw and G. Botton, Visualizing defect distributions in carbon nanotubes using linear dichroism signals in scanning transmission X-ray microscopy (STXM) and TEM-EELS, AVS meeting, Nashville, TN, USA Oct. 31-Nov 4, 2011


T285 A. P. Hitchcock, Chemically sensitive imaging of nanomaterials with Scanning Transmission X-ray Microscopy, Electrochemical Society 220th meeting, Boston, MA, USA,Oct. 9-14, 2011

T284 V.S. Coker, J. Byrne, J.R. Lloyd, N.D. Telling, G. van der Laan, A.P. Hitchcock and R.A.D. Patrack, Scanning transmission X-ray microscopy (STXM): a powerful imaging tool for the environmental sciences, Diamond Users Meeting, 7-8 Sep 2011 (invited)


Techniques and Instrumentation Developments at the 10ID-1 CLS-SM Beamline CLS Annual Users Meeting, Saskatoon, SK 25-Jun, 2011

A.F.G. Leontowich and A.P. Hitchcock, Temperature Dependent NEXAFS Spectromicroscopy at the Canadian Light Source, Chemical Society of Canada annual meeting, Montreal, Jun 4-7, 2011

A.P. Hitchcock, E. Najafi, C. Bittencourt, G. Van Tendeloo, P. Umek and C. P. Ewel, Studies of electronic structure and orientational order of individual sodium titanate nanoribbons by O 1s and Ti 2p X-ray absorption measured in STXM, MRS Spring meeting, San Francisco, 25-29 April, 2011

A.F.G. Leontowich and A. P. Hitchcock, Three dimensional measurement of the point spread function of a soft X-ray zone plate via single pixel exposure of photoresists at focus, SPIE Conference on Damage to VUV, EUV and X-ray Optics III, Prague, CZ, 18-19 April 2011


P. Umek, A. Gloter, C. Bittencourt, A.P. Hitchcock, E. Najafi, C. Díaz-Guera, J. Piqueras, M. Pregelj, P. Cevc and D. Arčon, Characterization of Sodium Titanate Nanostructures doped with Cu²⁺, Cr³⁺, Co²⁺ ions and Ag nanoparticles, Nanotech Insight, Cairo, Egypt, Feb 27- Mar 2 2011


J. Wang, A.P. Hitchcock, M. Obst, C. Karunakaran, A. Prange, T. Harkness, 3D chemical and elemental imaging by STXM spectro-tomography, 10th International Conference on X-ray Microscopy (XRM2010) Chicago, IL 15-20 August 2010


E. Najafi, A.P. Hitchcock, J. Guan, S. Denommee, B. Simard and J. Wang, Polarization dependence of the C 1s X-ray absorption spectra of carbon nanotubes, 37th Int. conf. Vacuum Ultraviolet Xray Physics, Vancouver, BC, 11-16 July, 2010


T254  Bonnie O. Leung, Adam P. Hitchcock, John L. Brash, Andreas Scholl, and Andrew Doran, *Soft X-ray Spectromicroscopy of Protein Interactions with Model Biomaterials*, AVS 2009 meeting, San Jose, CA, USA, Nov 8-13, 2009


Microscopy (STXM), 11th International Conference on Electronic Spectroscopy and Structure, Nara, Japan, Oct 6-10, 2009


P246 A.P. Hitchcock, R.A. Bonham, C.A. Chatzidimitriou-Dreismann and G. Cooper, Quasi-elastic electron scattering from atoms and molecules 11th International Conference on Electronic Spectroscopy and Structure, Nara, Japan, Oct 6-10, 2009


T244 C. Bittencourt, A. Felten, X. Ke, E. Najafi, A. P. Hitchcock and G. Van Tendeloo, Combined HRTEM and STXM-NEXAFS study of a patterned CNT, 11th Int. Conf. on Advanced Materials, Rio de Janeiro, Brazil, 20-25 Sep 2009. (invited)


P242 M. Obst, J. Wang and A.P. Hitchcock, 3D chemical mapping by STXM angle scan tomography, Interdisciplinary Symposium on 3D microscopy 2009, Interlaken, Switzerland, 12-16 July 2009

P241 Bonnie O. Leung, Adam P. Hitchcock, John L. Brash, Andreas Scholl, and Andrew Doran, Soft X-ray Spectromicroscopy of Protein Interactions with Model Biomaterials, ESF-EMBO Symposium on 'Biological Surfaces and Interfaces', Sant Feliu de Guixols, Spain, 27 Jun – 2 July 2009


P238 K.P. Lam, A.P. Hitchcock, M. Obst, J.R. Lawrence, G.D. W. Swerhone, and A. P. Hitchcock, 2D, 3D, and in-situ STXM in Geomicrobiology, Goldschmidt 2009, Davos, Switzerland, 21-26 Jun, 2009


T237 A.P. Hitchcock, M. Obst, K. Norlund, L. Warren and J. Wang, STXM studies of a novel syntrophic sulphur metabolizing consortia at the S 1s and S 2p edges, CLS Annual Users’ Meeting, Saskatoon, Jun 17,18, 2009.

T235 C. Gaillard, A. Berquand, C. Karunakaran, H. Gnaegi, B. Bouchet, E. Larquet and A.P. Hitchcock, Imaging wheat grain tissue through a Fluorescence / AFM / TEM / STXM correlative microscopy approach, French Microscopy Society annual meeting, Strasbourg, France, 8-12 June 2009.


P233 B.O. Leung, A.P. Hitchcock, M. T. Weidner, D.G. Castner A. Scholl, and A. Doran, Soft X-ray Spectromicroscopy of Patterned Polymeric Surfaces as Candidate Protein Microarrays,


P225 J. Wang, A.P. Hitchcock, M.M. West and G.A. Botton, Quantitative comparison of radiation damage to polyethylene-terephthalate (PET) in electron and X-ray microscopes, ALS Users Meeting, Berkeley, CA, 13,14 Oct 2008


*Transmission X-ray Microscope*, 9th Int. Conf. on X-ray Microscopy, Zurich, Switzerland, 21-25 July, 2008


P202 E. Najafi, A. Felten, B. Douhard, D. Hernández Cruz, Martin Obst, A. P. Hitchcock and J.-J.


******* awarded “Best Interactive Paper Display” at this conference *********


T186 B.O. Leung, J. Stewart-Ornstein, J.L. Brash, A.P.Hitchcock, J. Overhage, K. Hilpert, J.D. Hale


P166 A.P. Hitchcock, *Soft X-ray spectromicroscopy – core excitation with sub-50 nm spatial resolution* ICESS-10, Foz d’Igacu, Brazil, Aug27-Sep3, 2006


P155 A. Gopalan, K.P. Lee, A.P. Hitchcock, K.M. Manesh and P. Santhosh, Structure and morphology of electrospun blend nanofibrous mats, Korean Chemical society Annual Meeting, Korea, 20,21 April 2006


P152 J. Wang, A.P. Hitchcock, H.D.H. Stöver, D. Hernández Cruz and T. Tyliszczak, Metal mapping in riverine biofilms with soft X-ray scanning transmission X-ray microscopy (STXM), CLS Users’ Meeting, Saskatoon, Nov 19, 2005

P151 K. Kaznatcheev, A. Hitchcock and C. Karunakaran, Commissioning Phase Highlights of Soft X-ray Spectromicroscopy Beamline at CLS, CLS Users’ Meeting, Saskatoon, Nov 19, 2005

P150 A.P. Hitchcock, J. Wang, L. Li, J. Stewart-Ornstein, H.D. Stöver, J.L. Brash and D. Guay, Materials research with soft X-ray scanning transmission X-ray microscopy (STXM), CLS Users’ Meeting, Saskatoon, Nov 19, 2005


P148 K. Kaznatcheev, P. Dudin and A.P. Hitchcock, Liquid crystal thin film texture probed by STXM, ALS User’s meeting, Berkeley, Oct 18 2005

P147 A.P. Hitchcock, J. Wang, G.A. Botton and R.F. Egerton, Quantitative dose-damage relationships for radiation damage to polymers and molecular compounds in X-ray and electron microscopes, Microscopy & Microanalysis 2005, Honolulu, HI. July 31-Aug 4, 2005


P138 K.V. Kaznatcheev, P. Dudin and A.P. Hitchcock, Liquid crystal thin film texture, probed by X-ray spectromicroscopy, 005 Canadian Society of Chemists conference, Saskatoon, May 31-Jun 5, 2005


P125 K. Tani, N. Iwata, H. Ikeura-Sekiguchi, T. Araki and A.P. Hitchcock, *Observation of Phase separated polymer by STXM*, 8th Int. conf. on biology and Synchrotron Radiation, Himeji, Japan, 7-11 Sep 2004


P121 A. P. Hitchcock, G. Cooper, C.C. Turci and Maarten Vos, *Electron Compton scattering from methane and inelastic electron scattering from molecular nitrogen at variable impact energy and scattering angle*, 14th International Conference on Vacuum Ultraviolet Radiation Physics, Cairns, Australia, July 26-31, 2004

P120 A.P. Hitchcock, A.C. O. Guerra, J.B. Maciel, C.C. Turci and Hiromi Ikeura-Sekiguchi, *Ionic photofragmentation of C 1s excited and ionized formic acid*, 14th International Conference on Vacuum Ultraviolet Radiation Physics, Cairns, Australia, July 26-31, 2004


P106 S.G. Urquhart, C. Morin, A.P. Hitchcock and K. Kaznatcheev, *Spectromicroscopy with the
P95 A.P. Hitchcock, T. Araki, H. Ikeura-Sekiguchi, N. Iwata, K. Tani, *3-d chemical imaging with STXM*, ALS Basic Energy Sciences review meeting, Berkeley, 4 Feb 2002


T86 C. Morin, A.P. Hitchcock, I. Koprinarov, T. Tyliszczak, Y.M. Heng, R. Cornelius, J.L. Brash and A. Scholl, *X-Ray Spectromicroscopy Studies of Protein-Polymer Interactions*, ALS User meeting, October 2000 (Student/pdf competition oral presentation)


J.J. Neville, T. Tyliszczak, A. Jürgens, R. G. Cavell, and A.P. Hitchcock, “Photofragmentation of OCS and SPF3 at the S 1s and P 1s edges”, 12th Int. Conf on Vac. Ultraviolet Radiation Physics, San Francisco, Aug 1998


A.P. Hitchcock, “AXIS – Analysis of X-ray Images and Spectra”, X-ray Microscopy of Synthetic and Natural Polymers, NIST, Gaithersburg, May 10, 1998


A. P. Hitchcock, Ionic Fragmentation of Inner-shell Excited Molecules, 7th Int. Conf. on Electron Spectroscopy, Chiba, Japan (Sep, 1997).


T24  T. Tyliszczak and A.P. Hitchcock, "Advances in Inner-shell Excitation Spectroscopy of Surface Adsorbates" 9th Int. Conf. of Vacuum UV Radiation Physics (Hawaii, July, 1989)


T20 M. De Crescenzi, A.P. Hitchcock and T. Tyliszczak, "Temperature and Core Hole Dependence of EXFAS: The Auger Extended Fine Structure of Ag(111)", Auger and Related Techniques, Taormina, Italy, Sept., 1988

T19 M. De Crescenzi, A.P. Hitchcock and T. Tyliszczak, "Temperature and Core Hole Dependence of EXFAS: The Auger Extended Fine Structure of Ag(111)", XII Ann. Meeting on Advances in Surface and Interface Physics, Modena, Italy, Dec., 1987

T18 T. Tyliszczak, A.P. Hitchcock and M. De Crescenzi, "The Cu/Ag(111) Interface Studied by SEELEFS Spectroscopy at Grazing Incidence", XII Ann. Meeting on Advances in Surface and Interface Physics, Modena, Italy, Dec., 1987


P11 A.P. Hitchcock, C.J.L. Lock and B. Lippert, "Pt L\textsubscript{3} EXAFS of Pt-base Model Compounds and [(NH\textsubscript{3})\textsubscript{2}Pt(OH)\textsubscript{2}Pt(NH\textsubscript{3})\textsubscript{2}] Bound to DNA", Prog.in X-ray Studies by Synchrotron Radiation, Strasbourg, Apr. 1985


T6 A.P. Hitchcock, "K-Shell Ionization of Molecules - Bond Lengths from Continuum Shape Resonances", Atomic and Molecular Physics Division, CAP. Fall Meeting, Waterloo, October, 1983.


P2. A.P. Hitchcock, "PES Studies of Thermolysis of Oxadiazoline", (June 1, 1982) Chemical Institute of Canada, Toronto.


E. Training workshops on aXis2000 (software for processing spectromicroscopy data)

2007.06.15  CSC annual meeting, Edmonton, AB, Canada
2012.11.25  Australian synchrotron annual meeting, Melbourne, AU
2014.05.21  CLS annual meeting, Saskatoon, SK, Canada
2016.05.10  Soleil, Paris, France
2018.06.11  Soleil, Paris, France
2018.09.18  STXM-PEEM workshop, Australian synchrotron, Melbourne, AU