

Overview of publications/theses produced by the IS501 collaboration

List of PhD theses (not complete):

1. Dr.-Ing. Gerhard Lackner "Carbon Nanotubes in Organic Solar Cells"
2. Dr.-Ing. Danka Dittmer-Gobeljic "Polar Microstructure and Nanoscale Electromechanical Behavior of Lead-Free Piezoelectric Ceramics"
3. Dr.-Ing. Morad Etier "Preparation and Magnetoelctric Effect of Multiferroic Cobalt Ferrite-Barium Titanate Composites"
4. Dr. rer. nat. Yanling Gao "Synthesis of Core-Shell High-k Nanoparticles"
5. Dr. rer. nat. Harshkumar Bhadreshkumar Trivedi "Mapping Local Manifestations of the Strain Mediated Magnetoelectric Effect in Composites"
6. Dr. Monika Stachura "Nuclear techniques using radioactive beams for biophysical studies"

From the University of the British Columbia, Vancouver, Canada:

Name	Scholarship	PhD/MSc	Start	Finish
Yasmin Mawani		PhD	2006	2012
Paloma Salas		PhD	2006	2012
Maria Telpoukhovskaia	Alzheimer Society of Canada, NSERC PGSD	PhD	2009	2014
Eric Price	NSERC CGS M, CGS D, Laird	PhD	2009	2014
Katharina Rübenacker	at Heidelberg	MSc	2013	2014
Katja Dralle	4YF	PhD	2009	2015
Caterina Ramogida	4YF, NSERC CGS M, CGS D, Laird	PhD	2010	2015
Karen Arane		MSc	2013	2015
David Weekes		PhD	2011	2016
Xiaozhu "Hunter" Wang		PhD	2012	
Katharina Rück	at Heidelberg	PhD	2014	
Sarah Spreckelmeyer	Groningen/UBC co-tutelle	PhD	2014	

	CBR Grad Student Award			
Tom Kostelnik	NSERC CGS M, Laird	PhD	2015	
Lily Li	CES, TRIUMF IsoSiM CREATE	PhD	2016	
Neha Chowdhary	MITACS, CES, Laird	PhD	2016	
Jefferey Jang	TRIUMF IsoSiM CREATE	MSc	2016	
Aidan Ingham		PhD	2016	
Luke Wharton	starting	PhD in	2017	

List of publications:

2017

1. **Y.-B. Ma, C. Molin, V. V. Shvartsman, S. Gebhardt, D. C. Lupascu, K. Albe, and B.-X. Xu**
[State transition and electrocaloric effect in BaZr_xTi_{1-x}O₃: Simulation and experiment](#)
J. Appl. Phys. **121**(2), 024103 (2017)
2. **J. Schell, D. C. Lupascu, J. G. M. Correia, A. W. Carbonari, M. Deicher, M. B. Barbosa, R. D. Mansano, K. Johnston, I. S. Ribeiro, and the ISOLDE collaboration**
[In and Cd as defect traps in titanium dioxide](#)
Hyperfine Interact. **238**(2), (2017)
3. G. Topping, A. Yung, P. Schaffer, C. Hoehr, R. Kornelsen, P. Kozlowski, V. Sossi
Manganese Concentration Mapping in the Rat Brain with MRI, PET, and
Autoradiography
submitted

4. P. Jahangiri, R. Doering, S. Ferguson, K. Li, K. Buckley, F. Benard, D. M. Martinez, C. Hoehr Modeling the pressure rise of a liquid target on a medical cyclotron: Steady-state analysis
Applied Radiation and Isotopes, 120 22 (2017)
5. Radchenko V., Jonathan W. Engle J.W., Medvedev D.G., Maassen J.M., Naranjo C.M., Unc G.A., Meyer C.A.L, Mastren T., Brugh M., Mausner L., Cutler C.S., Birnbaum E.R., John K.D., Nortier F.M., Fassbender M. E. Proton induced production and radiochemical isolation of ^{44}Ti from scandium metal targets for $^{44}\text{Ti}/^{44}\text{Sc}$ generator development J. Nuclear Medicine and Biology accepted 2017
6. Fuente A., Radchenko V., Tsotakos T., Tsoukalas C., Paravatou-Petsotas M., Harris A.L., Köster U., Rösch F., Bouziotis P. Conjugation, labelling and in vitro/in vivo assessment of an anti-VEGF monoclonal antibody labelled with niobium isotopes. Radiochimica Acta, accepted 2017

2016

1. A. Belianinov, D. Gobeljic, V. V. Shvartsman, E. Endeve, E. J. Lingerfelt, R. Archibald, S. Kalinin, and S. Jesse [High Performance Computing Tools for Cross Correlation of Multi-Dimensional Data Sets Across Instrument Platforms](#) Microscopy and Microanalysis 22(3), 288-289 (2016)
2. M. Sanlialp, V. V. Shvartsman, M. Acosta, and D. C. Lupascu [Electrocaloric Effect in Ba\(Zr,Ti\)O₃-\(Ba,Ca\)TiO₃ Ceramics Measured Directly](#) J. Am. Ceram. Soc. 99(12), 4022-4030 (2016)
3. M. Sanlialp, C. Molin, V. V. Shvartsman, S. Gebhardt, and D. C. Lupascu [Modified Differential Scanning Calorimeter for Direct Electrocaloric Measurements](#) IEEE T Ultrason Ferr. 63(10), 1690-1696 (2016)
4. M. Etier, V. V. Shvartsman, S. Salamon, Y. Gao, H. Wende, and D. C. Lupascu [The direct and the converse magnetoelectric effect in multiferroic cobalt ferrite-barium titanate ceramic composites](#) J. Am. Ceram. Soc. 99(11), 3623-3631 (2016)
5. D. A. Kiselev, R. N. Zhukov, S. V. Ksenich, I. V. Kubasov, A. A. Temirov, N. G. Timushkin, A. S. Bykov, M. D. Malinkovich, V. V. Shvartsman, D. C. Lupascu, and Y. N. Parkhomenko [The effect of silicon-substrate orientation on the local piezoelectric characteristics of LiNbO₃ films](#) J. Surf. Investig-X-Ra. 10, 742-747 (2016)

6. M. Melo, E. B. Araujo, V. V. Shvartsman, V. Y. Shur, and A. L. Kholkin [Thickness effect on the structure, grain size, and local piezoresponse of self-polarized lead lanthanum zirconate titanate thin films](#) J. Appl. Phys. 120(5), 054101 (2016)
7. M. Naveed-Ul-Haq, V. V. Shvartsman, S. Salamon, H. Wende, H. Trivedi, A. Mumtaz and D. C. Lupascu [A new \(Ba,Ca\) \(Ti,Zr\)O₃ based multiferroic composite with large magnetoelectric effect](#) Scientific Reports 6, 32164 (2016)
8. G. Lackner, I. Anusca, M. Sanlialp, M. Escobar, S. Iffländer, and D. C. Lupascu [Thin films for photovoltaic application](#) Ferroelectrics 496, 187-195 (2016)
9. M. Khazaee, W. Xia, G. Lackner, R. G. Mendes, M. Rümmeli, M. Muhler, and D. C. Lupascu [Dispersibility of vapor phase oxygen and nitrogen functionalized multi-walled carbon nanotubes in various organic solvents](#) Scientific Reports 6, 26208 (2016)
10. J. Belovickis, V. Samulionis, J. Banys, M. Sibilin, A. Solnyshkin, Y. Shilyaeva, K. Nekludov, S. Gavrilov, V. Rubanik, and V. V. Shvartsman [Ultrasonic spectroscopy of copolymer based P\(VDF-TrFE\) composites with fillers on lead zirconate titanate basis](#) Polymer Testing 53, 211-216 (2016)
11. M. Labusch, M.-A. Keip, V. V. Shvartsman, D. C. Lupascu, and J. Schröder [On the Influence of Ferroelectric Polarization States on the Magneto-electric Coupling in Two-phase Composites](#) Technische Mechanik 36, 73-87 (2016)
12. D. Gobeljic, V. V. Shvartsman, A. Belianinov, B. Okatan, S. Jesse, S. V. Kalinin, C. Groh, J. Rödel, and D. C. Lupascu [Nanoscale mapping of heterogeneity of the polarization reversal in lead-free relaxor-ferroelectric ceramic composites](#) Nanoscale 8, 2168-2175 (2016)
13. L. F. Henrichs, O. Cespedes, J. Bennett, J. Landers, S. Salomon, C. Heuser, T. Hansen, T. Helbig, O. Gutfleisch, D. C. Lupascu, H. Wende, W. Kleemann and A. J. Bell [Multiferroic Clusters: A New Perspective for Relaxor-Type Room-Temperature Multiferroics](#) Adv. Funct. Mater. 2111-2121 (2016)
14. M. A. Telpoukhovskaia, B. O. Patrick, C. Rodríguez-Rodríguez, C. Orvig. In silico to in vitro Screening of Hydroxypyridinones as Acetylcholinesterase Inhibitors. Bioorg. Med. Chem. Lett. 2016, 26, 1624-1628.
15. D. W. Weekes, C. Orvig. Harnessing the Bone-seeking Ability of Ca(II)-like Metal Ions in the Treatment of Metastatic Cancer and Resorption Disorders. Chem. Soc. Rev. 2016, 45, 2024-2031.

16. E. W. Price, K. J. Edwards, K. E. Carnazza, S. D. Carlin, B. M. Zeglis, M. J. Adam, C. Orvig, J. S. Lewis. A Comparative Evaluation of the Chelators H₄octapa and CHX-A"-DTPA with the Therapeutic Radiometal ⁹⁰Y. *Nucl. Med. Biol.* 2016, 43, 566-576.
17. C. F. Ramogida, E. Boros, B. O. Patrick, S. K. Zeisler, J. Kumlin, M. J. Adam, P. Schaffer, C. Orvig. Evaluation of H₂CHXdedpa, H₂dedpa- and H₂CHXdedpa-N,N'-propyl-2-NI Ligands for ⁶⁴Cu(II) Radiopharmaceuticals. *Dalton Trans.* 2016, 45, 13082-13090 invited for Themed Issue: Metallodrugs: Activation, Targeting and Delivery.
18. K. D. Mjos, J. F. Cawthray, E. Polishchuk, M. J. Abrams, C. Orvig. Gallium(III) and Iron(III) Complexes of Quinolone Antimicrobials. *Dalton Trans.* 2016, 45, 13146-13160 invited for Themed Issue: Metallodrugs: Activation, Targeting and Delivery.
19. C. F. Ramogida, L. Murphy, J. F. Cawthray, J. D. Ross, M. J. Adam, C. Orvig. Novel "Bimodal" H₂dedpa Derivatives for Radio- and Fluorescence Imaging. *J. Inorg. Biochem.* 2016, 162, 253-262 invited for Prof. G. R. Hanson Memorial issue.
20. K. D. Mjos, E. Polishchuk, M. J. Abrams, C. Orvig. Synthesis, Characterization, and Evaluation of the Antimicrobial Potential of Copper(II) Coordination Complexes with Quinolone and p-Xylenyl-linked Quinolone Ligands. *J. Inorg. Biochem.* 2016, 162, 280-285 invited for Prof. G. R. Hanson Memorial issue.
21. C. F. Ramogida, D. Schindler, C. Schneider, Y. L. K. Tan, S. Huh, C. L. Ferreira, M. J. Adam, C. Orvig. Synthesis and Characterization of Lipophilic Cationic Ga(III) Complexes Based on the H₂CHXdedpa and H₂dedpa Ligands and Their ^{67/68}Ga Radiolabelling Studies. *RSC Adv.*, 2016, 6, 103763-103773.
22. P. Comba, L. Grimm, C. Orvig, K. Rück, H. Wadeohl. Synthesis and Coordination Chemistry of Hexadentate Picolinic Acid Based Bispidine Ligands. *Inorg. Chem.* 2016, 55, 12531-12543.
23. D. M. Weekes, C. F. Ramogida, M. de G. Jaraquemada-Peláez, B. O. Patrick, C. Apte, T. I. Kostelnik, J. F. Cawthray, L. Murphy, C. Orvig. Dipicolinate Complexes of Gallium(III) and Lanthanum(III). *Inorg. Chem.* 2016, 55, 12544-12558.
24. M. Stachura, A. Gottberg, K. Johnston, M.L. Bissell, R.F. Garcia Ruiz, J. Martins Correia, A.R. Granadeiro Costa, M. Dehn, M. Deicher, A. Fenta, L. Hemmingsen, M. Munch, G. Neyens, S. Pallada, M.C. Ribeiro Da Costa, D. Zakoucky Versatile Ion-polarized Techniques On-line (VITO) experiment at ISOLDE-CERN Nuclear Instruments and Methods B, 2016, 376, 369–373 (peer reviewed conference proceedings)

25. J.T. Pedersen, S.W. Chen, C.B. Borg, S. Ness, J.M. Bahl, N.H.H. Heegaard, C.M. Dobson, L. Hemmingsen, N. Cremades, K. Teilum Amyloid- β and α -Synuclein Decrease the Level of Metal-Catalyzed Reactive Oxygen Species by Radical Scavenging and Redox Silencing *J. Am. Chem. Soc.*, 2016, 138, 3966-3969
26. M. Stachura, S. Chakraborty, A. Gottberg, L. Ruckthong, Pecoraro V.L.*, Hemmingsen L.*
Remote mutation affects nanosecond exchange dynamics at a protein metal site
Accepted for publication in *J. Am. Chem. Soc.*
27. S. Girard, B. Capoen, H. El Hamzaoui, M. Bouazaoui, G. Bouwmans, A. Morana, D. Di Francesca, A. Boukenter, O. Duhamel, P. Paillet, M. Raine, M. Gaillardin, M. Trinczek, Member, C. Hoehr, E. Blackmore, Y. Ouerdane
Potential of Copper- and Cerium-doped Optical Fiber Materials for Proton Beam Dosimetry
IEEE Transactions on Nuclear Science, in print
28. P. Schaffer, G. Langille, H. Yang, S. Zeisler, C. Hoehr, T. Storr, C. Andreoiu Low Energy Cyclotron Production and Cyclometalation Chemistry of Iridium-192 Applied Radiation and Isotopes 115 81 (2016)
29. C. Lindsay, J. Kumlin, D.M. Martinez, A. Jirasek, C. Hoehr Design and Application of 3D-printed Stepless Beam Modulators in Proton Therapy Physics in Medicine and Biology 61 N276 (2016)
30. J. Hrbacek, K. K. MishraI, A. Kacperek, R. Dendale, C. Nauraye, M, Auger, J. Herault, I. K.
Daftari, A. V. Tromov, H. A. Shih, Y.-L. E. Chen, A. Denker, J. Heufelder, T. Horwacik, J. Swakon, C. Hoehr, C. Duzenli, A. Pica Practice Patters Analysis of Ocular Proton Therapy Centers: The International OPTIC Survey International Journal of Radiation Oncology, Biology, Physics 95 336 (2016)
31. P. Jahangiri, N. Zacchia, K. Buckley, F. Benard, P. Schaffer, D.M. Martinez, C. Hoehr An analytical approach of thermodynamic behaviour in a gas target system on a medical cyclotron Applied Radiation and Isotopes 107 252 (2016)
32. A. Infantino, E. Oehlke, M. Trinczek, P. Schaffer, D. Mostacci, C. Hoehr Assessment of the production of medical isotopes using the Monte Carlo code FLUKA: simulations against experimental measurements Nuclear Instruments and Methods B 366 117 (2016)

33. Radchenko V., Meyer C.A.L., Engle J.W., Naranjo C.M., Unc G.A., Mastren T., Brugh M., Birnbaum E.R., John K.D., Nortier F.M., Fassbender M.E. Separation of ^{44}Ti from proton irradiated scandium by using solid-phase extraction chromatography and design of $^{44}\text{Ti}/^{44}\text{Sc}$ generator system *J. Chromatography A*, 1477, (2016), 39–46.
34. Griswold J.R., Medvedev D.G., Engle J.W., Coping R., Fitzsimmons J.M., Radchenko V., Cooley J.C., Fassbender M.E., Denton D.L., Murphy K.E., Owens A.C., Birnbaum E.R., John K.D., Nortier F.M., Stracener D.W., Heilbronn L.H., Mausner L.F., Mirzadeh S. Large scale accelerator production of ^{225}Ac : Effective cross sections for 78-192MeV protons incident on ^{232}Th targets. *Appl Radiat Isot.* 118 (2016), 366-374
35. Marinov G.M., Marinova A.P., Medvedev D.V., Dadakhanov J.A., Milanova M.M., Happel S. Radchenko V., Filosofov D.V. Determination of distribution coefficients (K_d) of various radionuclides on UTEVA resin *Radiochimica Acta*, 104 (10), (2016), 735-742.
36. Radchenko V., Bouziotis P., Tsotakos T., Paravatou-Petsotas M., de la Fuente A., Loudos G., Harris A. L., Xanthopoulos S., Filosofov, D., Hauser H., Eisenhut M., Ponsard B., Roesch F. Labeling and preliminary *in vivo* assessment of niobium-labeled radioactive species: A proof-of- concept study *J. Nuc. Med. and Biol.* 43(5), (2016) 280–287.
37. Radchenko V., Filosofov D. V, Dadakhanov J., Karaivanov D. V. Marinova A., Baimukhanova A.,Roesch F. Direct flow separation strategy, to isolate no-carrier-added ^{90}Nb from irradiated Mo or Zr target. *Radiochimica Acta* 104(9), (2016) 625-634.
38. Radchenko V., Engle J. W., Wilson J. J., Maassen J. R., Nortier F. M., Birnbaum E. R., John K. D. and Fassbender M. E. Production yields and chromatographic separation of protactinium isotopes formed in proton irradiated thorium metal *Radiochimica Acta*.104(5) (2016) 291-304.

2015

1. H.-Y. Amanieu, H. N. M. Thai, S. Y. Luchkin, D. Rosato, D. C. Lupascu, M.-A. Keip, J. Schröder, and A. L. Kholkin [Electrochemical Strain Microscopy Time Spectroscopy: model and experiment on \$\text{LiMn}_2\text{O}_4\$](#) *J. Appl. Phys.* 118, 055101 (2015)

2. E.L. Fertman, A. V. Fedorchenko, A. V. Kotlyar, V. A. Desnenko, E. Čižmár, A. Baran, D. D. Khalyavin, A. N. Salak, V. V. Shvartsman, and A. Fehler [Exchange bias phenomenon in \$\(Nd_{1-x}Y_x\)_{2/3}Ca_{1/3}MnO_3\$ \(\$x = 0, 0.1\$ \) perovskites](#) Low. Temp. Phys. 41, 1001-1005 (2015)
3. M. V. Sibilin, J. Belovickis, S. Svirskas, M. Ivanov, J. Banys, A. V. Solnyshkin, S. A. Gavrilov, O. V. Varenyk, A. S. Pusenkova, N. Morozovsky, V. V. Shvartsman, and A. N. Morozovska [Polarization reversal in organic-inorganic ferroelectric composites: Modeling and experiment](#) Appl. Phys Lett. 107, 142907 (2015)
4. A.V. Solnyshkin, I. M. Morsakov, A. A. Bogomolov, A. N. Belov, M. I. Vorobiev, V. I. Shevyakov, M. V. Silibin, and V. V. Shvartsman [Dynamic pyroelectric response of composite based on ferroelectric copolymer of poly\(vinylidene fluoride-trifluoroethylene\) and ferroelectric ceramics of barium lead zirconate titanate](#) Appl. Phys. A 121, 311-316 (2015)
5. M. Sanlialp, V. V. Shvartsman, D. C. Lupascu, C. Molin, and S. Gebhardt [Direct electrocaloric measurements using a differential scanning calorimeter](#) IEEE International Symposium on ISAF, ISIF and PFM, 159-162, Singapore (2015)
6. D. C. Lupascu, H. Wende, M. Etier, A. Nazrabi, I. Anusca, H. Trivedi, V. V. Shvartsman, J. Landers, S. Salamon, and C. Schmitz-Antoniak [Measuring the magnetoelectric effect across scales](#) GAMM-Mitt. 38, 25-74 (2015)
7. S. Gorfman, H. Choe, V. V. Shvartsman, M. Ziolkowski, M. Vogt, J. Strempfer, T. Lukasiewicz, U. Pietsch and J. Dec [Time-resolved X-ray diffraction reveals the hidden mechanism of high piezoelectric activity in a uniaxial ferroelectric](#) Phys. Rev. Lett. 114, 097601 (2015)
8. D. O. Alikin, A. P. Turygin, J. Walker, T. Rojac, V. V. Shvartsman, V. Y. Shur, and A. L. Kholkin
[Quantitative phase separation in multiferroic \$Bi_{0.88}Sn_{0.12}FeO_3\$ ceramics via piezoresponse force microscopy](#) J. Appl. Phys. 118, 072004 (2015)
9. M. D. Simmons, N. Jones, D. J. Evans, C. Wiles, P. Watts, S. Salamon, M. Escobar Castillo, H. Wende, D. C. Lupascu, and M. G. Francesconi [Doping of Inorganic Materials in Microreactors - Preparation of Zn doped \$Fe_3O_4\$ Nanoparticles](#) Lab on a Chip 15, 3154-3162 (2015)
10. M. Naveed Ul-Haq, T. Yunus, A. Mumtaz, V. V. Shvartsman, and D. C. Lupascu
[Magnetodielectric effect in relaxor/ferrimagnetic composites](#) J. Alloy Compd. 640, 462-467 (2015)

11. H. Trivedi, V. V. Shvartsman, D. C. Lupascu, M. S. A. Medeiros, R. C. Pullar, A. L. Khoklin, P. Zelenovskiy, A. Sosnovskikh, and V. Y. Shur [Local manifestations of a static magnetoelectric effect in nanostructured BaTiO₃-BaFe₁₂O₉ composite multiferroics](#) Nanoscale 7, 4489-4496 (2015)
12. M. Etier, C. Schmitz-Antoniak, S. Salamon, H. Trivedi, Y. Gao, A. Nazrabi, J. Landers, D. Gautam, M. Winterer, D. Schmitz, H. Wende, V. V. Shvartsman, and D. C. Lupascu [Magnetoelectric coupling on multiferroic cobalt ferrite-barium titanate ceramic composites with different connectivity schemes](#) Acta Materialia 90, 1-9 (2015)
13. H.-Y. Amanieu, M. Aramfard, D. Rosato, L. Batista, U. Rabe, and D. C. Lupascu [Mechanical properties of commercial Li_xMn₂O₄ cathode under different states of charge](#) Acta Materialia 89, 153-162 (2015)
14. C. Molin, M. Sanlialp, V. V. Shvartsman, D. C. Lupascu, P. Neumeister, A. Schönecker, and S. Gebhardt [Effect of dopants on the electrocaloric effect of 0.92 Pb\(Mg_{1/3}Nb_{2/3}\)O₃-0.08 PbTiO₃ ceramics](#) J. Eur. Ceram. Soc. 35(7), 2065-2071 (2015)
15. M. Sanlialp, V. V. Shvartsman, M. Acosta, B. Dkhil, and D. C. Lupascu [Strong electrocaloric effect in lead-free 0.65Ba\(Zr_{0.2}Ti_{0.8}\)O₃-0.35\(Ba_{0.7}Ca_{0.3}\)TiO₃ ceramics obtained by direct measurements](#) Appl. Phys. Lett. 106, 062901 (2015)
16. C. Rodríguez-Rodríguez, M. A. Telpoukhovskaia, J. Ali-Torres, L. Rodríguez-Santiago, Y. Manso, G. A. Bailey, J. Hidalgo, M. Sodupe, C. Orvig. Thioflavin-based Molecular Probes for Application in Alzheimer's Disease: from in silico to in vitro Models. Metallomics 2015, 7, 78-87.
17. K. D. Mjos, J. F. Cawthray, G. Jamieson, J. A. Fox, C. Orvig. Iron(III)-binding of the Anticancer Agents Doxorubicin and Vosaroxin. Dalton Trans. 2015, 44, 2348-2358.
18. J. F. Cawthray, A. L. Creagh, C. A. Haynes, C. Orvig. Ion Exchange in Hydroxyapatite with Lanthanides. Inorg. Chem. 2015, 54, 1440-1445.
19. C. F. Ramogida, J. F. Cawthray, E. Boros, C. L. Ferreira, B. O. Patrick, M. J. Adam, C. Orvig. H₂CHXdedpa and H₄CHXoctapa-Chiral Acyclic Chelating Ligands for ^{67/68}Ga and ¹¹¹In Radiopharmaceuticals. Inorg. Chem. 2015, 54, 2017-2031.
20. C. F. Ramogida, J. Pan, C. L. Ferreira, B. O. Patrick, K. Rebullar, D. T. T. Yapp, K.-S. Lin, M. J. Adam, C. Orvig. Nitroimidazole-Containing H₂dedpa and H₂CHXdedpa Derivatives as Potential PET Imaging Agents of Hypoxia with ⁶⁸Ga. Inorg. Chem. 2015, 54, 4953-4965.
21. B. Bertrand, S. Spreckelmeyer, E. Bodio, F. Cocco, M. Picquet, P. Richard, P. Le Gendre, C. Orvig, M. A. Cinelli, A. Casini. Exploring the Potential of Gold(III) Cyclometallated

- Compounds as Cytotoxic Agents: Variations on the C^N Theme. Dalton Trans. 2015, 44, 11911-11918.
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23. J. F. Cawthray, D. M. Weekes, O. Sivak, A. L. Creagh, F. Ibrahim, M. Iafrate, C. A. Haynes, K. M. Wasan, C. Orvig. In vivo Study and Thermodynamic Investigation of Two Lanthanum Complexes, La(dpp)₃ and La(XT), for the Treatment of Bone Resorption Disorders. Chem. Sci. 2015, 6, 6439-6447.
24. Luczkowski M., De Ricco R., Stachura M., Potocki S., Hemmingsen L. and Valensin D. Metal ion mediated transition from random coil to β -sheet and aggregation of Bri2-23, a natural inhibitor of A β aggregation Metallomics, 2015, 7, 478-490
25. Garcia Ruiz R.F., Bissel M.L., Gottberg A., Stachura M., Hemmingsen L., Neyens G., Severijns N. and the VITO collaboration Perspectives for the VITO beam line at ISOLDE, CERN Eur. Phys. J. WOC, 2015, 93, 07004 (peer reviewed conference proceedings)
26. Szunyogh D., Gyurcsik B., Larsen F.H., Stachura M., Thulstrup P.W., Hemmingsen L.* and Jancso A.* Zn(II) and Hg(II) binding to a designed peptide that accommodates different coordination geometries Dalton Transactions, 2015, 44, 12576-12588
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28. Tebo A.G., Hemmingsen L., Pecoraro V.L. Variable primary coordination environments of Cd(II) Binding to Three Helix Bundles Provide a Pathway for Rapid Metal exchange Metallomics, 2015, 7, 1555-1561
29. Szunyogh D., Zsolokai H., Thulstrup P.W., Larsen F.H., Gyurcsik B., Christensen N.J., Stachura M., Hemmingsen L*, and Jancso A.* Specificity of the metalloregulator CueR for monovalent metal ions: Functional role of a coordinated thiol? Angew. Chem. Int. Ed., 2015, 54, 15756–15761
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**Conferences with abstracts presented (unless listed as invited) by Medicinal Inorganic
 Chemistry Group students or postdocs with posters or talks (not complete):**

1. Gordon Research Conference on Metals in Biology, Ventura CA, January 2012
2. Gordon Research Seminar on Bioinorganic Chemistry, Ventura CA, January 2012
3. 6th Drug Discovery for Neurodegenerative Diseases Conference, New York, February
 2012
4. ACS National Meeting, San Diego, March 2012 (invited lecture)

5. 95th Canadian Chem. Conference and Exhibition, Calgary AB, May 2012 (2 invited lectures, 5 talks)
6. International Symposium on Metal Complexes (ISMEC 2012), Lisbon, June 2012 (plenary lecture)
7. Gordon Research Conference on Metals in Medicine, Andover NH, June 2012
8. PacifiKen2, Timberline Lodge, OR, August 2012 (featured lecture)
9. XVI Brazilian Meeting on Inorganic Chemistry, III Latin American Meeting on Biological Inorganic Chemistry (LABIC III), Florianópolis, August 2012 (plenary lecture)
10. 4th EuCheMS Chemistry Congress (4th Congress of the European Association for Chemical and Molecular Sciences) Prague, August 2012
11. 40th International Conference on Coordination Chemistry, Valencia, Spain, September 2012 (keynote lecture)
12. 13th International Conference on Alzheimer's Drug Discovery, Jersey City, NJ, September 2012 (ADDF Young Investigator Scholarship)
13. 11th European Biological Inorganic Chemistry Conference, Granada, Spain, September 2012
14. XIV Encuentro de Química Inorgánica, Olmué, Chile, November 2012 (plenary lecture)
15. 4th International Max Planck Research School Student Symposium "Chemical Biology - Exploring the Interface", Dortmund Germany, November 2012
16. Gordon Research Seminar on Bioinorganic Chemistry, Ventura CA, January 2013
17. Zing Bioinorganic Chemistry Conference 2013, Lanzarote, Spain, February 2013 (plenary lecture)
18. ACS National Meeting, New Orleans, April 2013
19. 20th International Symposium on Radiopharmaceutical Sciences, Jeju, Korea, May 2013 (2 student lectures)
20. Society of Nuclear Medicine and Molecular Imaging, Annual Meeting, Vancouver BC, June 2013 (Berson-Yalow award/student lectures)
21. Radiometals 2013, Sonoma Valley, CA, June 2013 (student lecture)
22. Metallomics 2013 - 4th Intl. Symposium on Metallomics, Oviedo, Spain, July 2013 (plenary lecture)
23. 16th Intl. Conference on Biological Inorganic Chemistry, Grenoble, France, July 2013 (keynote lecture, poster)
24. XII Intl. Symposium on Inorganic Biochemistry, Wrocław, Poland, August 2013 (plenary lecture)

25. 14th International Conference on Alzheimer's Drug Discovery, Jersey City, NJ, September 2013 (ADDF Young Investigator Scholarship)
26. Annual Meeting, Helmholtz Virtual Institute "NanoTracking", Heidelberg, Germany, October 2013
27. American Association of Pharmaceutical Scientists, Annual Meeting, San Antonio TX, November 2013
28. Gordon Research Conference on Metals in Biology, Ventura CA, January 2014 (invited lecture)
29. 97th Canadian Chem. Conference and Exhibition, Vancouver BC, June 2014 (student lectures and posters)
30. Society of Nuclear Medicine and Molecular Imaging, Annual Meeting, St. Louis MO, June 2014 (student lecture)
31. Gordon Research Conference on Metals in Medicine, Andover NH, June 2014
32. Challenges in Inorganic and Materials Chemistry, International Symposium on Advancing the Chemical Sciences - ISACS 13, Dublin, Ireland, July 2014 (plenary lecture)
33. 41st International Conference on Coordination Chemistry, Singapore, July 2014 (invited lecture)
34. TERACHEM2014 – 2nd International Symposium on Technetium and other Radiometals in Chemistry and Medicine, Bressanone , Italy, September 2014 (two posters, one student talk)
35. ACS National Meeting, Denver, March 2015 (student talk)
36. International Symposium on Cutting Edge Molecules for Biological Materials and Imaging Applications, Hong Kong Polytechnic University, April 2015 (plenary lecture)
37. 5th Georgian Bay International Conference on Bioinorganic Chemistry (CanBIC-5), Parry Sound ON, May 2015 (invited lecture)
38. 21st International Symposium on Radiopharmaceutical Sciences, Columbia, MO, May 2015 (student talk)
39. 17th Intl. Conference on Biological Inorganic Chemistry, Beijing, China, July 2015 (student poster)
40. 1st International Symposium on Clinical and Experimental Metallodrugs in Medicine: Cancer Chemotherapy, Honolulu HI, December 2015 (invited lecture for roundtable, 1 student poster)

41. Pacifichem 2015, Honolulu HI, December 2015 (2 keynote lectures, 1 student lecture, 1 student poster)
42. Humboldt Kolleg "Time", Toronto, May 2016
43. Can. Society for Pharma. Sci. Annual Symposium, Richmond BC, June 2016 (student poster)
44. 99th Canadian Chemistry Conference and Exhibition, Halifax NS, June 2016
45. Metals in Medicine Gordon Res. Conf., Andover NH, June 2016 (invited lecture, 2 student posters)
46. 42nd International Conference on Coordination Chemistry, Brest, France, July 2016 (keynote lecture)
47. International Symposium on Solubility Phenomena and Related Equilibrium Processes – ISSP 17 Geneva, July 2016 (invited workshop lecture)
48. 5th Western Canada Medicinal Chemistry Workshop, Saskatoon, September 2016 (1st prize student talk)
49. Mike Adam Scientific Symposium, TRIUMF, Vancouver, September 2016 (invited lecture)
50. 6th Georgian Bay Int'l Conf. on Bioinorganic Chem. (CanBIC-6), Parry Sound ON, May 2017 (invited lecture)
51. 100th Canadian Chemistry Conference and Exhibition, Toronto, June 2016 (invited lecture)
52. 14th International Symposium on Applied Bioinorganic Chemistry, Toulouse, France, June 2017 (invited lecture)
53. 46th IUPAC World Chemistry Congress, São Paulo, Brazil, July 2017 (keynote lecture)
54. 18th Intl. Conference on Biological Inorganic Chemistry, Brazil, August 2017 (plenary lecture)
55. C. Hoehr Application of nuclear physics in medical physics and nuclear medicine Bulletin of The American Physical Society 61, 129 (2016)
56. Infantino, C. Hoehr Monte-Carlo simulation with FLUKA for solid Mo-100 target AIP Conference Proceedings in print
57. P. Jahangiri, D. M. Martinez, C. Hoehr Pressure rise in water targets WTTC16 Abstract book (2016)
58. K. Li, P. Jahangiri, N. Zacchia, T. Uittenbosch, K. Buckley, D. M. Martinez, C. Hoehr Modular design for a liquid target AIP Conference Proceedings in print

59. P. Jahangiri, S. E. Lapi, J. Publicover, K. Buckley, D. M. Martinez, T. J. Ruth, C. Hoehr Modeling pressure rise in gas targets AIP Conference Proceedings in print
60. N. Zacchia, D. M. Martinez, C. Hoehr Foil Degradation in Liquid Targets Irradiation Low pH Salt Solutions AIP Conference Proceedings in print
61. Dunning, C. Lindsay, N. Unick, V. Sossi, M. Martinez, C. Hoehr Treatment Verication of a 3D-printed Eye Phantom for Proton Therapy Medical Physics 43 4945 (2016)
62. T. Amin, C. Lindsay, C. Hoehr, R. Barlow PET scanning of ocular melanoma after proton irradiation Radiotherapy and Oncology 118 S3 (2016)
63. Hoehr, C. Lindsay, C. Dunning, N. Unick, V. Sossi, D.M. Martinez A 3D-printed eye phantom for proton therapy International Journal of Particle Therapy 3 218 (2016)
64. G. Dias, C. Ramogida, C. Hoehr, K.-S. Lin, P. Schaffer, F. Benard Peptide radiolabeling using Ga-68 directly produced in liquid targets: development of an improved purification method Journal of Nuclear Medicine 57 Supplement 2 187 (2016)
65. G. Dias, C. Ramogida, J. Rousseau, N. Zacchia, M. Vuckovic, C. Hoehr, K. Lin, P. Schaffer, F. Benard Liquid target production of Zr-89 for antibody labeling and in vivo studies a solid target production comparison study Journal of Nuclear Medicine 57 Supplement 2 188 (2016)
66. Lindsay, J. Kumlin, P. Schaffer, A. Jirasek, C. HoehrStepless 3D-printed beam modulators for passive beam delivery in proton therapy International Journal of Particle Therapy 2 219 (2015)
67. C. Hoehr, C. Hendriks, T. Uittenbosch, D. Cameron, S. Kellogg, D. Gray, K. Buckley, V. Verzilov, P. Schaffer Real-time beam-prole monitor for a medical cyclotron WTTC15 Conference Proceeding, 21 (2015)
68. T. Uittenbosch, K. Buckley, P. Schaffer, C. Hoehr Development of a forced gas target for improved thermal performance WTTC15 Conference Proceeding, 53 (2015)
69. Infantino, E. Oehlke, M. Trinczek, D. Mostacci, P. Schaffer, C. Hoehr Monte-Carlo simulation with FLUKA for liquid and solid targets WTTC15 Conference Proceeding, 25 (2015)
70. P. Jahangiri, S. Ferguson, R. Doering, K. Buckley, F. Benard, P. Schaffer, M. Martinez, C. Hoehr Numerical simulation for a liquid cyclotron target WTTC15 Conference Procedding, 129 (2015)
71. Hoehr, E. Oehlke, X. Hou, S. Zeisler, M. Adam, T. Ruth, K. Buckley, A. Celler, F. Benard, P. Schaffer Production of radiometals in a liquid target WTTC15 Conference Proceeding, 41 (2015)

72. Oehlke, C. Hoehr, F. Benard, X. Hou, S. Zeisler, M. Adam, T. Ruth, K. Buckley, A. Celler, P. Schaffer Production of Radiometals in a Liquid Target European Journal of Nuclear Medicine and Molecular Imaging 41 S244 (2014)
73. Infantino, E. Oehlke, M. Trinczek, D. Mostacci, P. Schaffer, C. Hoehr Monte-Carlo assessment of the saturation yield for liquid and solid targets at a medical cyclotron using FLUKA European Journal of Nuclear Medicine and Molecular Imaging 41 S450 (2014)
74. Lindsay, E. Blackmore, A. Jirasek, P. Schaffer, V. Sossi, M. Trinczek, C. Hoehr Monte Carlo Simulation of Primary Dose and PET Isotope Production for the TRIUMF Proton Therapy Facility Medical Physics 41 26 (2014)
75. Dias, E. Oehlke, C. Hoehr, P. Schaffer, K.-S. Lin, K. Buckley, F. Benard Comparison study on radiolabeling antibodies with Zr-89 produced from solid and liquid target systems Journal of Nuclear Medicine 55 Supplement 1 609 (2014)
76. E. Oehlke, C. Hoehr, P. Schaffer, S. Zeisler, M. Adam, K. Buckley, T. Ruth, F. Benard Production, purification and radiolabeling of radiometals produced in a liquid target on a 13 MEV medical cyclotron Journal of Nuclear Medicine 55 Supplement 1 215 (2014)
77. Hoehr, M. Trinczek, F. Li, E. Himbeault, N. Zacchia, P. Schaffer, E. Blackmore P170: FLUKA simulation of the TRIUMF Proton Therapy Facility International Journal of Particle Therapy 1 220 (2014)
78. Hoehr, V. Hanemaayer, S. Zeisler, H. Yang, K. Buckley, T. Ruth, F. Benard, P. Schaffer A simple method for producing and purifying Sc-44 from a liquid target using low energy medical cyclotrons Journal of Nuclear Medicine 54 Supplement 2 1096 (2013)
79. C. Hoehr, M. Trinczek, K. Dinelle, S. Blinder, E. Blackmore, W. Kwa, R. Lee, V. Sossi, T.R. Ruth, P. Schaffer, K. Paton PET scanning of ocular melanomas after proton therapy IEEE MIC 2012 Conference Record, M22-3 (2012)
80. C. Hoehr, B. Badesso, T. Morley, M. Trinczek, K. Buckley, S. Zeisler, V. Hanemaayer, T.R. Ruth, F. Benard, P. Schaffer Producing radio-metals in liquid targets: proof of feasibility with Tc-94mAIP Conference Proceedings 1509, 56 (2012)
81. C. Hoehr, T. Uittenbosch, V. Verzilov, W. English, K. Buckley, D. Gray, S. Kellogg, D. Cameron, P. Schaffer A real-time beam-prole monitor for a PET cyclotron AIP Conference Proceedings 1509, 41 (2012)

82. J. Klug, K. Buckley, M. Dodd, C. Hoehr, P. Tsao, J.P. Appiah, C. Economou, P. Schaffer, S. Zeisler A new transfer system for solid targets AIP Conference Proceedings 1509, 146 (2012)
83. T.J. Morley, C. Hødør, K. Buckley, P. Schaffer, F. Benard, T.J. Ruth Rapid and efficient production of Tc-94m Journal of Labelled Compounds and Radiopharmaceuticals 54 S245 (2011)
84. T.J. Morley, C. Hødør, K. Buckley, K. Gagnon, S. McQuarrie, M. Kovacs, P. Schaffer, F. Benard, T.J. Ruth Simple, rapid production of Tc-94m Journal of Nuclear Medicine 52 supplement 290 (2011)
85. Dias, G.M.*†; Ramogida, C.F. †; Hoehr, C.; Lin, K.S.; Schaffer, P.; Benard, F. "Peptide radiolabeling using ^{68}Ga directly produced in liquid targets: development of an improved purification method" SNMMI 2016 (Society of Nuclear Medicine and Medical Imaging Annual Meeting), San Diego, CA, USA, June 11 – 15, 2016. †Authors contributed equally to the work.
86. Dias, G.M.* †; Ramogida, C.F. †; Rousseau, J.; Zacchia, N.A.; Vuckovic, M.; Hoehr, C.; Lin, K.S.; Schaffer, P.; Benard, F. "Liquid target production of ^{89}Zr for antibody labeling and in vivo studies – a solid target production comparison study" SNMMI 2016 Annual Meeting, San Diego, CA, USA, June 11 – 15, 2016. †Authors contributed equally to the work.
87. Ramogida, C.F*; Ferreira, C.L.; Cawthray, J.; Orvig, C.; Adam, M.J. "H₂CHXdedpa and H₄CHXoctapa – chiral acyclic ligands for ^{68}Ga and ^{111}In radiopharmaceuticals" ISRS 2015 (The 21st International Symposium of Radiopharmaceutical Sciences), Columbia, MO, USA, May 26 – 31, 2015. (*Abstract awarded Dr. Michael J. Welch Hot Atom Fund Outstanding Trainee Award)
88. Ramogida, C.F*; Ferreira, C.L.; Cawthray, J.; Orvig, C.; Adam, M.J. "Acyclic chelators as potential PET imaging agents of hypoxia with ^{68}Ga " SNMMI 2014 Annual Meeting, St. Louis, MO, USA, June 7 – 11, 2014.
89. Ramogida, C.F*; Cawthray, J.; Ferreira, C.L.; Adam, M.J.; Orvig, C. "Nitroimidazole-containing acyclic chelators as potential PET imaging agents of tumour hypoxia with ^{68}Ga " CSC 97th Canadian Chemistry Conference, Vancouver, BC, Canada, June 1 – 5, 2014.
90. Ramogida, C.F*; Cawthray, J.; Ferreira, C.L.; Adam, M.J.; Orvig, C. "Nitroimidazole derivatives of an acyclic chelator as potential PET imaging agents of hypoxia using ^{68}Ga " Radiometals 2013, Sonoma Valley, CA, USA, June 13 – 16, 2013.

91. Ramogida, C.F*; Cawthray, J.; Ferreira, C.L; Adam, M.J.; Orvig, C. "Acyclic chelators for PET imaging of tumour hypoxia with ^{68}Ga " SNMMI 2013 Annual Meeting, Vancouver, BC, Canada, June 8 – 12, 2013.
92. Ramogida, C.F.*, Boros, E., Ferreira, C.L., Cawthray, J., Wester, D., Adam, M.J., Orvig, C. "Nitroimidazole-containing acyclic chelators for PET imaging of hypoxia with ^{68}Ga " CSC 95th Canadian Chemistry Conference and Exhibition, Calgary, AB, Canada May 26 – 30, 2012.
93. M. Stachura, Laser polarized β -NMR experiment for liquid samples X International Workshop on Application of Lasers and Storage Devices in Atomic Nuclei Research, Poznan, Poland (2016).
94. M. Stachura, β -NMR on liquid samples for biophysical and biochemical applications Fourth International ARIEL Science Workshop, Vancouver, Canada (2015).
95. M. Stachura, VITO project at ISOLDE-CERN European Radioactive Ion Beam (EUROBIC15) Conference, Hohenroda, Germany (2015).
96. M. Stachura, β -NMR on liquid media for biophysical and biological applications The International Conference on Electromagnetic Isotope Separators and Related Topics (EMIS), Michigan, USA, (2015).
97. M. Stachura, β -NMR on liquid media for bio-physics applications Hyperfine Interactions and International Symposium on Nuclear Quadrupole Interactions (HFI/NQI), Canberra, Australia (2014).
98. M. Stachura, Nuclear techniques for studying soft matter at ISOLDE-CERN European Radioactive Ion Beam (EUROBIC12), Padova, Italy (2012).
99. M. Stachura, Nuclear techniques for studying soft matter at ISOLDE-CERN International Nuclear Physics Conference (INPC), Firenze, Italy (2013)
100. M. Stachura, Versatile ion-polarized techniques online (VITO) at ISOLDE-CERN: an overview TRIUMF seminar, Vancouver, Canada (2013).
101. M. Stachura, Radioisotopes for probing biomolecular functionality in living matter ICTR-PHE 2012, Geneva, Switzerland (2012).