

Prof. Dr. Bruno Therrien, Privat Docent

Born in Montréal, 12th of April 1966, Canadian

Address for correspondence:

Chemin du Levant 2, CH-2087, Cornaux, Switzerland

Tel.: +41 (032) 7182499 (work) +41 (032) 7100618 (home) +41 (032) 7182511 (fax)

e-mail: bruno.therrien@unine.ch

Academic Qualifications

- University of Montreal, Montréal, Québec, Canada, 1989-1992, **Bachelor of Science** – Chemistry
- University of Montreal, Montréal, Québec, Canada, 1992-1993, **Master of Science** – Chemistry
“Réactions du niobium(V) avec l’imidazole et certains de ses dérivés méthylés“
- University of Berne, Berne, Switzerland, 1994-1998, **Doctor of Philosophy** – Chemistry (November 1998)
“Synthesis of a configurationally stable, three legged piano stool complex“
- Weizmann Institute, Rehovot, Israel, 1999, **Postdoctoral Fellow** – Protein Crystallography
- Massey University, Palmerston North, New Zealand, 2000-2001, **Postdoctoral Fellow** – Organometallic chemistry
- University of Neuchatel, Neuchâtel, Switzerland, 2002-2003, **Postdoctoral Fellow** – Organometallic chemistry
- Tokyo University, Tokyo, Japan, 2003-2005, **Postdoctoral Fellow** – Supramolecular chemistry
- University of Neuchatel, Neuchâtel, Switzerland, 2005-2008, **Senior Researcher** – Organometallic chemistry
- University of Neuchatel, Neuchâtel, Switzerland, 2008-present, **Privat Docent** and **Engineer in Crystallography**

Academic Experience / Teaching

- University of Montreal, Canada (1993-1994), **Demonstrator**, Crystallography
- University of Trois-Rivières, Canada (1994-1995), **Lecturer**, Inorganic Chemistry I and II
- University of Neuchatel, Switzerland, **Supervisor for Semester Project and Master Thesis**, M.Sc. in Micro and Nanotechnology (2005-2008)
- University of Neuchatel, Switzerland (2008), **Lecturer**, Reactivity Principles of Metals
- University of Neuchatel, Switzerland (2008), **Lecturer**, Metals in Medicine
- University of Rouen, France (2009), **Invited Professor**, Bioinorganic Chemistry
- University of Angers, France (2012), **Invited Professor**, Bioorganometallic Chemistry

Research Funding

- 2006 Swiss National Science Foundation, **sole applicant** (200021-111795, 2 years, 85'000 €)
“Functionalised Arene-Ruthenium Complexes: Bridging the Gap from Bio- to Nano-Materials”
- 2006 Swiss National Science Foundation, **sole applicant** (200021-113282, 1 year, 90'000 €)
“Supramolecular Self-Assembly Incorporating Arene-Ruthenium”
- 2008 Swiss National Science Foundation, **sole applicant** (200020-119760, 2 years, 115'000 €)
“Biological Applications of Arene Ruthenium Complexes”
- 2008 Key International Science Capacity Fund Programme, co-applicant (3 years, 20'000 €)
- 2008 Swiss South Africa Joint Research Programme, co-applicant (3 months, 8'000 €)
- 2009 Indo Swiss Joint Research Programme, co-applicant (2 months, 8'000 €)
- 2010 Strategic Korean-Swiss Cooperative Programme, co-applicant (1 month, 5'000 €)
- 2010 Swiss South Africa Joint Research Programme, co-applicant (5 months, 10'000 €)
- 2010 Swiss National Science Foundation, **sole applicant** (200020-129518, 2 years, 115'000 €)

“Supramolecular Self-Assemblies Incorporating Arene Ruthenium Complexes”.

2012 Indian Swiss Joint Research Project (ISJRP-138844, 3 years, 35'000 €) “Interaction of Synthetic Organic and Organometallic Molecules with G-quadruplex DNA and Evaluating them as DNMT and HDAC inhibitors”

2012 Sino Swiss Science and Technology Cooperation (EG21-092011, 1 year, 8'000 €) “Preparation of Water Soluble Complex-in-a-Complex Systems for Biological Applications”

2012 Swiss National Science Foundation, **sole applicant** (200020-140212, 2 years, 120'000 €) “Supramolecular Assemblies from Ruthenium Complexes”

2012 Swiss Romania Cooperation Programme (IZERZO-142198, 3 years, 150'000 €) “Thiazolo-Ruthenium Complexes as New Anticancer Agents”

Postgraduate Supervision

M.Sc. Students:

Jules NEABO, 2005; **Birgit MOLLWITZ**, 2006; **Stéphane FREIN**, 2006; **Nicolas P. E. BARRY**, 2008; **Natasha SIEBER**, 2008; **Preshen GOVENDER**, 2010; **Richard PAYNE**, 2011

PhD. Students:

Johan MATTSSON, 2006-2010 (primary supervisor) – graduated 2010

Nicolas P. E. BARRY, 2007-2011 (primary supervisor) – graduated 2011

Justin JOHN PETER, 2009-present (primary supervisor)

Julien FREUDENREICH, 2009-2012 (co-supervisor with Prof. G. Süss-Fink) – graduated 2012

Divambal APPAVOO, 2011-present (co-supervisor with Prof. R. Deschenaux)

Amine GARCI, 2011-present (primary supervisor)

Lydia PAUL, 2011-present (co-supervisor with Dr. J. Furrer, Berne)

Emmanuel DENOYELLE, 2011-present (co-supervisor with Prof. V. Sol, Limoges, France)

Thomas CHEMINEL, 2012-present (primary supervisor)

Ming-Hui YUAN, 2012-present (co-supervisor with Prof. P. Braunstein, Strasbourg, France)

Thesis Examined:

Elvira KRASNIQI (M.Sc.) External examiner 2007; **Yves CASTA** (Ph.D.) Internal examiner 2008; **Frédéric SCHMITT** (Ph.D.) External examiner 2009; **Preshen GOVENDER** (M.Sc.)

External examiner 2010; **Prinessa CHELLAN** (M.Sc.) External examiner 2010; **Michael GRAS** (Ph.D.) Internal examiner 2010; **A. VANITHA** (Ph.D.) External examiner 2010; **Daniel GARDINI** (M.Sc.) External examiner 2011; **Nicolas DROGAT** (Ph.D.) External examiner 2011;

Sébastien Bivaud (Ph.D.) External examiner 2012; **Marlène PERNOT** (Ph.D.) External

examiner 2012; **Alexandre STERN** (M.Sc.) External examiner 2013; **Lukas FILAK** (Ph.D.)

External examiner 2013

Oral Presentations in International Conferences and Universities

July 2007	ICBIC XIII in Vienna, Austria, “Ruthenium-Porphyrin Compounds for Photodynamic Cancer Therapy”
Sept 2007	XVII EuCheMS in Sofia, Bulgaria, “Ruthenium-Porphyrin Compounds for Photodynamic Cancer Therapy”
July 2008	ICOMC 2008 in Rennes, “Supramolecular Trojan Horse for Cancer Cells”.
Oct 2008	Cape Symposium, South Africa, “Self-assembled organometallic containers”.
July 2009	FIGIPAS 09 in Palermo, Italy, “Supramolecular cubes as selective quadruplex DNA binders”.
Sept 2009	ISABC10 in Debrecen, Hungary, “Supramolecular cubes as selective quadruplex DNA binders”.
June 2010	EUROBIC10 Thessaloniki, Greece, “Arene ruthenium metalla-cages: New drug delivery vectors”.

April 2011	EICC-1, Manchester, UK, “Ruthenium-porphyrin compounds in photodynamic therapy”.
June 2011	ICCBC-XXIII, Smolenice, Slovakia, “Ruthenium-porphyrin compounds in photodynamic therapy”.
Sept 2011	5 th EuCheMS Conference on Nitrogen Ligands, Granada, Spain, “Drug delivery by water-soluble organometallic cages”.
Nov 2011	1 st COST CM1005 Meeting, Frascati, Italy, “Drug delivery by water-soluble organometallic cages”.
March 2012	DYNAMOL workshop, Champéry, Switzerland, “Encapsulation of guest molecules in arene ruthenium metalla-assemblies”.
March 2012	Dalian University of Technology, Dalian, China, “Encapsulation of guest molecules in arene ruthenium metalla-assemblies”.
May 2012	Second Argentinean Workshop in Environmental Science, Rosario, Argentina, “Ruthenium-based compounds for chemotherapy and photodynamic therapy”.
June 2012	Colloque GECOM-CONCOORD 2012, Métabief, France, “Ruthenium-porphyrin compounds for photodynamic therapy”.
July 2012	ISBOMC'12, Toronto, Canada, “Drug delivery by water-soluble organometallic cages”.
Jan 2013	University of Vienna, Vienna, Austria, “Drug delivery by water-soluble organometallic cages”.
Feb 2013	University of Medicine and Pharmacy Iuliu Hatieganu Cluj-Napoca, Cluj-Napoca, Romania, “Water-soluble ruthenium complexes: A new family of anticancer agents”.
May 2013	University of Warwick, Coventry, UK, “Water-soluble organometallic cages for drug delivery”.
June 2013	46 th Heyrovský Discussion, Třešť, Czech Republic, “Selective sensing of picric acid using arene ruthenium tetrapyridyl-tetrathiafulvalene metalla-assemblies”.
July 2013	University of Otago, Dunedin, New Zealand, “Organometallic cages as carriers for photosensitizers”.

National and International Collaborations

- Prof. Gregory Smith, University of Cape Town, Cape Town, South Africa
- Dr. Narayana Nagesh, Center for Cellular and Molecular Biology, Hyderabad, India
- Dr. Stefano Brenna, University of Insubria, Italy
- Dr. Muriel Barberi-Heyob and Dr. Thierry Bastogne, CRAN, Nancy-Université, France
- Prof. Byeang Hyean Kim, Pohang University of Science and Technology, South Korea
- Prof. Paul J. Dyson, EPFL, Lausanne, Switzerland
- Prof. Nicola Armaroli, Consiglio Nazionale delle Ricerche, Bologna, Italy
- Prof. Jianzhang Zhao, Dalian University of Technology, Dalian, China
- Prof. Vincent Sol, University of Limoges, Limoges, France
- Prof. Ramon Vilar, Imperial College, London, UK
- Dr. Frédéric Schmitt and Dr. Lucienne Juillerat-Jeanneret, CHUV, Lausanne, Switzerland

List of Publications 2008-2013: For a full list of publications visit:

<http://www2.unine.ch/chs/page9676.html>

Peer-reviewed articles:

222-Arene ruthenium and pentamethylcyclopentadienyl rhodium and iridium complexes containing N,O-chelating ligands derived from piroxicam: Synthesis, molecular structure and cytotoxicity

M.U. Raja, J. Tauchman, **B. Therrien**, G. Süss-Fink, T. Riedel, P. J. Dyson, *Inorg. Chim. Acta*, doi: 10.1016/j.ica.2013.08.013.

221-Synthesis, molecular structure, computational study and *in vitro* anticancer activity of thiolato-bridged pentamethylcyclopentadienyl Rh(III) and Ir(III) complexes

G. Gupta, A. Garci, B. S. Murray, P. J. Dyson, G. Fabre, P. Trouillas, F. Giannini, J. Furrer, G. Süss-Fink, **B. Therrien**, *Dalton Trans.*, **2013**, doi: 10.1039/C3DT51991K.

220-Highly cytotoxic diruthenium trithiolato complexes of the type $[(\eta^6-p\text{-MeC}_6\text{H}_4\text{-Pr}^i)_2\text{Ru}_2(\mu_2\text{-SR})_3]^+$: Synthesis, characterization, molecular structure and *in vitro* anticancer activity

F. Giannini, L. E. H. Paul, J. Furrer, **B. Therrien**, G. Süss-Fink, *New J. Chem.*, doi: 10.1039/c3nj00476g.

219-Metallocene-modified uracils: Synthesis, structure, and biological activity

K. Kowalski, J. Skiba, L. Oehninger, I. Ott, J. Solecka, A. Rajnisz, **B. Therrien**, *Organometallics*, doi: 10.1021/om400294s.

218-Neutral and cationic osmium(II)-arene metallocendrimers: Synthesis, characterisation and anticancer activity

P. Govender, F. Edafe, B. C. E. Makhubela, P. J. Dyson, **B. Therrien**, G. S. Smith, *Inorg. Chim. Acta*, **2013**, doi: 10.1016/j.ica.2013.05.025.

217-Sawhorse-type diruthenium tetracarbonyl complexes derived from pyrenyl-carboxylic acids

J. P. Johnpeter, **B. Therrien**, *Inorg. Chim. Acta*, **2013**, 405, 437-443.

216-The Goldilocks principle in action: Synthesis and structural characterization of a novel $[\text{Cu}_4(\mu_3\text{-OH})_4]$ cubane stabilized by monodentate ligands

G. A. Ardizzoia, S. Brenna, S. Durini, **B. Therrien**, I. Trentin, *Dalton Trans.*, **2013**, 42, 12265-12273.

215-Ferrocenyl-flavones: synthesis, structure, anticancer and antibacterial activity studies

K. Kowalski, A. Koceva-Chyla, L. Szczupak, P. Hikisz, J. Bernasińska, A. Rajnisz, J. Solecka, **B. Therrien**, *J. Organomet. Chem.*, **2013**, 741-742, 153-161.

214-Treating cancer with ruthenium-porphyrin derivatives: A win-win combination?

B. Therrien, in *Actas del Segundo Taller Argentino de Ciencias Ambientales*, Ed L. F. Sala, Rosario, Argentina, **2013**, pp 306-314.

213-Transporting and shielding photosensitizers using water-soluble organometallic cages: A new strategy in drug delivery and photodynamic therapy

B. Therrien, *Chem. Eur. J.*, **2013**, 19, 8378-8386.

212-Encapsulation of photosensitizers in hexa- and octanuclear organometallic cages: Synthesis and characterization of carceplex and host-guest systems in solution
J. Freudenreich, C. Dalvit, G. Süss-Fink, **B. Therrien**, *Organometallics*, **2013**, *32*, 3018-3033.

211-Catalytic and anticancer activity of sawhorse-type diruthenium tetracarbonyl complexes derived from fluorinated fatted acids
J. P. Johnpeter, L. Plasseraud, F. Schmitt, L. Juillerat-Jeanneret, **B. Therrien**, *J. Coord. Chem.*, **2013**, *66*, 1753-1762.

210-Reactions of a cytotoxic hexanuclear arene ruthenium assembly with biological ligands
L. Paul, **B. Therrien**, J. Furrer, *J. Organomet. Chem.*, **2013**, *734*, 45-52.

209-Arene ruthenium dichloro complexes containing isonicotinic ester ligands: Synthesis, molecular structure and cytotoxicity
F.-A. Khan, **B. Therrien**, G. Süss-Fink, O. Zava, P. J. Dyson, *J. Organomet. Chem.*, **2013**, *730*, 49-56.

208-Different coordination modes of dipyridyl ketimine ligands in cationic arene ruthenium complexes
M.U. Raja, **B. Therrien**, G. Süss-Fink, *Inorg. Chem. Commun.*, **2013**, *29*, 194-196.

207-Discrete metalla-assemblies as drug delivery vectors
B. Therrien, in *Nanomaterials in Drug Delivery, Imaging, and Tissue Engineering*, Eds A. Tiwari and A. Tiwari, Wiley, **2013**, pp 149-168.

206-Neutral and cationic multinuclear half-sandwich rhodium and iridium complexes coordinated to poly(propyleneimine) dendritic scaffolds: Synthesis and anticancer activity
R. Payne, P. Govender, **B. Therrien**, C. M. Clavel, P. J. Dyson, G. S. Smith, *J. Organomet. Chem.*, **2013**, *729*, 20-27.

205-Synthesis, characterisation, and *in vitro* anticancer activity of hexanuclear thiolato-bridged arene ruthenium metalla-prisms
M. A. Furrer, A. Garci, E. Denoyelle-Di-Muro, P. Trouillas, F. Giannini, J. Furrer, C. M. Clavel, P. J. Dyson, G. Süss-Fink, **B. Therrien**, *Chem. Eur. J.*, **2013**, *19*, 3198-3203.

204-Sawhorse-type diruthenium tetracarbonyl complexes containing biologically relevant acids
J. P. Johnpeter, **B. Therrien**, *Inorg. Chim. Acta*, **2013**, *394*, 723-728.

203-The influence of RAPTA moieties on the antiproliferative activity of peripheral-functionalised poly(salicylaldiminato) metalloendrimers
P. Govender, L. C. Sudding, C. M. Clavel, P. J. Dyson, **B. Therrien**, G. S. Smith, *Dalton Trans.*, **2013**, *42*, 1267-1277.

202-A cyclometallated platinum complex as a selective optical switch for quadruplex DNA
K. Suntharalingam, A. Łęczkowska, M. A. Furrer, Y. Wu, M. K. Kuimova, **B. Therrien**, A. J. P. White, R. Vilar, *Chem. Eur. J.*, **2012**, *18*, 16277-16282.

201-System biology approach for *in vivo* photodynamic therapy optimization of ruthenium-porphyrin compounds
M. Pernot, T. Bastogne, N. P. E. Barry, **B. Therrien**, G. Koellensperger, S. Hann, V. Reshetov, M.

Barberi-Heyob, *J. Photochem. Photobiol. B: Biology*, **2012**, *117*, 80-89.

200-Interaction of a ruthenium hexacationic prism with amino acids and biological ligands: ESI mass spectrometry and NMR characterization of the reaction products

L. Paul, **B. Therrien**, J. Furrer, *J. Biol. Inorg. Chem.*, **2012**, *17*, 1053-1062.

199-Photoactive sawhorse-type diruthenium tetracarbonyl complexes

J. P. Johnpeter, F. Schmitt, E. Denoyelle-Di-Muro, G. Wagnières, L. Juillerat-Jeanneret, **B. Therrien**, *Inorg. Chim. Acta*, **2012**, *393*, 246-251.

198-Ruthenium(II) complexes bearing a ligand derived from *P,N-* or *P,N,O-* diphenylphosphino-benzoxazine: Synthesis, X-ray characterization, and *cis* diastereoselectivity in styrene cyclopropanation

G. A. Ardizzoia, S. Brenna, S. Durini, **B. Therrien**, *Organometallics*, **2012**, *31*, 5427-5437.

197-Sawhorse-type diruthenium tetracarbonyl tweezers

J. P. Johnpeter, J. Mohanraj, N. Armaroli, **B. Therrien**, *Eur. J. Inorg. Chem.*, **2012**, 3449-3455.

196-Highly cytotoxic trithiophenolatodiruthenium complexes of the type $[(\eta^6-p\text{-MeC}_6\text{H}_4\text{Pr})_3\text{Ru}_2(\text{SC}_6\text{H}_4\text{-}p\text{-X})]^+$: Synthesis, molecular structure, electrochemistry, cytotoxicity and glutathione oxidation potential

F. Giannini, J. Furrer, A.-F. Ibañez, G. Süss-Fink, B. Therrien, O. Zava, M. Baquie, P. J. Dyson, P. Štěpnička, *J. Biol. Inorg. Chem.*, **2012**, *17*, 951-960.

195-Enhancement of cytotoxicity by combining pyrenyl-dendrimers and arene ruthenium metalla-cages

A. Pitto-Barry, O. Zava, P. J. Dyson, R. Deschenaux, **B. Therrien**, *Inorg. Chem.*, **2012**, *51*, 7119-7124.

194-Syntheses and structural studies of mononuclear arene ruthenium complexes with nitrogen-based chelating ligands

G. Gupta, **B. Therrien**, S. Park, S. S. Lee, J. Kim, *J. Coord. Chem.*, **2012**, *65*, 2523-2534.

193-Heterodinuclear arene ruthenium complexes containing a glycine-derived phosphinoferrocene carboxamide: Synthesis, molecular structure, electrochemistry, and catalytic oxidation activity in aqueous media

J. Tauchman, **B. Therrien**, G. Süss-Fink, P. Štěpnička, *Organometallics*, **2012**, *31*, 3985-3994.

192-Bio-metallocendrimers - Emerging therapeutics in metal-based drug design

P. Govender, **B. Therrien**, G. S. Smith, *Eur. J. Inorg. Chem.*, **2012**, 2853-2862.

191-Cellular delivery of pyrenyl-arene ruthenium complexes by a water-soluble arene ruthenium metalla-cage

M. A. Furrer, F. Schmitt, M. Wiederkehr, L. Juillerat-Jeanneret, **B. Therrien**, *Dalton Trans.*, **2012**, *41*, 7201-7211.

190-Heteronuclear complexes containing the *N,N'*-di(2-pyridyl)amidocarboxylferrocene ligand

M. Auzias, **B. Therrien**, G. Süss-Fink, *Inorg. Chim. Acta*, **2012**, *387*, 446-449.

189-Physical and physico-chemical stimuli-responsive arene ruthenium metalla-prism

M. A. Furrer, J. Furrer, **B. Therrien**, *Organometallics*, **2012**, *31*, 3149-3154.

188-Investigation of the reactivity between a ruthenium hexacationic prism and biological ligands

L. Paul, **B. Therrien**, J. Furrer, *Inorg. Chem.*, **2012**, *51*, 1057-1067.

187-Encapsulation of hydrophobic pyrenyl-cycloplatinate complexes within a water-soluble arene

ruthenium metalla-cage

N. P. E. Barry, O. Zava, W. Wu, J. Zhao, **B. Therrien**, *Inorg. Chem. Commun.*, **2012**, *18*, 25-28.

186-Encapsulation of inorganic and organic guest molecules into an organometallic hexacationic arene osmium metalla-prism: Synthesis, characterisation and anticancer activity

N. P. E. Barry, O. Zava, P. J. Dyson, **B. Therrien**, *J. Organomet. Chem.*, **2012**, *705*, 1-6.

185-Delivery of floxuridine derivatives to cancer cells by water-soluble organometallic-cages

J. Wu Yi, N. P. E. Barry, M. A. Furrer, O. Zava, P. J. Dyson, **B. Therrien**, B. H. Kim, *Bioconjugate Chem.*, **2012**, *23*, 461-471.

184-Thiolato-bridged arene ruthenium complexes: Synthesis, molecular structure, reactivity and anticancer activity of the dinuclear complexes (arene)₂Ru₂(SR)₂Cl₂

A.-F. Ibañez, M. Gras, **B. Therrien**, G. Süss-Fink, O. Zava, P. J. Dyson, *Eur. J. Inorg. Chem.*, **2012**, *1531*-1535.

183-Organometallic cages as vehicles for intracellular release of photosensitizers

F. Schmitt, J. Freudenreich, N.P.E. Barry, L. Juillerat-Jeanneret, G. Süss-Fink, **B. Therrien**, *J. Am. Chem. Soc.*, **2012**, *134*, 754-757.

182-Drug delivery by water-soluble organometallic cages

B. Therrien, *Top. Curr. Chem.*, **2012**, *319*, 35-56.

181-Efficient photodynamic therapy of cancer using chemotherapeutic porphyrin-ruthenium arene metalla-cubes

F. Schmitt, N. P. E. Barry, L. Juillerat-Jeanneret, **B. Therrien**, *Bioorg. Med. Chem. Lett.*, **2012**, *22*, 178-180.

180-Organotin(IV) trifluoromethanesulfonates chemistry: Isolation and characterization of a new di-n-butyl derivative presenting a Sn₃O₃ core

L. Plasseraud, **B. Therrien**, A. Růžička, H. Cattey, *Inorg. Chim. Acta*, **2012**, *380*, 50-56.

179-Ni(II) and Pd(II) pyridinyloxazolidine-compounds: Synthesis, X-ray characterisation and catalytic activities in the aza-Michael reaction

G. A. Ardizzoia, S. Brenna, **B. Therrien**, *Dalton Trans.*, **2012**, *41*, 783-790.

178-{6-Hydroxymethyl}pyridin-2-yl)methyl ferrocene-1-carboxylate

M. Auzias, G. Süss-Fink, **B. Therrien**, *Acta Cryst.*, **2011**, *E67*, m1618.

177-Dichlorido[1-(2-chloroethyl)-3-(pyridin-4-ylmethyl-κN)urea](η⁶-hexamethylbenzene)ruthenium(II) chloroform monosolvate

M. Auzias, G. Süss-Fink, **B. Therrien**, *Acta Cryst.*, **2011**, *E67*, m1613.

176-Dichlorido(furfurylamine-κN)(η⁶-hexamethylbenzene)ruthenium(II)

A. Garci, T.-T. Thai, G. Süss-Fink, **B. Therrien**, *Acta Cryst.*, **2011**, *E67*, m1592.

175-Targeted and multifunctional arene ruthenium chemotherapeutics

G. S. Smith, **B. Therrien**, *Dalton Trans.*, **2011**, *40*, 10793-10800.

174-Reactivity study of arene(azido)ruthenium N⁺O-base complexes with activated alkynes

S. L. Nongbri **B. Therrien**, K. Mohan Rao, *Inorg. Chim. Acta*, **2011**, *376*, 428-436.

173-Arene ruthenium bis-saccharinato complexes: Synthesis, molecular structure and catalytic oxidation properties in aqueous solution

T.-T. Thai, **B. Therrien**, G. Süss-Fink, *J. Organomet. Chem.*, **2011**, *696*, 3285-3291.

172-Anticancer activity of tetra-cationic arene ruthenium metalla-cycles
N.P.E. Barry, F. Eafe, **B. Therrien**, *Dalton Trans.*, **2011**, *40*, 7172-7180.

171-Encapsulation of pyrene functionalised poly(benzyl ether) dendrons into an arene ruthenium metalla-cage

A. Pitto-Barry, N.P.E. Barry, O. Zava, R. Deschenaux, **B. Therrien**, *Chem. Asian J.*, **2011**, *6*, 1595-1603.

170-Ru₂(CO)₄(OOCR)₂L₂ sawhorse-type complexes containing axial 5(4-pyridyl)-10,15,20-triphenylporphyrin ligands

M. Gras, N.P.E. Barry, **B. Therrien**, G. Süss-Fink, *Inorg. Chim. Acta*, **2011**, *371*, 59-62.

169-Mono- and dinuclear (η^6 -arene) ruthenium(II) benzaldehyde thiosemicarbazone complexes: Synthesis, characterization and cytotoxicity

T. Stringer, **B. Therrien**, D. T. Hendricks, H. Guzgay, G. S. Smith, *Inorg. Chem. Commun.* **2011**, *14*, 956-960.

168-Excellent correlation between drug release and portal size in metalla-cages drug delivery systems

N.P.E. Barry, O. Zava, P.J. Dyson, **B. Therrien**, *Chem. Eur. J.*, **2011**, *17*, 9669-9677.

167-[Bis(2-pyridyl- κ N)amine]chlorido(η^6 -hexamethylbenzene)ruthenium(II) hexafluoridophosphate dichloromethane solvate

G. Gupta, **B. Therrien**, J. Kim, *Acta Cryst.* **2011**, *E67*, m548.

166-Template-directed synthesis of hexanuclear arene ruthenium complexes with trigonal-prismatic architecture based on 2,4,6-tris(3-pyridyl)triazine ligands

J. Freudenreich, J. Furrer, G. Süss-Fink, **B. Therrien**, *Organometallics*, **2011**, *30*, 942-951.

165-Ru₂(CO)₄{OOC(CH₂)_nCH₃}₂L₂ sawhorse-type complexes containing $\mu_2\text{-}\eta^2\text{-carboxylato}$ ligands derived from saturated fatty acids

J. Johnpeter, **B. Therrien**, *J. Struct. Chem.*, **2011**, *52*, 151-159.

164-Study of complexes of platinum group metals containing nitrogen bases derived from pyridine aldehydes: Interesting molecular structures with unpredicted bonding modes of the ligands

G. Gupta, S. Gloria, S. L. Nongbri **B. Therrien**, K. Mohan Rao, *J. Organomet. Chem.*, **2011**, 696, 2014-2022.

163-Study of half sandwich platinum group metal complexes containing tetradeinate *N*-donor ligand bearing two di-pyridylamine units linked by an aromatic spacer

G. Gupta, S. Gloria, **B. Therrien**, B. Das, K. Mohan Rao, *J. Organomet. Chem.*, **2011**, 696, 702-708.

162-Antiproliferative activity of chelating *N,O*- and *N,N*-ruthenium(II) arene functionalised poly(propyleneimine) dendrimer scaffolds

P. Govender, A. K. Renfrew, C. M. Clavel, P. J. Dyson, **B. Therrien**, G. S. Smith, *Dalton Trans.* **2011**, *40*, 1158-1167.

161-Coordination chemistry of 2,4,6-tri(pyridyl)-1,3,5-triazine ligands

B. Therrien, *J. Organomet. Chem.*, **2011**, 696, 637-651.

160-Double targeting of tumours with pyrenyl-modified dendrimers encapsulated in an arene-ruthenium metalla-prism

A. Pitto-Barry, N.P.E. Barry, O. Zava, R. Deschenaux, P.J. Dyson, **B. Therrien**, *Chem. Eur. J.*, **2011**, *17*, 1966-1971.

159-Synthesis, characterisation and anticancer activity of porphyrin containing organometallic cubes

N.P.E. Barry, O. Zava, P.J. Dyson, **B. Therrien**, *Aust. J. Chem.*, **2010**, *63*, 1529-1537.

158-Thiophenolato-bridged dinuclear arene ruthenium complexes: A new family of highly cytotoxic anticancer agents

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