



## RHODES UNIVERSITY, GRAHAMSTOWN, SOUTH AFRICA

### STAFF INFORMATION



**DR JONATHAN BRITTON**

**Manager**

#### **CONTACT DETAILS:**

Rhodes University, Department of Chemistry, P O Box 94, Grahamstown 6140, South Africa  
Email: [j.britton@ru.ac.za](mailto:j.britton@ru.ac.za) or [jonathanbritton668@gmail.com](mailto:jonathanbritton668@gmail.com)

#### **EDUCATION DETAILS:**

Phd (Chemistry) 2013 - Rhodes University, Grahamstown, South Africa  
MSc (Chemistry with distinction) 2010 - Rhodes University, Grahamstown, South Africa  
BSch 2007 - Rhodes University, Grahamstown, South Africa  
BSc 2006 - Rhodes University, Grahamstown, South Africa

#### **EMPLOYMENT HISTORY:**

Currently employed since January 2014 as the NIC Manager in the Chemistry Department at Rhodes University.

Post-doctoral Fellow in 2013, Rhodes University, Chemistry Department.

## **RESEARCH INTEREST:**

Nanoparticles, nonlinear optical devices, solar cells, etc.

## **PUBLICATIONS:**

1. **J. Britton**, E. Antunes and T. Nyokong  
Fluorescence studies of quantum dots and zinc tetraamino phthalocyanine conjugates.  
**Inorg. Chem. Commun** **12** (2009) **828-831**
2. **J. Britton**, E. Antunes and T. Nyokong  
Fluorescence quenching and energy transfer in conjugates of quantum dots with zinc and indium tetraamino phthalocyanines.  
**J. Photochem. Photobiol. A. Chem.** **210** (2010) **1-7**.
3. **J. Britton**, C. Litwinski, T. Nyokong,  
Optical limiting behavior of ring substituted zinc, indium and gallium phthalocyanines in the presence of quantum dots  
**J. Porphyrins Phthalocyanines**, **15** (2011) **1239-1249**
4. **J. Britton**, C. Litwinski, E. Antunes, M. Durmuş, V. Chauke, T. Nyokong  
Optical limiting analysis of phthalocyanines in polymer thin films  
**Journal of Macromolecular Science, Part A: Pure and Applied Chemistry** **50(1)** (2013), **110-120**
5. **J. Britton**, E. Antunes, T. Nyokong  
Synthesis and nonlinear optical examination of 3(4), 15(16)-Bis-(4-*tert*-butyl-phenoxy)-10, 22-diaminohemiporphyrinato chloroindium  
**J. Mol. Struc.** **1047** (2013) **143-148**
6. **J. Britton**, M. Durmuş, Samson Khene, V. Chauke, T. Nyokong  
Third order nonlinear optical properties of phthalocyanines in the presence nanomaterials and in polymer thin films  
**J. Porphyrins Phthalocyanines (Special issue Lukyanets)** **17** (2013) **691-702**
7. **J. Britton**, M. Durmuş, V. Chauke, T. Nyokong  
Polymethyl acrylate films containing metallo phthalocyanines in the presence of CdTe quantum dots: non-linear optical behaviour and triplet state lifetimes  
**J Mol Struc.** **1054-1055** (2013) **209-214**
8. Mkhize, Colin; **Britton, Jonathan**; Nyokong, Tebello  
Enhanced nonlinear optical properties of octa-substituted lead and cadmium phthalocyanines when embedded in poly(bisphenol A carbonate) as thin films  
**Polyhedron** (2014), **81**, **607-613**.
9. Zongo, S.; Sanusi, K.; **Britton, J.**; Mthunzi, P.; Nyokong, T.; Maaza, M.; Sahraoui, B.  
Nonlinear optical properties of natural laccaic acid dye studied using Z-scan technique  
**Optical Materials (Amsterdam, Netherlands)**, (2015), **46**, **270-275**  
DOI:10.1016/j.optmat.2015.04.03  
<http://linkinghub.elsevier.com/retrieve/pii/S0925346715002591>

10. Mkhize, Colin; **Britton, Jonathan**; Mack, John; Nyokong, Tebello  
Optical limiting and singlet oxygen generation properties of phosphorus triazatetrabenzcorroles  
**Journal of Porphyrins and Phthalocyanines (2015), 19(1/3), 192-204**  
DOI:10.1142/S1088424614501065  
<http://www.worldscientific.com/doi/abs/10.1142/S1088424614501065>
11. Bankole, Owolabi M.; **Britton, Jonathan**; Nyokong, Tebello  
Photophysical and non-linear optical behavior of novel tetra alkynyl terminated indium phthalocyanines: Effects of the carbon chain length  
**Polyhedron (2015), 88, 73-80**  
DOI:10.1016/j.poly.2014.12.020  
<http://linkinghub.elsevier.com/retrieve/pii/S0277538714007852>
12. Oluwole, David O.; **Britton, Jonathan**; Mashazi, Philani; Nyokong, Tebello  
Synthesis and photophysical properties of nanocomposites of aluminum tetrasulfonated phthalocyanine covalently linked to glutathione capped CdTe/CdS/ZnS quantum dots  
**Synthetic Metals (2015), 205, 212-221**  
DOI:10.1016/j.synthmet.2015.04.015  
<http://www.sciencedirect.com/science/article/pii/S037967791500180>
13. D'Souza, Sarah; Mashazi, Philani; **Britton, Jonathan**; Nyokong, Tebello  
Effects of differently shaped silver nanoparticles on the photophysics of pyridylsulfanyl-substituted phthalocyanines  
**Polyhedron (2015), 99, 112-121**  
DOI:10.1016/j.poly.2015.06.038  
<http://linkinghub.elsevier.com/retrieve/pii/S027753871500354X>
14. Watkins, Zane; Taylor, Jessica; D'Souza, Sarah; **Britton, Jonathan**; Nyokong, Tebello  
Fluorescence Behaviour and Singlet Oxygen Production of Aluminium Phthalocyanine in the Presence of Upconversion Nanoparticles  
**Journal of Fluorescence (2015), 25(5), 1417-1429**  
DOI:10.1007/s10895-015-1632-z  
[http://link.springer.com/article/10.1007/s10895-015-1632-z#](http://link.springer.com/article/10.1007/s10895-015-1632-z#/)
15. Ngubeni, Grace N.; **Britton, Jonathan**; Mack, John; New, Edward; Hancox, Ian; Walker, Marc; Nyokong, Tebello; Jones, Tim S.; Khene, Samson  
Spectroscopic and nonlinear optical properties of the four positional isomers of 4-(4-tert-butylphenoxy)phthalocyanine  
**Journal of Materials Chemistry C: Materials for Optical and Electronic Devices (2015), 3(41), 10705-10714.**  
DOI:10.1039/C5TC01601K  
<http://xlink.rsc.org/?DOI=C5TC01601K>
16. Pierre Kempgens and Jonathan Britton  
Powder-XRD and 14N magic angle-spinning solid-state NMR spectroscopy of some metal nitrides.  
**Magnetic Resonance in Chemistry (2016), 54, 371-376**  
DOI 10.1002/mrc.4395  
<http://onlinelibrary.wiley.com/doi/10.1002/mrc.4395/abstract>
17. Managa, Muthumuni; Mkhize, Scebi; **Britton, Jonathan**; Prinsloo, Earl; Nyokong, Tebello

Synthesis and dark toxicity of 5-(4-carboxyphenyl)-10,15,20-tris(phenyl)-porphyrinato chlorido gallium(III)

when conjugated to  $\delta$ -aminolevulinic acid

**Journal of Coordination Chemistry (2016), 69(20), 3035-3042**

DOI:10.1080/00958972.2016.1223292

<http://dx.doi.org/10.1080/00958972.2016.1223292>

18. Managa, Muthumuni; **Britton, Jonathan**; Prinsloo, Earl and Tebello Nyokong  
Effects of pluronic silica nanoparticles on the photophysical and photodynamic therapy behavior of triphenyl-p-phenoxy benzoic acid metalloporphyrins

**Journal of Coordination Chemistry (2016) 69 (23) 3491-3506**

DOI: 10.1080/00958972.2016.1236372

<http://dx.doi.org/10.1080/00958972.2016.1236372>

19. Achadu O., **Britton J.**, and Nyokong T.

Graphene Quantum Dots Functionalized with 4-Amino-2, 2, 6, 6-Tetramethylpiperidine-N-Oxide as Fluorescence "Turn-ON" Nanosensors

**Journal of fluorescence (2016) 26, 2199–2212**

DOI: 10.1007/s10895-016-1916-y

20. **Jonathan Britton**, Alexander G. Martynov, David O. Oluwole, Yulia G. Gorbunova, Aslan Yu. Tsvadze and Tebello Nyokong

Improvement of nonlinear optical properties of phthalocyanine bearing diethyleneglycole chains: Influence of symmetry lowering vs. heavy atom effect

**Journal of Porphyrins and Phthalocyanines 2016; 20: 1296–1305**

DOI: 10.1142/S1088424616501042

<http://dx.doi.org/10.1142/S1088424616501042>

21. Watkins, Zane; Uddin, Imran; **Britton, Jonathan**; Nyokong, Tebello

Characterization of conjugates of NaYF<sub>4</sub>:Yb,Er,Gd upconversion nanoparticle with aluminum phthalocyanines

**Journal of Molecular Structure (2017), 1130, 128-137.**

DOI:10.1016/j.molstruc.2016.10.011

<http://dx.doi.org/10.1016/j.molstruc.2016.10.011>

22. Managa, Muthumuni; **Britton, Jonathan**; Amuhaya, Edith K.; Nyokong, Tebello

Photophysical properties of GaCl<sub>3</sub> 5,10,15,20-tetra(1-pyrenyl)porphyrinato incorporated into Pluronic F127 micelle

**Journal of Luminescence (2017), 185, 34-41.**

DOI:10.1016/j.jlumin.2016.12.043

<http://dx.doi.org/10.1016/j.jlumin.2016.12.043>

23. Nwaji, Njemuwa; Oluwole, David O.; Mack, John; Louzada, Marcel; Khene, Samson; **Britton, Jonathan**; Nyokong, Tebello

Improved nonlinear optical behaviour of ball type indium(III) phthalocyanine linked to glutathione capped nanoparticles

**Dyes and Pigments (2017), 140, 417-430**

DOI:10.1016/j.dyepig.2017.01.066

<http://dx.doi.org/10.1016/j.dyepig.2017.01.066>

24. Nwaji, Njemuwa; Mack, John; **Britton, Jonathan**; Nyokong, Tebello  
Synthesis, photophysical and nonlinear optical properties of a series of ball-type phthalocyanines in solution and thin films  
**New Journal of Chemistry (2017), 41(5), 2020-2028**  
DOI:10.1039/C6NJ03662G  
<http://pubs.rsc.org/en/content/articlehtml/2017/nj/c6nj03662g>
25. Njemuwa Nwaji, Owolabi M. Bankole, **Jonathan Britton** and Tebello Nyokong  
Photophysical and nonlinear optical study of benzothiazole substituted phthalocyanines in solution and thin films  
**Journal of Porphyrins and Phthalocyanines (2017), 21, 263-272**  
DOI: 10.1142/S1088424617500079  
<http://dx.doi.org/10.1142/S1088424617500079>
26. Nwahara, Nnamdi; **Britton, Jonathan**; Nyokong, Tebello  
Improving singlet oxygen generating abilities of phthalocyanines: aluminum tetrasulfonated phthalocyanine in the presence of graphene quantum dots and folic acid  
**Journal of Coordination Chemistry (2017), 70(9), 1601-1616.**  
DOI:10.1080/00958972.2017.1313975  
<http://dx.doi.org/10.1080/00958972.2017.1313975>
27. Managa, Muthumuni; Ngoy, Bokolombe Pitchou; Mafukidze, Donovan; **Britton, Jonathan**; Nyokong, Tebello  
Photophysical studies of meso-tetrakis(4-nitrophenyl) and meso-tetrakis(4-sulfophenyl) gallium porphyrins loaded into Pluronic F127 polymeric micelles  
**Journal of Photochemistry and Photobiology, A: Chemistry (2017), 348, 179-187**  
DOI:10.1016/j.jphotochem.2017.08.033  
<https://doi.org/10.1016/j.jphotochem.2017.08.033>
28. Louzada, Marcel; **Britton, Jonathan**; Nyokong, Tebello; Khene, Samson  
Solvent Effect on the Third-Order Nonlinear Optical Properties of  $\alpha$ - and  $\beta$ -Tertbutyl Phenoxy-Substituted Tin(IV) Chloride Phthalocyanines  
**Journal of Physical Chemistry A (2017), 121, 7165-7175**  
DOI:10.1021/acs.jpca.7b07349.  
<http://pubs.acs.org/doi/abs/10.1021/acs.jpca.7b07349>
29. Oluwole, David O.; Ngxeke, Sixolisile M.; **Britton, Jonathan**; Nyokong, Tebello  
The effect of point of substitution and silver based nanoparticles on the photophysical and optical nonlinearity of indium carboxyphenoxy phthalocyanine  
**Journal of Photochemistry and Photobiology, A: Chemistry (2017), 347, 146-159**  
DOI:10.1016/j.jphotochem.2017.07.032  
<https://doi.org/10.1016/j.jphotochem.2017.07.032>
30. Peteni, Siwaphiwe; Sekhosana, Kutloano Edward; **Britton, Jonathan**; Nyokong, Tebello  
Effects of charge on the photophysicochemical properties of zinc phthalocyanine derivatives doped onto silica nanoparticles  
**Polyhedron (2017), 138, 37-45**  
DOI:10.1016/j.poly.2017.09.003  
<https://doi.org/10.1016/j.poly.2017.09.003>

31. David O. Oluwole, Alexey V. Yagodin, **Jonathan Britton**, Alexander G. Martynov, Yulia G. Gorbunova, Aslan Yu. Tsivadze and Tebello Nyokong

Optical limiters with improved performance based on nanoconjugates of thiol substituted phthalocyanine with CdSe quantum dots and Ag nanoparticles†

**Dalton Transactions (2017) 46, 16190-16198**

DOI: 10.1039/c7dt03867d

<http://pubs.rsc.org/en/content/articlehtml/2017/dt/c7dt03867d>

32. Managa, M., Khene, **S., Britton**, J., Martynov, A.G., Gorbunova, Y.G., Tsivadze, A.Y. and Nyokong, T.

Photophysics and NLO properties of Ga(III) and In(III) phthalocyaninates bearing diethyleneglycol chains

**Journal of Porphyrins and Phthalocyanines (2018), 22(1/3), 137-148**

DOI:10.1142/S1088424618500128

<https://doi.org/10.1142/S1088424618500128>

33. Mwanza, D.; Louzada, M.; **Britton, J.**; Sekhosana, E.; Khene, S.; Nyokong, T.; Mashazi, P.

The effect of the cobalt and manganese central metal ions on the nonlinear optical properties of tetra(4-propargyloxyphenoxy)phthalocyanines

**New Journal of Chemistry (2018), 42(12), 9857-9864**

DOI:10.1039/c8nj00748a

<http://pubs.rsc.org/en/content/articlehtml/2018/nj/c8nj00748a>

34. Magadla, Aviwe; Oluwole, David O.; **Britton, Jonathan**; Nyokong, Tebello

Effect of nature of nanoparticles on the photophysicochemical properties of asymmetrically substituted Zn phthalocyanines

**Inorganica Chimica Acta (2018), 482, 438-446**

DOI:10.1016/j.ica.2018.06.043

<https://doi.org/10.1016/j.ica.2018.06.043>

35. Managa, Muthumuni; **Britton, Jonathan**; Prinsloo, Earl; Nyokong, Tebello

Effects of Pluronic F127 micelles as delivering agents on the vitro dark toxicity and photodynamic therapy activity of carboxy and pyrene substituted porphyrins

**Polyhedron (2018), 152, 102-107**

DOI:10.1016/j.poly.2018.06.031

<https://doi.org/10.1016/j.poly.2018.06.031>

36. Francis Chindeka, Philani Mashazi, **Jonathan Britton**, Gertrude Fomo, David O. Oluwole, Azole Sindelo, Tebello Nyokong

Optimizing phthalocyanine based dye-sensitized solar cells: The role of reduced graphene oxide

**Synthetic Metals 246 (2018) 236–245**

DOI: 10.1016/j.synthmet.2018.10.021

<https://doi.org/10.1016/j.synthmet.2018.10.021>

36. Makinde, Z.O., Louzada, M.S., Britton, J., Nyokong, T. and Khene, S.

Spectroscopic and nonlinear optical properties of alkyl thio substituted binuclear phthalocyanines

**Dyes and Pigments (2019), 162, 249-256**

DOI:10.1016/j.dyepig.2018.10.022

<https://doi.org/10.1016/j.dyepig.2018.10.022>

37. Kapambwe Peter Kabwe, Marcel Louzada, Jonathan Britton, Temitope Oloruntoba Olomola, Tebello Nyokong, Samson Khene

Nonlinear optical properties of metal free and nickel binuclear phthalocyanines

**Dyes and Pigments** (2019), **168**, 347-356.

DOI: 10.1016/j.dyepig.2019.05.003

<https://doi.org/10.1016/j.dyepig.2019.05.003>

38. Shumba, Munyaradzi; Nyoni, Stephen; Britton, Jonathan; Nyokong, Tebello

Characterization of electrodes modified with nanocomposites of cobalt tetraaminophenoxypthalocyanine, reduced graphene and multi-walled carbon nanotubes

**Journal of Coordination Chemistry** (2019), (2019) **72(11)**, 1922-1935

DOI:10.1080/00958972.2019.1621299

<https://doi.org/10.1080/00958972.2019.1621299>

39. Jones, Ben; Britton, Jonathan; Mafukidze, Donovan; Nyokong, Tebello

Photodegradation of 4-chlorophenol using Zn and In phthalocyanines substituted with pyrrole without hetero atoms linkers and supported on polyacrylonitrile electrospun fibres

**Polyhedron** (2020) **178**, 114329

DOI:10.1016/j.poly.2019.114329

<https://doi.org/10.1016/j.poly.2019.114329>

40. Nqobile Njoko, Marcel Louzada, Jonathan Britton, Samson Khene, Tebello Nyokong and Philani Mashazi

Bioelectrocatalysis and surface analysis of gold coated with nickel oxide/hydroxide and glucose oxidase towards detection of glucose

**Colloids and Surfaces B: Biointerfaces**, (2020) **190**, 110981 (1-7)

DOI: 10.1016/j.colsurfb.2020.110981

<https://doi.org/10.1016/j.colsurfb.2020.110981>

41. Chindeka, Francis; Mashazi, Philani; Britton, Jonathan; Oluwole, David O.; Mapukata, Sivuyisiwe; Nyokong, Tebello

Fabrication of dye-sensitized solar cells based on push-pull asymmetrical substituted zinc and copper phthalocyanines and reduced graphene oxide nanosheets

**Journal of Photochemistry and Photobiology, A: Chemistry** (2020), **399**, 112612 (1-9)

DOI:10.1016/j.jphotochem.2020.112612

<https://doi.org/10.1016/j.jphotochem.2020.112612>

42. Jankowski, Krzysztof; Ostafin, Agnes; Tomasik, Mikolaj; Nyokong, Tebello; Britton, Jonathan  
Growth of centimeter scale carbon wires using in-liquid AC arc discharge

**SN Applied Sciences** (2020), **2**, 1064 (1-6)

DOI:10.1007/s42452-020-2881-2

<https://link.springer.com/article/10.1007/s42452-020-2881-2>

43. Sivuyisiwe Mapukata, Jonathan Britton, Olawale L. Osifeko, Tebello Nyokong

The improved antibacterial efficiency of a zinc phthalocyanine when embedded on silver nanoparticle modified silica nanofibers

**Photodiagnosis and Photodynamic Therapy** **33** (2021) 102100 (1-11)

DOI: 10.1016/j.pdpdt.2020.102100

<https://doi.org/10.1016/j.pdpdt.2020.102100>

44. Lindokuhle Cindy Nene, Azole Sindelo, Jonathan Britton and Tebello Nyokong  
Effect of ultrasonic frequency and power on the sonodynamic therapy activity of cationic Zn(II) phthalocyanines

**Journal of Inorganic Biochemistry** 217 (2021) 111397 (1-12)

DOI: 10.1016/j.jinorgbio.2021.111397

<https://doi.org/10.1016/j.jinorgbio.2021.111397>

45. Nwahara, Nnamdi; Managa, Muthumuni; Stoffels, Mhlali; Britton, Jonathan; Prinsloo, Earl; Nyokong, Tebello

Synthesis of a near infrared-actuated phthalocyanine-lipid vesicle system for augmented photodynamic therapy

**Synthetic Metals** (2021), 278, 116811 (1-14)

DOI:10.1016/j.synthmet.2021.116811

<https://doi.org/10.1016/j.synthmet.2021.116811>

46. Sivuyisiwe Mapukata, Jonathan Britton, Nnamdi Nwahara and Tebello Nyokong

The photocatalytic properties of zinc phthalocyanines supported on hematite nanofibers for use against methyl orange and *Staphylococcus aureus*

**Journal of Photochemistry and Photobiology A: Chemistry**, 424 (2022) 113637 (1-12)

DOI: 10.1016/j.jphotochem.2021.113637

<https://doi.org/10.1016/j.jphotochem.2021.113637>

47. Azole Sindelo, Jonathan Britton, Anabel E. Lanterna, Juan C. Scaiano and Tebello Nyokong

Decoration of glass wool with zinc (II) phthalocyanine for the photocatalytic transformation of methyl orange

**Journal of Photochemistry and Photobiology A: Chemistry** 432 (2022) 114127 (1-12)

DOI: 10.1016/j.jphotochem.2022.114127

<https://doi.org/10.1016/j.jphotochem.2022.114127>

48. Sendibitiyosi Gandidzanwa, Natasha Beukes, Sinelizwi V Joseph, Arno Janse Van Vuuren, Philani Mashazi, Jonathan Britton, Gareth Kilian, Saartjie Roux, Tebello Nyokong, Michael E Lee, Carminita L Frost and Zenixole R Tshentu

The development of folate-functionalised palladium nanoparticles for folate receptor targeting in breast cancer cells

**Nanotechnology** 34 (2023) 465705 (1-15)

DOI: 10.1088/1361-6528/acec52

<https://doi.org/10.1088/1361-6528/acec52>

49. Aviwe Magadla, Lekhethe S. Mpeta, Jonathan Britton, Tebello Nyokong

Photodynamic antimicrobial chemotherapy activities of phthalocyanine-antibiotic conjugates against bacterial biofilms and interactions with extracellular polymeric substances

**Photodiagnosis and Photodynamic Therapy** 44 (2023) 103878 (1-11)

DOI: 10.1016/j.pdpdt.2023.103878

<https://doi.org/10.1016/j.pdpdt.2023.103878>

#### **CONFERENCES/WORKSHOPS ATTENDED:**

**1. South African Chemical Institute (SACI) 2011 CONVENTION**



16– 21 January 2011, University of Witswatersrand, Johannesburg.

**Jonathan Britton**, E Antunes, C Litwinski and T Nyokong

Poster: The Optical Limiting Properties of Monoaminometallophthalocyanines and Quantum Dot Conjugates.

## **2. 4th Lynedoch Physics Workshop – Ultrafast Spectroscopy**

University of Stellenbosch, Stellenbosch

2 March 2012

Participants: **Jonathan Britton**, J Taylor, E Sekhosana, P Modisha

## **3. PRIMS Optical Limiters Workshop**

Rhodes University, Chemistry Department, Grahamstown

25 June 2012

**Jonathan Britton**, T Nyokong, C Litwinski, V. Chauke, M. Durmu? and E Antunes

Oral Presentation: Optical Limiting Behaviour of Phthalocyanines and Nano-Materials Mixtures in Thin Films.

## **4. South African Chemical Institute (SACI) 2013 CONVENTION**

1– 6 December 2013, Walter Sisulu University, East London.

**Jonathan Britton**, E Antunes and T Nyokong

Oral Presentation: The Optical Limiting Properties of Metallophthalocyanine and Nanomaterial mixtures in Polymer films.

## **5. 8<sup>th</sup> International Conference on Porphyrins and Phthalocyanines (ICPP-8)**

Istanbul Lütfi Kırdar Convention and Exhibition Centre – Rumeli Building, Istanbul, Turkey

22-27 June 2014

**Jonathan Britton**, Colin Mkhize, Edith Antunes, Tebello Nyokong

Oral Presentation: Nonlinear Optical Studies of Metallophthalocyanines in Polymer Films and in the presence of quantum dots

## **6. The 17<sup>th</sup> South African chemical Institute Inorganic Chemistry Conference (INORG2015)**

28 June – 2 July 2015, Rhodes University, Eden Grove Complex, Grahamstown, South Africa

**Jonathan Britton**, Colin Mkhize, Kutloano E. Sekhosana and Kayode Sanusi

Oral Presentation: The Utilization of Phthalocyanine Derivatives and Phthalocyanine-nanomaterial Conjugates as Optical Limiters

## **7. 9<sup>th</sup> International Conference on Porphyrins and Phthalocyanines (ICPP-9)**

3-8 July 2016, Zhongshan Hotel (Nanjing, China)

**Jonathan Britton**, Zane Watkins, Imran Uddin, Ojodomo J. Achadu, Tebello Nyokong.

Oral Presentation: An examination of Fluorescence Resonance Energy Transfer between phthalocyanines and nanomaterials

## **9. Autex World Textile Conference**

Corfu Holiday Palace Hotel, Corfu, Greece, 29-31 May 2017

Oral Presentation:

**Jonathan Britton**, Nkosiphile Masilela, Olawale Osifeko and Tebello Nyokong

Embedding unsymmetrically substituted and/or charged phthalocyanines in electrospun fibres for use in destroying unwanted compounds

## **10. 10th International Conference On Porphyrins And Phthalocyanines (ICPP-10), Munich, Germany**

1-6 July 2018

Oral Presentation:

**J Britton**, O L Osifeko, N Masilela, P Kleyi, Z Tshentu, G Priniotakis, P Westbroek and T Nyokong  
Embedding unsymmetrically substituted and/or charged phthalocyanines in electrospun fibres for antimicrobial and water purification.

**11. 11th International Conference on Porphyrins & Phthalocyanines (ICPP-11)  
28th June to 3rd July 2021 (Virtual Meeting)**

Oral Presentation:

Jonathan Britton, Refilwe Matshitse, Bokolombe P. Ngoy, Muthumuni Managa, John Mack, Samson Khene, Tebello Nyokong  
The use of Detonation Nanodiamonds for Optical Limiting and Photodynamic Therapy

**12. 12th International Conference on Porphyrins & Phthalocyanines (ICPP-12)  
Riu Plaza España Hotel and Conference Center, Madrid, Spain 10-15 July 2022**

Oral Presentation:

Dr Britton, Ben Jones, Donovan Mafukidze, Sivuyisiwe Mapukata, Andrew S. Hainer, Anabel E. Lanterna, Juan C. Scaiano, Olawale L. Osifeko and Tebello Nyokong  
Applications of Phthalocyanine Modified Electrospun Fibers

**MASTERS AND PHD STUDENTS CO-SUPERVISED:**

09M2492	Mkize, Nhlakanipho	Master of Science (with distinction) - 2015
15C9610	Centane, Sixolile	Master of Science - 2019
16J5916	Joseph, Otto	Master of Science
12M5531	Mageza, Rhulani	Master of Science – 2020
15N7460	Nwahara, Nnamdi	Master of Science - (with distinction) - 2019
16P2891	Peteni, Siwaphiwe	Master of Science - (with distinction) - 2019
14N1717	Neduvhuledza, Matodzi	Master of Science - 2020
16M8398	Matlou, Gauta	PhD – July 2020
16N2142	Nwaji, Njemuwa Njoku	PhD – 2018
16M8730	Matshitse, Refilwe	PhD – 2021
18B2044	Benise, Emihle	Master of Science (in progress)
15C0005	Chindeka, Francis	PhD (in progress)

**OVERSEAS TRAVEL:**

I was privileged to spend 4 months in Sendai, Japan in 2008 with Prof Kobayashi at the Tohoku University where I learned techniques on phthalocyanine synthesis.

Attended 9th European Workshop on Secondary Ion Mass Spectrometry – SIMS Europe 2014  
University of Münster, Münster, Germany (6-12 September 2014)