

## ***Faculty of Natural and Agricultural Sciences***

### ***Department of Chemistry***

#### **Conference Contributions 2019**

1. **Erasmus E** (2019). Truncated cubic Cu-oxide nanocrystals... International FreeStatePhyChem-2019 Symposium, Bloemfontein, South Africa, 12-Aug-2019 - 12-Aug-2019. **ufs-034793**
2. **Parrott LK, Erasmus E** (2019). Graphene oxide Based supports, with Chitosan and Magnitite, for Palladium Catalysed Reduction of Nitrophenol... International FreeStatePhyChem-2019 Symposium, Bloemfontein, South Africa, 12-Aug-2019 - 12-Aug-2019. **ufs-034794**
3. **Xantini Z, Erasmus E** (2019). Preparation, characterisation and comparing three different catalytic supports for hydrogenation of unsaturated carbonyl compounds... International FreeStatePhyChem-2019 Symposium, Bloemfontein, South Africa, 12-Aug-2019 - 12-Aug-2019. **ufs-034795**
4. **Swart MR, Erasmus E, Marais C, Bezuidenhout BCB** (2019). An investigation of the influence of p-cresol on Grubbs second-generation catalyzed cross-metathesis... International Symposium on Olefin Metathesis and Related Chemistry, Barcelona, Spain, 30-Jun-2019 - 03-Jul-2019. **ufs-034798**
5. **Faber J, Marais C, Wilhelm A** (2019). Investigation into the oxidation reactions of the C-glucosylated xanthone, mangiferin... SA Chemical Institute - Frank Warren Conference 2019, Drakensberg, South Africa, 07-Jul-2019 - 11-Jul-2019. **ufs-034704**
6. **Swart MR, Erasmus E, Marais C, Bezuidenhout BCB** (2019). A study towards improving cross-metathesis reactions between styrene- and acrylate derivatives. International FreeStatePhyChem Symposium, 12 August 2019, Bloemfontein. **ufs-034796**
7. **Smit JBM, Marais C, Bezuidenhout BCB** (2019). Hydroformylation of oxygenated 1, 2-diphenylethenes and -ethynes en Route to Isoflavonoids... 20th IUPAC International Symposium on Organometallic Chemistry directed towards organic synthesis, Heidelberg, Germany, 21-Jul-2019 - 25-Jul-2019. **ufs-034711**

8. **Lyudmila V. Moskaleva\***, Wilke Dononelli, Gabriele Tomaschun, Thorsten Klüner, "Understanding dioxygen activation on nanoporous gold. A DFT and microkinetic modeling study", Symposium of the Research Unit NAGOCAT, Luneburg, Germany, September 7-12, 2019. (Oral) [ufs-035105](#)
9. **Lyudmila V. Moskaleva\***, Gabriele Tomaschun, Wilke Dononelli, Marcus Bäumer, "Theoretical modelling of methanol oxidation on nanoporous gold using stepped and kinked extended gold surfaces", CATSA 2019, Club Mykonos Resort, Langebaan, South Africa, November 10-13, 2019. (Oral) [ufs-035106](#)
10. Shikun Li, Yong Li, Marcus Bäumer, **Lyudmila Moskaleva\***, "Theoretical study on the structures and thermodynamics of A-type rare earth sesquioxides by HSE and PBE+U methods", CECAM Workshop (Poster)  
"Correlated electron physics beyond the Hubbard model", Bremen, Germany February 4 – 8, 2019. [ufs-035107](#)
11. **Lyudmila V. Moskaleva\***, Wilke Dononelli, Gabriele Tomaschun, Thorsten Klüner, "Understanding dioxygen activation on nanoporous gold. A DFT and microkinetic modeling study", Third International Symposium on Nanoporous Materials by Alloy Corrosion, Philadelphia, USA, February 24-28, 2019. (Poster) [ufs-035108](#)
12. **V. A. Azov**, "Electrochemical Behavior of Tetrathiafulvalenes in Functional Molecular Systems" Oral presentation, *FreeStatePhyChem-2019 Symposium*, Bloemfontein, South Africa, 12.08.2019; abstract: OR1. [ufs-035120](#)
13. **V. A. Azov**, "Electrochemical Behavior of Tetrathiafulvalenes in Dynamic Molecular Systems" Oral presentation, *70<sup>th</sup> Annual Meeting of the International Society of Electrochemistry*, Durban, South Africa, 4–9.08.2019. [ufs-035122](#)
14. **V. A. Azov**, M. Böckmann "Tetrathiafulvalene-Azobenzene Macrocycles: Controlling Electrochemical Properties of Tetrathiafulvalene by Light" Poster presentation, *70<sup>th</sup> Annual Meeting of the International Society of Electrochemistry*, Durban, South Africa, 4–9.08.2019; abstract: s14-012. [ufs-035123](#)
15. **V. A. Azov**, "Tetrathiafulvalene-based Molecular Receptors for Recognition of Electron Deficient Guests" Oral presentation, *Frank Warren Organic Chemistry Conference*, Drakensberg, South Africa, 7–11.07.2019; abstract: OL16. [ufs-035125](#)
16. **Wilhelm, A. 2019**. HPLC-Based Activity Profiling for GABAA Receptor Modulators in *Murraya exotica* (Oral presentation). Frank Warren Organic Chemistry Conference, Drakensberg, South Africa, 7 – 11 July. [ufs-035126](#)

17. **Nkoe, P.I., Brink, A., Schutte-Smith, M.** *A Mechanistic Study of Bipyridine and  $\beta$ -Diketone Bidentate Ligand Interactions on the Rhenium (I) Tricarbonyl Core.* (Oral). ReMec2: 2<sup>nd</sup> Symposium on Reaction Mechanisms, Johannesburg – QwaQwa – Bloemfontein, South Africa, 28 Oct - 1 Nov 2019. **ufs-035128**
  
18. **Schutte-Smith, M., Roodt, A., Visser, H.G.** *Methanol Substitution in fac-[Re (Trop) (CO)<sub>3</sub>(CH<sub>3</sub>OH)] – an Ambient and High-Pressure Kinetic Investigation.* (Oral). ReMec2: 2<sup>nd</sup> Symposium on Reaction Mechanisms, Johannesburg – QwaQwa – Bloemfontein, South Africa, 28 Oct - 1 Nov 2019. **ufs-035129**
  
19. **Mokolokolo, P.P., Pretorius, C., Brink, A., Schutte-Smith, M., Alberto, R., Roodt, A.** *Schiff Bases, an Unending Journey.* (Oral). ReMec2: 2<sup>nd</sup> Symposium on Reaction Mechanisms, Johannesburg – QwaQwa – Bloemfontein, South Africa, 28 Oct - 1 Nov 2019. **ufs-035130**
  
20. **Kuhn, J., Visser, H.G., Schutte-Smith, M., Deacon, F.** *Analysis of the effect of heavy metal distribution on the browsing patterns of giraffes (Giraffa Camelopardalis).* (Oral). Southern African Wildlife Management Association, Sustainable landscapes for wildlife conservation and management, Wilderness, South Africa, 1-5 September 2019... **ufs-035131**
  
21. **Conradie, J.** Oral 2019, Brucker NMR user meeting, Trends in <sup>103</sup>Rh NMR shifts of Rh-b-diketonato complexes, 29 – 31 January 2019, University of the Free State, Department of Chemistry, Bloemfontein. **ufs-035132**
  
22. **Conradie, J.** Oral 2019. Redox behaviour of [Ru (b-diketonato)<sub>3</sub>] complexes. The 70th Annual Meeting of the International Society of Electrochemistry. 4 - 9 August 2019, Durban, South Africa. <https://annual70.ise-online.org/index.php> Program book p 22. **ufs-035133**
  
23. **Conradie, J.** Oral 2019. Noncovalent rhodium-rhodium interactions. 1st International Conference on Noncovalent Interactions, 2-6 September 2019, Lisbon, Portugal. <https://icni2019.eventos.chemistry.pt/> Program book p 32 contribution O22. **ufs-035134**
  
24. **Conradie, J.,** Poster MARRIGJE MARIANNE CONRADIE, HENDRIK FERREIRA, 2019. Redox behaviour of Substituted Tris (1, 10-phenanthroline) cobalt (II) Complexes. The 70th Annual Meeting of the International Society of Electrochemistry. 4 - 9 August 2019, Durban, South Africa. <https://annual70.ise-online.org/index.php> Program book p 109, contribution S14-2 **ufs-035135**
  
25. Alhadji Malloum, Jean Jules Fifen and **Jeanet Conradie.** Poster 2019. Structures and Hydrogen Bond Networks of Molecular Clusters. 1st International Conference on Noncovalent Interactions, 2-6 September 2019, Lisbon, Portugal. <https://icni2019.eventos.chemistry.pt/> Program book p 37 contribution P35. **ufs-035136**
  
26. **Jeanet Conradie,** MARRIGJE MARIANNE CONRADIE, HENDRIK FERREIRA, Poster, Redox behaviour of a series of Co(II) complexes, containing substituted phenanthrolines, International FreeStatePhyChem-2019 Symposium, University of the Free State, Bloemfontein, South Africa, 12 Aug 2019; abstract: PO2. [fb.me/FreeStatePhyChem](https://fb.me/FreeStatePhyChem) **ufs-035137**

27. Emmie Chiyindikio, **Jeanet Conradie, Ernst H.G. Langner**. 2019 Oral. Electrochemical reduction of bis ( $\beta$ -diketonato) copper (II) compounds. The 70th Annual Meeting of the International Society of Electrochemistry. 4 - 9 August 2019, Durban, South Africa. <https://annual70.ise-online.org/index.php> Program book p 22. **ufs-035138**
28. Tankiso Lawrence Ngake, Johannes Hermanus Potgieter, **Jeanet Conradie, Ernst H.G. Langner**. 2019 Oral. Voltammetry of Imino- $\beta$ -diketones. The 70th Annual Meeting of the International Society of Electrochemistry. 4 - 9 August 2019, Durban, South Africa. <https://annual70.ise-online.org/index.php> Program book p 21. **ufs-035162**
29. Adebayo A. Adeniyi, **Jeanet Conradie**. 2019 Oral. Complementary Insight into the Experimental Reduction Potentials of the Tris (b-Diketonato) Iron (III) Complexes Using the DFT Methods. The 70th Annual Meeting of the International Society of Electrochemistry. 4 - 9 August 2019, Durban, South Africa. <https://annual70.ise-online.org/index.php> Program book p 67. **ufs-035163**
30. Tankiso Lawrence Ngake, Johannes Hermanus Potgieter, **Jeanet Conradie**, Oral presentation, Electrochemical study of  $\beta$ -amino- $\alpha,\beta$ -unsaturated ketones, FreeStatePhyChem-2019 Symposium, International University of the Free State, Bloemfontein, South Africa, 12 Aug 2019; abstract: OR6. [fb.me/FreeStatePhyChem](https://fb.me/FreeStatePhyChem) **ufs-035164**
31. Emmie Chiyindikio, **Ernie H.G. Langner, Jeanet Conradie**, Oral presentation, Redox Properties of Bis( $\beta$ -diketonato) Copper(II) Complexes, International FreeStatePhyChem-2019 Symposium, University of the Free State, Bloemfontein, South Africa, 12 Aug 2019; abstract: OR8. [fb.me/FreeStatePhyChem](https://fb.me/FreeStatePhyChem) **ufs-035165**
32. Pieter J. Swarts, **Jeanet Conradie**, Oral presentation, Electrochemical studies on novel subphthalocyanines, International FreeStatePhyChem-2019 Symposium, University of the Free State, Bloemfontein, South Africa, 12 Aug 2019; abstract: OR9. [fb.me/FreeStatePhyChem](https://fb.me/FreeStatePhyChem) **ufs-035166**
33. Deidré van der Westhuizen, **Karel G. von Eschwege and Jeanet Conradie**, Oral presentation, Ru (II) Complex Electrochemical and Spectral Properties, International FreeStatePhyChem-2019 Symposium, University of the Free State, Bloemfontein, South Africa, 12 Aug 2019; abstract: OR11. [fb.me/FreeStatePhyChem](https://fb.me/FreeStatePhyChem) **ufs-035167**
34. Emmie Chiyindikio, **Jeanet Conradie, Ernst H.G. Langner**. 2019 Poster. Electrochemistry of gamma-substituted complexes of bis (b- diketonato) copper (II). The 70th Annual Meeting of the International Society of Electrochemistry. 4 - 9 August 2019, Durban, South Africa. **Won poster prize for the best poster presented in Symposium 14, Molecular Electrochemistry.** <https://annual70.ise-online.org/index.php> Program book p 109, contribution S14-1 **ufs-035169**
35. Tankiso Lawrence Ngake, Johannes Hermanus Potgieter, **Jeanet Conradie, Ernst H.G. Langner**. 2019. Electrochemical behaviour of Tris (b-ketoiminato) ruthenium (III) complexes. The 70th Annual Meeting of the International Society of Electrochemistry. 4 - 9 August 2019, Durban, South Africa. <https://annual70.ise-online.org/index.php> Program book p 109, contribution S14-5 **ufs-035179**

36. Nandisiwe Ghandi Sibongile Mateyise, Marrigje Marianne Conradie, **Jeanet Conradie**. 2019 Poster. Redox behaviour [Rh ( $\beta$ -diketonato) (CO) (PPh<sub>3</sub>)] Complexes. The 70th Annual Meeting of the International Society of Electrochemistry. 4 - 9 August 2019, Durban, South Africa. <https://annual70.ise-online.org/index.php> Program book p 109, contribution S14-3 **ufs-035182**
37. **Swarts, J.C., Buitendach, B.E., Niemantsverdriet, J.W.**, 2019. (Oral): Electrochemical generation of oxygen on iridium/ruthenium modified electrodes. 27th International Conference on Coordination and Bioinorganic Chemistry, Smolenice, Slovakia, 2-7 June 2019 **ufs-035193**
38. Nandisiwe Ghandi Sibongile Mateyise, Marrigje Marianne Conradie, **Jeanet Conradie**, Poster, Electrochemical behaviour 1,3-substituted-propane-1,3-diones, International FreeStatePhyChem-2019 Symposium, University of the Free State, Bloemfontein, South Africa, 12 Aug 2019; abstract: PO6. fb.me/FreeStatePhyChem **ufs-035195**
39. Nandisiwe Ghandi Sibongile Mateyise, Marrigje Marianne Conradie, **Jeanet Conradie**. 2019 Poster. Redox behaviour 1, 3-substituted-propane-1, 3-diones. The 70th Annual Meeting of the International Society of Electrochemistry. 4 - 9 August 2019, Durban, South Africa. **Won poster prize for the best poster presented in Symposium 14, Molecular Electrochemistry.** <https://annual70.ise-online.org/index.php> Program book p 109, contribution S14-4 **ufs-035196**
40. Deidre van der Westhuizen, **Karel von Eschwege, Jeanet Conradie**. 2019 Poster. Determination of electrochemical, spectral and computational properties of substituted [Ru (phen)<sub>3</sub>]<sup>2+</sup> and [Ru (bpy)<sub>3</sub>]<sup>2+</sup> complexes. The 70th Annual Meeting of the International Society of Electrochemistry. 4 - 9 August 2019, Durban, South Africa. <https://annual70.ise-online.org/index.php> Program book p 110, contribution S14-7 **ufs-035197**
41. **Karel G. von Eschwege, Jeanet Conradie**, Oral presentation, Theoretical Prediction of Redox Potentials, International FreeStatePhyChem-2019 Symposium, University of the Free State, Bloemfontein, South Africa, 12 Aug 2019; abstract: OR4. fb.me/FreeStatePhyChem **ufs-035198**
42. Frederick P. Malan, Eric Singleton, Petrus H. van Rooyen, **Jeanet Conradie**, and Marilé Landman, Oral presentation, Electronic effects of N-heterocyclic carbene ligands on the catalytic activity of half-sandwich Ni(II) complexes, International FreeStatePhyChem-2019 Symposium, University of the Free State, Bloemfontein, South Africa, 12 Aug 2019; abstract: OR7. fb.me/FreeStatePhyChem **ufs-035199**
43. Marilé Landman, Frederick P. Malan, Eric Singleton and **Jeanet Conradie**, Oral presentation, Synthesis of NHC-Stabilised Heterohalo Cyclopentadienyl Cr(III) Complexes, Electrochemical Properties and Base-Free Glucose Dehydration, International FreeStatePhyChem-2019 Symposium, University of the Free State, Bloemfontein, South Africa, 12 Aug 2019; abstract: OR13. fb.me/FreeStatePhyChem **ufs-035201**
44. **Brink A** (2019). Merging the Boundaries between Chemical and Bio-Catalysis: Stepping toward the 4<sup>th</sup> Industrial Revolution... ReMec 2: 2nd Symposium on Reaction Mechanisms, Johannesburg, QwaQwa and Bloemfontein, South Africa, 28-Oct-2019 - 01-Nov-2019. **ufs-035438**

45. **Brink A** (2019). Traversing interoperability – drug development harnessing the CSD and PDB. ... American Chemical Society Annual Meeting, San Diego, USA, 25-Aug-2019 - 30-Aug-2019. [ufs-035441](#)
46. **Morerwa ZG, Roodt A, Venter GJS** (2019). Environmentally friendly rhodium (I) model catalysts.. American Chemical Society Annual Meeting, San Diego, USA, 25-Aug-2019 - 30-Aug-2019. [ufs-035443](#)
47. Jacobs FJF, Venter GJS, **Brink A** (2019). **Awarded the Outstanding Poster Prize.** Rhenium Radiopharmaceuticals Inspired by Biological Moieties... Biophysics & Structural Biology at Synchrotrons Workshop, Cape Town, South Africa, 17-Jan-2019 - 24-Jan-2019. [ufs-035554](#)
48. **Brink A** (2019). Exploring strategies for radiopharmaceuticals with rhenium in chemical and protein crystallography... Biophysics & Structural Biology at Synchrotrons Workshop, Cape Town, South Africa, 17-Jan-2019 - 24-Jan-2019. [ufs-035667](#)
49. Jacobs FJF, **Venter G, Brink A** (2019). Asking Biological Questions for Radiopharmaceuticals... Hot Topics in Contemporary Crystallography 4 – Structural Biology, Dubrovnik, Croatia, 01-Oct-2019 - 06-Oct-2019. [ufs-035669](#)
50. **Motente MA, Venter J, Brink A** (2019). Rhodium (I) N-Heterocyclic Carbene Complexes as Model Catalysts... ReMec 2 2nd Symposium on Reaction Mechanisms, Johannesburg, QwaQwa and Bloemfontein, South Africa, 28-Oct-2019 - 01-Nov-2019. [ufs-035670](#)
51. Jacobs FJF, **Venter G, Brink A** (2019). Exploring the Synergistic World of Macromolecular Catalysis... ReMec2 2nd Symposium on Reaction Mechanisms, Johannesburg, QwaQwa and Bloemfontein, South Africa, 28-Oct-2019 - 01-Nov-2019. [ufs-035671](#)
52. **Khasemene MTW, Brink A, Roodt A** (2019). Middle and late transition metals as carbon dioxide capture and model water-splitting catalysts... ReMec 2 2nd Symposium on Reaction Mechanisms, Johannesburg, QwaQwa and Bloemfontein, South Africa, 28-Oct-2019 - 01-Nov-2019. [ufs-035672](#)
53. **Kama DV, Brink A, Alberto R, Roodt A** (2019). Exploring Structural Implications of Diphosphinoamine Ligands on Radiopharmaceuticals and Catalysis... ReMec 2 2nd Symposium on Reaction Mechanisms, Johannesburg, QwaQwa and Bloemfontein, South Africa, 28-Oct-2019 - 01-Nov-2019. [ufs-035673](#)
54. **Morerwa ZG, Roodt A, Brink A** (2019). Environmentally Friendly Rhodium (I) Model Catalysts... ReMec 2 2nd Symposium on Reaction Mechanisms, Johannesburg, QwaQwa and Bloemfontein, South Africa, 28-Oct-2019 - 01-Nov-2019. [ufs-035675](#)
55. **Conradie J, Ghosh A** (2019). High performance computing of super heavy elements of the periodic table... 13th CHPC National Conference, Birchwood, Kempton Park, South Africa, 01-Dec-2019 - 05-Dec-2019. [ufs-035768](#)



56. **Conradie J** (2019).Jahn-Teller effect observed in octahedral copper (II) complexes... 13<sup>th</sup> CHPC National Conference, Birchwood, Kempton Park, South Africa, 01-Dec2019 - 05-Dec-2019. [ufs-035770](#)
57. **Mateyise NGS, Conradie-Bekker MM, Conradie J** (2019).HPC calculations to understand the reduction of 1, 3-substitutedacetylacetone derivatives... 13<sup>th</sup> CHPC National Conference, Birchwood, Kempton Park, South Africa, 01-Dec-2019 - 05-Dec-2019. [ufs-035771](#)
58. **Adeniyi AA, Conradie J, Ngake TL** (2019).The impact of the solvent media and substituents on the energy band-gap and redox potential of hydroxyl benzophenone (HBP) using both experimental and computational methods...13<sup>th</sup> CHPC National Conference, Birchwood, Kempton Park, South Africa, 01-Dec-2019 - 05-Dec-2019. [ufs-035772](#)
59. Malloum A, Fifen J, **Conradie J** (2019).Solvation Energies of the Proton in Ammonia... 13th CHPC National conference, Birchwood, Kempton Park, South Africa, 01-Dec-2019 - 05-Dec2019. [ufs-035774](#)
60. Malloum A, Fifen J, **Conradie J** (2019).Theoretical infrared Spectrum of the Ethanol Hexamer... 13th CHPC National Conference, Birchwood, Kempton Park, South Africa, 01-Dec-2019 – 05-Dec-2019. [ufs-035776](#)
61. **Fourie E** (2019). Fluorene-containing  $\beta$ -diketonato ligands and their Rh (I) complexes. International FreeStatePhyChem-2019 Symposium, Bloemfontein, South Africa, 12-Aug-2019 - 12-Aug-2019. [ufs-036183](#)
62. **K.A, Muller, A. Roodt, M. Schutte-Smith, G. Steyl** (2019) Poster Presentation – ‘Theoretical and Solid State Investigation of Copper (II) O, O’-Bidentate and Copper (I) Triphenylphosphine Complexes’. ReMec2: 2<sup>nd</sup> Symposium on Reaction Mechanisms, 28 October - 1 November 2019, Johannesburg-Qwa-Qwa-Bloemfontein, South Africa. [ufs-036186](#)
63. **U. Oosthuizen, M. Schutte-Smith, H.G. Visser.** (2019) Oral Presentation – ‘Studie van bimetaalverbindings vir die behandeling van verskillende kankersoorte’ Studentesimposium in die Natuurwetenskappe 2019, 1 November 2019, Bloemfontein, South Africa. [ufs-036189](#)
64. **L. Jansen van Vuuren, H.G. Visser, M. Schutte-Smith.** (2019) Oral Presentation – ‘Renyum trikarboniel komplekse van (2-alkielamino) tropone en aminotroponimiene as potensiële chemoterapeutiese middels’ Studentesimposium in die Natuurwetenskappe 2019, 1 November 2019, Bloemfontein, South Africa. [ufs-036200](#)
65. **C. van Staden, H.G. Visser, M. Schutte-Smith** (2019) Oral Presentation, ‘Die manipulasie van goud(I) interaksies deur die variasie van fosforbaseerde ligande’ Studentesimposium in die Natuurwetenskappe 2019, 1 November 2019, Bloemfontein, South Africa. [ufs-036203](#)
66. **L. Kapp, H.G. Visser, M. Schutte-Smith** (2019) Oral Presentation, ‘Kankerbestryding met metale: karakterisering, substitusie kinetika, asook evaluering van renium(I) trikarboniel en dikarboniel komplekse vir fotodinamiese terapie’ Studentesimposium in die Natuurwetenskappe 2019, 1 November 2019, Bloemfontein, South Africa [ufs-036208](#)

67. **Tsai C-W, Niemantsverdriet J, Langner EHG** (2019). Ligand exchanged nano-ZIF-8 with enhanced CO<sub>2</sub> adsorption. 6th International Conference on Multifunctional, Hybrid and Nanomaterials, Sitges, Spain, 11-15 March 2019. [ufs-036233](#)
68. **Abraha YW, Langner EHG** (2019). Modification of Nano-sized Zinc Zeolitic 2-methylimidazolate Framework 8 (ZIF-8) by Solvent Assisted Ligand exchange (SALE) for Enhanced Carbon dioxide Uptake. International FreeStatePhyChem-2019 Symposium, Bloemfontein, South Africa, 12 Aug-2019. [ufs-036234](#)
69. **Masiu MP, Langner EHG** (2019). The synthesis and electrochemical study of ZIF-8 and ZIF-67 with Ferrocenecarboxylic acid attached to its surface. International FreeStatePhyChem-2019 Symposium, Bloemfontein, South Africa, 12 Aug-2019. [ufs-036236](#)
70. **Jannie C. Swarts**, Chris C. Joubert, Oral presentation, Reaction Between CO and H<sub>2</sub> Catalyzed by Fe-Cu Particles Supported on Silicon Wafers Including Electrochemical and Spectroscopic Aspects, International FreeStatePhyChem-2019 Symposium, University of the Free State, Bloemfontein, South Africa, 12 Aug 2019; abstract: Keynote 3. [fb.me/FreeStatePhyChem](#) [ufs-036386](#)
71. **Bonnet, SL\_ 2019**. Sixty Years of Flavonoid Chemistry at the University of the Free State: Past and Contemporary Research (Keynote lecture). Frank Warren Organic Chemistry Conference, Drakensberg, South Africa, 7 – 11 July. [ufs-036387](#)
72. **A. Roodt. Invited Keynote Lecture**. Designing Horses for Courses: Fundamental Aspects of 'Applied' Chemical Processes (Know Mechanisms). ReMec2: 2<sup>nd</sup> Symposium on Reaction Mechanisms, Johannesburg – QwaQwa – Bloemfontein, South Africa, 28 Oct - 1 Nov 2019. [ufs-036498](#)
73. **Elmakki M, Venter GJ, Venter JA, Roodt A** (2019). Homogeneous catalyst models using natural rubber as a ligand. ReMec2 2nd Symposium on Reaction Mechanisms, Johannesburg, QwaQwa and Bloemfontein, South Africa, 28-Oct-2019 - 01-Nov-2019. [ufs-036501](#)
74. **Alexander OT, Alberto R, Roodt A** (2019). Engineering of N-Based Ligand Cobalt Complexes As Potential Water Splitting Catalyst. ReMec2 2nd Symposium on Reaction Mechanisms, Johannesburg, QwaQwa and Bloemfontein, South Africa, 28-Oct-2019 - 01-Nov-2019. [ufs-036502](#)
75. **Bezuidenhout Z, Roodt A** (2019). Activating natural product diolefins by transition metal coordination. ReMec2 2nd Symposium on Reaction Mechanisms, Johannesburg, QwaQwa and Bloemfontein, South Africa, 28-Oct-2019 - 01-Nov-2019. [ufs-036503](#)
76. **Redgard S, Roodt A** (2019). Nucleophile assisted carbon dioxide fixation for a cleaner environment. ReMec2 2nd Symposium on Reaction Mechanisms, Johannesburg, QwaQwa and Bloemfontein, South Africa, 28-Oct-2019 - 01-Nov-2019. [ufs-036504](#)