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Design and synthesis of metal-based chemotherapeutic agents for targeted DNA interactions or DNA repair pathway modulation

Griend, C.J. van de

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List of publications

Ruthenium-Locked Helical Chirality: A Barrier of Inversion and Formation of an Asymmetric Macrocycle.

Corjan van de Griend, Johannes J. van de Vijver, Maxime A. Siegler, Remus T. Dame, and Sylvestre Bonnet.

Inorg. Chem. **2022**, *61*, 40, 16045–16054.

Photochemical Resolution of a Thermally Inert Cyclometalated Ru(phbp) (N–N)(Sulfoxide)⁺ Complex.

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J. Am. Chem. Soc. **2019**, *141*, 1, 352–362.

Induction of a Four-Way Junction Structure in the DNA Palindromic Hexanucleotide 5'-d(CGTCAG)-3' by a Mononuclear Platinum Complex.

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Photochem. Photobiol., **2023**, *99*: 777–786

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pH dependence and structure-activity relationship for square planar Pt(II) and Pd(II) tetrapyrrolyl complexes interacting with DNA.

Corjan van de Griend, Chucky Chau, Chantal Huisman, Lars Mensink, Maxime A. Siegler, Remus T. Dame, Sylvestre Bonnet.

Photocaging of RAD51 inhibitor by ruthenium.

Corjan van de Griend, Maarten van Ginkel, Anita Milisav, Ludo R. Bretin, Amanda Harris, Yurii Husiev, Maxime A. Siegler, Sylvia E. Le Dévédec, Remus T. Dame, Sylvestre Bonnet.

Dual photoactivation of ruthenium-caged inhibitors

Corjan van de Griend, Maxime A. Siegler, Remus T. Dame, Sylvestre Bonnet.

Curriculum vitae

Cornelis Johannes van de Griend was born November 1st, 1989 in Cromstrijen, the Netherlands. In 2011 he finished his pre-university education (HAVO) at Willem van Oranje, in Oud-Beijerland and continued his education with a bachelor Chemistry at the Hogeschool in Rotterdam. In this period, he did an internship ‘Shelf-life determination of polymer additives concentrates’ at AkzoNobel in Deventer and another internship in the group of Hermen Overkleef at Leiden University entitled “The synthesis and characterization of enantiomer pure iminosugar derivatives”. In 2014, he entered the master Chemistry program at Leiden University, where he did an internship in the Bio-organic Synthesis department in the Hans Aerts lab focused on substrate synthesis to identify the origin of melanoma in advanced Gaucher disease. He performed his main master research internship in the MCBIM sub-group of Sylvestre Bonnet, where he started working with ruthenium complexes for photoactivated chemotherapy. After obtaining his Master of Science degree in 2017, he started a PhD position in the Leiden Institute of Chemistry under the co-supervision of Sylvestre Bonnet and Remus T. Dame. During his PhD thesis he studied the design and synthesis of metal-based chemotherapeutic agents for targeted DNA interactions or DNA repair pathway modulation, and wrote this PhD manuscript. Since 2023, he continues his career as a consultant in chemistry and sustainability at Hezelburcht Grant & Funding Consultancy.