Neue 3-Imidazolin-1-oxyl-Radikale mit pyridyl und chinolylhaltigen 4-(2-Aminovinyl)-Substituenten und Palladium, Platin und Ruthenium-Komplexe mit diesen 4-Amino-1-azadien-Liganden

New 3-Imidazoline-1-oxyl Radicals with Pyridyl and Quinolyl Containing 4-(2-Aminovinyl) Substituents and Palladium, Platinum and Ruthenium Complexes of these 4-Amino-1-aza-diene Ligands

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The addition of pyridyl and quinolyl nitriles to the 4-lithium salt of 1-hydroxy-2.2.4.5.5-pentamethyl-3-imidazoline with a silyl protected OH group affords 4-aminovinyl substituted imidazoline derivatives **3**, **6**, **9**, **12**, and **15** which can be converted into the corresponding nitroxide radicals **5**, **8**, **11**, **14** and **17**. The 4-amino-1-azadiene residues of these imidazoline nitroxides form a series of chelates of palladium (**22 – 26**, **29 – 32**) and with ruthenium half sandwich complexes (**33 – 36**). Coordination of the pyridine or quinoline N atom has been observed in mononuclear (**19 – 21**) and trinuclear (**27**, **28**) palladium complexes and the structure of **19** was determined by X-ray diffraction.

Key words: Nitroxide Radicals, Imidazoline, Transition Metal Complexes