

Large Scale Synthesis of 4'-(4-Bromophenyl)-2,2':6',2''-terpyridine and Nature of the Mysterious Green By-product

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Z. Naturforsch. **58b**, 443 – 446 (2003); received December 9, 2002

4'-(4-Bromophenyl)-2,2':6',2''-terpyridine (**5**) was prepared on a large scale (up to 100 g batches) from 2-[3-(4-bromophenyl)-1-oxoprop-2-enyl]pyridine (**3a**) and *N*-[2-oxo-2-(2-pyridyl)-ethyl]pyridinium iodide (**4**). In the presence of substoichiometric amounts of **4**, 1-[3-(4-bromophenyl)indolizin-1-yl-1-imino]-3-[4-bromophenyl]-1*H*-indolizinium iodide (**6aI**) was formed as an intensely coloured by-product. The synthesis of several related novel indolizinium derivatives is described, including 1-[3-(4-methylphenyl)indolizin-1-yl-1-imino]-3-[4-methylphenyl]-1*H*-indolizinium hexafluorophosphate (**6cPF₆**), whose crystal structure has been determined.

Key words: Rigid-Rod Molecules, Indolizinium Compounds, X-Ray Data