Using resin **8** instead of the hydroxylamine Wang resin improved yields by up to 20%.

New solid-phase chemistry

The arsenal of reactions suitable for solid-phase synthesis is still only a fraction of that available for solution-phase chemistry, but it is growing rapidly. In the last presentation of the day, Professor Mark Kurth (University of California, Davis, CA, USA) demonstrated how 1,3-dipolar additions can be employed in solid-phase synthesis. He prepared a series of poly-isoxazolines (**9**) from selenonitrates (**10**; Figure 1, Scheme 3). Phenyl isocyanate was used to convert the nitrate to a nitryl oxide, which reacts with the double bond to form the isoxazoline ring. The selenide group is subsequently removed with sodium periodate, and the resulting aldehyde cleaved to give an olefin, so that the reaction can be repeated. Examples of isoxazoles, isoxazolines and poly-isoxazolines that had been synthesized using this solid-phase 1,3-dipolar cycloaddition were shown.

The SCI is organizing a two-day symposium on *Challenges and Issues in High-Throughput Screening* on 6–8 July in Manchester (UK). For more information contact the SCI Conference Secretariat, tel: +44 171 235 3681, fax: +44 171 235 7743 or e-mail: conferences@chemind.demon.co.uk.

Henriëtte Willems

Book review

Cancer Therapeutics: Experimental and Clinical Agents

edited by B.A. Teicher, Humana Press, 1997. $125 (xii + 451 pages) ISBN 0 896 03460 7

Cancer Therapeutics: Experimental and Clinical Agents covers nearly 100 years of scientific and clinical investigation to treat or cure the many diseases called cancer. In 19 chapters from 29 contributors it successfully traces the stepwise advances that have led to the current treatments and the discoveries that point to future promise.

The book is divided into two equal parts – 'Cytotoxic Agents: Old and New' and 'Newer Strategies and Targets' – that chronicle the past achievements, highlight current therapeutic challenges, and summarize new therapeutic opportunities. It does a fine job of introducing many existing classes of agents in Part I, including the nitrogen mustards, phosphoramide and related mustards, nitrosoureas, platinum complexes, anthracyclines, Topo I and II inhibitors, the taxoids, some DNA groove binders, bis-naphthalmides and enediynes, but should not be considered comprehensive. Many classical agents are not treated in detail (e.g. mitomycins, vinca alkaloids, bleomycins), in spite of exciting recent developments in the basic science underlying their properties.

Part II focuses on agents and strategies for controlling growth, inhibiting growth, activating or deactivating stromal or malignant cells, or altering intra- or intercellular signaling cascades. It contains reviews of matrix metalloproteinase inhibitors, interferons and other cytokines, angiogenesis inhibitors, antisense oligonucleotides, growth factors and their inhibitors, immunoconjugates, *ras* targeted agents, and gene therapy. This section does a superb job of summarizing the current status of the newer opportunities for the treatment of cancer, especially for those who may be unfamiliar with the rapidly developing science.

Both sections are well referenced (typically up to 1994, occasionally 1995) and well composed, though a bit light on the representation of chemical structures. It makes for easy reading for those new to the field, yet it is valuable to those who have been daily engaged in the field for years.

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  1359-6446/97/$17.00.