almost comparable cytotoxicity to adriamycin and (E)-methyl/ethyl 3-[2-(1,4-dimethoxy-5,8-dione) naphthalenyl]-2-propenoates showed strong cytotoxicity against various solid tumor cell lines.

[PD1-6] [04/20/2001 (Fri) 13:30 - 14:30 / Hall 4]

Cinmetacin유도체의 합성과 진통항염활성

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Nine cinmetacin derivatives as potential nonsteroidal analgesic and antiinflammatory compounds were prepared and their analgesic-antiinflammatory activity was compared with cinmetacin. Salicylic acid and phenols were reacted with DCC to give phenyl salicylates. Cinmetacin was treated with DCC and phenol derivatives to yield cinmetacin esters. Some of compounds showed stronger analgesic activity than cinmetacin, but only one compound showed comparable antiinflammatory activity to cinmetacin.

[PD1-7] [04/20/2001 (Fri) 13:30 - 14:30 / Hall 4]

Design and Synthesis of Isoindoloquinoxaline Derivatives as Potential Antitumor Agents

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The azaanthraquinones are a new class of antitumor agents that exhibit promising in vitro and in vivo activity against a wide spectrum of tumor cell lines. In an effort to develop novel antitumor intercalating agents that could overcome the shortcoming of anthracyclines, we recently reported the synthesis and biological evaluation of some azaanthraquinone derivatives and continued our efforts to design the related compounds.

In this study, we describe synthesis of a series of isoindoloquinoxaline derivatives. These were designed based on the structure-activity relationship of azaanthraquinones and structural analysis of products which are fitted with doxorubicin. A Diels-Alder reaction and a high temperature and pressure oxidative reaction were used as key synthetic steps.

[PD1-8] [04/20/2001 (Fri) 13:30 - 14:30 / Hall 4]

Formation of Carbamates; Comparison of the Stability of Various Carbocations via CSI Reaction

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The cinnamyl alkyl ethers were treated with chlorosulfonyl isocyanate (CSI) to afford the corresponding N-protected allylic amines as a mixture of regioisomers. However, in the case of cinnamyl t-butyl ether, the corresponding allyl carbamate was obtained rather than N-allylcarbamates as a single product. These results may be rationalized by suggesting that the reaction pathways are determined in accord with the stability of carbocations obtained during the reaction process. From these results, we