

EXCLUSIVES

CHEMISTRY & INDUSTRY

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Battery technology

Cyclohexanone production

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& INDUSTRY

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NEWS

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NEWS REPORT

Sensors

Rudy Baum reports on a new device for measuring metabolic responses of cells to stimuli.

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BATTERY TECHNOLOGY

Lithium Rechargeable Batteries:
A Review of Recent Trends

Ian Faul and John Knight of the Royal Aerospace Establishment describe how the development of these batteries was driven by the differing requirements of the defence, consumer and industrial markets, and compare systems in development and on the market.

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The Lead Acid Battery – 130 Years Old and Still Improving

Barry Culpin of Chloride Industrial Batteries Group analyses the reasons for the success of these batteries and examines their future market.

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PROCESS DEVELOPMENT

A Low Cost Phenol to Cyclohexanone Process

Workers from Johnson Matthey and Montedipe describe their joint efforts to design and implement this competitive new process.

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COMMUNICATIONS TO THE EDITOR

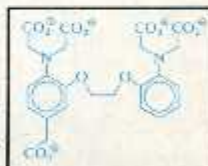
Production of chlorophenols by the reaction of fibreboard and timber components with chlorine-based cleaning agents.

C Ross Tindale and Frank B Whitfield

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HIGHLIGHTS

A feast of medium ring heterocyclic chemistry ... preparing medium ring ethers of marine origin... improving the Sharpless procedure... for oxidising alkenes to 1,2-diketones... cellular invasions by 'Trojan horse chelators'... reactions with disulphur monooxide... stereoelectronic effects in a bis(alkene)osmium complex.



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Synthesising whisky lactones... nibbling versus gorging... re-evaluating egg cholesterol levels... classifying brandies... tocopherols in nuts... nutmeg flavour substitute... controlling overeating.

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