Biocatalytic resolution of racemic 6-acetyl-3,4-dihydro-3-hydroxy-7-methoxy-2,2-dimethyl-2H-1-benzopyran

Virinder S Parmar*, Sunil K Sharma, Sanjay Malhotra, Amitabh Jha, William Errington, Oliver W Howarth & Mohindar S Puar

An exceedingly mild and efficient CAN mediated method for the deprotection of acetals

Vijay Nair*, Latha G Nair, Lakshmi Balagopal & Roshini Rajan

β,β-Dimethylacrylophenones: BF₃·Et₂O·POCI₃ catalysed acylation of phenols using β,β-dimethylacrylic acid

Boron trifluoride-etherate-POCl₃ is a useful reagent for the acylation of phenols with β,β-dimethylacrylic acid to give acrylophenones. But hydroquinone forms acryloyl esters.

Niveta Jain & H G Krishnamurty*

Claisen rearrangement of 3-bromo-3,6-dibromo-3,8-dibromo- and 8-iodo/aminomethyl/acetyl-7-allyloxy-4-methylcoumarins

Compounds 1-5 have been allylated and subjected to Claisen rearrangement in N,N-DMA when only 8-allyl-7-hydroxy-4-methylcoumarin is obtained. In all these rearrangements the 8-substituent is removed and the migration takes place at the 8-position. The N,N-DMA serves as the scavenger for the substituent lost. The Claisen rearrangement of 6 gives 8-acetyl-6-allyl-7-hydroxy-4-methylcoumarin, in which the acetyl group remains intact.

S R Ghantwal & S D Samant*
1248  Cyclisation of 3-[cyclopent-2-enyl]-4-hydroxy[1]-benzopyran-2-one

Compound 3 on treatment with pyridine hydrotribromide in 
CH$_2$Cl$_2$ gives furochromone 5 in 90\% yield.

K C Majumdar*, P K Choudhury & P Biswas

1253  Investigations on photochemical linking of 
steroids with amino acids: Irradiation of $\alpha,\beta$-unsaturated steroidal ketones in the presence of 
amino acids in aqueous medium

Photochemistry of cholesta-1,4-diene-3-one and 16-dehydropregnenolone-3$\beta$-acetate in aqueous-organic 
solvent, in the presence of amino acids, is described.

M P S Ishar*, N K Girdhar, K Kumar, Rama & 
S Kaur

1262  C$_3$H$_4$: Interconversion of isomers

Interconversions of the important isomers on the C$_3$H$_4$ 
potential energy surface are investigated by the MNDO 
method.

Rita Kakkar* & Bhabani S Padhi

1270  Kinetics and mechanism of the oxidation of 
aliphatic aldehydes by benzyltrimethylammonium 
dichloroiodate

The oxidation of aldehydes by benzyltrimethylammonium 
dichloroiodate in glacial acetic acid, in the presence of 
zinc chloride, involves a hydride-ion transfer from the aldehyde 
to the oxidant to form the corresponding carboxylic acids.

Garima Goswami, Seema Kothari 
& Kalyan K Banerji*
1274  First total synthesis of (R,S)-8-geranyl-5,7-dihydroxyflavanone

8-Geranyl-5,7-dihydroxyflavanone 1 has been synthesized from 2 via 3a.

Chusheng Huang, Zhe Zhang & Yulin Li*

1277  Synthesis of new acetylhydroxyflavone derivatives

The diaroyldioxy derivatives 1 on Baker-Venkataraman rearrangement yield 2 which on acid catalysed cyclisation affords 3.

P E Kumar & K J Rajendra Prasad*

1280  Synthesis of vinyl caffeate, an antioxidant from Perilla frutescens Britton var. crispa (Thunb.)

Vinyl caffeate 1 has been synthesized from 3,4-dihydroxybenzaldehyde in four steps with an overall yield of 20%.

Jakka Kavitha, Dodda Rajasekhar, G V Subbaraju* & G N Ramesh
CONTENTS

1282 Synthesis of N₅-macrocyclic ligands by polyphosphoric acid-catalysed condensation of trimethoprim with amino acids

![Chemical structure]

R' = 3,4,5-trimethoxybenzyl
R = H (L1); CH₃ (L2); C₆H₅H₂ (L3), HO - C₆H₅H₂ (L4) & C₆H₅N - CH₂- (L5)

M Amaladasan, A Paulraj & K S Arulsamy*

1285 Sulphuric acid adsorbed on silica gel: An efficient catalyst for the protection and deprotection of alcohols with dihydropyran

Alcohols are tetrahydropyranylated in the presence of sulphuric acid adsorbed on silica gel in dichloromethane in good to excellent yields. Addition of methanol brings about complete deprotection.

![Reactions]

M M Heravi*, M A Bigdeli, N Nahid & D Ajami

1287 Coupling of anthrone by mercury(II) salts

Coupling of anthrone in ethanol or glacial acetic acid medium using mercuric acetate or mercuric chloride under refluxing condition furnishes bianthronyl in 60-70% yield. The structure of the products has been established from detailed spectral evidences.

Narayan Pradhan, Anjali Pal & Tarasankar Pal*

1289 Synthesis of new 2-(substituted benzothiazolylcarbamoyl)benzimidazoles as potential CNS depressants

A novel series of 2-(substituted benzothiazolylcarbamoyl)benzimidazoles has been synthesized and characterized by IR, NMR, mass and elemental analysis. All the synthesized compounds have been screened physiologically and found to exhibit a remarkable CNS activity.

Pratibha Sharma*, Anupam Mandloi & Shreeya Pritmani

[51; R = 2-NO₂]
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<td>Regioselective reaction: Synthesis and biological activity of some Mannich derivatives</td>
<td>Balakrishna Kalluraya*, Prashantha Gunaga &amp; Ananda K</td>
<td>The Mannich reaction of 3-(substituted)-4-(1-phenyl-3-methyl-5-chloro-4-pyrazolidene)amino-5-mercapto-1,2,4-triazoles results in the regioselective formation of ( N)-Mannich derivatives.</td>
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<td>1299</td>
<td>Monoterpenic fragment analogues of Aplasmomycin as potential antimalarials</td>
<td>Mrinal K Kundu, Jacob V Thomas &amp; S V Bhat*</td>
<td>( \text{In vivo} ) anti-malarial activity of monoterpenic fragment analogues of Aplasmomycin is described.</td>
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<td>1301</td>
<td>Two bromo-compounds from the sponge ( Psammaphysilla ) purpurea</td>
<td>M Rama Rao, U Venkatesham &amp; Y Venkateswarlu*</td>
<td>Two bromo-compounds, 3,5-dibromo-4-(3-dimethylamino-propoxy)phenethylamine 1 and aplysamine-2 free base 2 have been isolated from the sponge ( Psammaphysilla ) purpurea and characterized through the interpretation of spectral data.</td>
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<td>1304</td>
<td>Identification of novel aliphatic compounds from Artabotrys odoratissimus leaves</td>
<td>B K Mehta*, Preeti Jain &amp; ShrilaKshi Kotra</td>
<td>Three novel aliphatic compounds have been isolated from the leaves of ( Artabotrys ) odoratissimus and characterised as nonacosanyl hexacosanoate 1, 2-hydroxytricontane 2, and pentatetracontan-19-ol 3 by spectral and chemical analyses.</td>
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Novel flavanone and chalcone glycosides from Clerodendron phlomidis (Verbenaceae)

Characterization of novel flavanoid glycosides isolated from the flower and root extracts of Clerodendron phlomidis is reported.

Authors for correspondence are indicated by (*)