

# Synthesis

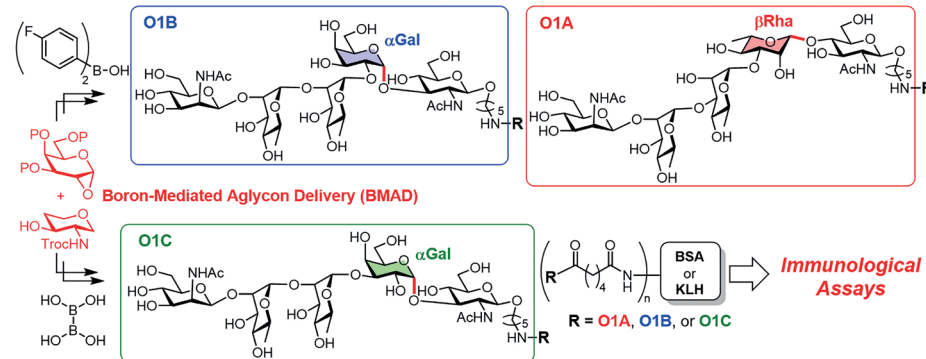
Reviews and Full Papers in Chemical Synthesis

March 15, 2024 • Vol. 56, 887–1041

## Special Topic (Part I)

*Emerging Trends in Glycoscience*

Guest Editor: Vinod K. Tiwari



Synthesis and Immunological Evaluation of *Escherichia coli* O1-Derived Oligosaccharide–Protein Conjugates toward Avian Pathogenic *Escherichia coli* O1 Vaccine Development

K. Seki, T. Makikawa, K. Toshima, D. Takahashi

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## Synthesis

### Preface: Emerging Trends in Glycoscience

## Editorial

*Synthesis* 2024, 56, 887–889  
DOI: 10.1055/s-0042-1752048

**V. K. Tiwari\***  
Banaras Hindu University, India



887

## Synthesis

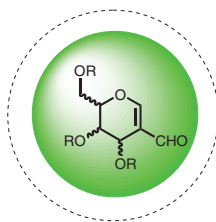
### Recent Advances in the Synthesis and Application of C-2-Formyl Glycals

## Review

*Synthesis* 2024, 56, 890–905  
DOI: 10.1055/a-2066-1659

**A. Arora**  
**S. Kumar**  
**V. Khatri**  
**A. K. Prasad**  
**R. J. Chhatwal\***  
**S. Kumar\***  
University of Delhi, India

**Synthesis of C-2-Formyl Glycal**  
Vilsmeier–Haack formylation  
By consecutive cyclization  
XtalFluor-E based synthesis



C-2-Formyl Glycal

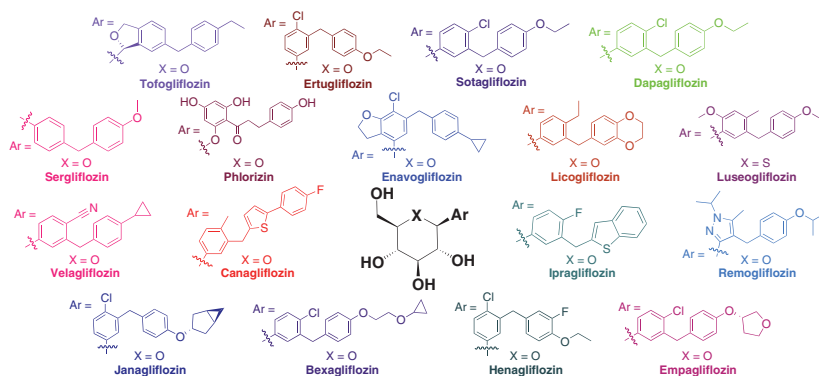
**Application of C-2-Formyl Glycal**  
Synthesis of  
various biologically /  
pharmaceutically / industrially  
important molecules

890

Synthesis 2024, 56, 906–943  
DOI: 10.1055/s-0042-1751524

C. V. Sasikala  
P. D. Nahide\*  
M. Beesu  
S. Biswas  
D. Basu  
S. Achanta  
R. Annapragada\*  
R. Bandichhor\*

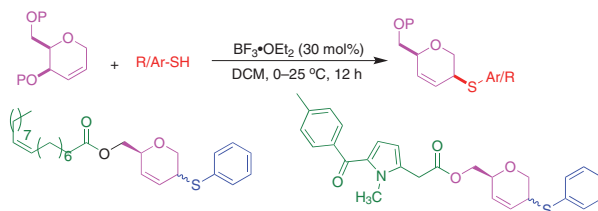
Dr. Reddy's Laboratories Ltd.,  
India  
GITAM University, India



Synthesis 2024, 56, 944–952  
DOI: 10.1055/a-2126-0815

B. Tiwari  
M. K. Sharma  
R. P. Pandey  
N. Hussain\*

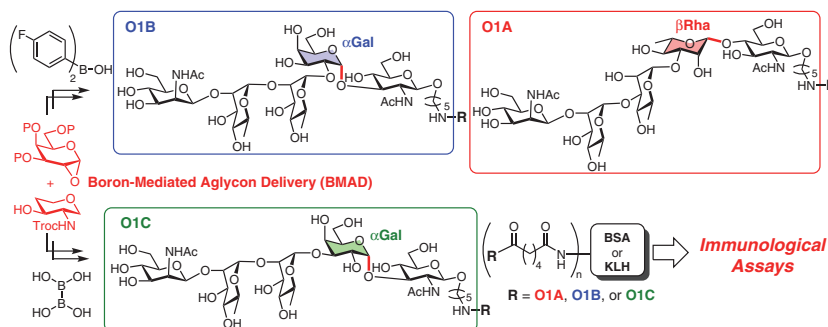
Banaras Hindu University-Varanasi,  
India



Synthesis 2024, 56, 953–965  
DOI: 10.1055/a-2152-0255

K. Seki  
T. Makikawa  
K. Toshima\*  
D. Takahashi\*

Keio University, Japan



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Synthesis 2024, 56, 966–974  
DOI: 10.1055/a-2149-4586

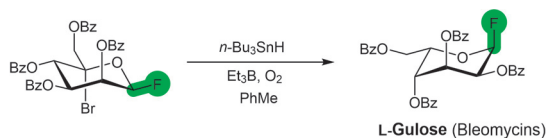
N. W. See  
G. K. Pierens  
E. H. Krenske  
V. Ferro\*

The University of Queensland,  
Australia

## C-5 Epimerisation of D-Mannopyranosyl Fluorides: The Influence of Anomeric Configuration on Radical Reactivity

Paper

966



## Fluorine-directed synthesis

- Insights into glycosyl radical reactivity
- DFT-aided diagnosis of anomeric configuration
- Evidence for radical-based NGP of 6-benzoyloxy group

## Synthesis

Synthesis 2024, 56, 975–988  
DOI: 10.1055/a-2157-9001

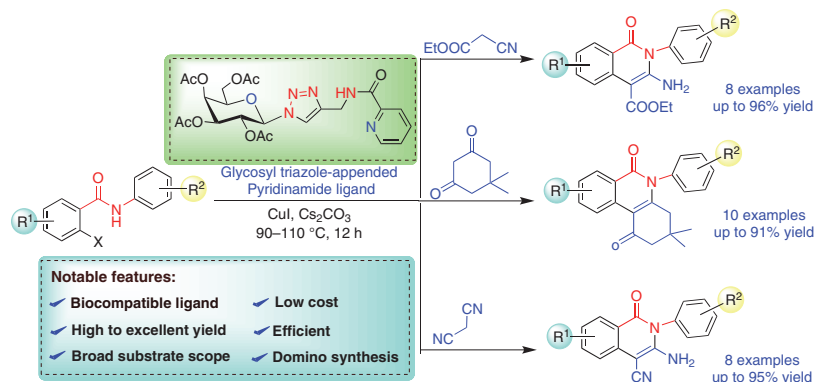
S. K. Singh  
S. Kumar  
M. S. Yadav  
S. Bhattacharya  
V. K. Tiwari\*

Banaras Hindu University, India

## Glycosyl Triazole Based Pyridinamide/CuI-Catalyzed Coupling of 2-Halobenzamides with Active Methylene Compounds

Paper

975



## Synthesis

Synthesis 2024, 56, 989–998  
DOI: 10.1055/a-2181-9709

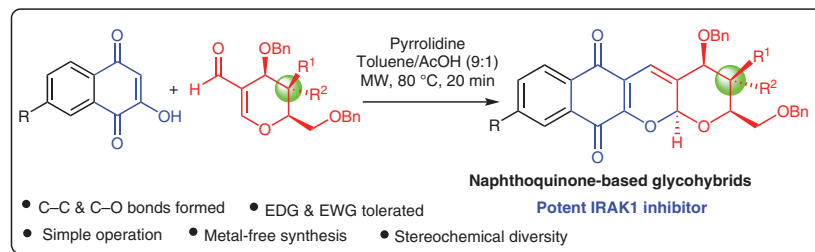
A. Khanna  
G. Tiwari  
V. K. Mishra  
K. Singh  
R. Sagar\*

Banaras Hindu University, India

Efficient Synthesis of Natural Product Inspired Naphthoquinone-Fused Glycohybrids and Their *In Silico* Docking Studies

Paper

989



## Synthesis

Synthesis 2024, 56, 999–1006  
DOI: 10.1055/a-2093-3528

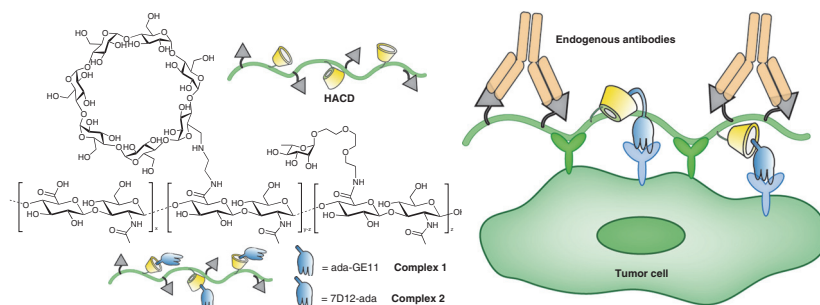
L. Zheng  
Y. Li  
H. Lin  
H. Hong  
J. Shi  
Z. Zhou\*  
Z. Wu

Jiangnan University,  
P. R. of China

### CD44 and EGFR Dual-Targeted Antibody-Recruiting Complex Based on Hyaluronic Acid Grafted with $\beta$ -Cyclodextrrin and Multivalent Rhamnose for Cancer Immunotherapy

Paper

999



## Synthesis

Synthesis 2024, 56, 1007–1016  
DOI: 10.1055/s-0042-1751460

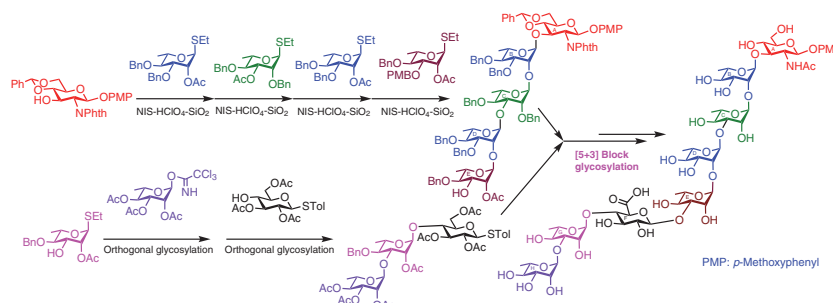
S. Sahaji  
P. Shit  
A. K. Misra\*

Bose Institute, India

### Convergent Synthesis of the Octasaccharide Repeating Unit of the K55 Capsular Polysaccharide of *Acinetobacter baumannii* BAL\_204 Strain

Paper

1007



## Synthesis

Synthesis 2024, 56, 1017–1025  
DOI: 10.1055/a-2157-9100

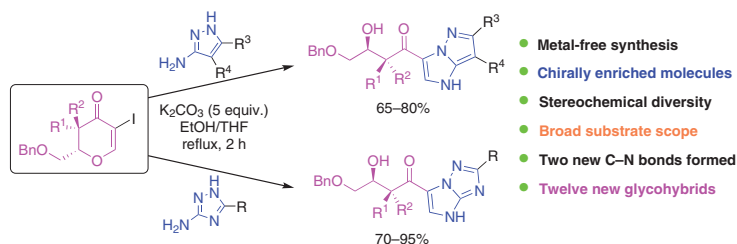
V. K. Mishra  
G. Tiwari  
A. Khanna  
R. Tyagi  
R. Sagar\*

Banaras Hindu University, India

### Efficient Synthesis of Chirally Enriched 1*H*-Imidazo[1,2-*b*]pyrazole- and 4*H*-Imidazo[1,2-*b*][1,2,4]triazole-Based Bioactive Glycohybrids

Paper

1017



## Synthesis

Synthesis 2024, 56, 1026–1034  
DOI: 10.1055/a-2186-7116

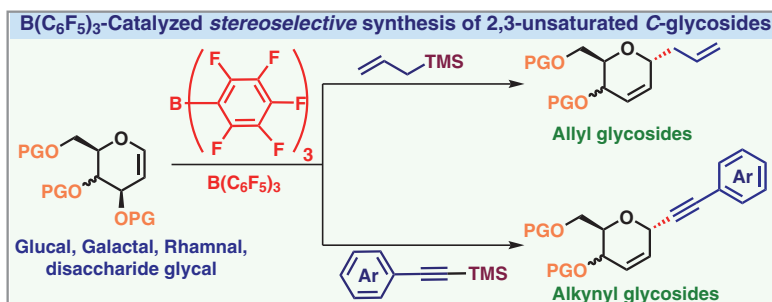
A. Gaurav  
Z. Azeem  
P. K. Mandal\*

CSIR-Central Drug Research Institute, India

### Tris(pentafluorophenyl)borane-Catalyzed Stereoselective C-Glycosylation of Glycals: A Facile Synthesis of Allyl and Alkynyl Glycosides

Paper

1026



## Synthesis

Synthesis 2024, 56, 1035–1041  
DOI: 10.1055/s-0041-1738440

H. Singla  
J. Maity  
S. Kumar  
K. Kavita  
R. Chaudhary  
A. K. Prasad\*

University of Delhi, India

### Chemoenzymatic Synthesis of *arabino*-Configured Bicyclic Nucleosides

Paper

1035

