

**COP30: Fossil Fuel Divide  
in Belém**  
Anil Pratap Singh

**27**

**EDITORIAL**

**Sickle Cell Disease and the Promise of India's  
First Indigenous CRISPR-based Gene Therapy**

Sonali Nagar

9

**ARTICLES**

**The Tilt**

Monalisa Paul

30

**Crossing the Species Barrier: Bird Flu  
Spillover to Mammals and Humans in India**

Nirupama Vaid and Anil Kothari

38

**Artificial Photosynthesis**

**A Future Source of Clean Energy**

RC Parida & PK Ghosh

42

**The Hemifusome: An Undercover  
Agent in the Cell**

Alok Ajakkala

44

**IDPs: Dancing Proteins and the Search for  
New Therapies**

Swati

46

**The Chase for Iodine**

Ravindra Vaze

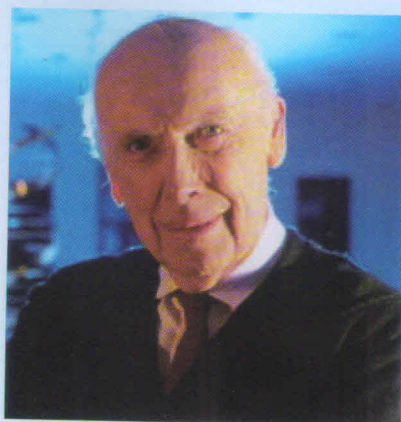
50

**OBITUARY**

**The Co-Discoverer of the DNA Double-Helical  
Structure**

Tushar Kanti Nath

36



**Spectrum**

10

**Indian S&T Breakthroughs**

32

**CSIR Tech that Touches Lives**

34

**Infographic**

52

**Nature's Marvels**

54

**What's New**

56

**Test Your Knowledge**

58

**Crossword**

61

**Puzzle Corner**

62