



## CONTENTS

### From the President's Desk Editors' Page

1. Review of Urban Heat Islands: Monitoring, Forecast and Impacts 1  
**Ajit Tyagi, Mohit Kumar, S. C. Bhan, Rohit Magotra and Yashi Sharma**
2. Heat Waves over India 29  
**Venkata Bhaskar Rao Dodla and G. Ch. Satyanarayana**
3. 50 Years of Satellite Meteorology in India 47  
**R. C. Bhatia and A. K. Mitra**
4. Weather and Weather Forecasting 59  
**P. N. Sen**
5. An Assessment of Relation of Meteorological Parameters and COVID-19 Transmission at the Early Stage during March-May 2020 in India 73  
**Krushna Chandra Gouda, Mahendra Benke, Priya Singh, Nikhilasuma Pernaje Reshama Kumari, Chandrika Murali, Geeta Agnihotri, Sneha Joshi, Smrutishree Lenka, Rani Devi, Suryanaryana Murty Upadhyayula and Himesh Shivappa**
6. Role of Topography and Aerosols in the Rainfall over the Western Ghats and Rain Shadow Regions as Inferred from Aircraft Measurements 86  
**R. S. Maheskumar, B. Padmakumari, Savitha B. Morwal and J. R. Kulkarni**
7. Global Scale Features Associated with Winter Weather Systems during 2016-17 96  
**Rahul Sharma, Shiv Kumar, R.K. Giri & D. R. Pattanaik**
8. Report on Extreme Weather Events during January-May 2021 107  
**D. R. Pattanaik**
9. A Report from Indian Meteorological Society and its Local Chapters 115
10. New Members of IMS 120