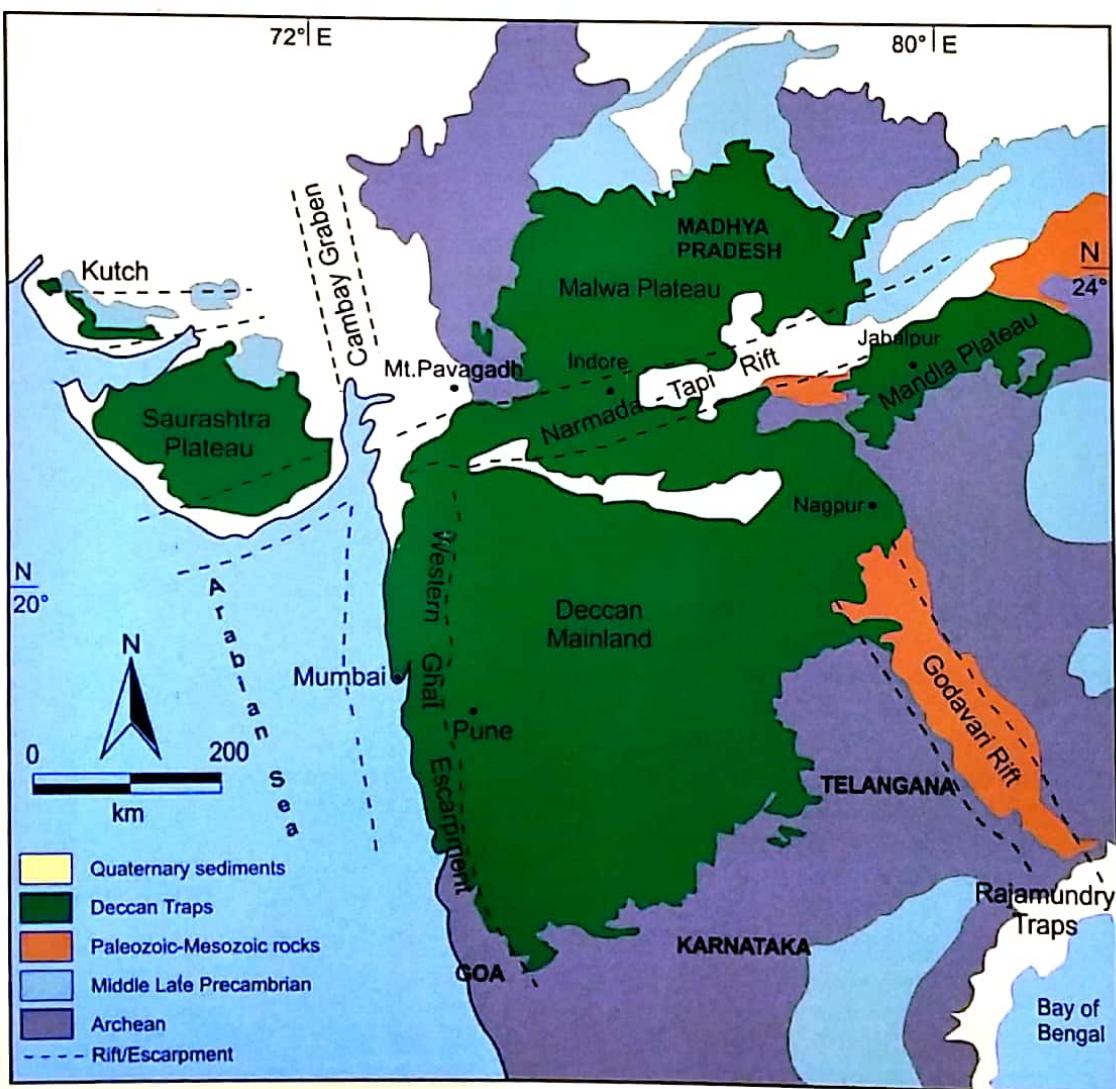


# Journal of The Geological Society of India

Vol.96

JULY 2020

No.1



LIBRARY REF. NO. U(8)  
DATE: 9-12-20

# JOURNAL of THE GEOLOGICAL SOCIETY OF INDIA

(Abstracted/Indexd in AGI's Bibliography and Index of Geology, Chemical Abstracts, Current Contents, GEOBASE, GEOFRef, Mineralogical Abstracts, GeoArchive, Thomson ISI database (SCIE, CC/PC & ES))

---

Vol. 96

JULY 2020

No. 1

---

## CONTENTS

### **Sea Level Rise, from Global to Local.**

ANNY CAZENAVE .....	3
---------------------	---

## REVIEW ARTICLE

### **The Deccan Volcanic Province (DVP), India: A Review.**

**Part 1: Areal extent and distribution, compositional diversity, flow types and sequences, stratigraphic correlations, dyke swarms and sills, petrography and mineralogy**

P. KRISHNAMURTHY .....	9
------------------------	---

## RESEARCH ARTICLES

### **Bore-hole Well-cores Provide Evidence for Crustal Heterogeneity Beneath the Koyna-Warna Reservoir Site, Deccan Volcanic Province, India.**

TARUN C. KHANNA, KUSUMITA ARORA, HARIS RAZA, R. K. CHADHA and HARSH K. GUPTA .....	36
--	----

### **Palaeofloral Investigation Based on Morphotaxonomy, Palyno-morphs, Biomarkers and Stable Isotope from Lalmatia Coal Mine of Rajmahal Lower Gondwana Basin, Godda District, Jharkhand: An Inclusive Empirical Study.**

S. SURESH KUMAR PILLAI, RUNCIE PAUL MATHEWS, SRIKANTA MURTHY, SHREERUP GOSWAMI, SHAILESH AGRAWAL, MRUTYUNJAYA SAHOO and RANJIT KUMAR SINGH .....	43
--	----

### **Delineation of Average 1-D Shear Velocity Structure below North India by Surface Wave Dispersion Study.**

ABHISHEK KUMAR GUPTA and PRANTIK MANDAL .....	58
---	----

### **Comparative Analysis of Pixel and Object Based Classification Approach for Rapid Landslide Delineation with the Aid of Open Source Tools in Garhwal Himalaya**

HARSHITA ASTHANA, CHANDRASHEKHAR A. VISHWAKARMA, PRIYadarshini SINGH, PARDEEP KUMAR, VIKAS RENA and SAUMITRA MUKHERJEE .....	65
--	----

### **Slope Management Survey by Comparative Study of the Anbalagan and SAS Methods in Precinct 20, Putrajaya, Malaysia**

MUHAMMAD MUKHLISIN and NUR SYAHIRA ZAINAL .....	73
---	----

### **Stabilization of Cut Slopes along the Highway by Optimizing Geometry, NH-58, Lesser Himalaya.**

T. SIDDIQUE, S. P. PRADHAN, NANI DAS, A. K. ANAND and T. N. SINGH .....	79
---	----

## CONTENTS

<b>Thermodynamic Modelling of Effect of Flux on the Liquidus Temperatures and Phase transitions in Coal Ash.</b> NARESH KUMAR, R. VENUGOPAL, S. SOREN and S. CHAKRAVARTY .....	87
<b>Integrated Hydrogeological and Hydrochemical Studies in an Agri-horticulture Intensive Watershed at Narkhed, Nagpur, Maharashtra and Pandhurna, Chindwara, Madhya Pradesh - A Case Study from Central India.</b> RAFAT QUAMAR, ASHUTOSH KUMAR MISHRA, RAMESH JANIPELLA, PARAS R. PUJARI, CHINTALAPUDI PADMAKAR, PANDURANG BALWANT, SHALINI DHYANI, LEENA DESHPANDE, PARIKSHIT VERMA and VELIGETI JYOTHI .....	91

## NEWS AND NOTES

<b>Robert Bruce Foote Sangankallu Archaeological Museum, Ballari, Karnataka.</b> RAVI KORISETTAR .....	101
---	-----

## OBITUARY

<b>Raj Kumar Verma (1928-2020).</b> MANOJ MUKHOPADHYAY .....	103
---	-----

---

### Cover

*Simplified geological map of western India, showing the main areas of distribution of the Deccan Traps. For details see pages 9-35*

## ADDRESS OF EDITOR

All papers intended for publication and also related correspondence should be addressed to:  
B. Mahabaleswar, Editor, Geological Society of India, No.30 & 31, 1<sup>st</sup> Main, 3<sup>rd</sup> Cross,  
Byrappa Garden, Kathriguppe Village, BSK 3<sup>rd</sup> Stage, Bengaluru - 560 085.  
Email: editorjournalgsi@gmail.com; jgsi.journl@gmail.com; Mobile: 09341264052;  
Telephone: 080-2672 3943; Website: <http://www.geosocindia.org>.