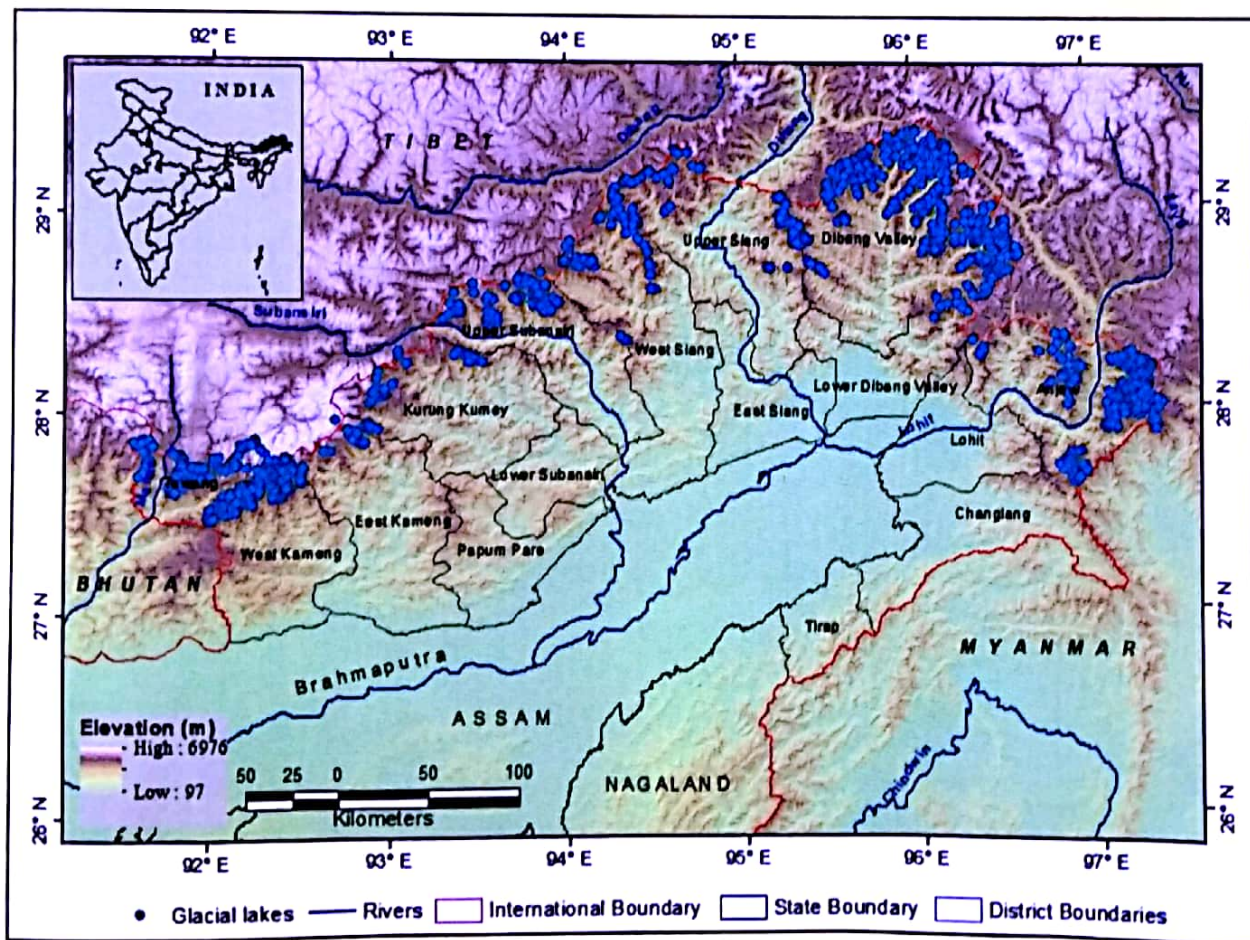


# Journal of The Geological Society of India

Vol.96

DECEMBER 2020

No.6



# JOURNAL of

LIBRARY REF. NO. 11(12)  
DATE: 9-12-20

## THE GEOLOGICAL SOCIETY OF INDIA

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

Vol. 96

DECEMBER 2020

No. 6

### CONTENTS

#### Future Geosciences.

ASHOK KUMAR SINGHVI ..... 533

#### RESEARCH ARTICLES

#### Characterization of Downstream Channel Morphology of a Monsoon Dominated Dwarkeswar River in West Bengal.

SADHAN MALIK and SUBODH CHANDRA PAL ..... 539

#### Occurrence and Stability of Allanite and Monazite in the Greater Himalayan Sequence, Dhauliganga Valley, Garhwal Himalaya.

C. CHAURASIA, K. MADHAVAN, S.S. THAKUR, S.C. PATEL, A.K. SAMAL, S. NEMA and P.K. DIXIT ..... 557

#### Characterising the Ongole Coastal Dunefield of SE India: Formation and Temporal Constraints.

DEVENDER KUMAR, DONTIREDDY VENKAT REDDY and ROBIN DAVIDSON-ARNOTT ..... 565

#### Fenitized Basement Gneissic Xenoliths in Northern Part of Sövite Ring Dike, Amba Dongar Carbonatite Diatreme, Gujarat, India

SHRINIVAS G. VILADKAR ..... 573

#### Stereographic Reconstruction of Impact Microstructures using Optical and Electron Microscopy.

AMAR AGARWAL, BORIS REZNIK and DEEPAK C. SRIVASTAVA ..... 579

#### Geological Signatures of Tectonic Instability along the North Cambay Basin during the Late Holocene Period, North Gujarat, India

ARCHANA DAS and TARUN SOLANKI ..... 584

#### Garnet-Hornblende Geothermometer: A Comparative Study.

HAREL THOMAS and HARITABH RANA ..... 591

#### Study on the Quality of Groundwater and its Impact on Human Health: A Case Study from Murshidabad District, West Bengal

BHABANI PRASAD MUKHOPADHYAY, SWARNALI BARUA, AMIT BERA and ATIN KUMAR MITRA ..... 597

#### Mössbauer Spectroscopic Study of Samples from Cambay Shale Formation, Cambay Basin, in Context of Shale Gas or Shale Oil.

MRIDULA BOHRA, K.R. PATEL, ARUN KUMAR and R.P. TRIPATHI ..... 603

<b>Inventory and Spatial Distribution of Glacial Lakes in Arunachal Pradesh, Eastern Himalaya, India.</b> SURAJ MAL, ATUL KUMAR, RAKESH BHAMBRI, UDO SCHICKHOFF and R.B. SINGH .....	609
<b>Development of Groundwater Level Fluctuation Response System Subjected to Rainfall for Slope Stability Forecasting.</b> SOON MIN NG, MOHD ASHRAF MOHAMAD ISMAIL and ISMAIL ABUSTAN .....	616

NEWS AND NOTES

<b>First Discovery of Carbonatite in India.</b> SHRINIVAS G. VILADKAR .....	623
<b>The Evanescence of the Art of Petrography.</b> ANAND MOHAN .....	625
<b>Farm Legislations and Minimum Support Price.</b> MOHAN V. KATARKI .....	627
<b>ECR Webinar on Emerging Areas of Research in Quaternary Science: A Report.</b> AKASH SRINIVAS and AAYUSH SRIVASTAVA .....	628

AUTHOR INDEX	629
--------------	-----

SUBJECT INDEX	633
---------------	-----

**Cover**

*Location of Arunachal Pradesh in India. The district boundaries of Arunachal Pradesh are according to the Census of India-2011 (<http://censusindia.gov.in>). The background elevation image (90 m) is the SRTM, obtained from the website (<http://srtm.csi.cgiar.org>) of the Consultative Group for International Agricultural Research (CGIAR). (for details see pp.609-615)*

**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.journal@gmail.com; **Mobile:** 09341264052;  
**Telephone:** 080-2672 3943; **Website:** <http://www.geosocindia.org>.