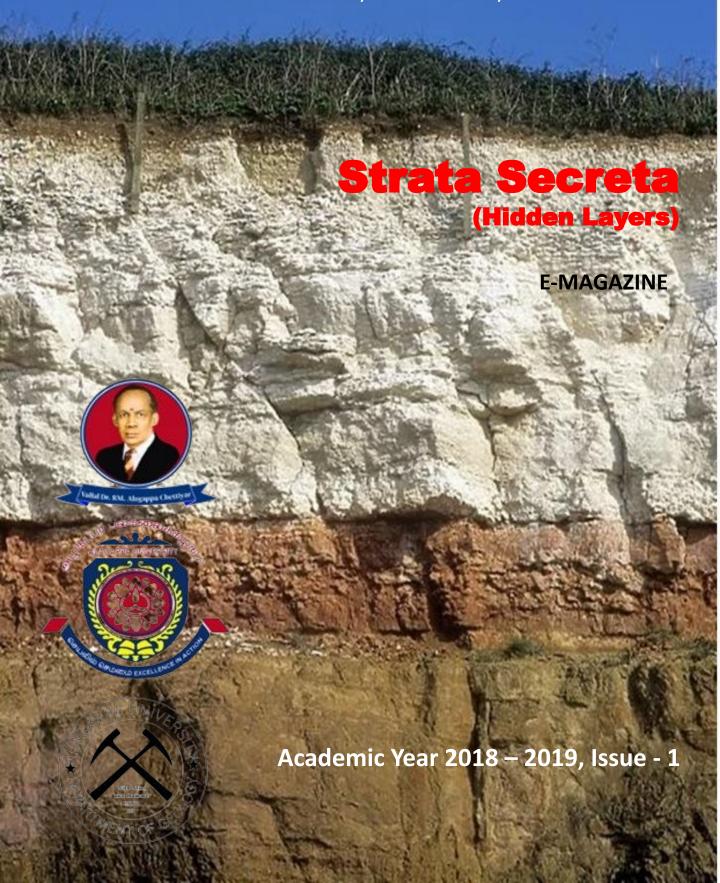
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Dr. R.KARIKALAN PROFESSOR & HEAD

# Head of the Departmen t Desk...



I am really proud and happy as I go through the page of our Departments E-magazine As the Hod of this prestigious Department, consider it e privilege to observe the phenomenal success and growth. It is a proof of the passion, talent, and originality that nourish among students. It is reflection of the various perspectives, experiences, and goes that make our Department a lively and dynamic setting for learning Over the years, our Department has continuously worked to offer a nurturing environment that promotes holistic development and equips students to become leaders in their fields of study. We believe that education is not just about acquiring knowledge but also about cultivating critical thinking, empathy, and a sense of responsibility towards society. I extend my heartfelt congratulations to the editorial team and all those who have contributed to the making of this E-magazine. Your efforts have brought forth a beautiful compilation of literature in different languages, photography, art work and overall creativity that truly captures the essence of our Department. May this e-magazine inspire you to reach new heights and serve as a reminder of the Incredible potential that lies within each one of you.

# Advisory Board





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With great pleasure, I extend my warm greetings through the pages of our Department e-magazine, Strata Secreta (Hidden Layers) which beautifully embodies the essence of our Department sprit.

At Department of Geology, we firmly believe that education transcends the confines of textbooks and lecture halls Each of our students possesses unique talents, passions, and interests, and we are dedicated to fostering an environment that encourages the exploration and growth of these skills. We encourage our students to embrace their passions in various domains, whether sports, arts, music, theater, debates, community service, or any other pursuit. Engaging in extracurricular activities enables them to excel in diverse fields and contributes significantly to their personal development.

In today's digital era, embracing innovative ways of sharing knowledge and ideas becomes crucial Our Department E-magazine serves as a virtual platform for expressing our thoughts and learning from one another. Every student and faculty member will continue to participate and contribute to this enriching endeavor actively I express my heartfelt appreciation to the editorial team and everyone involved in the creation of Strata Secreta (Hidden Layers)

Your hard work and dedication havs resulted in a remarkable collection of stories, articles, and creative expressions that genuinely showcase the spirit of our Department community.

May the upcoming year be filled with fruitful and rewarding experiences for all

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Research Scholar

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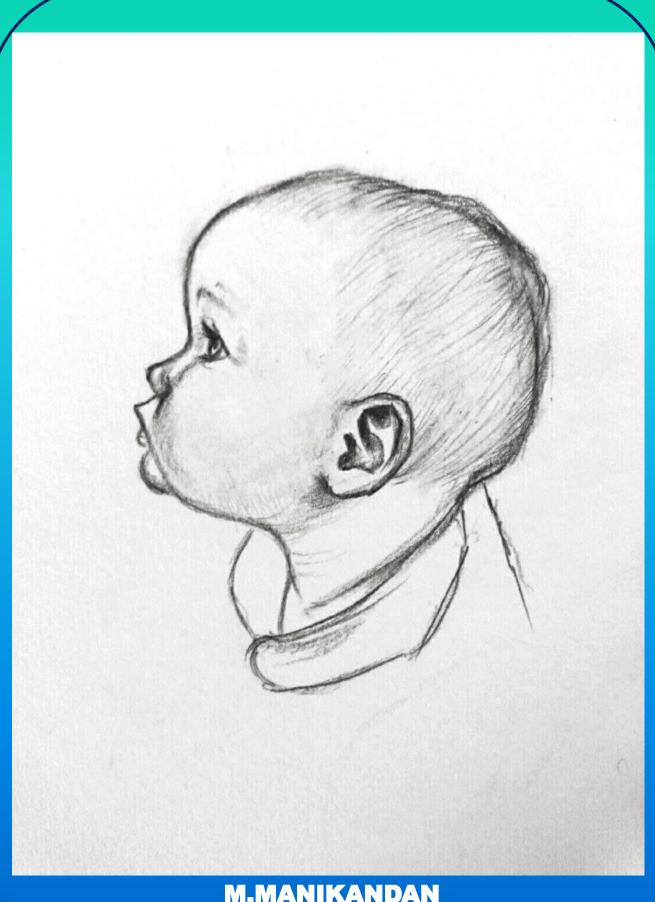


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AKALYA

I<sup>st</sup> M.Sc., Applied Geology





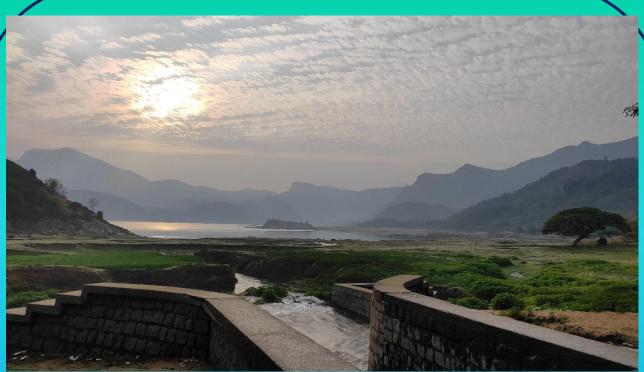
M.MANIKANDAN I<sup>st</sup> M.Sc Applied Geology



RAMANATHAN

Ist M.Sc Applied Geology

# **PHOTOGRAPHY**





SHRI RAMAKRISHNAN
IInd M.Sc., Applied Geology



SHRI RAMAKRISHNAN IInd M.Sc., Applied Geology

# **EVENTS**

#### FRESHER DAY - 2018















AGRADA
THOMBRAILIT
MARAMA
THOMBR

**KERALA FLOOD RELIEF - 2018** 



# **PUBLICATIONS**

#### Disaster Advances

#### Assessment of Shoreline Changes between Cuddalore and Nagapattinam Coast, East Coast of Tamilnadu, India using Geospatial Techniques

Thangaraj Kongeswaran\* and Ramasamy Karikalan
Department of Geology, Alagappa University, Karaikudi, Tamilnadu, 630003, INDIA
\*kongesgeo@gmail.com

#### Abstract

Coastal attrition is one of the most important problems in world seashore. Its impact has adversely affected the livelihood of the coastal community. The coastal zone of India is experiencing a wide range of natural and anthropogenic pressure. This study carried out the shoreline changes between Cuddalore and Nagapattinam, East coast of Tamilnadu, India using satellite images from 1980 to 2015. The long-standing coastal erosion and accretion rates have been calculated using the Digital Shoreline Analysis System (DSAS). Linear regression rate (LRR) statistical method is applied to estimate the shoreline change rate.

The results of the analysis show that erosion is dominant in Devanampattinam to Cuddalore old town, Sothikuppam to Rajapettai, Chitrapettai to Nanjalingampettai, Kodiampalayam north side, sedimentation due to increasing precipitation have been observed in coastal areas, estuaries, canals and coastlines. Therefore, identifying the prevailing procedure to determine volatility and change in position of shoreline is the most important parameter required in managing in coastal areas.

Therefore, it is important to determine measurements of the coastline at different times and it will support to compare and evaluate them for inclusion into the prognosis and decisions as future changes in the environment. Monitoring of coastline areas is needed over the time, as shorelines are the most important and dynamic of the natural phenomenon and change one and other parts of the land features. Failure of observing may cause many coastal environment projects to be unsuccessful, or to have a negative impact on the surrounding areas. These studies are important priorities while doing projects in management engineering studies.

Krishnakumar et al<sup>8</sup> have studied change detection studies in





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