



Dear SPGians,

I extend my warmest greetings to all the esteemed stakeholders of GEOHORIZONS, the premier geoscientific periodical published by the Society of Petroleum Geophysicists (SPG), India.


As I pen this message, I find myself filled with a profound sense of pride and responsibility, for this marks the third edition of GEOHORIZONS published under my leadership as the President of SPG. It is with great enthusiasm that I reflect upon the journey we have undertaken thus far. GEOHORIZONS has evolved significantly since its inception, and I am pleased to share that SPG has successfully published 28 volumes, thanks to the relentless efforts of various Editorial Boards, esteemed authors, guidance from the Central Executive Body, and unwavering support from our readers.

Our upcoming issue of GEOHORIZONS is poised to make a grand entrance at the SPG's 14th Biennial International Conference, scheduled from 3rd to 5th November 2023. The theme of the conference, "**New Age Geosciences: A Fulcrum for Energy Trilemma**" speaks to the pressing challenge of balancing the three competing goals of *energy affordability*, *energy reliability*, and *environmental sustainability*. In today's world, where these goals intersect, new-age geosciences are emerging as a critical fulcrum for addressing this *trilemma*. They provide invaluable insights and solutions that can help the energy industry strike a delicate balance needed to fulfil the country's energy requirements while ensuring sustainability.

Our special theme for the current issue of GEOHORIZONS, "*100 Years of geophysics in India*", is a testament to the rich legacy of geoscientific exploration in our country. It reminds us of the enduring commitment of pioneers in this field and their contributions to India's progress. Through this theme, we aim to honour their legacy and inspire future generations to continue the journey of exploration and discovery.

We must also express our deep gratitude to the authors who have contributed to this edition of GEOHORIZONS. Their insights and expertise are the driving force behind the success of our publication and the conference. In unity, as we collaborate and pool our knowledge and resources,

we not only meet but exceed the nation's expectations, leaving a lasting and transformative impact on the future.

I offer my heartfelt wishes for the success of this edition of GEOHORIZONS and eagerly anticipate our journey into the era of energy transition, where hydrocarbons are poised to play a revitalized role in addressing the Energy Trilemma. 

- Vishal Shastri
President, SPG India

Design explanation for conference theme

(Inside back cover)

With the conference theme "**New Age Geosciences: A Fulcrum for Energy Trilemma**" in mind, specific design elements have been chosen.

The central triangle symbolizes three key aspects: *energy security, equity, and environmental sustainability*. It balances security and equity on two sides, with sustainability at the center. At the triangle's core are seismic elements - *seismic section, wavelet, and interval velocity*, emphasizing geoscience's essential role in addressing this trilemma.

The upper part of the seismic wavelet represents conventional knowledge, aligned with the seismic section. Conversely, the lower part showcases geo-statistical interval velocity, reflecting modern geoscience tools. Ultimately, equilibrium between the energy trilemma and new geoscience approaches is found at the central point, marked by concentric circles.

In the lower section, the utilization of the horst and graben structure underscores geophysics' primary objective: uncovering the Earth's subsurface secrets. Various energy forms are displayed to emphasize that Mother Earth is the origin of all these energies. In the left corner, the integration of culture with geosciences is also emphasized.