We geophysicists carry out very interesting exercises, whether it is data acquiring, processing, or interpreting surface seismic data. While trying to address the goals set for our exercises we come up with novel workflows, or we implement ideas that result in value addition in terms of achieving a geologic/ exploration goal by solving the problem at hand. For example, simply improving imaging is not enough, it must highlight specific exploration issues that could not be solved earlier but can be achieved now with reprocessed data. This also needs a careful selection of the project one undertakes to work on. Such successful outcomes besides bringing value to the employer, warrant their sharing with peers, which may take the shape of a presentation made at a conference or a workshop. But a more beneficial route for sharing your work is to publish it in a journal. Of course, this route is not an easy one, for one must sit down and write about one's work, which requires patience and dedication. But more so the individual should be 'overpowered' with conviction that this way the work will be preserved for posterity.

Writing a paper is an art that one develops gradually, and once the paper is ready, it must be submitted to a journal for publication. The journals have an editorial team that assesses the suitability of the paper in terms of substance in the paper, any new advance being discussed, and if there is enough evidence for the drawn conclusions. If a paper satisfies such a criterion, only then it is published. It is rather rare that any paper is accepted outright on submission. Usually, the reviewers find deficiencies in the papers, which are pointed out for improving their quality.

Having said this, let me turn to an important aspect, and that is how do authors feel when they receive the reviewer comments on their paper. Let me begin with the worst-case scenario, i.e., the paper is rejected. This is depressing to many, and you can virtually 'hear' their exasperated sighs. But then, how did this happen? A simple reason is the author(s) did not devote enough time to work on their paper, i.e., to ensure that the paper has a structure – an introduction (which describes the background and description of the problem being addressed), the theory/method/workflow, examples and conclusions drawn from the exercise carried out, and every aspect described well. Once the first draft of the paper is ready, more time needs to be spent polishing it up so that it reads well. All papers when written in a coherent and cogent manner appeal to the readers. Papers are not meant to report the exercises carried out but are meant to share the know-how with others, the readers. Thus, one must ensure that the texts and the figures in the article are systematically organised for clear understanding and enjoyment of the readers. Often things are clear to the authors because of their long association with the problem and the data but not so for others. Readers are the principal clients, and they must be satisfied no matter how much more time and labour is to be expended. If all this is ensured, then the papers cannot be rejected. Even if the authors look at the positive side of the rejection decision, the review process allows to improve the work being published. The paper in question can be revised and resubmitted and eventually can become a good contribution towards technical communication. The other scenario would be that the reviewer suggests minor revisions, which can be attended to quickly.

Never be in a hurry to submit your paper and get it off your plate. Before you submit your paper for review, ask yourself as an author, if you would like to receive a positive review. If your answer is yes, which would be in almost all cases, then you must work on it. Once you have completed writing your paper, you can request your coauthor(s) or colleague(s) to read through it, and give you, their honest impression. Such an exercise will improve the quality of your paper.

As I said at the beginning, many of us work on assignments or projects in seismic data acquisition, processing, or interpretation. If you have done your work with conviction, and have achieved good results, it brings happiness and satisfaction to you. I would like to draw your attention to a question that you can ask yourselves at this point: how will it contribute to your career development? Simply saying 'I gained the experience' may not be enough, as with each passing month/year such experiences/remembrances tend to fade and must be revisited from time to time. It is therefore necessary to document your work so that it can be revisited later. Looking at the documented examples and reading through the written material is a satisfying experience. My suggestion here is, 'please do not miss out on it'.

In this issue of GEOHORIZONS, besides the regular columns, we have collated seven technical papers which cover a variety of topics from case studies to application of newer ideas and demonstrate that the technology envelope is indeed still being vigorously expanded.

In their paper entitled '*Improved imaging by adopting wide azimuth processing in Padra area of Cambay Basin, India*, Sharma and Yadava demonstrate the application of a wide azimuth processing workflow, which exhibited an overall improvement in reflection event continuity.

Chopra and Sharma in their paper entitled '*Stepping towards more accurate reservoir characterization',* discuss the application of improved workflows which if implemented carefully could result in estimation of more accurate reservoir properties from seismic data in the form of lithology and petrophysical parameters.

For a case study from Western Offshore Basin, West Coast of India, in their paper entitled '*Impedance variation with angle: A case study*', Kumar et al. show that EI at higher angles of incidence indicated higher contrast between the reservoir and non-reservoir facies, unlike P-impedance alone.

In their paper entitled '*Principal component analysis-based statistical well log analysis: A case study from Upper Assam Basin*', Garia et al. show the use of PCA for classification of trends on well log data between hydrocarbon-bearing and non-hydrocarbon-bearing zones in Upper Assam Basin, India.

Vinod and Mandal in their paper entitled *'Improved imaging of the deeper Paleogene and basement structural configurations through anisotropic PSDM: A case study from south Assam shelf*', demonstrate the application of their methodology on a 3D seismic volume from Borholla area of south Assam shelf to show improved mapping of Kopili, Sylhet targets and fractures of the basement.

Narayan et al. in their paper entitled '*Reservoir characterization of Kopili sands using model-based impedance inversion and multilayer perceptron neural network in Lakwa oilfield, Assam Basin, India',* show the estimation of impedance and effective porosity attributes using the model-based inversion and multilayer perceptron NN.

Finally, Malik and Dixit in their paper entitled '*Application of rock physics driven deep machine learning for hydrocarbon exploration*', present a case study from Western Australia, where acoustic impedance, volume of clay and water saturation models are generated using theory guided deep ML, to reduce drilling risk and uncertainty.

We thank the authors for their valuable contributions, and hope the readers find the articles both informative and interesting. Please do let us know if you found a liberal dose of technical material in this edition, which whet your appetite for the present.

- *Satinder Chopra,* **Chief Editor**