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Editor's Desk

What does wonder have to do with a magazine for middle school science teachers?

Well, as biologist Richard Dawkins writes, wonder has for long been recognised as the 'wellspring of all scientific inquiry', motivating scientists to investigate rainbows, the night sky, and other strange phenomena. But, studies like those of primatologist Jane Goodall's with wild chimpanzees indicate that they too are capable of this child-like wonder, for example, at the sight of a beautiful waterfall. Does this mean that our capacity for this emotion is no different from that of our closest relatives? Or that Francis Bacon was right in suggesting that wonder only arises out of a mystified ignorance that science alone can cure? Hardly! While we may share our sense of wonder for natural phenomena with higher primates; we now have reason to believe that as a culturally mature species, no longer pre-occupied with the necessities of survival, we are also capable of a more evolved form of this emotion. One that is reflected in our craving to understand these phenomena through the unique process and perspective offered by science, or what Charles Darwin called 'this view of life'. Thus, far from 'curing' us of wonder, scientific discoveries are themselves wondrous, deepening our excitement and delight in the mystery and grandeur of the natural world!

Middle school marks a period of remarkable transformation. Youngsters enter middle school as children, full of wonder and excitement. And leave as young adults, who with opportunities to discover the wonders of science, may be inspired by a lasting sense of meaning for its cause. One that, in conservationist Rachel Carson's words, acts as 'an unfailing antidote against the boredom and disenchantments of later years, the sterile preoccupation with things that are artificial'. We see *I wonder* as an attempt to bring together a community of writers and readers willing to share their experience of engaging with just such a cultural shift in school science. One that, as theoretical physicist Brian Greene urges, 'places science in its rightful place alongside music, art and literature as an indispensable part of what makes life worth living'.

Our 2nd issue is book-ended by two themes that celebrate this sense of wonder. **Interactions** is all about perspective, inviting readers to view the world through the lens of scientific explanations that unify seemingly disparate phenomena into a seamless whole. We explore the underlying forces (The Fundamental Four and Material Interactions) and cues (Chemical Ecology: Talking in Nature's Language and How to build a Nervous System) that shape the dynamics and behaviour of systems as distant as galaxies (Interactions in Outer Space) and as immediate as our immune system responding to the ubiquitous common cold (A Viral Handshake).

Emerging Trends in Biology, on the other hand, is more about process. How are the big questions in Biology and breakthroughs in method shaping the scope of future scientific inquiry and the nature of this discipline? We give you a peek into the latest in our understanding of memories (We are what we remember), relationship with gut bacteria (We have Company), and genetic clues to evolutionary history (Reconstructing the History of Life).

In an on-going effort to bring new perspectives and voices, this issue also presents nineteen new authors and three new sections – Research to Practice, The Science Teacher at Work, and Science Communication. Go ahead - dive in! And, don't forget to send your feedback to us at iwonder.editor@azimpremjifoundation.org.

Chitra Ravi
Co-editor.

