

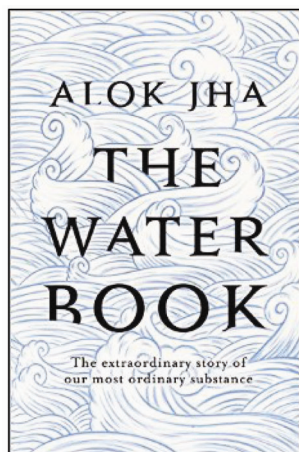
## BOOK REVIEWS

functions and in extreme cases, the patient goes into coma. One of the serious dilemmas that the doctor faces is to know if the patient is conscious or not, and the degree of consciousness. The review by Gosseries *et al.* deals with the clinical assessment of consciousness, its neural correlates and the integrated information theory of consciousness which considers that it is related to the capacity of the brain for information integration.

This volume has an interesting breadth of coverage of the different aspects of neuroscience. It should be useful to experimental neuroscientists and clinicians interested in the science of brain disorders. I like the hard-bound volume, which I hope they will continue to publish in the era of e-books.

S. K. SIKDAR

*Molecular Biophysics Unit,  
Indian Institute of Science,  
Bengaluru 560 012, India  
e-mail: sks@mbu.iisc.ernet.in*



**The Water Book: The Extraordinary Story of Our Most Ordinary Substance.** Alok Jha. Headline Publishing Group, An Hachette UK Company, 338 Euston Road, London NW1 3BH. 2015. 376 pages. Price: Rs 499.

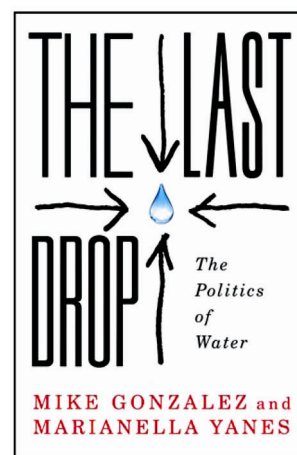
How would you fathom a contrasting situation when one is fighting crises of water supply at home and a distant friend

has gone shopping for a fishing gear to exploit the small stream flowing through his coffee farm? Envious undoubtedly; what is 'fish out of water' for one is 'catch a fish' opportunity for the other. That is what water does under differing situations, perhaps a grim reminder on its undisputed value for human existence, and more importantly, for being human. We seem to value the universal liquid when it is in short supply, but do we understand it well?

'Of all known liquids,' wrote the great water chemist Felix Franks, 'water is probably the most studied and least understood'. Taking cue, Alok Jha has set out to write a biography on this wonder molecule, and has come out with an exhaustive treatise on the subject. Of all mysterious properties of water, the dielectric constant sets it apart from other naturally occurring materials. At an incredible value of 80, its large dielectric constant breaks affinity between other molecules with ionic bonds and earns itself the title of a universal solvent. No wonder, whenever one thinks of a liquid, one is thinking of water with a small amount of other things dissolved or suspended within it. Could this be one of the reasons for its omnipresence on this planet?

Water has invented humans, and indeed sustains all other life forms on the Earth. Paradoxically, however, a liquid that is part of life is also one of fear and death. Some of the most dreaded creatures live under water, carrying on eternal war amidst them by preying on each other. There is nothing softer and weaker than water, and yet nothing as hard and strong too. Jha journeys through the hydrosphere, biosphere and cryosphere to capture the nature and properties of the second most abundant molecule in the universe.

Putting the works of several philosophers, chemists and hydrologists into perspective, the author marvels at the way the water molecule acts like a hawala system of informal cash transaction in transferring energy at impossible speed. Just as the hawala system works on trust and word of mouth, so do networks of hydrogen-bonded water molecules in carrying the charge of protons from one part of a cell to another. This book captures all this and much more, but is a trifle too long. While it is a useful addition to water literature, it could be worthy as a textbook.



**The Last Drop: The Politics of Water.** Mike Gonzalez and Marianella Yanes. Pluto Press, 345 Archway Road, London N6 5AA. 2015. 224 pages. Price: Rs 1357.

This book offers a study in contrast. Focusing on the trade and politics of water, the professor-journalist duo of Mike Gonzalez and Marianella Yanes lament the growing insanity of identifying with bottled water as a social drink – consumed by elegant people in elegant bars. It is no surprise therefore that some nine billion bottles of water are sold annually across the world. The massive expansion of the private water industry, including the bottled water industry, is an outcome of commitment of neo-liberalism to the privatization of all public services and public goods. Outwardly it may seem to be the only way out to address the issue of access and quality. The reality is that big corporations with turnover exceeding US\$ 40 billion annually have contributed literally nothing to the resolution of the water problem. This is not surprising when one learns that 34% of water and sewerage privatizations have failed across the world, with as many as 180 cities having re-municipalized their water operations.

Citing real-case stories of predatory privatization, from Mexico to Kerala and from Laos to Bolivia, the authors contend that capitalism is anything but blind to ecology. It transforms nature into commodities, homogenizing it into products which can be traded for profit. Calling for a new world water order, the book seeks collective engagement of all small movements in big picture change in favour of water peace, as opposed to the widely publicized prediction of