In this issue

Bibliometric Analysis

Provoking self reflection

Current Science, an interdisciplinary journal established in 1932, has grown over time. Researchers from the Dalian University of Technology, China, now analyse dynamics and trends of the publications in the multidisciplinary journal between 1961 and 2015.

They retrieved 34,042 records of publications by *Current Science* under 17 different document types and examined the number of publications in each type from the Web of Science database. As articles, letters, notes, editorial materials and reviews constituted more than 90% of the publications, the researchers focused on these five types to analyse the number and distribution of institutions and countries publishing in the journal, and their cooperation, the growth of impact factor, *h*-index of *Current Science*, and the distribution of *h*-classic articles. They also extracted the main research themes that have emerged in the publications over the last five and a half decades.

See the General Article on **page 386** in this issue for a bibliometric profile of your favourite journal.

Safe Water for All

The next target for India

India met the MDG Target 7C: reducing by half the proportion of people without sustainable access to safe drinking water and basic sanitation, by 2015. The census estimate of 2011 claims that well over 50% of households in major parts of India had access to 'safe' drinking water, thus satisfying the target.

Now, in a General Article on **page 393** in this issue, researchers at the O. P. Jindal Global University, Sonipat give a wakeup call to shake us out of complacency: more than 75 million people in India live without access to safe and sustainable potable water. A significantly large proportion of the population depends on groundwater resources contaminated with fluoride, arsenic, nitrates and other toxic chemicals. What is considered safe may also not be really safe, given the scarcity of scientific data. By bringing out the available scientific knowledge and statistics, the authors call the attention of decision makers to the areas that need immediate attention.

Reviewing Radiation

Cancer diagnosis and therapy

Imaging techniques based on radiations such as X-rays and γ-rays are routinely used now-a-days for the accurate and sensitive diagnosis of cancer. Radiation therapy before or after the surgery may use X-rays, γ-rays, α-particles, protons or heavy ions. Thus, radiations of different kinds have become the mainstay in the diagnosis and therapy of human tissues that grow out of control.

A Review Article by Gaurav Aggarwal and Suresh Kumar Aggarwal examines available technologies and their comparative strengths and weaknesses in diagnosis and therapy. They also discuss the costs involved for the patients as well as for the hospitals that need to buy equipment, some of which have mini-particle accelerators.

The review on **page 413** in this issue is relevant for cancer patients and their relatives, useful for doctors, necessary for the managers of large hospitals and of great value for policy makers in public health departments.

Cover Identity

Alternate uses of fruit peels

The bitter tasting peels of most fruits are usually discarded. For India, the second largest fruit producer in the world, this creates waste-disposal problems. However, fruit peel is not without value. It is rich in antioxidants, vitamins and minerals.

Each year tonnes of such fruit peel, rich in bioactive compounds, rot. With proper knowledge and use of technology, this waste can serve as inexpensive raw material for the production of energy, medicines, cosmetics and adsorbents.

A team of researchers from the Visvesvaraya National Institute of Technology, Nagpur and CSIR-NCL Pune, take a deeper look at different fruit peels and categorize their uses according to spectroscopic, microscopic, calorimetric and gravimetric analyses. In a Research Article on **page 444** find an account of the myriad ways in which fruit peels could be utilized as value added products.

Glaciers in the Baspa Basin

The Baspa basin in Himachal Pradesh covers an area of more than a thousand square kilometres. The altitudes here vary from 1800 to 6400 meters, above sea level. The area is influenced both by the westerlies and by monsoon precipitation. So there is yearly accumulation and melting of snow.

There are nearly ninety glaciers here - most of them inaccessible. In summer, these glaciers are what quench the thirst and feed the people that live downstream. So the health of these glaciers needs to be monitored – especially in view of climatic changes.

Scientists from the ESSO-National Centre for Antarctic and Ocean Research, Goa, the Indian Institute of Science, Bengaluru and the Visvesvaraya Technological University, Belgaum present us a Research Communication that investigates basin level mass balance in this region, using a geodetic method to estimate the glacier mass balance of 42 glaciers covering more than 70% of the area under glaciers. The mass balance estimated using the geodetic method is in good agreement with that derived using the temperature index method and is quite reliable.

The scientists used datasets from the Shuttle Radar Topographic Mission (February 2000) and the Advanced Spaceborne Thermal Emission and Reflection Radiometer (October 2011) to compare elevation differences. After co-registering the two images and taking precautions against other errors that may have crept in, and considering local meteorological data from the same time period, the scientists found that less snow accumulated during the period under investigation. Thinning was observed for all the glaciers. The authors express concern that the mass loss in the Baspa basin is higher than that in glaciers in other regions of the Himalayas.

See **page 486** in this issue for more details.

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