From the Editorial Desk

It is our pleasure to be associated with this journal, the first of its kind to be published by Bethune College, Kolkata, an institution which took the first step in ushering in higher education for women in our country. This inaugural volume has been enriched by a variety of contributions, covering a range of subjects. We have kept this first issue comprehensive and open to all disciplines and topics, including both Science and Humanities.

This issue of the "Heritage" journal brings out a collection of twenty four articles and we made two sections of the contributions, namely, Humanities and Social Sciences Section and Science Section.

The majority of the ten essays from the Humanities express gender related concerns. In her thought-provoking essay, *Nari O Samajbyabosthar Ekti Dik*, Professor Sangeeta Tripathi Mitra explored the implications of criminality, law, and conviction in the context of the relation between the ruling class and the ruled, and how this affects the lives of ordinary women who find themselves trapped in perennial subjugation. Apart from the novels of Rabindranath and Jarasandha, she studied accounts by women writers such as Rani Chanda, Surama Ghatak and Meenakshi Sen which bear chilling testimony to women's incarceration. Social norms, law, prison administration system and regulations have never permitted ordinary women to lead healthy lives.

The problems faced by rural Bengal are highlighted from a different perspective in the essay by Prof. Kumkum Chattopadhyay, who suggests how rural society may be developed in keeping with Tagore's modern and scientific thoughts, with his emphasis on education, employment and self-sufficiency.

Prof. Sharmishtha Neogi underscored yet another aspect of Tagore's writings, comparing him to another universal poet of all times, Kalidasa. She has shown how they represent their respective eras through their poetry and yet succeed in becoming timeless and universal through their re-invention of archetypes. Kalidasa's conscious deconstruction and refashioning of myth is followed by Rabindranath, who again charts out his own distinct path by bringing together elements from Greek and Western myth or western fairy and folk tales and Hindu Puranas.

Prof. Jayanta Mistri has written on *Pirititatva* as central to *Sahajiya Sadhana*. He has elaborated the Buddhist and Vaishnav *Sahajiya* history and its influence on Bengali literature, specifically in novels by Tarashankar, Abadhut, and Amiyabhushan Majumder, in a play by Budhadeb Basu and in the poetry of Rabindranath. How the protagonist Krishna is transformed into the immobile Lord Jagganath and the parallel transformation of the *barangana* as beloved was also elaborated.

Prof. Suchimita Maitra has drawn attention to class conflict manifesting itself through conjugal conflict in Rabindranath's *Jogajog*. She has commented on how several of Tagore's novels draw attention to conjugal conflict and the way the clash between old aristocracy and nouveau riche is enacted on the domestic stage.

Prof. Jayita Datta focused on identity crisis, as expressed by the conflict between the private and the public, the personal and the social as articulated in the writings of Rabindranath and the teachings of Gautama Buddha.

Prof. Ranjana Sharma highlighted the position of women in Partition narratives, and focused on *Dayamayeer Katha*, a pathbreaking Bengali novel in the memoir form.

Prof. Mandira Mitra English has taken Amitav Ghosh's The *Calcutta Chromosomes* as an anti-narrative in which the protagonist's quest for self-knowledge loses itself in a neurosis, which cannot be resolved narratologically. She has shown how the absence of a coherent plot may be linked to a disturbed state of mind. Plot disruptions therefore parallel and narratologically represent the content or the subject-matter of this novel.

Prof. Piyali Gupta interrogated the concept of gender in children's literature and popular culture in post-war Britain and shown how such constructions are problematized in Enid Blyton's school stories. In the process of ridiculing and often rejecting in unequivocal terms the traditional image of femininity, Blyton not only interrogates such constructs but also presents an alternative idea of the same. Her protagonists, although they belong to a society that perpetrated the role of the submissive women, seek to resist this conventional construct.

Prof. Sudeshna Mitra raised questions of identity through the processes of referring, denoting and naming, with reference to Russell and Frege and discussed, in this context, the issue of existence in relation to proper names and descriptions. She has analyzed the discourse on proper names, the distinction between connotation and denotation from ancient Greek thought to contemporary writings. The other contribution belongs to the field of narratology.

The Social Science Section and Science Section includes fourteen papers addressing diverse issues. Professor Mahuya Chakraborty in her paper shed light on future marketing strategies of television broadcasters in the context of the ongoing process of digitization of cable networks in India. A 'duopoly' model with differentiated products in a two-sided television market is considered.

In a fast globalizing world, export competitiveness of a nation determines its long run economic performance. Professor Maitri Ghosh in her paper analysed the effect of foreign direct investment (FDI) on firm level export performance across manufacturing sectors in India. Panel data analysis for different industries has been done which reflected that

import of technology, in-house R&D, import of raw materials, expenditure on marketing, advertising and distribution are the major determining factors of firm level exports.

As water and live processes are synonymous, so special attempts should be adopted around the world to protect and conserve this invaluable resource. Professor Gautam Bandyopadhyay in his paper reviewed the different sources, harmful effects and control measures of water pollutants namely, organic and inorganic pollutants, sediments, radioactive and thermal pollutants.

Professor Rahul Kumar Datta and his associates in their article reported the findings of their observation of different physico-chemical parameter of water of 'Rasik bill', Coochbehar (West Bengal) as a part of study of freshwater ecosystem and also accounted for various kinds of local and migrating birds which are present in and around the 'bill.'

Hydroxyapatite (HA) is one of the most versatile materials used for implantation due to its biomimic nature to natural bone. Professor Samiran Ghosh and Riya Mitra in their paper reported the UV spectroscopy and X-ray diffraction analysed data regarding the Muga Sericin mediated synthesis of Hydroxyapatite from egg shell.

Professor Rina Rani Ray and Debpali Sur in their article reported the different characteristics like Gram-nature, antibiotic resistance property etc of some bacterial isolates collected from water samples of Hooghly river (West Bengal).

Professor Rina Rani Ray and Priyanki Bose in their paper reviewed the basic background of the MMP gene family, especially "Matrix Metalloproteinase 9" (MMP-9) and their role in metastasis. The article also reported the recent researches on their application to live subjects. The findings indicated different functional mechanism for MMP-9 during distinct steps of the metastatic cascade and their pro-metastatic as well as anti-metastatic roles.

There is an existence of perennial roosting colony of the Indian Flying fox in Bethune College campus, Kolkata. Professor Roli Shukla Ray in her paper, which is first of its kind, emphasized the estimation of total population of the frugivorous bats in different roosting sites, their dietary habits and tracking the foraging route so that an appropriate measure can be taken to conserve this endangered species.

The article of Professor Subhasree Sengupta reviewed some of the available genomic technologies, especially, with special emphasis on genetic markers, their classification and application in aquaculture in Indian context. The potential beneficial application of Marker assisted selection were also shown along with its implications for fisheries management and aquaculture.

Acridid, the most dominant group of herbivorous insects play an important role in the functioning of forest ecosystems as they contribute to the diet of many birds and spider species. Professor Hiroj Kumar Saha and Parimalendu Halder have studied the acridial assemblages in five different habitats of a dry deciduous forest of West Bengal and in their paper reported the Acridid diversity, abundance and species richness in different undisturbed and disturbed habitats.

One of the important concerns of waste water fisheries is the contamination of fishes by faecal bacteria. Professor Samir Banerjee and Sutapa Sanyal in their experimental article reported the infection level of indicator bacteria in the muscles and digestive tract contents of *Oreochromis* sp reared in wastewater fed pond and their level of resistance to different antibiotics.

Professor Rituparna Kundu Chaudhuri, Dipankar Chakraborty and Arpita Maity in their article reported the morphogenetic potential of seedling of *Vigna radiata* on MS media containing a wide range of hormonal combinations including BAP, NAA and amino acid Proline.

Professor Sanghamitra Sanyal and Dipayan Chattopadhyay in their article, reported for the first time, a checklist of Angiospermic plants which are available in Bethune College campus, Kolkata. Their paper includes a list containing a total of 119 Angiospermic species (102 dicots and 17 monocots) under 106 genera belonging to 49 families and the common names, flowering-fruiting time and medicinal or other economic importance of those plants are also mentioned in tabular form.

India is at the crossroads so far as acceptance of GMOs towards ensuring food security is concerned. An intense research on GMOs is essential to safeguard the health, environment and biodiversity. Professor Saswati Laha, in her paper, reviewed the various facets of GMOs crops and their merits and demerits.

This journal has been conceptualized and published under the expert and enthusiastic guidance of our Principal, Professor Sangeeta Tripathi Mitra, who has been our inspiration at every step of this enterprise. We would also like to acknowledge our debt to our august Advisory Committee for being part of this initiative. We are grateful to the editors and the Editorial Board for extending their valuable support. The financial assistance received from the state Government of West Bengal to shape this issue is gratefully acknowledged.

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