Editorial

Vijay Chandru, Associate Editor

Rear Admiral Grace Hopper will always be remembered for the phrase “debugging of computer programs”. The bug was a moth that stuck between relay contacts of an early electro-mechanical computer. The Article-in-a-Box by V Rajaraman relates this story along with many other interesting facts about the pioneering work of Hopper in the early days of computing machinery.

This issue contains a varied fare as usual. The discovery of conducting polymers holds great promise for applications in photovoltaics and thin film transistors. T P Radhakrishnan tells us how Heeger, MacDiarmid and Shirakawa were led to this Nobel Prize winning discovery in chemistry. Kelkar, Dhavale and Pol (Microscale Experiments in Chemistry, Part 3) have some serious advice for young chemists – pipetting can be harmful to your health.

Anyone heard of ‘anyons’? P Ramadevi, in a general article on exchange of identical particles, argues that anyons co-inhabit Flatland along with their relatives, the bosons and fermions. Space-time and local gauge symmetries are the theme of Sourendu Gupta’s article on quantum field theory. The classification of real compact surfaces is communicated visually in the article by Alexandru Oancea. The Harish-Chandra Research Institute has recently celebrated its silver anniversary and is profiled by Sumathi Rao.

In Part 4 of the series on electronic commerce, V Rajaraman explains how secure payments using credit cards and cheques can be transacted over the net (you will have to wait for the next part to learn about electronic cash transactions). Bejoy tells us about hydrotalcite clay and its role in a cure for peptic ulcers, while Ghate Utkarsh warns us about the increasing role that lawyers will play in the era of intellectual property rights and biodiversity treaties.

Mass marriages are familiar to most of us, but arranging infinite number marriages requires the wild imagination of a transversal theorist. The classroom section includes pieces on infinite marriages, crows and transgenics. Incidentally, young readers are invited to send in their favourite questions and the editors will structure the classroom sections around suitable ones.