

"What did Newton write about colour?"



This year's National Science Day Lecture was delivered by Prof N Balakrishnan ("Balki" to everyone who's privileged to know him) on 28 February 2000 at the S R Valluri Auditorium. Prof Balakrishnan spoke on Information Science and Technology for the 21st Century. The lecture covered wide ground (from the "technical" to the "philosophical"). There were reminiscences of computing at IISc in the good old days ("on computers whose computing power doesn't even match the power on my wrist watch today"). There were hypotheses ("once the Cold War scenario disappeared there was a compelling need to move computers from defence establishments to drawing rooms - to move from monomedic technology to multimedia technology"). There were glowing tributes to networks ("the network is everywhere .. and soon it will go beyond wires") - with a particularly lucid introduction of Sankhya Vahini, the proposed mega national network. There were homilies ("in today's world the small fish eat the big fish; e.g. SGI buys out Cray, Compaq buys out DEC"). And there was introspection ("should we solve unrealistic problems quickly or should we attempt to solve realistic problems slowly? - the truth is that even at today's blinding computing speeds we still can't get realistic solutions unless we go back to basic physics and work our way up with clever algorithms"). In his wide-ranging lecture Prof Balakrishnan nearly achieved the impossible -- of touching upon practically every active field in information science and technology. But if one still had to pick two themes which he covered with special felicity they would probably be his visualisation of a 'multimediced world' and his crystal gazing into the 21st Century. In "Balki's (multimediced) World" there would be cameras on poles and chandeliers capturing information, Boolean searches would be replaced by natural language searches (e.g. asking a database: "can you get me all the video clips where Alan Donald behaves aggressively with Sachin Tendulkar?"). Libraries would not be 'book collectors' but 'knowledge brokers' (and would respond to queries like: "what did Newton write about colour?"). The 'learn-work-learn-work' cycle would be replaced by 'just-in-time learning. Why an amateur crooner could even sing to his computer and be told which raga he was singing! The 21st Century crystal ball sees the demise of time and distance; Internet as the only communication medium; education as the most profitable venture; all human knowledge available 'anytime, anywhere'; development of 'intelligence amplifiers'; more work in less time; customized 'just-in-time' products; quality health care at affordable costs and even rose auctions on the Web! The lecture was therefore a compelling narrative articulated stylishly (by an incorrigible romantic?). Balki's 21st Century promises to be great fun.

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