

A genius with numbers

BY TILAK D. GUPTA

His papers have been approved for publication in renowned mathematical journals both in India and abroad; he has also got direct admission into the department of pure mathematics at the Cambridge University. He is Anand Kumar, a post-graduate student of mathematics at the Patna University.

Unfortunately for this unassuming young man with a Ramakrishna-like face, despite his achievements against all odds and the high rating by his professors, Anand has not been able to avail of the offer by the Cambridge University due to a lack of sponsors.

Anand's field of enquiry is the theory of numbers. "Every natural number has certain specific properties and the search is continually on to discover them," he says, to explain the basics of his discipline.

This maths wiz kid's achievement list is already quite impressive. A national journal has published his paper on the Lily property of numbers; the *Mathematic Spectrum*, a UK-based journal has accepted his paper on the squaring of digits of a number, for publication; *Mathematical Gazette*, another journal from the UK, has also approved one of his papers for publication.

Anand's mentors rate him highly, some say that he has shown greater promise than Vasishtha Narayan Singh, the widely-known mathematical genius from Bihar. Dr Debi Prasad Verma, an eminent professor of mathematics at the Patna University, recalls how Anand, then, just out of school, used to confront him with complex mathematical problems. "Initially," recounts Dr Verma, "I did not take him seriously. But later, it dawned on me that the boy has great talent." Dr Bal Gangadhar Prasad, also a professor of mathematics in Patna University, is immensely impressed by Anand's capabilities too. "He has a highly innovative mind," asserts Dr Prasad.

If Anand had managed to get the requisite funds, he would have been in Cambridge University by now. "My family could not afford to pay the fees of Rs six lakhs and I could not find any sponsors," says Anand, betraying his obvious frustration. To worsen matters, Anand's father, an employee of the postal audit department at Patna, died suddenly a few months back. Today, Anand needs all the support he can get to continue with his

order to earn a living, he is now



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Anand Kumar

forced to give tuitions to those appearing in admission tests for IITs and other engineering colleges.

Mathematics, indeed, seems to have been Anand's sole passion since his high school days. "To begin with, I was a little weak in mathematics," confesses Anand. "So, I worked for extra hours to have a grip over the high school mathematics and that is how my romance with numbers began," he adds. And that might be a good tip for those youngsters who find mathematics a 'bogey' subject. Anand, with the help of his friends, now runs the Ramanujan School of Mathematics to encourage young minds to go deeper into the wonders of this "mother of all sciences."

Bihar is perhaps not the best of places for mathematical talent to flourish. Given the prevailing anarchy in the state's college education where classes are seldom held and mass copying is a way of life, Anand's achievements seem all the more creditable. Since the academic session here runs way behind schedule, Anand who should have appeared in his M.A. (Hons) Examination in 1994 will now have to wait till next year to complete his present course. And this is a sheer wastage of

Anand's time, opines his professor. Anand himself, however, is more modest about his achievements. "I am just learning and still have a long way to go," he says humbly.

Anand has strong opinions about the current methods of teaching mathematics at the school level. The books these days are much better but few teachers care to inculcate a curiosity among the student about the wonderful world of mathematics, he says. Children should be encouraged to learn the "why" and the "wherefore" of mathematics and also be helped to relate the subject to happenings in their daily lives, feels Anand.

Anand's teachers at the University insist that he must now move out of Bihar to pursue his studies in pure mathematics. "There are no research facilities worth the name in this state and even current books and journals are not available in the universities here," informs Dr Prasad. To keep himself informed about the latest works on his subject, Anand is compelled to make regular trips to Benaras Hindu University, the institution, where such study material is available, to some extent.

One may recall that Vasishtha Singh got wide publicity in Bihar after he became an instant success story. Anand's story of Anand Kumar is still unfolding and the gifted young man is in the right environment to develop to the fullest. Are talents