Preface

The third successful completion of the INDOCRYPT conference series marks the acceptance of the series by the international research community as a forum for presenting high-quality research. It also marks the coming of age of cryptology research in India.

The authors for the submitted papers were spread across 21 countries and 4 continents, which goes a long way to demonstrate the international interest and visibility of INDOCRYPT. In the previous two conferences, the submissions from India originated from only two institutes; this increased to six for the 2002 conference. Thus INDOCRYPT is well set on the path to achieving two main objectives – to provide an international platform for presenting high-quality research and to stimulate cryptology research in India.

The opportunity to serve as a program co-chair for the third INDOCRYPT carries a special satisfaction for the second editor. Way back in 1998, the scientific analysis group of DRDO organized a National Seminar on Cryptology and abbreviated it as NSCR. On attending the seminar, the second editor suggested that the conference name be changed to INDOCRYPT. It is nice to see that this suggestion was taken up, giving us the annual INDOCRYPT conference series. Of course, the form, character, and execution of the conference series was the combined effort of the entire Indian cryptographic community under the dynamic leadership of Bimal Roy.

There were 75 submissions to INDOCRYPT 2002, out of which one was withdrawn and 31 were accepted. The invited talks were especially strong. Vincent Rijmen of AES fame gave a lecture on the design strategy for the recently accepted AES standard. Manindra Agrawal, Neeraj Kayal, and Nitin Saxena recently achieved a breakthrough by obtaining a polynomial time deterministic algorithm for primality testing. This was presented at an invited talk by the authors. GuoZhen Xiao, an eminent researcher in the theory of sequences and Boolean functions, presented a lecture on efficient algorithms for computing the linear complexity of sequences.

The reviewing process for INDOCRYPT was very stringent and the schedule was very tight. The program committee did an excellent job in reviewing the papers and selecting the final papers for presentation. These proceedings include the revised versions of the selected papers. Revisions were not checked and the authors bear the full responsibility for the contents of the respective papers.

Program committee members were assisted in the review process by external reviewers. The list of external reviewers is included in the proceedings. Our thanks go to all the program committee members and the external reviewers who put in their valuable time and effort in providing important feedback to the authors.

Organizing the conference involved many individuals. We would like to thank the general chairs V.P. Gulati and M. Vidyasagar for taking care of the actual

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hosting of the conference. They were ably assisted by the organizing committee, whose names are included in the proceedings. Additionally, we would like to thank Kishan Chand Gupta, Sandeepan Chowdhury, Subhasis Pal, and Amiya Kumar Das for substantial help on different aspects of putting together this proceedings in its final form. Finally we would like to thank Springer-Verlag for active cooperation and timely production of the proceedings.

December 2002 Alfred Menezes
Palash Sarkar

INDOCRYPT 2002 was organized by the Institute for Development and Research in Banking Technology (IDRBT) and is an annual event of the Cryptology Research Society of India.

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