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DNA Computing and Molecular Programming

16th International Conference, DNA 16
Hong Kong, China, June 14-17, 2010
Revised Selected Papers

Springer

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Preface

The 16th International Meeting on DNA Computing and Molecular Programming was held during June 14–17, 2010 in Hong Kong University of Science and Technology, Hong Kong. This conference series serves as one of the many task forces aimed at achieving a mission to establish biomolecular computing in life science. Through the efforts of many scientists in the past 16 years, accomplishments from DNA computing to programmed construction of 1D, 2D, 3D DNA scaffolds, and DNA origami have been achieved and reported. Participants of this conference carry out well-funded research projects in DNA-controlled drug delivery systems, DNA nanomachines, DNA-induced information storage devices, DNA scaffolds and patterning, etc. Scientists, engineers, and students meet at this time every year to present new results and project foreseeable goals for the future.

The scientific program included three tutorials, six invited lectures, 23 oral presentations, and 31 posters. The topics were well balanced between theoretical and experimental work. The meeting began with tutorial talks by John Reif, Chengde Mao, and Brian Wolfe. During the meeting, a number of excellent keynote speakers gave an up-to-date overview of different aspects of DNA computing and biochemical information processing. We express our appreciation to Ned Seeman, Akira Suyama, Christina Smolke, Satoshi Kobayashi, David Soloveichik, and Erik Demaine for their excellent keynote talks. Thanks are also given to all the authors of the oral presentations and posters. Their efforts made this meeting possible.

In total, the meeting was attended by 92 researchers from 13 countries: Canada, China, Finland, Germany, Ireland, Israel, Italy, Japan, South Korea, Singapore, Spain, UK, USA. The DNA16 Program Committee received a total number of 59 submissions, of which 23 were presented orally. This proceedings volume contains improved versions of 16 papers selected from these oral contributions.

The editors would like to thank the members of the Program Committee and the reviewers for all their hard work reviewing papers and providing constructive comments to authors. We give thanks to Natasha Jonaska, the Chair of the Steering Committee, Llyod Smith, the Co-chair of the Program Committee, and Shihua Zhang for maintaining the conference website and facilitating communications.

October 2010

Yasubumi Sakakibara
Yongli Mi

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DNA16 was organized by Hong Kong University of Science and Technology.

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