

## Foreword

In the first years of the Olympiads in Informatics conference a specific theme was set. Since 2009 papers have been accepted on any topic that falls under our remit – along with the occasional one that falls just outside. One way of splitting these papers is into those that relate to olympiads and those that look at the wider teaching of informatics. Many of the conference's earlier papers, when not discussing contest technicalities (tasks, graders, etc...) looked towards the organisational aspects of the events. We are now seeing papers that take as their foundation national strategies for teaching, of which an informatics olympiad is (if at all) a small part.

We are fortunate to deal with a subject that adapts well to new technology. As an illustration consider the International Olympiad in Informatics which has moved from manual grading to automated grading; originally requiring evaluators typing in data by hand, moving to evaluators running semi-automated systems, to our current state of automated grading which can – on a good day – have the results of the event ready before the students have left the contest area. What is more exciting is to see these same grading systems being adapted outside of the contest environment and becoming part of the pedagogical one.

We live in a world containing teachers with a mix of abilities, knowledge and motivations. Schools where there are limits on the amount of time to teach and the resources to teach with. Students who need to work hard on the simplest materials; those who are able to rush ahead to the complex; those who want to study the esoteric. The last few years, especially through the internet, have seen an explosion of courses that are available outside of the usual teaching environment. Again – we are fortunate to deal with a subject that adapts well to new technology. One where automated systems can give accurate feedback to students. One where, without specialist equipment, students can study at their own rate.

The development of grading and teaching environments within our community, and their spread to the wider teaching community, is one of our strengths. There is now a real choice of several strong environments that we have created and made available. This volume contains several papers discussing such systems; their technical aspects but also how they can be used to teach. It is not just our top students who are benefiting from the olympiads; not just those who compete in our contests. We are making a real difference out there.

As always thanks are due to all those who have assisted with the current volume – authors, reviewers and editors. A lot of work goes, not only to the writing of the papers, but to an extended period of review and correction and, in several cases, translation.

Peer reviewing all of the papers takes a significant amount of time and work and special thanks should be given to those otherwise unsung reviewing heroes.

Last, but by no means least, particular thanks are due to the organisational committee for IOI'2014 in Taiwan without whose assistance we would be unable to hold the conference. Their assistance, during what is an already busy period, is gratefully received.

Editors