

## Preface

The 12th European Conference on Research in Chemistry Education (ECRICE 2014) took place in Jyväskylä, Finland from 7<sup>th</sup> of July to 10<sup>th</sup> of July, 2014. The international biennial conference was hosted by the Department of Chemistry, University of Jyväskylä, and organized under the auspices of EuCheMS Division of Chemistry Education and the Division of Chemistry Education of the Finnish Chemical Society. Altogether 145 participants from 31 different countries took part in the conference at the shores of Lake Jyväsjärvi, in Agora on the Mattilanniemi Campus of Jyväskylä University.

ECRICE is the forum for researchers and teachers to exchange experiences on research in chemical education carried out at every education level - from primary school up to graduate studies, as well as to promote lifelong learning and enthusiasm in chemistry. The conference has always been able to attract a significant number of participants from all over the world to discuss and to exchange ideas on chemistry education.

The theme of ECRICE 2014 was “New trends in research-based chemistry education”, which reflects the striving to an enhanced motivation and practice in learning and teaching within the wonderful world of chemistry. The conference included five plenary lectures focusing on curriculum development, exploring student reasoning, how learning can be facilitated, how classroom practices can be transformed to support learning, and how new technologies are changing learning and teaching of chemistry. There were also 13 invited talks including a session commemorating the late prof. Hans-Jürgen Schmidt. Also, 78 short oral communications (78) representing all fields of chemistry education. All papers accepted for the conference were peer-reviewed.

The proceedings published in the LUMAT journal represent scientific papers presented at the ECRICE 2014 conference. The proceedings will be published in two separate issues of LUMAT representing the diversity of scientific research and development work going on in chemistry education, and highlighting the novel aspects of attempts to understand how chemistry learning takes place and how this learning can be helped and nurtured. This first issue will contain 12 papers, and the second issue will contain 14 papers representing all categories of papers from the conference.

The ECRICE 2014 conference provided a splendid opportunity to discuss recent findings, new ideas, start or enhance collaboration, and meet old and new acquaintances. The conference series will continue in 2016 in Barcelona, Spain. The ECRICE 2014 conference was financially supported by the University of Jyväskylä, the Federation of Finnish Learned Society, and the City of Jyväskylä.

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