

### **Annual National Report on Chemical Education in Finland 2014-2015**

#### 1. Abstract

The Division of the Chemical Education is the national Society for chemistry teachers. The intension of the division is to inform and to offer seminars and other appointments for chemistry teachers at all educational levels and to maintain the cooperation between teachers and the Finnish industry. The division has about 300 members all over Finland.

## 2. National Education Policy

Providing equal opportunities for all citizens to high-quality education and training is a long-term objective of the Finnish education policy. The key words in Finnish education policy are quality, efficiency, equity and internationalisation. The basic right to education and culture is recorded in the Constitution. The policy is built on the principles of lifelong learning and free education. Education is seen as a key to competitiveness and wellbeing of the society.

There is a wide-spread consensus of the main pillars of education policy and the policy is characterized by cooperation and continuity - evolution rather than revolution. Tripartite partnership among Government, trade unions and employer organisations is an integrated part of policy-making. Participation and consultation of a wide range of different stakeholders play a central role in educational reform. Teachers and the Trade Union of Education as their representative are the key players in the development of education. The main objectives and broad lines of the policy are defined at central level, but the implementation of these is the responsibility of the local level. The main

steering document in the Finnish education policy is the Government's Development Plan for Education and Research.

#### 3. Events in Chemical Education

Organizations organizing annually seminars, further education, and offering services etc. for chemistry teachers are the following:

- The Finnish National Board of Education, http://www.oph.fi/english
- The Finnish Association for Teachers of Mathematics, Physics, Chemistry and Informatics MAOL, <a href="http://www.maol.fi/maol-ry/?L=2">http://www.maol.fi/maol-ry/?L=2</a> is a pedagogical subject organization which works for the advancement of mathematics and natural sciences in Finnish society) offering local pedagogical club functions, networking, further education, and support material for education
- The aim of LUMA Centre Finland, <a href="http://www.luma.fi/centre">http://www.luma.fi/centre</a> is to inspire and motivate children and youth into mathematics, natural sciences and technology through the latest methods and activities of science and technology education. The aim is also to support the lifelong learning of teachers working on levels of education from early childhood to universities, and strengthen the development of research-based teaching..

# 4. Activities and Liaison with the Chemical Industry, Organisations and Schools

The Finnish Chemical Society, <a href="http://kemianseurat.fi">http://kemianseurat.fi</a> offers in-service training and was one of the organizers for the Event ChemBio Finland 18-19.3 2015 in Helsinki, about 6000 visitors attended the exhibition and seminars.

The Division rewarded and promoted a number of students and teachers, who showed deep interest in chemistry.

The European Conference on Research in Chemical Education (ECRICE) offers researchers and teachers the possibility to exchange experiences on research in chemical education carried out at every educational level - from primary school up to graduate studies. The conference was hosted by the University of Jyväskylä in cooperation among others with the Division.

The Division organized a seminar on "Functional Materials" in cooperation with the Pharmaceutical Faculty Helsinki University and also a visit to the museum in Joutsen Apteekki, the oldest pharmacy in Finland which is still in operation.

# 5. International and European Initiatives

Members of the Finnish Chemical Societies and its divisions have participated in numerous international networks, expert committees, and projects for example in the IUPAC Committee on Chemistry Education, Division of Chemical Education of the European Association for Chemical and Molecular Sciences, and in European Chemistry and Chemical Engineering and Education Network activities.

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