

Update on CITIES

Chemistry and Industry

for Teachers in European Schools

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EMCEF-ECEG Social Dialogue Committee
WG Education, Training, Lifelong Learning
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CITIES Partners

1. Contractor and Co-Ordinator: Europa Fachhochschule Fresenius (DE)
2. European Chemistry Employers' Group ECEG (BE)
3. European Mine, Chemical and Energy Workers' Federation EMCEF (BE)
4. Johann-Wolfgang-Goethe-Universität (DE)
5. Czech Chemical Society (CZ)
6. Gesellschaft Deutscher Chemiker (DE)
7. Insitut Químic de Sarriá (ES)
8. Uniwersytet Jagiellonski (PL)
9. Nottingham Trent University (UK)
10. Royal Society of Chemistry (UK)

What is CITIES all about?

- Giving teachers the tools to tell pupils why & how chemistry is indispensable in a modern society
- Inspiring them to tell others how chemistry makes a difference to their lives
- Helping teachers to make the chemistry they are required to teach more exciting, vibrant and relevant to its real life context
- Interesting teachers and pupils alike in the European context in which all this happens

The modules we are looking to produce

Module 1: European context of chemical education, training and development

1. General Basic Information on EU policies, with special respect to the context of chemistry and chemical industry
2. International educational programs, sources of funding etc.
3. Different approaches to vocational and tertiary chemical education in Europe (not only: also secondary – EURYDICE), with sub-section on student work experience and student mobility
4. Employability of the graduates in a global economy

Product:

Handbook „Chemical education in Europe“ (EN, PL, CZ, DE, ES), with a multilingual glossary of key „Euro-Chem“ terms

The modules we are looking to produce

Module 2: Commerce and innovation – our future

Scope and impact of the European Chemical Industry, its workers and employees and of chemistry based products on the European economy, on citizens' everyday life, on the environment and on the labour market

Module 3: Chemistry changes everything

Current and future development trends in the field of commercial application of chemical innovation, with particular regard to the European area (covering fields such as nano-technology, bio-technology, bio-analysis, sustainability of material and energy use, Green Chemistry, chemical engineering design etc.)


The modules we are looking to produce

Module 4: Chemistry – bringing it alive

Modern, practically oriented, appealing methodologies of teaching chemistry to a broad spectrum of pupils from different abilities and interests, including those who are heading for a career in chemistry and those who will just be “users” of applications of chemistry and voters in elections (societal aspects)

- Forensic chemistry brought alive
- Chemistry of a tin of Ravioli
- Everyday chemistry experiments

Present Status of Project

- Interim report done by Dec. 31st, 2007
- Needs report done
- Meeting in Prague Nov. 2007 decided on revised module structure and homepage structure
- Internal project web page operational (<https://cities.rikanise.net/>)
- External project web page operational by mid-march – structure see 

Material to which Social Partners need to contribute

- **Commerce and innovation – our future**
(Module 2, structure/branches, innovative fields, SusChem)
- **Chemistry changes everything** 
(Module 3, "benefit landscape", product lines, value chain)
- **Working chemistry**
Company profiles (ECEG)
This section needs country specific material
- **Careers from chemistry**
(if possible: series of "faces", with profiles, interviews, statements; delivered by EFF-Leo, RSC-Colin, Czech Chem. Soc....) This section needs country specific material

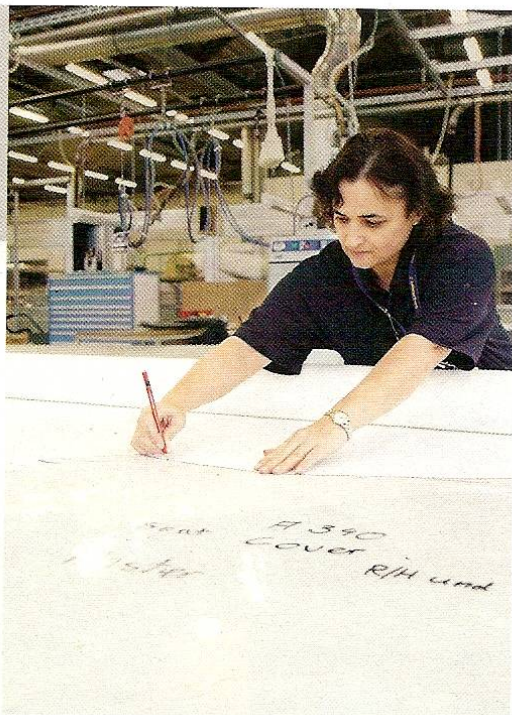
Needed from Social Partners

- Country overview of Chemical Industry, 2 pages max. per country, from CZ, PL, UK, DE, ES, and other countries
 - total size, statistics (number of companies, employees, structure, branches/products)
 - link to homepages of national social partner web pages (do they already give data named above?)
 - personal statements (see next page)
- company/product profiles

Personal Statements we have

- Robert Oswald, Robert Weiß
- 4 Spanish employees BASF Tarragona
- One Turkish and one Italian interview sent by Guiseppe Bellissima

We need more from different levels and propose to model some of them as shown in the following slide



Was machen Sie da, Frau Ekinci?
// What's that you're doing, Ms. Ekinci?

Arife Ekinci, 49, ist Näherin und arbeitet seit 1984 in der Sattlerei (WO481) bei Lufthansa Technik in Hamburg.

Überwiegend fertigt sie Vorhänge an

und erstellt die passenden Schablonen nach Zeichnung. Arife Ekinci: „Hier zeichne ich nach einer Schablone die Konturen für Kälteschutzvorhänge. Auf dem Tisch liegt eine Lage Filz und darunter Kunstleder. Aus beiden Materialien entstehen nach dem Nähen die Kälteschutzvorhänge. Bis ein Sichtschutzvorhang fertiggestellt ist, durchläuft er mehrere Arbeitsstationen: Vom Zuschnittstisch wandert er zur Kettelmaschine, dann weiter zur Strickmaschine und anschließend zur Nähmaschine, an der er fertiggenäht wird. Danach geht es zum Bügeltisch, wo er den letzten Feinschliff bekommt. Es gibt bis zu 70 verschiedene Vorhänge. Je nach Größe brauche ich zwischen drei und zwölf Stunden, bis ein Vorhang fertig ist. Die größten Vorhänge messen bis zu zwei mal drei Meter und bestehen aus vier bis fünf Teilen.“ // Arife Ekinci, 49, is a seamstress. She has been working at the Lufthansa Technik saddlery in Hamburg since 1984. Ms. Ekinci mainly draws patterns and sews insulating curtains. “Right now I'm tracing a pattern for insulating curtains. The roll of felt on the table and the sheet of imitation leather beneath it are the materials I use to sew them. Opaque curtains have to go through several work stages: from the cutting table to the chain-stitching machine, from the embroidering machine to the sewing machine and from there to the ironing board for the final touch. There are as many as 70 different types of curtain. It takes between three and five hours to make one, depending on its size. The largest curtains measure two meters by three meters and consist of four or five sections.”

Model of Chemists' Statements

Should

- be brief but attractive
- give idea about what people are doing at different levels
- wake „appetite“ to learn/study chemistry

Financial Balance

	P2 ECEG	P3 EMCEF
1. Staff costs	0	480
2. Direct costs	0	137
2.1 Travel & subsistence	0	137
2.2 Equipment & materials	0	0
2.3 Subcontracting, consultancy & other external services	0	0
2.4 Other costs	0	0
3. General costs	500	500
TOTAL	500	1.117

This is what we wanted to tell you...

...thank you for your attention, merci,
gracias, grazie, bedankt, köszönöm,
danke schön, dzenkuje, dekuji.....

...we are happy to listen to your
comments and hope for active
contributions to CITIES from all of you:
who can do what? (please give me your business card)

gros@fh-fresenius.de (project co-ordinator)