



Chemistry: All About You

Module 3. Additional online resources on
chemistry & its applications

CONTENTS

Module 3. Additional online resources on chemistry & its applications.....	2
1. Economy- business.....	2
2. Energy.....	3
3. Food.....	4
4. Fuels	5
5. Health.....	6
6. Transport.....	7



MODULE 3. ADDITIONAL ONLINE RESOURCES ON CHEMISTRY & ITS APPLICATIONS

In this section, teachers can find links to resources and projects useful to prepare the lessons, give background information to the students and find more activities to organise in class as a complement to the video “*Chemistry, It’s All About You*”. This section provides links to resources by topics, giving access to information on the various applications of chemistry.

1. ECONOMY- BUSINESS

Source	Link	Description
Journal of Business Chemistry	Click here	This article addresses the near-term business of chemistry environment in which the industry will operate as well as the implications for the global business of chemistry.
Advancing Green Chemistry	Click here	Website of an organisation promoting the development and adoption of Green Chemistry, namely, the scientific foundation of greener products, a sustainable economy, and healthier people. The website provides definitions and principles as well as teaching materials.
Living with Chemicals blog	Click here	Blog on the topic of building cooperative relationships between chemical companies and communities
Oxford Economics	Click here	Report of Oxford Economics on the economic benefits of chemistry research to the UK
American Chemistry Council	Click here	Article on chemistry in the economy
Wikianswers	Click here	Question: What is the importance of chemistry in the economy?

2. ENERGY

Source	Link	Description
U4energy competition	Click here	U4energy is a challenging, pan-European competition for primary and secondary schools. The aim is to encourage them to contribute innovative ideas on reducing energy consumption and to raise awareness on how to use energy more responsibly.
Chemistry explained – Foundations and applications	Click here	Article explaining the importance of energy in the understanding of chemistry
The Scripps research institute	Click here	Energy Source Chemistry
Central Science, Cleantech Chemistry	Click here	Article on Algae and Water Energy
RSC – Advancing the chemical sciences	Click here	Article on chemistry, Energy and Climate Change
Chemistry is all around us project	Click here	Article on Chemistry and energy of the future taken from the project website of “Chemistry is all around us,” which aims to contribute to the promotion of lifelong learning of scientific subjects and chemistry in particular.

3. FOOD

Resource	Link	Description
Tutorial website from Phoenix College: 'Chemistryland'	Click here	Resource on The Early Impact of Chemistry: Preservation Chemistry
ACS Chemistry for Life ©	Click here	Article on the careers of Food and Flavour Chemists
Chemistry explained – Foundations and applications	Click here	Article on food preservatives
Chemistry through food	Click here	Series of entertaining lectures and demonstrations about chemistry and about food presented by Professors Charles Abrams and Joy Walker. Each session includes fascinating stories about food and its preparation with emphasis on the chemistry that underlies the way we experience food.
PennState College of Agricultural Sciences website	Click here	Definition of Food Chemistry

4. FUELS

Resource	Link	Description
Website of the U4energy project, a European competition on energy education organised by the European Commission	Click here	U4energy project offers debate theme cards on energy that can be used as a basis to discuss the role of chemistry in the energy sector.
Chemistry explained – Foundations and applications	Click here	Articles on Chemistry and energy
Website of the ACS – Chemistry for Life – ACS Webinars	Click here	Webinar: Can We Grow Energy? The Role of Chemistry in the Energy Future
New Zealand Institute of Chemistry website	Click here	Article about chemistry in the coal industry
Oracle ThinkQuest Education Foundation website	Click here	Article: Comparing Alternative Energy Forms – Chemistry & Nuclear Power
Blog on Chemistry for a sustainable world	Click here	Articles on Green Chemistry, the environment, science & society, for the non-technical reader
eNotes.com website, proposing comprehensive online educational resource.	Click here	Article on fuels and fuel chemistry

5. HEALTH

Resource	Link	Description
Xplore Health project website	Click here	Xplore Health is a European educational portal on cutting-edge health research that offers innovative multimedia and hands-on experience to young people through the internet, schools and science centres and museums.
Nanoyou project website	Click here	NANOYOU (Nano for Youth) was a European project that aimed to increase young people's basic understanding of nanotechnologies (NT) and to engage in the dialogue about their ethical, legal and social aspects (ELSA).
Website of the National Institute of General Medical Sciences	Click here	Article on the role of chemistry in health research and drug development
The Health blog of the Wall Street Journal	Click here	Article "Nobel Prize-winning Chemistry Process Helps in Medicine Synthesis"
WikiAnswers website	Click here	Article on the contributions of chemistry to medicine

6. TRANSPORT

Resource	Link	Description
Two brochures produced by the European Petrochemical Association on the connection between cars and the chemical industry	See " <i>Chemistry: All About You</i> " webpage	A brochure on the history of Mercedes and a cartoon on the first test drive of a Mercedes developed in 2009
Website of U4energy project, a European competition on energy education organised by the European Commission	Click here	U4energy project offers debate theme cards on transportation that can be used as a basis to discuss the role of chemistry for transportation.
Yahoo Answers website	Click here	Questions and answers on the importance of chemistry in transportation
Website of the National Academies Press publishing reports issued by the National Academy of Sciences, of Engineering, the Institute of Medicine, and National Research Council.	Click here	Article: Role of 21 st century chemistry in transport and energy
Website of the Combustion Energy Frontier Research Centre of Princeton University	Click here	Article on chemistry and transport
Chemistry Diaries: the good, the bad and the ugly: blog about chemistry and how it affects us in our daily lives	Click here	Article on Chemistry in transport
All Experts website	Click here	Chemistry (including Biochemistry) – Article: Is petroleum used to make car parts?
Live Science website	Click here	Article on The Chemistry of Life: The Plastic in Cars
Blog on Chemistry for a sustainable world	Click here	Articles on Green Chemistry, the environment, science & society, for the non-technical reader including resources on transport

