

**Online Yearbook on Research for
Sustainable Chemistry
Guide to use the Website**

2019

Federchimica

The National Federation of the Chemical Industry represents 1,400 companies for a total of over 92,000 employees; it is made up of 17 sector associations and 38 product groups. The main objectives of Federchimica are the coordination and protection of the role of the Chemical Industry operating in Italy and the assistance to associated companies.

The Research, Development and Innovation Committee (Co.R.S.I.)

The Co.R.S.I., chaired by Dr. Alessandro Sidoli, is the institutional body of Federchimica that deals with issues related to R&D in chemical companies. The Committee is composed by representatives of associated companies, associations and permanent guests.

At the moment, the Co.R.S.I. deals with specific issues, thanks to the support of 4 Working Groups:

Open Innovation and sustainability
Nanomaterials and safety
European funding programmes (“Horizon 2020” and “Horizon Europe”) and National funding
Technology transfer

INDEX

ONLINE YEARBOOK ON RESEARCH FOR SUSTAINABLE CHEMISTRY	Pag. 1
1. HOMEPAGE	Pag. 1
2. SEARCH TOOL	Pag. 2
3. COMPANY SHEET	Pag. 4
4. UNIVERSITY SHEET	Pag. 6

ONLINE YEARBOOK ON RESEARCH FOR SUSTAINABLE CHEMISTRY

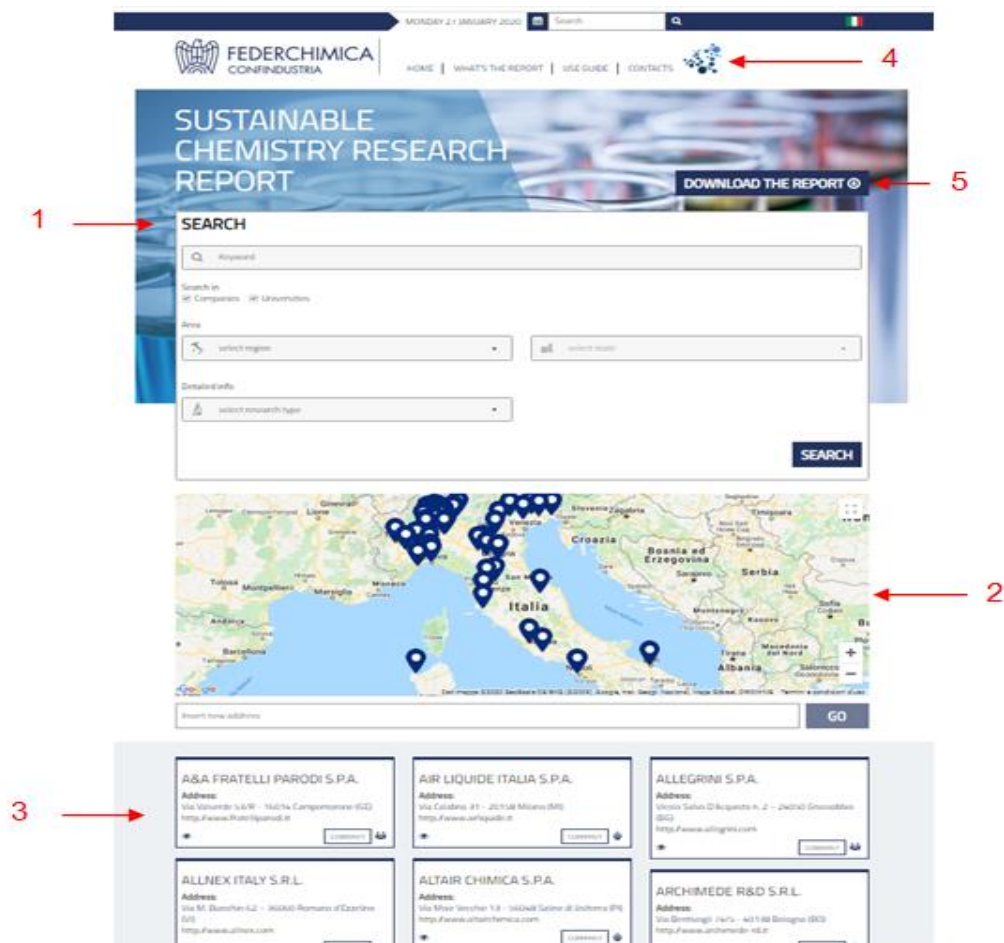
The website Yearbook on Research for Sustainable Chemistry was created by Federchimica to support users in finding information on associated chemical companies and university departments, involved in R&D for sustainable chemistry. This system allows an easy and fast research of these data.

1. HOMEPAGE

Going to the website <http://annuario.federchimica.it/> you can access the homepage of the website of the Online Yearbook on Research for Sustainable Chemistry.

In the Homepage you can find:

1. The research tool;
2. The national map: here it is possible to see the location of companies and universities participating;
3. A list with previews of the sheets of all companies and universities;
4. The main menu: starting from this point you can go to what's the report, partners and contacts pages;
5. The link to download the Yearbook.



2. THE SEARCH TOOL

The search tool allows to find companies and university departments within the Yearbook, using as filters the geographical area and the type of research carried out by the company or university department (product or process research, incremental or innovative, research for water saving, chemistry from renewable sources, wastewater treatment, biotechnology, reduction of CO₂ emissions).

Selecting only on the “Companies” checkbox, the filters “Select business sectors” (defined on the basis of the product classification of associated companies) and “Select company size” (with reference to the European definition of medium, small and micron enterprise) will also appear.

MONDAY 27 JANUARY 2020 Search

FEDERCHIMICA CONFINDUSTRIA HOME | WHAT'S THE REPORT | USE GUIDE | CONTACTS

SUSTAINABLE CHEMISTRY RESEARCH REPORT DOWNLOAD THE REPORT

SEARCH

Keyword

Search in
 Companies Universities

Area
select region select state

Detailed info
select research type select business sector select company size

SEARCH

Selecting only the "University" checkbox you will also see the "Select scientific area" filter (identified areas are: chemistry and materials science, biotechnology, engineering, agriculture, veterinary, pharmacy and medicine).

MONDAY 17 FEBRUARY 2020 Search

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SEARCH

Keyword

Search in
 Companies Universities

Area
select region select state

Detailed info
select research type select scientific sector

SEARCH

3. COMPANY SHEET

After having carried out a search with the “Search tool” or having selected the company name directly from the list on the homepage, you will access the Company sheet. In this page you can see the following information:

1. General information (company name, logo, address, and contact person);
2. Logo of Responsible Care and/or SET and/or Suschem Italy in case the company participates to these initiatives;
3. Buttons “download”, “print” and “send link by e-mail”;
4. Detailed info (size of the company, percentage of research expenditure on turnover, number of researchers and business sectors);

The screenshot shows the company sheet for BRACCO IMAGING S.p.A. with the following elements:

- Navigation:** SEARCH (dropdown) and BACK TO RESULTS buttons.
- Breadcrumbs:** HOME >> Companies >> BRACCO IMAGING S.p.A.
- Company Name:** BRACCO IMAGING S.p.A.
- Section:** GENERAL INFORMATIONS
- Company Logo:** BRACCO LIFE FROM INSIDE.
- Address:** BRACCO IMAGING S.p.A., Via Folli 50 - 20134 Milano (MI), Web site: http://www.bracco.com, download business card.
- Contacts:** Luciano Lattuada, luciano.lattuada@bracco.com, +39 0221772654.
- Action Buttons:** DOWNLOAD, Print, and Email icons.
- Participation Logos:** Responsible Care and susCHEM IT.
- Section:** DETAILED INFO
- Metrics:**
 - Dimension: LARGE COMPANY
 - Research expenditure (% of turnover): 9.00%
 - Number of researchers: 100
- Business Sectors:** Active and intermediate principles for the pharmaceutical industry.

Red arrows and numbers 1-4 indicate the following features:

- 1:** Points to the company logo, address, and contact information.
- 2:** Points to the Responsible Care and susCHEM IT logos.
- 3:** Points to the DOWNLOAD, Print, and Email buttons.
- 4:** Points to the DETAILED INFO section, including Dimension, Research expenditure, Number of researchers, and Business sectors.

5. Description of industrial research for sustainable chemistry (detailed by type of research);
6. Collaborations with Public Research (universities, research centres, foundations, etc.).

DESCRIPTION OF INDUSTRIAL RESEARCH FOR SUSTAINABLE CHEMISTRY

5

Product research	
Innovative research	Research of new MRI contrast agents containing metals more sustainable than gadolinium or without metals.
Incremental research	Research of more efficient gadolinium complexes for MRI with the aim to decrease the dose and, consequently, to improve the sustainability and reduce the environmental impact.
Process research	
Innovative research	New processes with low environmental impact (e.g. processes exploiting flow continuous reactors and microreactors).
Incremental research	Intensification of current processes in order to increase safety and yields and reduce the environmental impact, without drug master file (DMF) modification.
Water conservation research	Increasing the productivity of reactions performed in water; engineering interventions to recycle process waters.
Chemistry from renewable sources research	Synthesis of raw materials from renewable sources.
Wastewater treatment research	Recovery and recycle of strategic raw materials from wastes and wastewaters; optimization of wastewater treatment through new enabling technologies.
Biotechnological research	Application of biocatalysis to organic chemistry processes and to the treatment of industrial wastes.
CO₂ emission reduction research	Implementation of more efficient systems for energy production and transportation of goods and people.

6 → COLLABORATIONS WITH PUBLIC RESEARCH

- CNR of Naples
- CNR of Padua
- IIT, Genova

4. UNIVERSITY SHEET

After having carried out a search by the “Search tool” or having selected the university department directly from the list on the homepage, you will access the University sheet. In this page you can see the following information:

1. General information (name, logo, address and contact details of the Director of the Department, scientific area and Suschem Italy logo in case the Department joins the Platform);
2. Buttons “download”, “print” and “send link by e-mail”;
3. Specific information (university staff, number of students enrolled, post-graduate training and number of patents in portfolio);

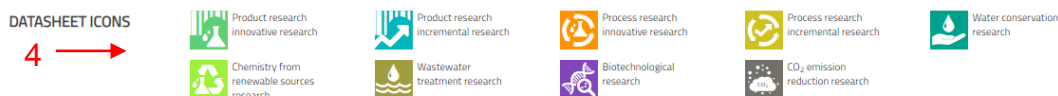
CNR - Dipartimento Scienze Chimiche e Tecnologie dei Materiali, Institute of Crystallography (IC)

GENERAL INFORMATIONS

The screenshot shows the following layout:

- Top Right:** Three buttons: "DOWNLOAD", "Print", and "Send link by e-mail". Red arrows labeled "2" point to these buttons.
- General Information Section:**
 - Logo:** DSC TM logo with "Consiglio Nazionale delle Ricerche" and "Dipartimento Scienze Chimiche e Tecnologie dei Materiali" text.
 - Text:** "CNR - Dipartimento Scienze Chimiche e Tecnologie dei Materiali", "Institute of Crystallography (IC)", "Via Amendola 122/O - 70126 Bari (BA)", "Web site: http://www.ic.cnr.it", "download business card".
 - Contact:** "Contacts", "Dr. Michele SAVIANO", "+39 0805929142".
 - Icons:** A grid of six icons representing various scientific fields: a flask, a DNA helix, a factory, a plant, a dog, and a caduceus.
- Numbered Annotations:**
 - 1:** Points to the general information text and the icon grid.
 - 2:** Points to the "DOWNLOAD", "Print", and "Send link by e-mail" buttons.
 - 3:** Points to the "DETAILED INFO" section.
- DETAILED INFO Section:**
 - Staff:** 56 Researchers, 3 Technologists, 25 Structured Technicians, 3 AdministrativeTechnicians.
 - Registered students:** (No numerical data provided).
 - Post Lauream Training:** 8 enrolled in doctoral programs, 10 Research fellows.
 - Patents:** 6.

4. “Datasheet icons” (symbol legend useful for reading the R&D activities table);
5. R&D activities detail (for each research activity the symbols of the type of research are indicated as defined in the iconography). Selecting the drop-down menu “select type of research” you can search for R&D activities according to the proposed filters;
6. Other R&D organizations (external research structures connected to the Department).



R&D ACTIVITIES DETAIL

select research type TOGGLE ALL ELEMENTS ▾

CHEMISTRY AND BIOLOGY

Crystallization techniques for the separation of biopharmaceutical products as antibodies in the pos-production phases. Use of crystallized enzymes for semi-artificial photosynthesis and CO2 conversion into chemicals Toggle ▾

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Characterization and implementation of biological processes for the production of biosensors, bioenergy and fine chemicals Toggle ▾

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Advances diffraction techniques for the characterization of organic and inorganic nanomaterials for biotechnology Toggle ▾

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Design and synthesis of molecules with potential biological activity in the pharmacological and diagnostic field Toggle ▾

Michele Saviano (+39 0805929148)
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Characterization, by development and application of advanced diffraction methods, of molecules of pharmaceutical interest Toggle ▾

Angela Altomare (+39 0805929155)
angela.altomare@ic.cnr.it download business card

OTHER R&D ORGANIZATIONS ← 6

<p>X-RAY Microimaging Laboratory (XMI-L@b)</p>	<p>Diffraction and imaging facility for small and wide angle scattering in transmission (SAXS-WAXS) or reflection (GISAXS/GIWAXS) mode for the characterisation of natural or engineered tissues at molecular and atomic scale, thin films, nanostructured surfaces.</p> <p>Contacts: Cinzia Giannini (+39 0805929167) - cinzia.giannini@ic.cnr.it</p>
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