

Comparing Techo Specialisations *UK vs France*

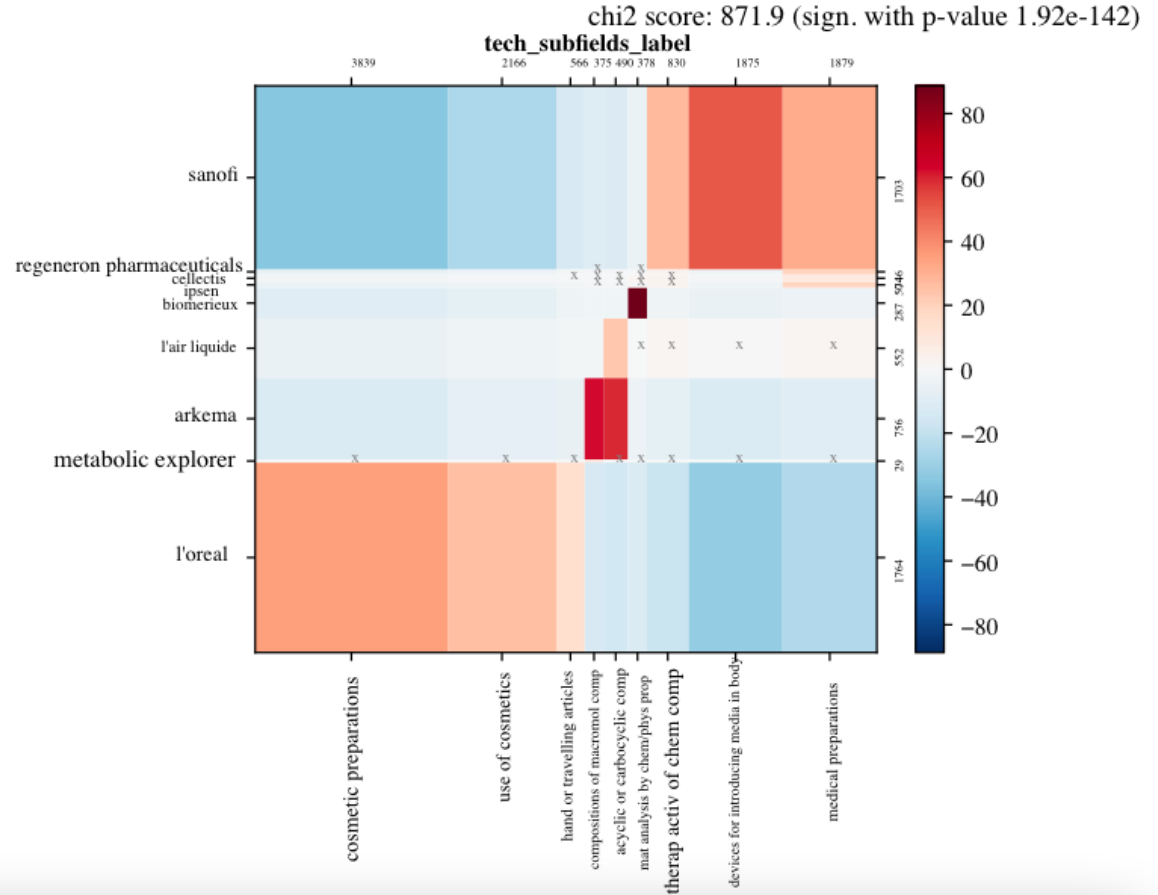
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Approach 1

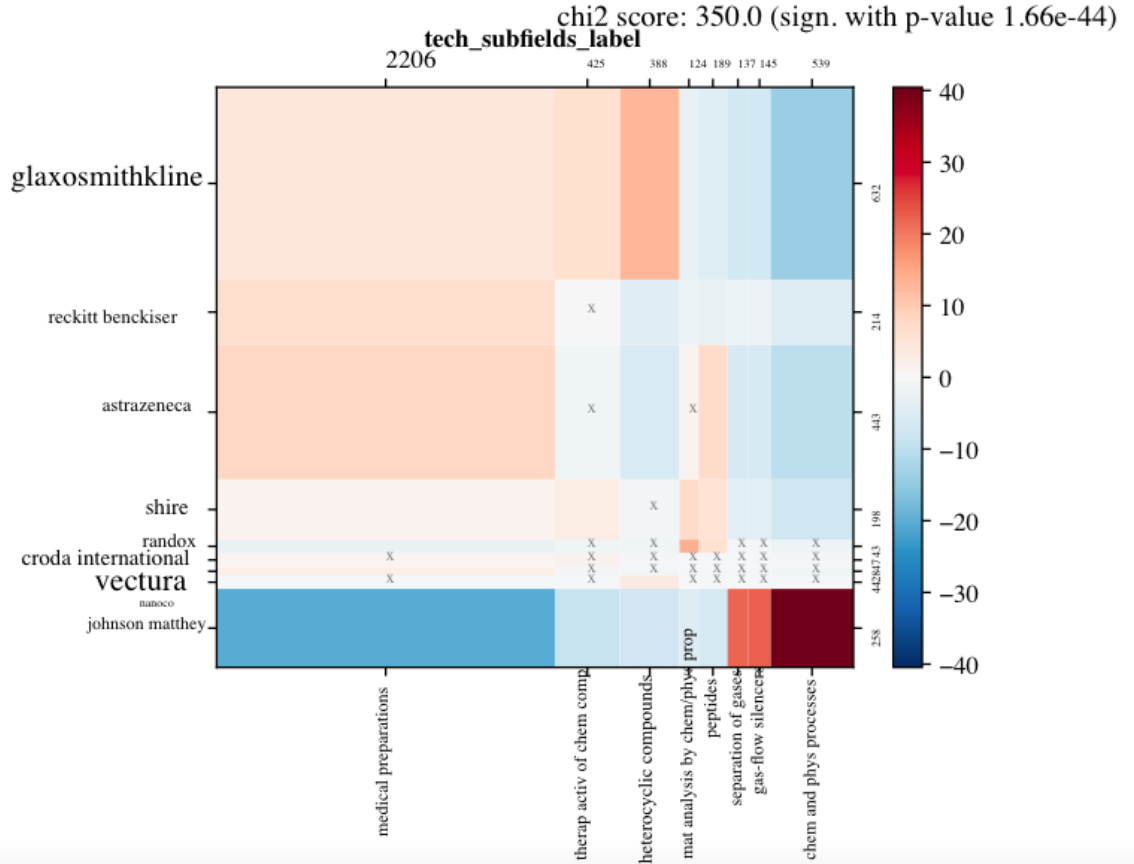
UK and France isolated from any other countries

- Technological specialisation of firms
- Geographical distribution of the top-10 areas

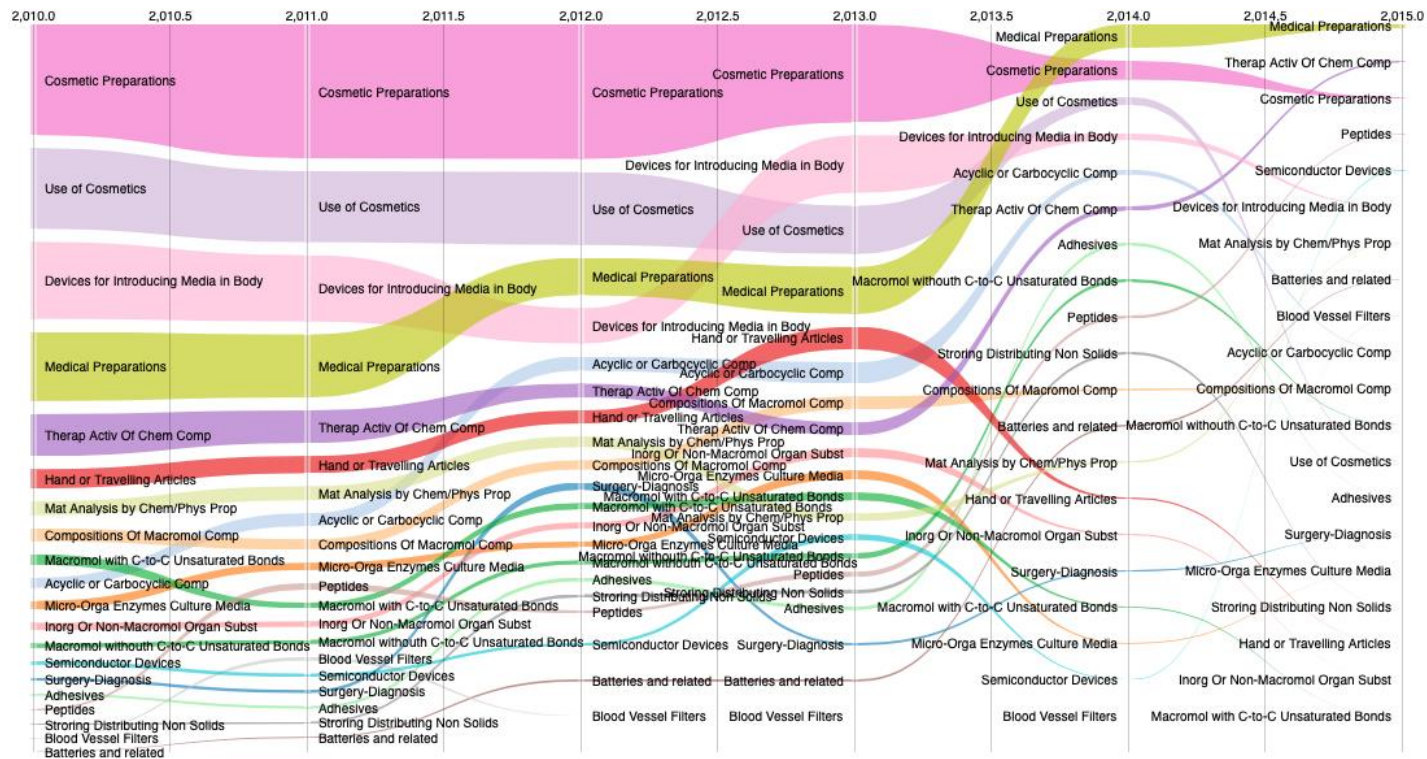
Technological specialisation of firms-France



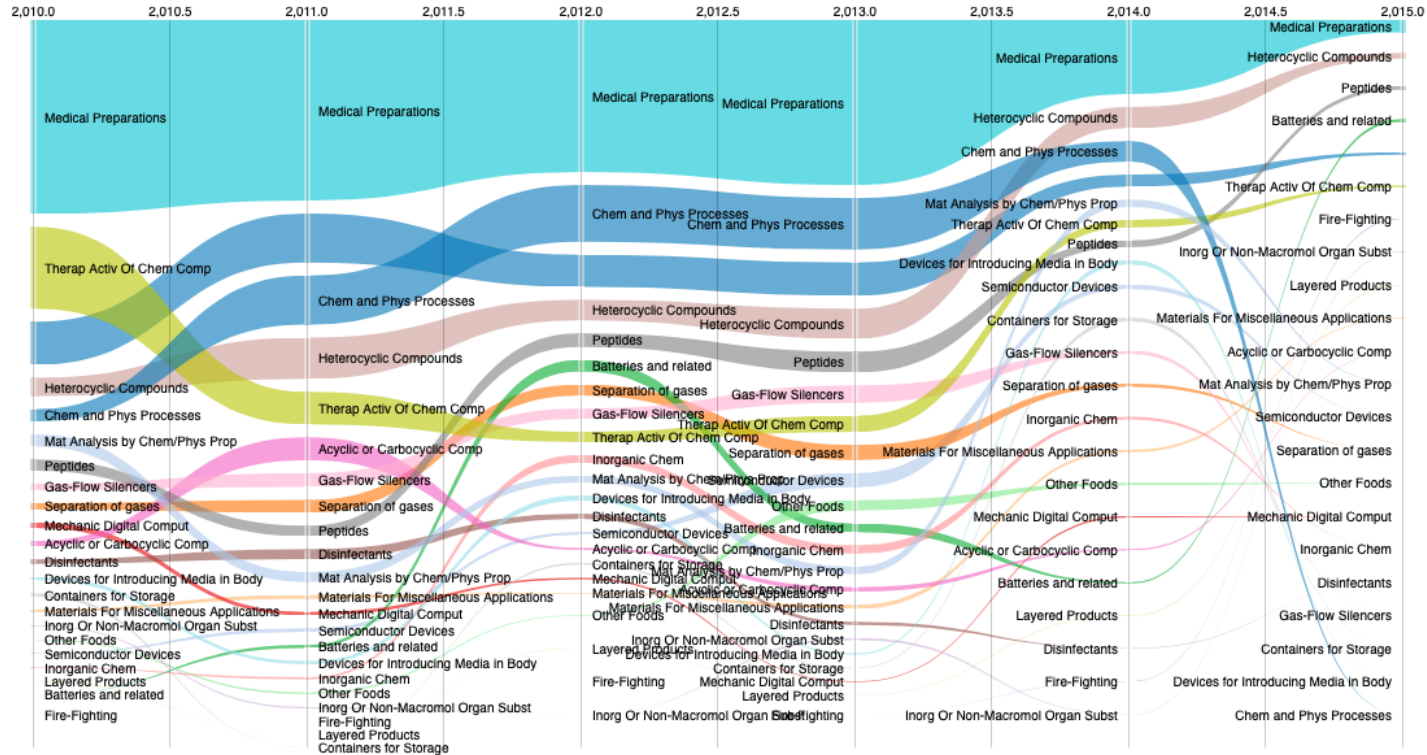
Technological specialisation of firms-UK



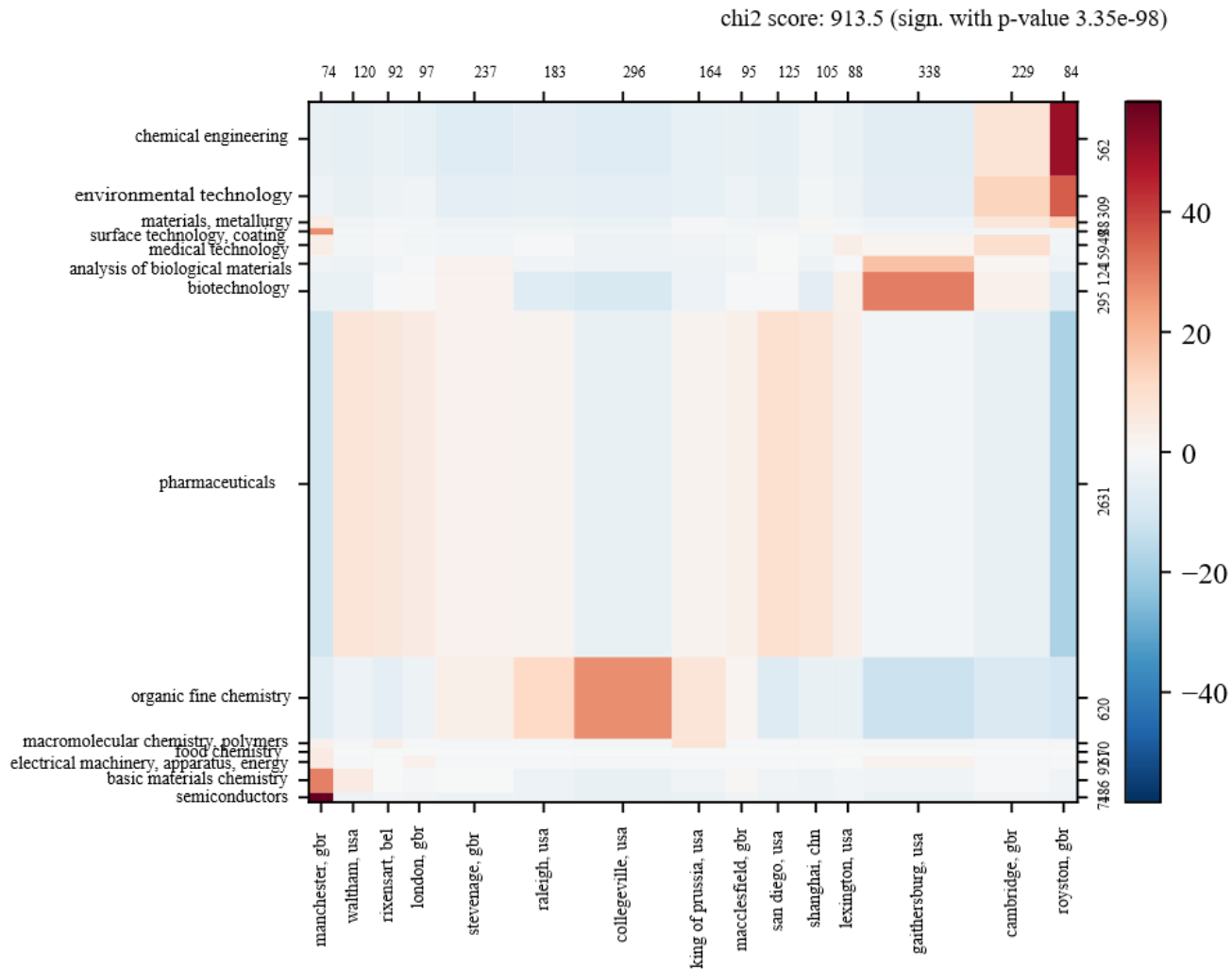
The Shift of Techo Specialisations overtime-France



The Shift of Techo Specialisations overtime-UK



Geographical Distribution of Techo Specialisations- UK



Approach 2

Worldwide and selecting UK-FR: Position of the country in reference to the RoW

RQ: What is the level of specialisation of both countries in reference to the RoW?
What is the position of both countries worldwide?

Assumption: some technologies could be underestimate because of their relative position to the RoW.

Approach 3

Subsetting UK and France:

We condition the data for UK or France to see the patent portfolio of the 2 countries and deep dive into areas that could potentially be underestimated if we consider the world's influence

The aim here is to bring more granularity into areas that may not be covered in approach 2.

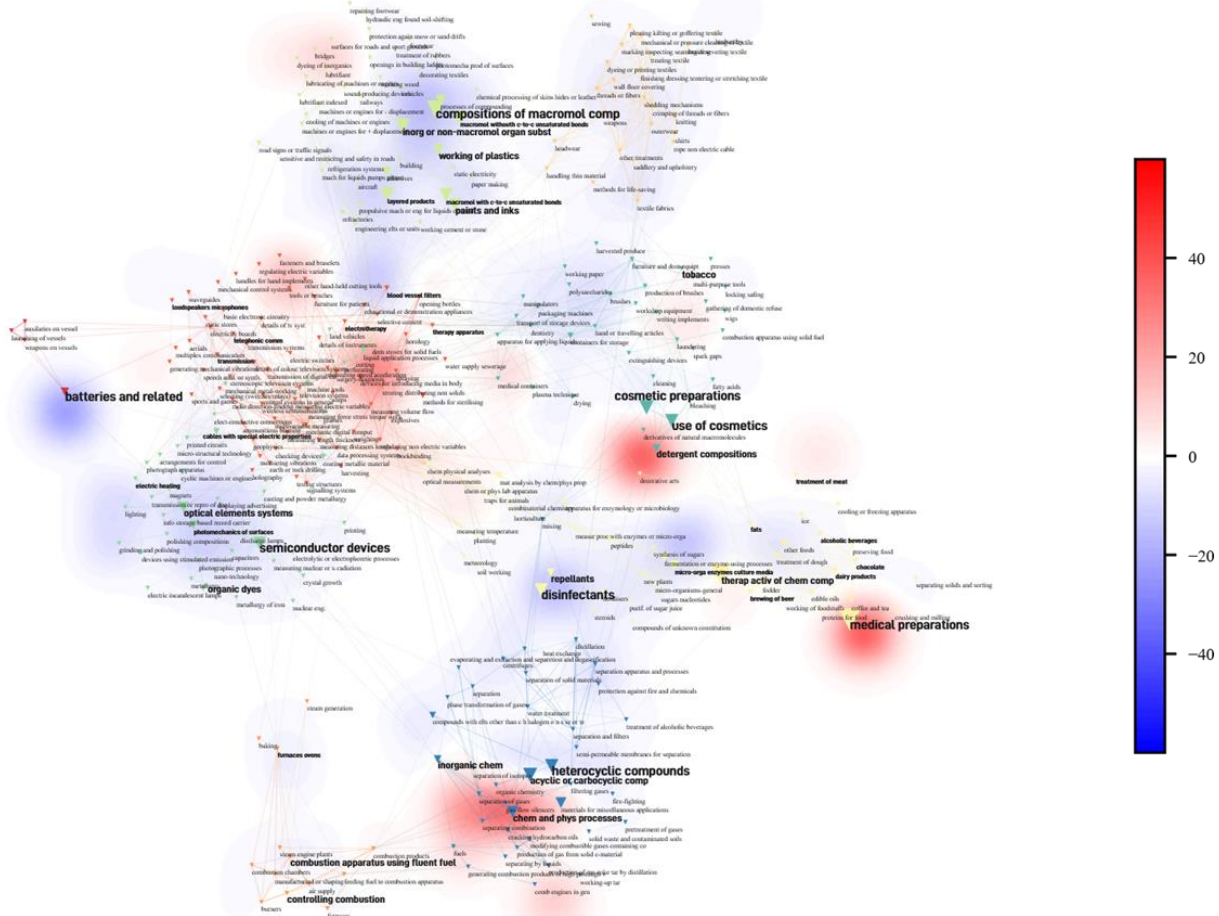
Subfields - *Inventors*

Differences relative to:

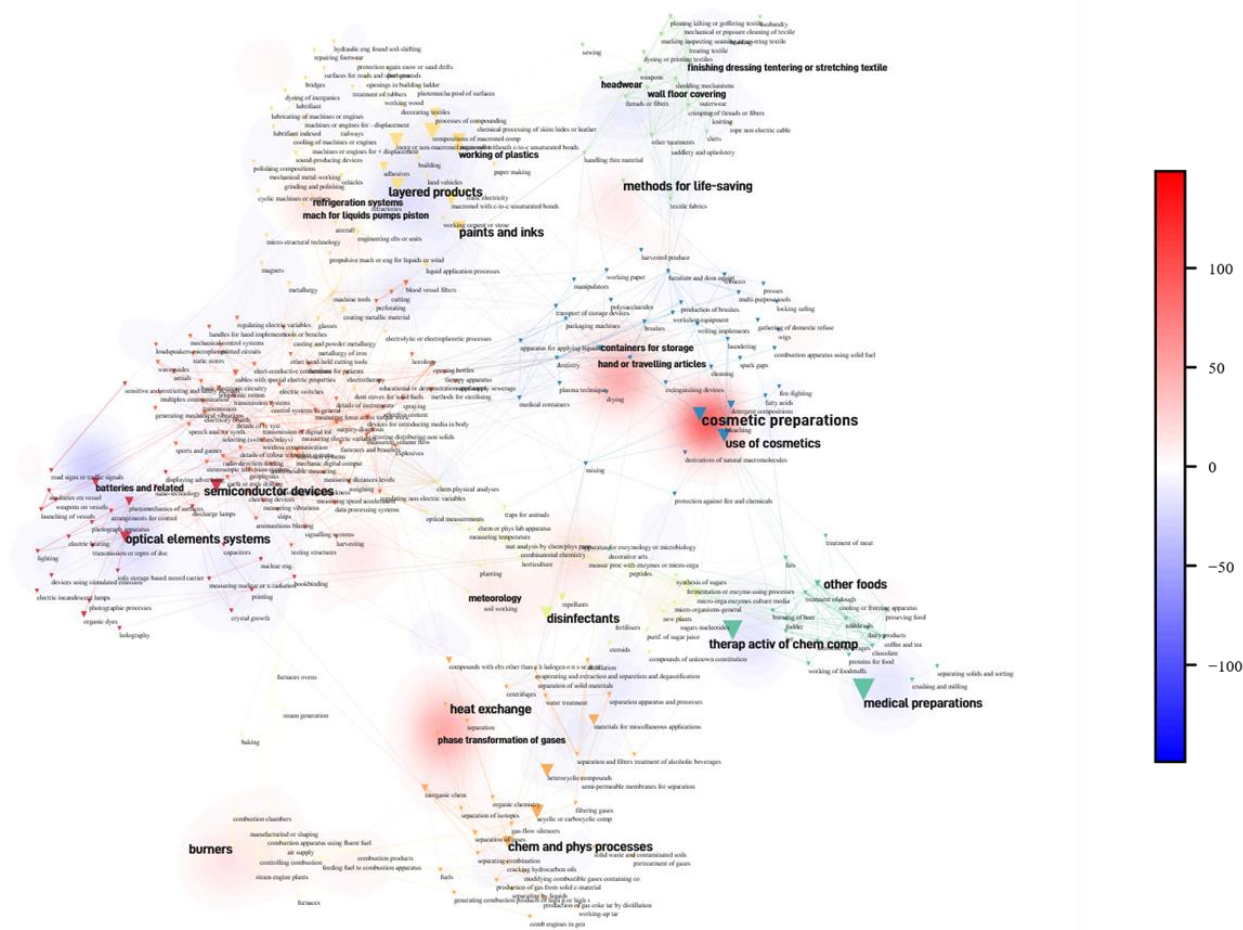
- Worldwide
- UK and France

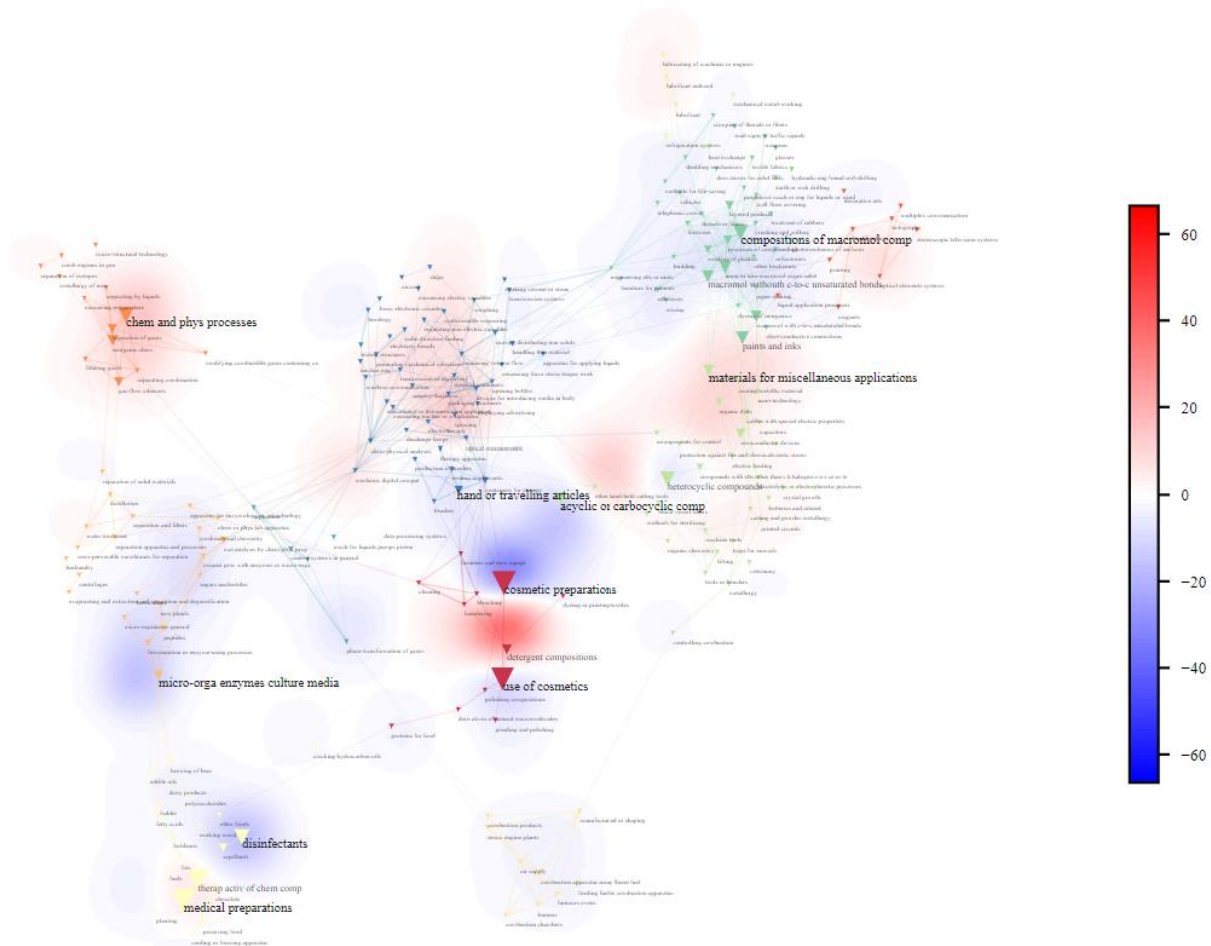
United Kingdom, 2010-2015

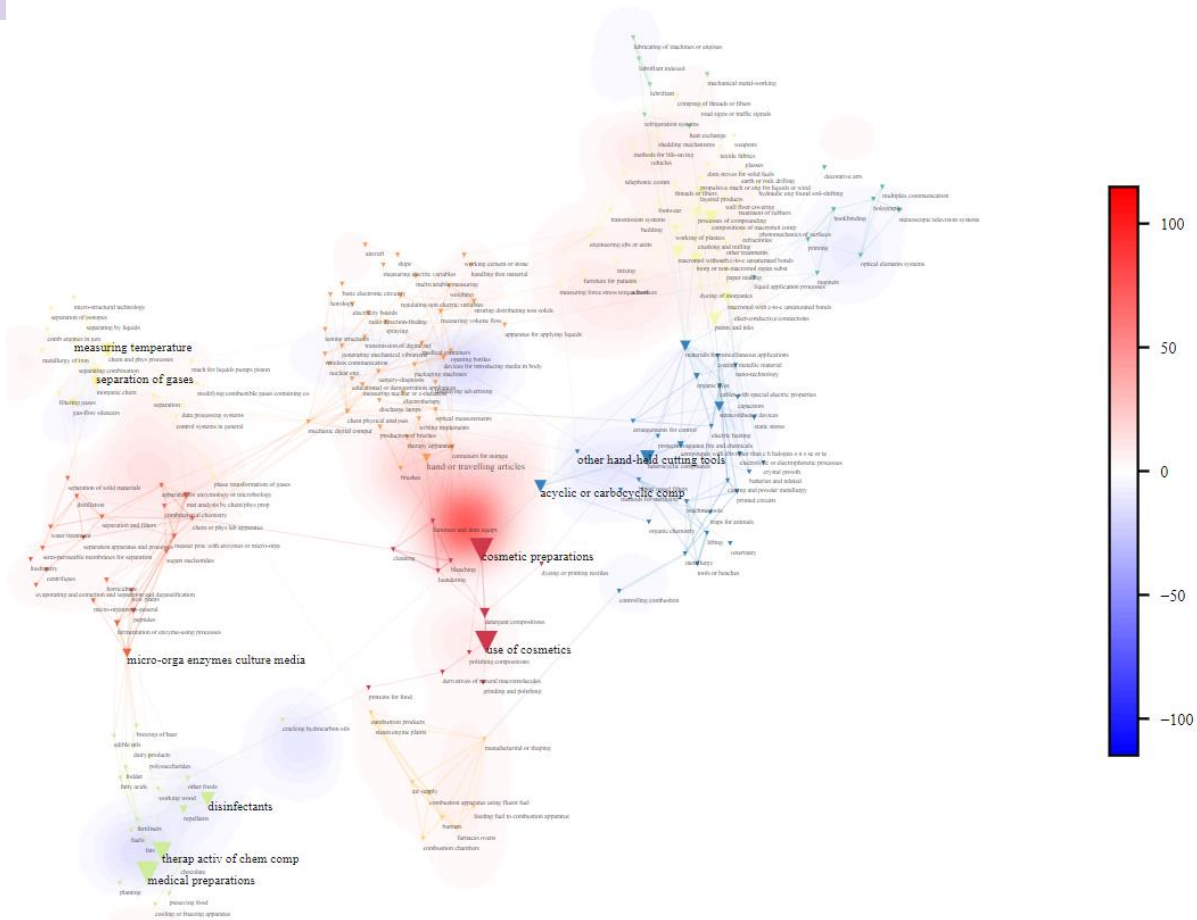
Sub_field ww



France, 2010-2015





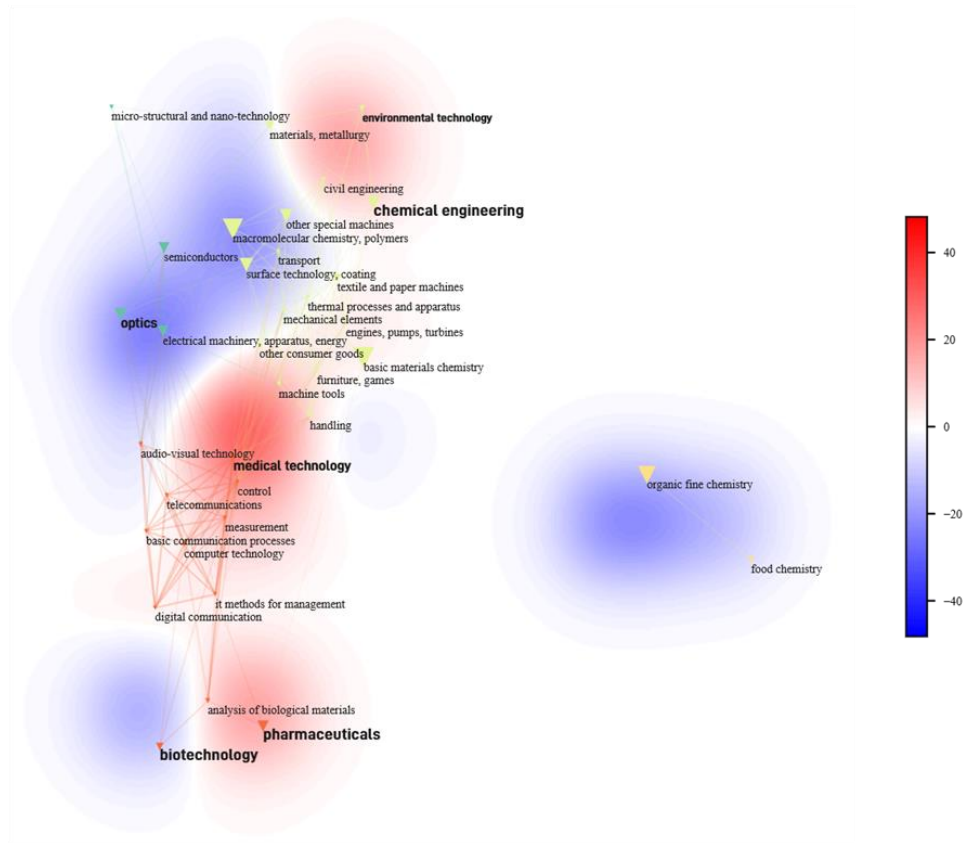


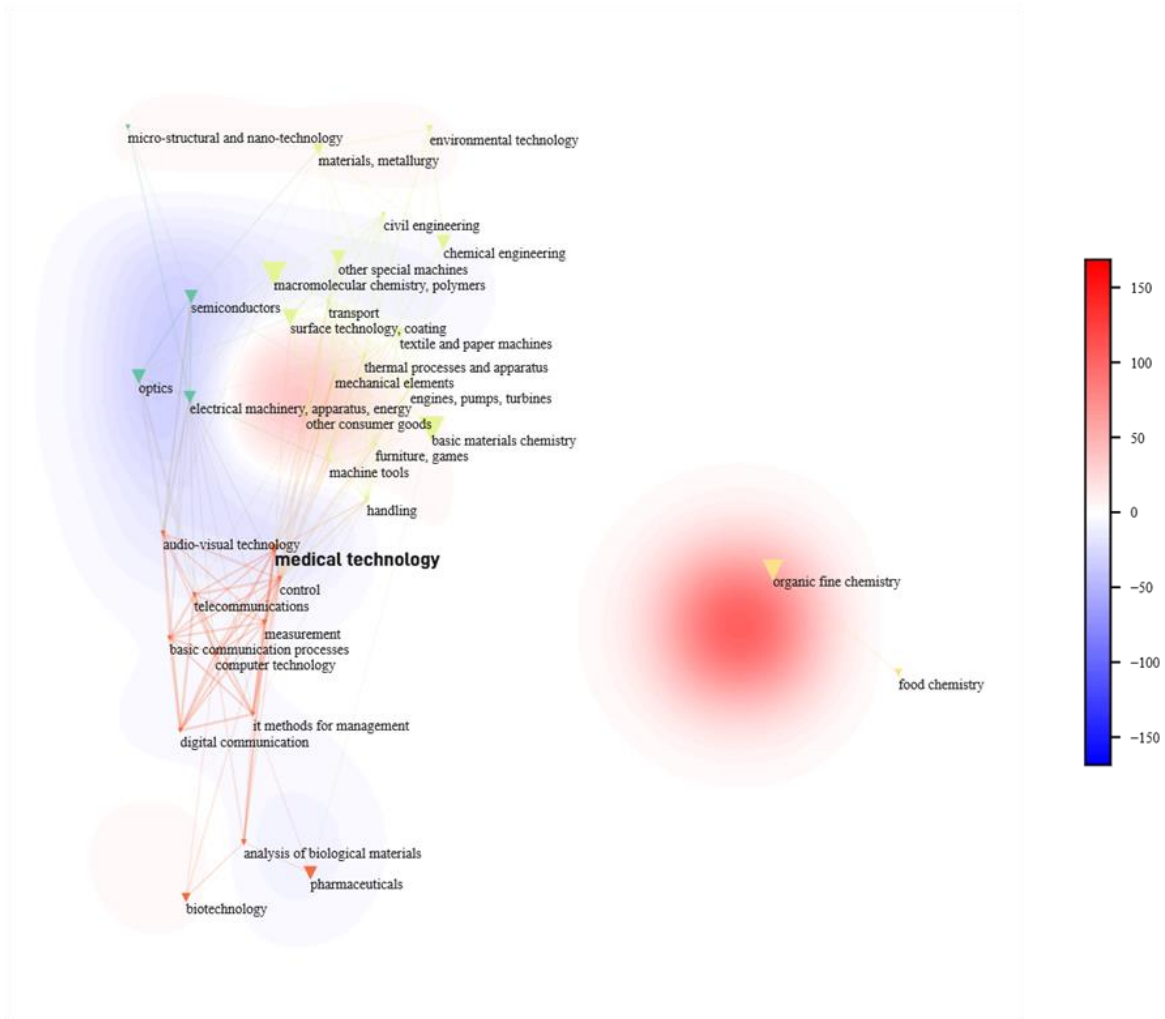
Fields - *Inventors*

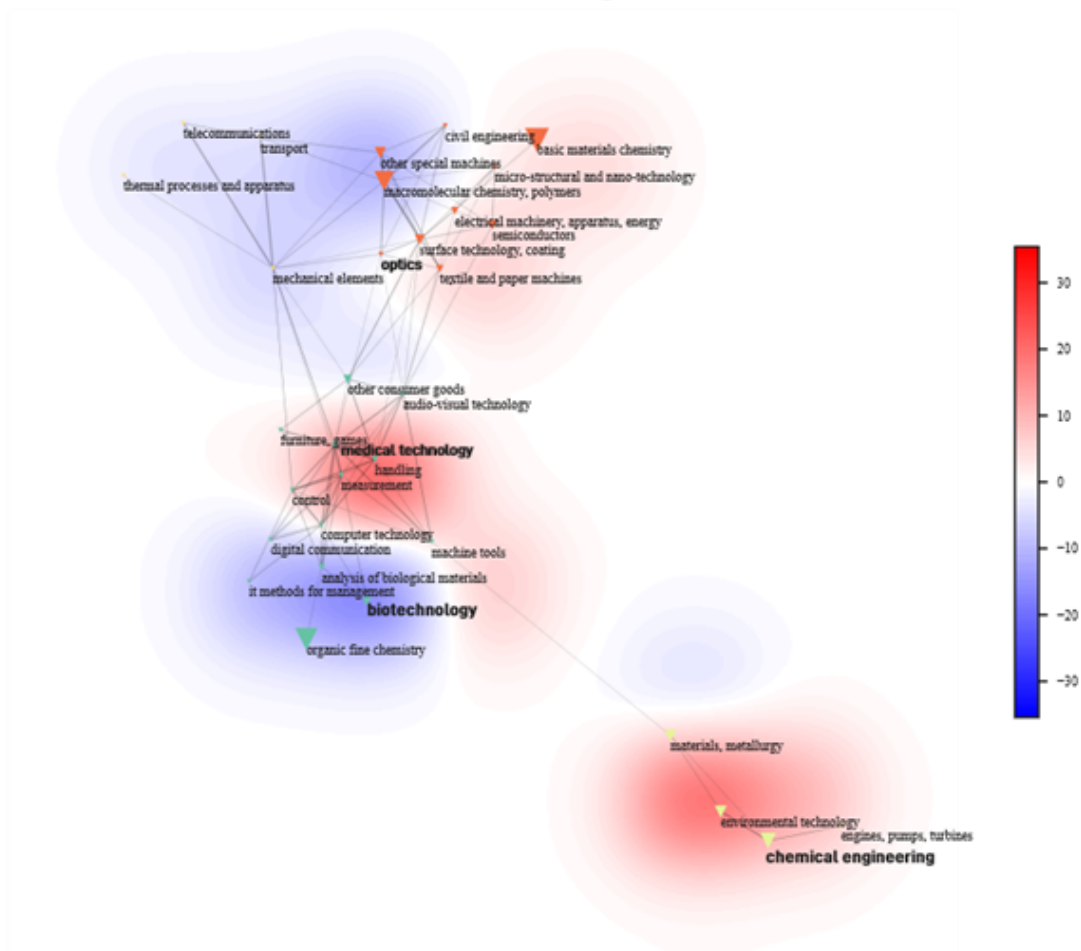
Differences relative to:

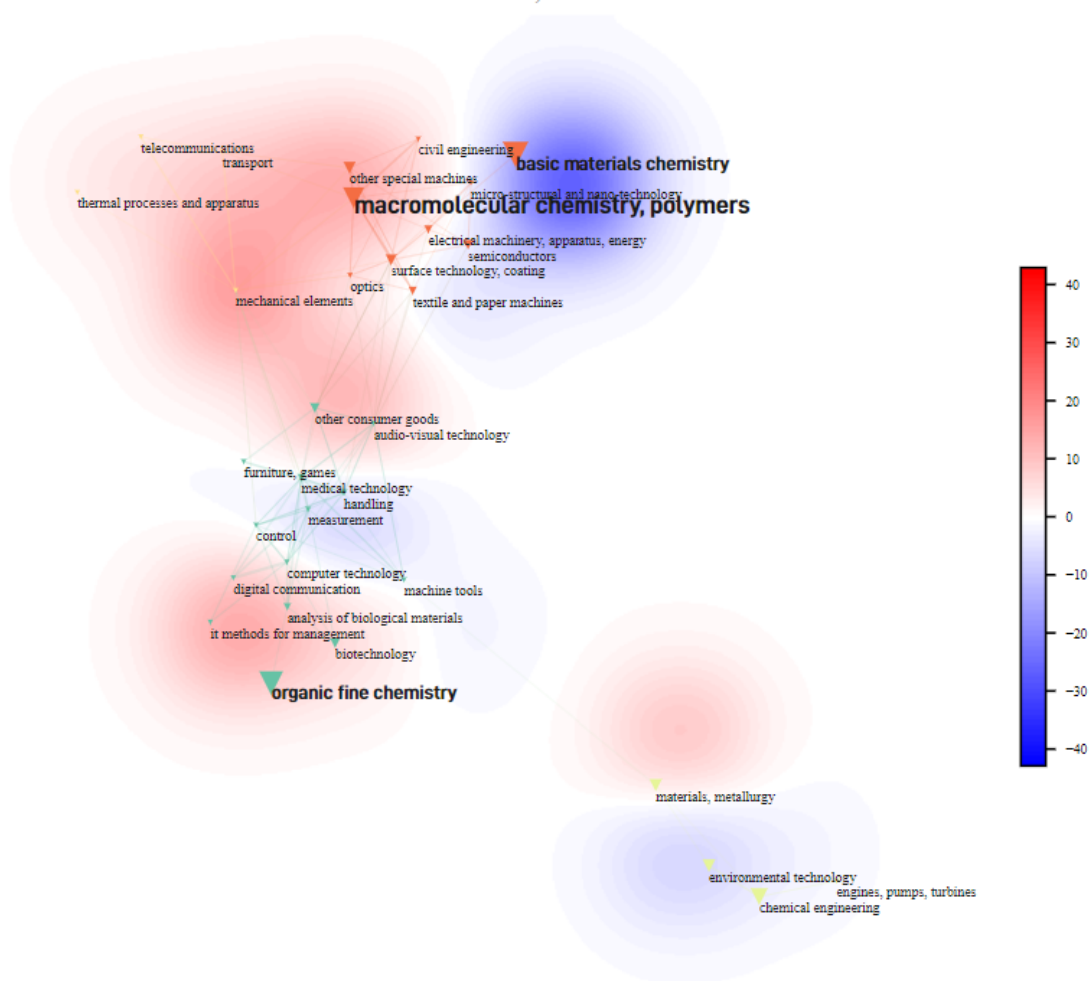
- Worldwide
- UK and France

United Kingdom, 2010-2015









Conclusions (1)

- Within the 2 industrial sectors and looking at inventors, UK mainly specialises in medical technologies and materials, whereas France sees specialisation in Food chemistry and mechanical elements

	Level of specialisation	Country-Worldwide	UK-FR
UK	Strong	Medical technology/elements	Medical technology/elements
		Pharmaceuticals	
		Chemical engineering	Chemical engineering
	Weak	Optics	Optics
		Biotechnology	Biotechnology
	Level of specialisation	Country-Worldwide	UK-FR
France	Strong	Organic fine chemistry	Organic fine chemistry Macromolecular chemistry
	Weak	Medical technology	Basic materials chemistry

Fields – *International collaboration*

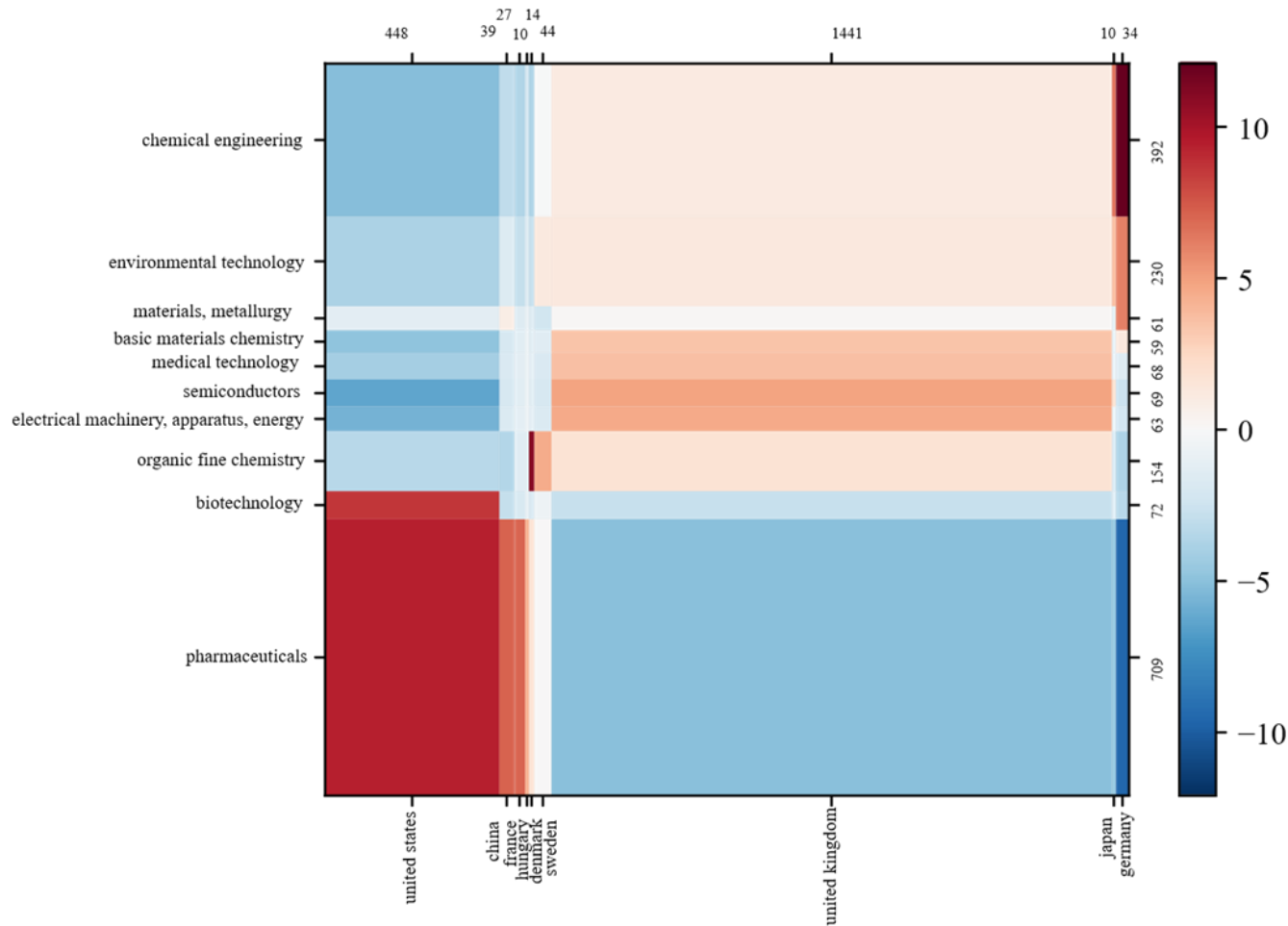
Both France and UK appear to quite homogeneous.

France shows a stronger internal connection.

UK is deeply connected to US, especially in the Pharmaceutical and Biotechnology fields; while Germany collaboration seems relevant for the Chemical engineering.

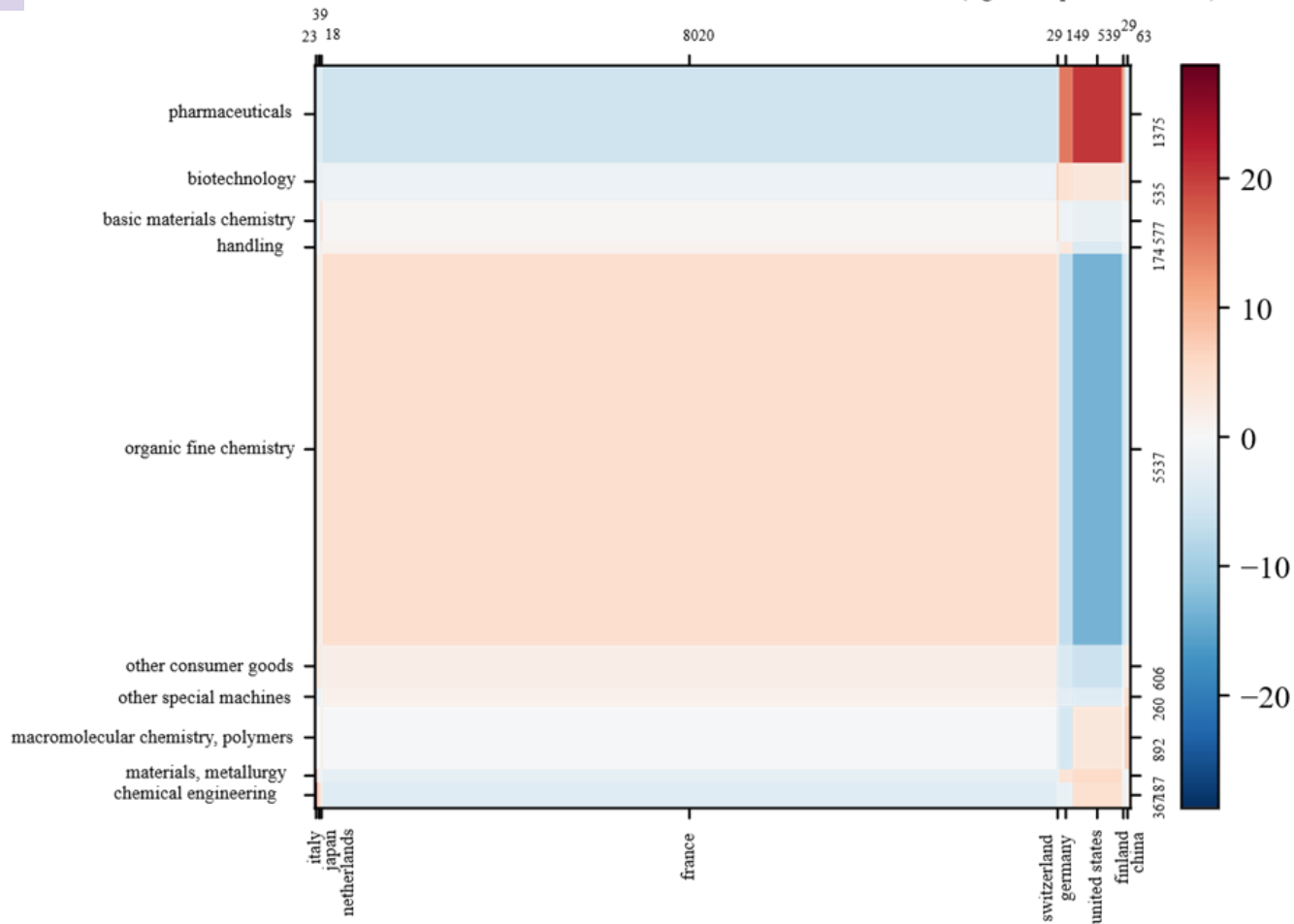
UK - International Collab

chi2 score: 263.8 (sign. with p-value 4.00e-24)



France - International Collab

chi2 score: 339.3 (sign. with p-value 1.09e-36)

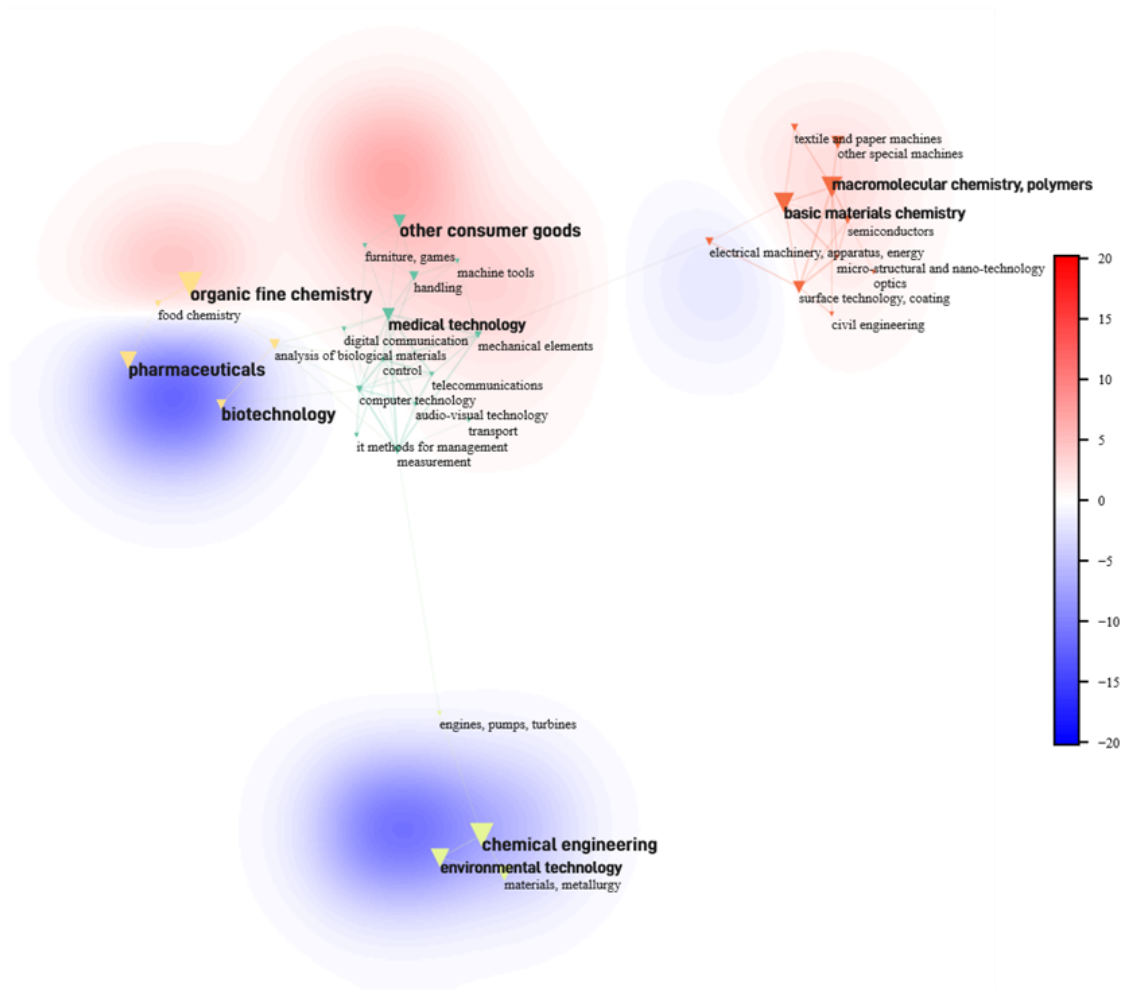


Fields - *Head Quarter*

Differences relative to:

- Inventors and Head Quarter





Conclusions (2)

- Within the 2 industrial sectors and looking at HQ, France's investors specialise in medical technologies, other consumer good and textile technologies. UK's pharmaceuticals, chemical engineering and environmental technologies are overrepresented.

Level of specialisation	UK	France
Strong	Pharmaceuticals, biotechnology	Medical technology
	Chemical engineering	Other consumer goods
	Environmental technology	Textile, papers machines
Weak	Medical technology	Pharmaceuticals, biotechnology
	Macromolecular chemistry, polymers	Chemical engineering
	Basic materials	Environmental technology

Conclusions (3)

- **Medical Technology, Communication Technology**

Represent a strong area of interest for the inventors from UK, but France shows to be stronger in terms of Firms investing in those types of patents

- **Biotechnology, Organic fine chemistry**

UK Firm focus on the fields overcome the UK inventors activities