

Passionate about **science**
north east
england



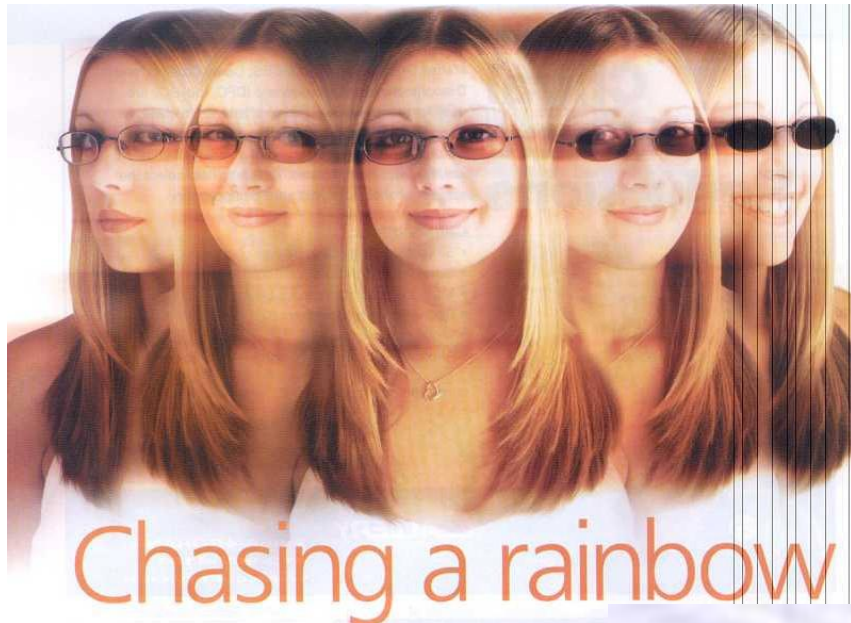
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*NorthEast Process
Industry Cluster*

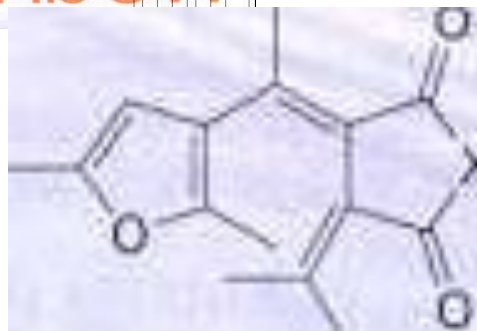
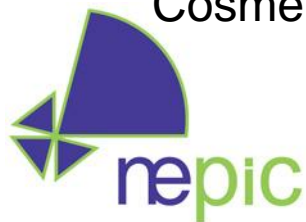
Past Experience in Cosmetic Chemicals

Surfactants – Detergents, Softeners, Wetting Agents, etc

Colours - Hair Dyes, Nail Varnish, Eye protection etc

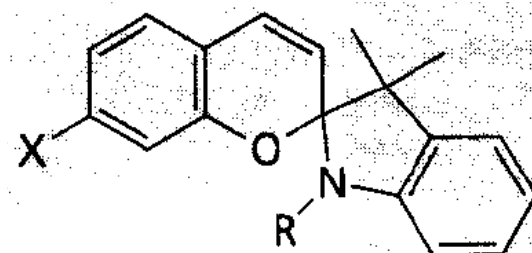


Real Chemistry &
Still Patentable
Opportunities in
Cosmetic Chemicals



x = 0; Fulgides
X = NR; Fulgimides

**Novel colour-changing
molecules are finding
ever more applications**
Stan Higgins
Chemistry in Britain
2003



Spiropyrans

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NE England has many companies that could serve cosmetics markets.

1. Some will already do so directly or indirectly via intermediates they supply to others down stream of their businesses.

2. Suppliers to the Cosmetics Industry are often chosen as suppliers because of specific technical capability or supply chain reliability

3. Technical Competencies include R&D, analytical applications, quality systems, good and consistent product purity profiles. lab to plant capability, or a very specific Knowledge e.g. how colours work,

4. Supply Chain Reliability

Flexibility in demand supplies, consistent source of raw materials, broad ranging chemical reaction capability, ability to contribute to customers development pipeline, reputation (responsible care etc)



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Examples of local companies who could supply cosmetic markets

Banner Chemicals
Durham Organics
High Force Research
Fine Organics
Shasun
Fine & Performance Chemicals
Fruitarom
Huntsman Toxide
Fulbeck
Dow Halterman
Johnson Matthey
Lyrachem
Newchem Technologies
Nanocentral
Spartan Nano
Vertellus
etc.

Personal Care market growing (data from Kline)

- The global personal care market is estimated at \$270billion at retail level and >\$10billion for ingredients
- The market is growing at 5-6% per annum underpinned by demographics and the drive for sustainability
 - Skin care is the largest sector
 - Emerging markets are showing >10% growth



Key Trends

- Beauty from within
- Natural ingredients & products
- Blurring of boundaries between PC, pharma and food – cosmeceuticals, nutraceuticals

Natural Personal Care (Kline)

- Analysis of more than 50 “natural” cosmetic & toiletry brands in US & Europe
 - Truly natural account for 38%
 - 35% Europe, 41% US
- Manufacturers’ sales of natural PC products in US and western Europe grew by 15.8% in 2007-8
- Since 2003 CAGR 15.4% in Europe driven by increasing distribution & consumer demand

Natural Personal Care (Kline)

- US largest single market followed by Germany, UK, France
- Natural inspired sales in US up 20% compared with 12% in Europe
- Truly natural brands up 17 and 14% respectively

Key Technologies

- Novel active ingredients
anti-aging, anti-acne, skin whitening,
sun protection
- Delivery systems
Nanoparticles, microcapsules, films, etc

A Wide Range of Ingredients are Needed

- Ingredients registered for use in cosmetics are given in Section 1 of the annex to the Cosmetics Directive (as amended).
- Provides a guide to substance names (Common or INCI and also IUPAC), CAS/ EINECS Numbers, Function and any Restrictions.
- Functions are broken down into 63 categories.
- Substances list extends to more than 500 pages!
- Many substances are extracts or physical preparations of naturally occurring materials.
- Some functions use predominantly mineral or basic inorganic chemicals – e.g. anti-caking, absorbent and bulking substances.
- Many substances are either currently manufactured in the North East of England, or are able to be made here.
- NEPIC's Capability Matrix will help cosmetics manufacturers to identify those sites that can carry out these processes locally .

Benefits of Local Sourcing

- Highest possible Quality Standards available
 - Many companies experienced in supply to cosmetics and personal care markets.
 - Many companies supply into Pharma sector where demands are high.
 - Some other highly demanding sectors are supplied by local businesses.
 - Many local companies are ready adopters of accredited quality standards, often going beyond ISO9000 levels.
- Shortened supply times compared to overseas suppliers.
- Excellent development experience, both within manufacturers and with contract research organisations.
- Ready adoption of lean manufacturing techniques to ensure effective cost management
- Zero language difficulties
- Assurance of strong regulatory control protecting reputation of purchasing business
- Open to inspection, often at short notice
- Willingness to be flexible

Some areas where NEPIC Members may be able to Supply

- Anti-Corrosives
 - Includes many amine derivatives
 - Thomas Swan, Fine Organics, Vertellus,
- Absorbents
 - Includes Acrylamides
 - Acrylic Acid derivatives readily available
- Anti-Dandruff
 - Many natural extracts
 - Many petroleum/ tar distillates/ alcohols
 - Koppers, Sabic, Petroplus, Conoco-Phillips, Thomas Swan, Fine Organics,
- Anti-Microbials
 - Thomas Swan, Shasun, Fine Organics,
- Colourants, Pigments, Dyes
 - Thomas Swan, Huntsman Pigments, Verdex
- Fragrances, Masking agents
 - Frutarom, Thomas Swan
- Solvents, Viscosity Controllers, Buffers etc.
- And many others

NEPIC Capability Matrix

- Under development now – completion early 2010.
- Covers all NE region.
- Identifies companies linked to specific syntheses.
- Identifies particular technological advantages.
- Identifies registrations to regulatory or accreditation bodies.
- Will allow searching to find suppliers.
- Will allow the region to market itself more comprehensively as a region for total chemical solutions.
- Will identify investment opportunities that can be marketed to third parties.
- Contact us to arrange to discuss what the region has to offer:
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