Indicator washcloth to detect irritating agents in personal care products

Summary

An Austrian research institute has developed an innovative, cost-effective, ecological washcloth featuring an indicator which changes colour from green to red if an irritating (alkaline) washing agent is used. The washcloth is useful for infants with highly-sensitive skin, for those with dermatitis/other skin conditions and for the elderly. The research institute seeks partners for licence/commercial agreement, in addition to those interested in further technical development and manufacturing.

Creation Date	20 July 2016
Expiration Date	25 July 2017
Reference	TOAT20160719001

Details

Description

The research institute develops solutions and technologies for businesses and industries across a wide range of sectors and conducts top-level research at an international level. It has developed a specialised washcloth aimed at infants, the elderly and those with skin conditions.

The acid mantle of the skin has a pH of around 5.5, which is slightly acidic. This protects the skin against bacteria, fungi and dryness. Therefore, skin-friendly (pH skin-neutral) detergents, shampoos and shower gels have a slightly acidic pH. Soaps and low-cost cleaning products however, are often alkaline (pH above 8), which can lead to skin irritation in both infants and dermatitis patients.

The washcloth is stained with a pH indicator. This indicator shows a colour change corresponding to the pH of the washing solution. Green signifies a pH value in the skin-friendly pH range, while red means that the pH is above 8, indicating that skin irritation may occur. This colour system is more user-friendly and unambiguous than the colour spectrum used with pH strips.

The washcloth is designed exclusively for personal care products. The washcloth may be immersed into the cleaning solution (e.g. in the bathtub), or used in the shower. Personal care products may also be tested prior to use by mixing a few drops of the product with water and dipping the washcloth into the solution. The indicator washcloth only shows the pH value correctly when the measuring area (the coloured heart) is sufficiently wet. Before reusing the washcloth, it should be rinsed several times with tap water to remove any traces of the previous cleaning product. In order to estimate the pH accurately, a colour comparison chart can be used. The washcloth should be washed at a maximum of 60 °C (conventional washing machines) with white textiles only. As the dye is sensitive to UV light, the washcloth should not be exposed to direct sunlight.

The dyeing procedure is practically identical to conventional textile dye chemistry and should therefore be compatible with established fabrication processes. Cotton, viscose, linen and cellulose can be dyed in this way, where dyeing is carried out in an aqueous solution at room temperature. The research institute has developed reactive dyes which form covalent bonds,which are stronger than hydrogen bonds.

The washcloth is specifically aimed at infants, the elderly and those suffering with skin conditions. Parents can get immediate information regarding the pH level of infant care products, thus enabling them to decide on alternatives if desired. In addition, since manufacturers frequently change their product compositions without informing the consumer, continuous monitoring of personal care products is advisable. The washcloth enables those with highly-sensitive skin to control the quality of their personal care products in this way.

The washcloth can also give additional information concerning the textile purging efficiency of the washing machine. If, after machine washing, the damp washcloth is red, then there are still detergent residues in the textile. Thus, the machine washing was insufficient and the textiles may be irritating when brought into contact with the skin.

The Austrian research institute would be open to licensing the product to interested parties with the aim of launching the product on the market, possibly in the form of a commercial agreement with technical assistance. It would also like to hear from partners who are in a position to cooperate on further development of the technology, specifically with regard to the fabrication process where yarn is coloured with the innovative dye and this yarn is then used to embroider the washcloth. Manufacturing partners who can assist with scaling-up the production for larger quantities are also of interest.

Advantages and Innovations

Irritating products are indicated immediately

Allows for improved care of infants, dermatitis patients, the elderly, and those with highly-sensitive skin

Enables continuous monitoring of products where the composition might change without prior warning

Simple technology using an unambiguous colour system

Low maintenance as the washcloth can be used repeatedly and washed in conventional washing machines

Cost-effective and environmentally friendly compared to pH strips which are discarded after one use

Stage of Development

Prototype available for demonstration

IPR Status

Secret Know-how

Comment Regarding IPR status

Patents concerning design and trademarks may be submitted together with the future industrial partner.

Profile Origin

National or Regional R&D programme

Keywords

Technology

02007012	Optical Materials
02007018	Advanced Textile Materials
03005003	Dyeing related to Textiles Technology
06001005	Diagnostics, Diagnosis
06001022	Medical Textiles

Market

05001007	Other diagnostic
05010001	Safety for the elderly
07004002	Health and beauty aids
08001019	Speciality/performance chemicals
09004003	Textiles (synthetic and natural)

NACE

M.72.1.9	Other research and experimental development on natural sciences and engineering

Network Contact

Issuing Partner

ASTER - SOCIETA CONSORTILE PER AZIONI

Contact Person

Giulia Basilici

Phone Number

+39 51 6398099

Email

giulia.basilici@aster.it

Open for EOI : Yes

Client

Type and Size of Organisation Behind the Profile

R&D Institution

Year Established

0

Already Engaged in Trans-National Cooperation

Yes

Experience Comments

The safety of the staining with the indicator dye chemistry is certified by OekoTex.

Languages Spoken

English
German
French

Client Country

Austria

Partner Sought

Type and Role of Partner Sought

The ideal partner should be have expertise in dyeing of textiles and be in a position to up-scale the production and fabrication of the washcloth for larger quantities. The partner should also be in a position to launch the product on the market and have the necessary marketing and distribution contacts and skills.
Partners with experience in dermatology or venereology would be of particular interest.
The partner should be capable of manufacturing the indicator washcloth (parts of the process may be sub-contracted) and should also be able to carry out the relevant marketing and distribution activities.

In the initial stages, up-scaling the fabrication can be done in cooperation with the Austrian research institute. A partner interested in further product optimisation would be ideal.

Type and Size of Partner Sought

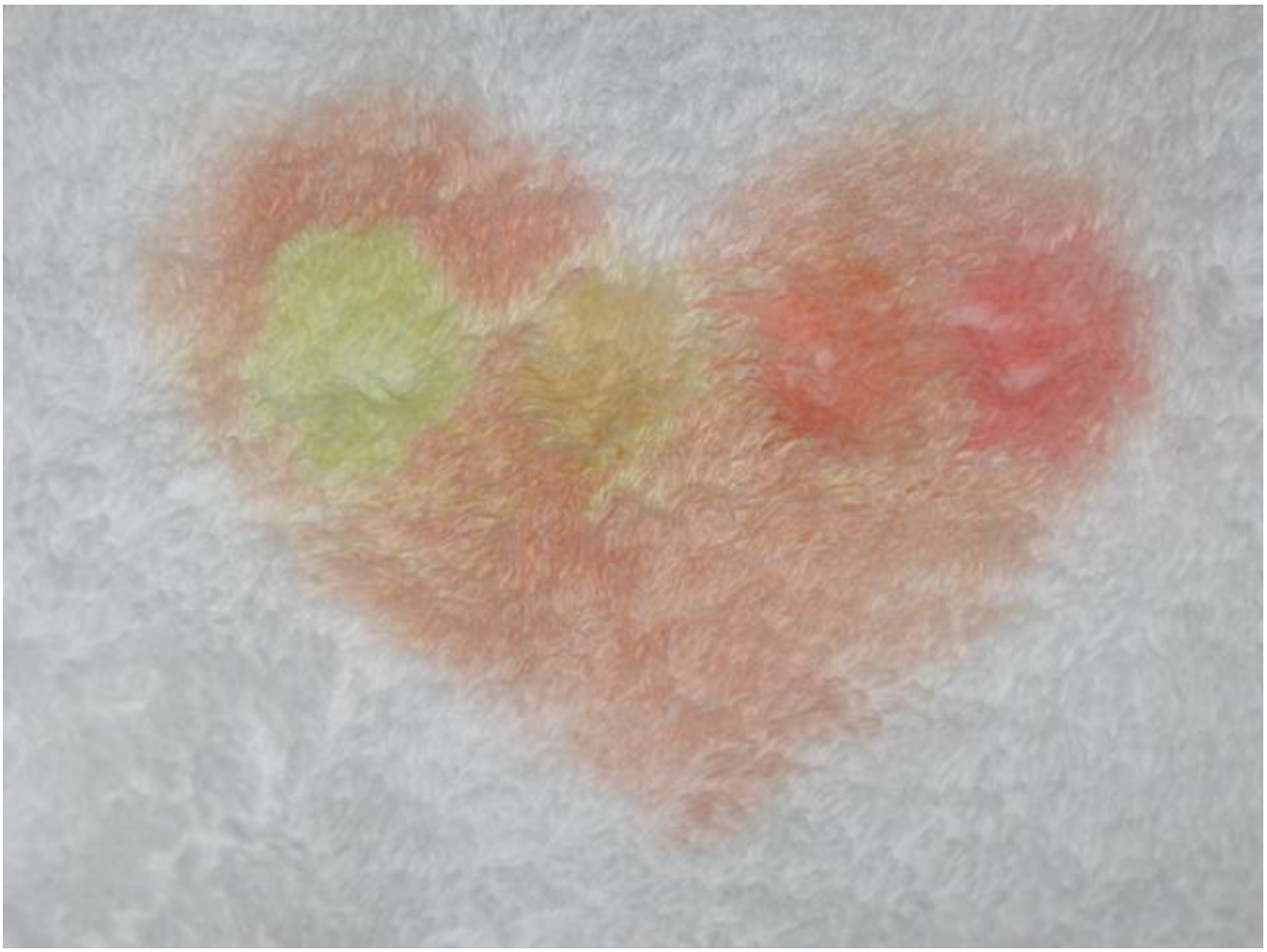
SME 11-50,SME <10,>500 MNE,251-500,SME 51-250,>500

Type of Partnership Considered

License agreement
Manufacturing agreement
Commercial agreement with technical assistance
Technical cooperation agreement

Attachments

ph sensor wash cloth.JPG



Technology Request

Cell therapy dedicated contract development & manufacturing organization looking for partners with technical knowhow in cell therapy to establish operations in Japan and/or South Korea

Summary

A Belgian company operating a validated cGMP facility and listed as contract development and manufacturing organization (CDMO) dedicated to cell therapy is looking for a partner to enter the Asiatic market, and more specifically Japan and/or South Korea. Partners with technical know how in cell therapy are requested to allow them to have a first footprint in these countries or elsewhere in Asia. A joint venture agreement or a manufacturing agreement are requested.

Creation Date 17 June 2015
Last Update 12 January 2017
Reference TRBE20150416001

Details

Description

The demanding Belgian company is a contract development and manufacturing organization (CDMO) that serves the pharmaceutical industry.
Its mission is to to deliver optimized process industrialization capacities to cell therapy organizations, and speed up the arrival of their therapies onto the market. The heart of the company is a team of over 35 highly dedicated experts combining strong experience in cGMP (current good manufacturing practice) cell therapy manufacturing with a technology-focused approach and a substantial knowledge of the industry.
From technology selection to business modeling, process development, quality management and assay development, the team of the Belgian company is fully committed to helping their clients fulfill their objective of providing sustainable and affordable therapies to their patients.

The Belgian company already has some ties to the US market, but they want to be a worldwide actor. That is why they would like to find partners that could help them to enter Asia (more specifically Japan and/or South Korea, but not only).

The interest in the Asiatic market stems from the phenomenon of a rapidly aging population, the strong growth in cell therapy products and the first class medical centers with experienced medical scientists that create a favourable environment for foreign companies' entry in the Japanese and/or South Korean market.

The Belgian company is looking for a partner with technical knowhow in cell therapy and a manufacturing capability to allow them to enter the Asian market.
The Partner should have a strong local network in cell therapy and/or existing cell therapy

products.
A joint venture agreement or a manufacturing agreement are requested.

Technical Specification or Expertise Sought

The partner should have a manufacturing capability and allow to access the market through this manufacturing site.
The partner should be able to bring technological support as well as to develop some specific aspects of the added-value services that would be proposed to clients (e.g. production technology automation).

Stage of Development

Already on the market

Profile Origin

Private (in-house) research

Keywords

Technology

06002002	Cellular and Molecular Biology

Market

04006	Cellular and Molecular Biology
04009	In vitro Testing, Trials
04013	Stem cells and biobanks

NACE

M.72.1.1	Research and experimental development on biotechnology
M.72.1.9	Other research and experimental development on natural sciences and engineering
M.74.9.0	Other professional, scientific and technical activities n.e.c.
Q.86.9.0	Other human health activities

Network Contact

Issuing Partner

ASTER - SOCIETA CONSORTILE PER AZIONI

Contact Person

Giulia Basilici

Phone Number

+39 51 6398099

Email

giulia.basilici@aster.it

Open for EOI : Yes

Dissemination

Send to Sector Group

Bio Chem Tech

Client

Type and Size of Organisation Behind the Profile

Industry SME 11-49

Year Established

0

Already Engaged in Trans-National Cooperation

No.

Languages Spoken

English
Dutch
French

Client Country

Belgium

Partner Sought

Type and Role of Partner Sought

The Belgian company is very flexible and open to any type of partner(ship) but joint venture or manufacturing agreements are requested in priority.
The goal is to allow the Belgian company to be a worldwide actor. And enable clients to access all the different markets through one organization, without having to commit the resources or take the risks of setting up various manufacturing sites.

The searched partner company can be based in Japan or South Korea or be used to work in these countries.

The partner should have a manufacturing capability and should be able to bring technological support as well as develop some specific aspects of the added-value services that would be proposed to clients (e.g. production technology automation).

It would also be useful to have a partner with a strong local network/knowledge in cell therapy and/or existing cell therapy products.

Type and Size of Partner Sought

SME 11-50,SME <10,>500 MNE,251-500,SME 51-250,>500

Type of Partnership Considered

Manufacturing agreement
Joint venture agreement

Attachments

Technology Request

Technology for increasing detergent resistance of medical paper dishes is requested.

Summary

A Polish company produces disposable medical dishes (e.g. kidney dishes, male urine bottles and bowls for washing patients) that are made from cellulose pulp. The company seeks a provider of a substance that mixed with basic pulp will increase their resistance to detergents, thus improving their durability. Cooperation in form of a commercial agreement with technical assistance is sought.

Creation Date	10 August 2016
Last Update	12 August 2016
Expiration Date	12 August 2017
Reference	TRPL20160810001

Details

Description

The company from North West Poland active in the healthcare industry for 15 years specialises in production of medical disposable paper dishes. Among company's products are: kidney dishes, male urine bottles and bowls for washing patients. The production begins with receiving waste and recycled paper, which then is processed into a cellulose pulp, from which final products are burned out.

The company has identified a technological problem – high durability of products in normal conditions, rapidly decreases when a detergent (e.g. mixed with water) is poured into them. As a result, the dishes become leaky and unusable very quickly. Therefore, the client is looking for a technological solution that will increase products resistance to detergents, hence improving their durability. The company is interested in a wax or any other component that mixed with basic cellulose pulp will help to keep high resilience of products in case of their contact with detergents.

Commercial agreement with technical assistance is requested. Partner is expected to provide technical solution to the problem and to help implement it.

Technical Specification or Expertise Sought

The company is looking for chemical component that:
• can be added to a paper pulp before forming and burning out dishes and which doesn't lose its properties in the process (e.g. due to high temperatures);
• is safe for use at medical and nursing entities;
• will increase detergent resistance of a dish made from cellulose pulp to at least 4 hours;
• increase durability of paper dishes for most popular types of detergents used in hospitals and nursing homes.

Stage of Development

Already on the market

Comments Regarding Stage of Development

• has been already tested on the market;

Keywords

Technology

02002002	Coatings
02007013	Paper technology
03004010	Special chemicals, intermediates

Market

05007001	Disposable products
05007007	Other medical/health related (not elsewhere classified)
08001023	Other chemicals and materials (not elsewhere classified)
09004008	Other manufacturing (not elsewhere classified)

NACE

C.17.1.1	Manufacture of pulp
C.17.2.2	Manufacture of household and sanitary goods and of toilet requisites
C.32.5.0	Manufacture of medical and dental instruments and supplies
E.38.2.1	Treatment and disposal of non-hazardous waste
Q.86.9.0	Other human health activities

Network Contact

Issuing Partner

ASTER - SOCIETA CONSORTILE PER AZIONI

Contact Person

Giulia Basilici

Phone Number

+39 51 6398099

Email

giulia.basilici@aster.it

Open for EOI : Yes

Client

Type and Size of Organisation Behind the Profile

Industry SME <= 10

Year Established

2001

Turnover

1 - 10M

Already Engaged in Trans-National Cooperation

Yes

Certification Standards

ISO 9001
ISO 14001:2004
ISO 9000

Languages Spoken

English
Polish

Client Country

Poland

Partner Sought

Type and Role of Partner Sought

Type of partner sought: academic or industry.

Field of partner's activity: the company is looking for producers or researchers who work in the area of chemicals, materials, food or environment.

Role of partner sought: to provide solution that will be effective and ready for implementation, and to provide expertise in implementation of the technology.

Type and Size of Partner Sought

SME 11-50,University,Inventor,R&D Institution,SME <10,>500 MNE,251-500,SME 51-250,>500

Type of Partnership Considered

Commercial agreement with technical assistance

Attachments

Technology Request

Testing of innovative disinfection technologies for recreational water, pools and spas

Summary

A chemical cluster of the Balearic Islands (Spain), in collaboration with the University of the Balearic Islands (Spain), is preparing a project about testing innovative disinfection technologies for recreational waters, pools and spas. The aim of the project is to find alternatives to conventional disinfection using chemical products. Technologies must be able to reduce the consumption of chemicals. The cluster and the University are searching for industrial partners.

Creation Date 14 July 2016
Last Update 26 July 2016
Reference TRES20160712001

Details

Description

Mallorca, the main island of the Balearic Islands has many pools, both public and private. The pool water is treated with chemicals that produce changes in the water properties. For this reason, water needs to be renovated every day and this implies high consumption of water daily. The cluster has been testing different chemical disinfectants for the disinfection of recreational water. The study analysed the cost-efficient of various products.

Cluster memberships have as client big hotel chains which will be informed of technologies tested. Technological partners will be announced in the tourism sector of the Balearic Islands, which is a big market. The added value of testing technologies in the Balearic Islands is that the results will be much closer to the regional conditions and the clients can know how works that technologies with these conditions.

The main objective of the project is to find alternative technologies for recreational water disinfection. The cluster and the University of the Balearic Islands are looking for partners that can provide this kind of technology. They intend to test alternative technologies allowing recreational water disinfecting minimizing the use of chemicals, keeping water conditions as natural as possible. The added value of these technologies will take care of the health of users. If the use of chemicals are limited, disinfection products will be eliminated, which are harmful to human health. They also have advantages over installations, as it generates more durable components. Furthermore, it improves security facilities to avoid accidents when handling chemicals. Moreover, the project wants to improve sustainability by reducing water consumption.

As a result of this project, the cluster in collaboration with the University of the Balearic Islands, want to transfer to hoteliers, information about sustainable solutions of recreational water disinfection.

The results will not be published without the agreement of the companies that provide the technology. At all times the information obtained will be kept confidential.

Once agreed the information can be disseminated to the partner, the technology will be released to the chemical sector of the Balearic Islands, giving data such as system efficiency, economic savings, water savings, savings in chemicals and compliance with the parameters set by law, so that the sector can commercialize these technologies for recreational water disinfection.

The impact of this study will be on the Balearic local tourism market. The beneficiaries of the technologies will be mainly hoteliers, but also public and private pools. These new technologies can lead to get reduced up to 5% of the daily water consumption. Reduced use of chemicals will mean more job security and fewer irritations and allergies for swimmers.

Technical Specification or Expertise Sought

Alternative technologies allowing recreational water disinfecting minimizing the use of chemicals, keeping water conditions as natural as possible. The added value of these technologies will take care of the health of users. If the use of chemicals are limited, disinfection products will be eliminated, which are harmful to human health. They also have advantages over installations, as it generates more durable components. Furthermore, it improves security facilities to avoid accidents when handling chemicals.

Keywords

Technology

05001004	Organic Chemistry
10001002	Assessment of Environmental Risk and Impact
10003006	Waste disinfection / detoxification
10004001	Industrial Water Treatment
10004008	Water Resources Management

Market

08004003	Water treatment equipment and waste disposal systems
09008002	Water, sewerage, chemical and solid waste treatment plants

NACE

E.36.0.0	Water collection, treatment and supply
M.72.1.9	Other research and experimental development on natural sciences and engineering

Network Contact

Issuing Partner

ASTER - SOCIETA CONSORTILE PER AZIONI

Contact Person

Giulia Basilici

Phone Number

+39 51 6398099

Email

giulia.basilici@aster.it

Open for EOI : Yes

Client

Type and Size of Organisation Behind the Profile

Other

Year Established

1982

Already Engaged in Trans-National Cooperation

No.

Experience Comments

Chemical cluster of the Balearic Islands (Spain) with 34 companies dedicated to the chemical sector. Besides that, the University of the Balearic Islands collaborates in this project.

Languages Spoken

English
Spanish

Client Country

Spain

Partner Sought

Type and Role of Partner Sought

All entity that has a technology that allows to disinfect water recreation and an interest in the Balearic market.

The company will be carrying disinfection technology in exchange for an open door to access to the Balearics touristic market.

Cluster memberships have as client big hotel chains which will be informed of technologies tested. Technological partners will be announced in the tourism sector of the Balearic Islands, which is a big market. The added value of testing technologies in the Balearic Islands is that the

results will be much closer to the regional conditions. And the clients can know how works that technologies with these conditions.

Type of Partnership Considered

Technical cooperation agreement

Attachments