

## Partnering Opportunity

Profile Status: Published

### Technology Offer

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## A Japanese university is offering a new technology for polymer synthesis aiming at joint development of new applications

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### Summary

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*The Japanese university is aiming to achieve joint research, technical cooperation or patent licensing agreements with EU companies so to find new applications for a polymer synthesis technology they have developed. The technology is currently applied in manufacturing of colour materials and they would like to develop it for chemical and resin material manufacturing fields. The main feature is its reduced costs, 1/100, compared to existing technology.*

<b>Creation Date</b>	08 June 2018
<b>Last Update</b>	06 June 2019
<b>Expiration Date</b>	09 June 2020
<b>Reference</b>	TOJP20180608001
<b>Public Link</b>	<a href="https://een.ec.europa.eu/tools/services/PRO/Profile/Detail/1052a0c8-0b9f-470d-8442-f91678c64624">https://een.ec.europa.eu/tools/services/PRO/Profile/Detail/1052a0c8-0b9f-470d-8442-f91678c64624</a>

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### Details

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#### Description

The company developed a new monomer molecule as a material of chemosynthesis which applies in polymerisation with acrylic ester. The synthetic polymer with this monomer molecule enables to control 3D dimensions structure in a stable condition.

Their polymer synthesis technique the university developed is currently applied in manufacturing of colour materials, and through the partnership, they wish to find further possibilities of new applications in the field of chemical and resin material manufacturing.

They already have collaborated with companies on research and development worldwide. Based on their previous partnership agreements, they wish to collaborate with EU-based companies under the form of joint research cooperation agreement, technical cooperation

agreement or licensing agreements. Financial agreements proposed by funding bodies will be considered where it is appropriate.

Once the partnership works well, they would like to evaluate the technology and discuss commercialisation options together with their potential partner.

### Advantages and Innovations

Their polymer techniques has following features:

#### 1) Low Cost

- By applying their new technique of polymer synthesis, it reduces cost to approximately one-hundredth (1/100) comparing to the existing technology utilizing common raw material.
- It also allows to reduce cost on synthetic monomer by utilising of organic catalyst, carbon, nitrogen, alcohol, halogenated alkali metal compounds, and so on.

#### 2) Low environmental impact

- By utilising of low-toxicity catalyst it minimises environmental impact.

#### 3) Easy operation

- Their polymer can be used without special manufacturing equipment.

#### 4) Accessibility

- The polymer can be accessible to a wide-range of polymer design such as Block, Star, Comb, Hyper-branch, and Bruch type, etc.
- It also accessible to various monomers.

### Stage of Development

Already on the market

### Comments Regarding Stage of Development

Their technology is commercially used for manufacturing colour materials for the time being.

### IPR Status

Patent(s) applied for but not yet granted, Patents granted

### Comment Regarding IPR status

7 patents are granted in Europe, US, Japan and China etc.  
Some new patents are applied but not yet granted.

### Profile Origin

Private (in-house) research

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## Keywords

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### Technology

02007014

Plastics, Polymers

03004

Chemical Technology and Engineering

**Market**

08001 Chemicals and Materials  
08001016 Commodity chemicals and polymers  
08001018 Polymer (plastics) materials

**NACE**

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

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**Network Contact**

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**Issuing Partner**

EU-Japan Centre for Industrial Cooperation

**Contact Person**

Masae Ozawa

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**Open for EOI :** Yes

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**Dissemination**

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**Relevant Sector Groups**

Bio Chem Tech

**Restrict Dissemination to Specific Countries**

Austria, Belgium, Bulgaria, Croatia, Cyprus, Czechia, Denmark,  
Estonia, Finland, France, Germany, Greece, Hungary, Ireland, Italy,  
Latvia, Lithuania, Luxembourg, Malta, Netherlands, Poland, Portugal,  
Romania, Slovakia, Slovenia, Spain, Sweden, UnitedKingdom,

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**Client**

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**Type and Size of Organisation Behind the Profile**

University

Ref: TOJP20180608001

**Year Established**

1869

**Turnover**

>500M

**Already Engaged in Trans-National Cooperation**

Yes

**Experience Comments**

The University has a joint research agreement for their technology with the US partner for more than 2 years.

**Languages Spoken**

English

**Client Country**

Japan

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**Partner Sought**

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**Type and Role of Partner Sought**

They are looking for partner(s) in the field of manufacturing of chemical and / or resin who would be working together with the Japanese university to develop further applications of their technique.

The partner can be an industrial company of any size that is in the field of manufacturing of chemical and /or resin.

The partner is expected to have a basic knowledge on living radical polymerisation.

**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  
Financial agreement  
Technical cooperation agreement  
Research cooperation agreement

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**Attachments**

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