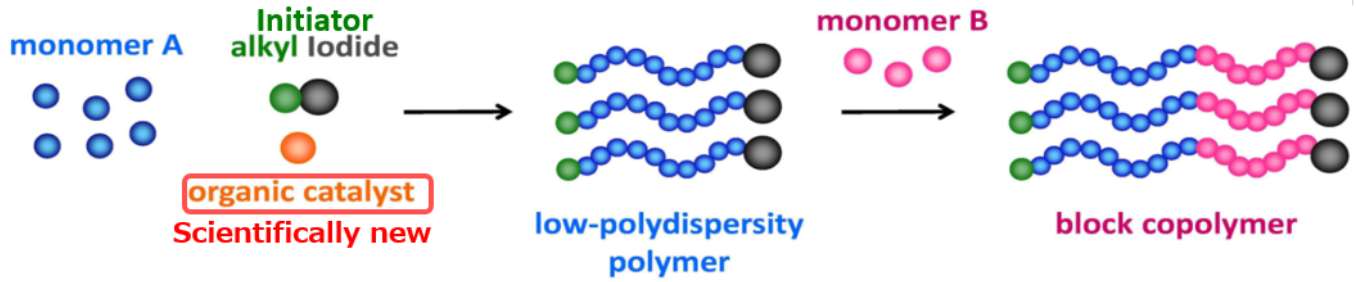


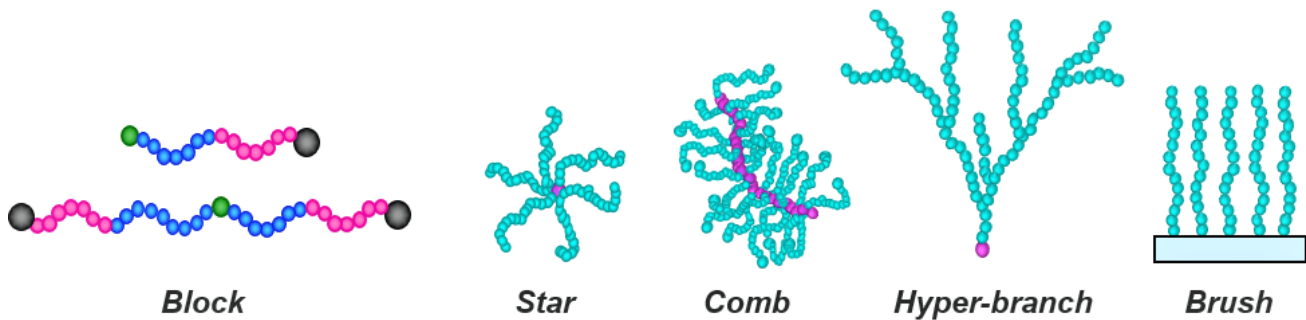
Title	A Japanese university is offering a new technology for polymer synthesis aiming at joint development of new applications
POD Reference	TOJP20180608001
Summary	<p>The Japanese university is aiming to achieve joint research, technical cooperation or patent licensing agreements with EU companies so to find new applications for a polymer synthesis technology they have developed.</p> <p>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.</p>
Description	<p>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.</p> <p>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.</p> <p>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.</p> <p>Once the partnership works well, they would like to evaluate the technology and discuss commercialisation options together with their potential partner.</p>
Advantages and Innovations	<p>Their polymer techniques has following features:</p> <ol style="list-style-type: none"> <li>1) Low Cost <ul style="list-style-type: none"> <li>• 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.</li> <li>• It also allows to reduce cost on synthetic monomer by utilising of organic catalyst, carbon, nitrogen, alcohol, halogenated alkali metal compounds, and so on.</li> </ul> </li> <li>2) Low environmental impact <ul style="list-style-type: none"> <li>• By utilising of low-toxicity catalyst it minimises environmental impact.</li> </ul> </li> <li>3) Easy operation <ul style="list-style-type: none"> <li>• Their polymer can be used without special manufacturing equipment.</li> </ul> </li> <li>4) Accessibility <ul style="list-style-type: none"> <li>• The polymer can be accessible to a wide-range of polymer design such as Block, Star, Comb, Hyper-branch, and Bruch type, etc.</li> <li>• It also accessible to various monomers.</li> </ul> </li> </ol>
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

Comments 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

### Attachments



null



null

### Keywords

Technology Keywords	02007014 Plastics, Polymers 03004 Chemical Technology and Engineering
Market Keywords	08001 Chemicals and Materials 08001016 Commodity chemicals and polymers 08001018 Polymer (plastics) materials
NACE Keywords	M.72.1.9 Other research and experimental development on natural sciences and engineering

### Partner Sought

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	> 500 > 500 MNE 251-500 SME <10 SME 11-50 SME 51-250
Type of Partnership Considered	Financial agreement License agreement Research cooperation agreement Technical cooperation agreement

**Client**

Type and Size of Client	University
Year Established	1869
Turnover (euro)	>500M
Already Engaged in Trans-National Cooperation	Yes
Additional 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

**Dissemination**

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 United Kingdom