



श्रीचित्रातिरुनालआयुर्विज्ञानऔरप्रौद्योगिकीसंस्थान, तिरुवनन्तपुरम – 695 011, केरल, भारत

**SREE CHITRA TIRUNAL INSTITUTE FOR MEDICAL SCIENCES AND  
TECHNOLOGY (SCTIMST)**

THIRUVANANTHAPURAM – 695 011, KERALA, INDIA

(An Institute of National Importance under DST ; Government of India)

(भारतसरकारकेअधीनएकराष्ट्रीयमहत्वकासंस्थान)

[www.sctimst.ac.in](http://www.sctimst.ac.in)

Press Release(25.8.2022)

**Winners of the 'National Petrochemical Award'**



**Dr. Roy Joseph,  
Scientist G, Division of  
Polymeric Medical  
Devices**



**Ms. Gopika V. Gopan,  
PhD student, Division  
of Polymeric Medical  
Devices**



**Dr. Jayadevan ER,  
Professor, Imaging  
Sciences and  
Interventional  
Radiology Department**



**Scientists of Sree Chitra Tirunal Institute for Medical Sciences and Technology, Thiruvananthapuram wins the 11<sup>th</sup> National Petrochemicals Award for developing “Metal Free Radiopaque Liquid Embolic Agent”**

A novel injectable radiopaque liquid embolic agent developed by scientists of SCTIMST , **Dr.Roy Joseph, Ms.Gopika Gopan and Dr.Jayadevan (Interventional Neuroradiologist)** has been successfully tested in pig model. The invention has secured them the **11<sup>th</sup> National Petrochemicals Award** under the category ‘Polymers in Medical and Pharmaceutical Applications’ instituted by the Department of Chemicals & Petrochemicals, Ministry of Chemicals & Fertilizers, Govt. of India.

The innovative development of the polymeric embolic agent is helpful for the treatment of arteriovenous malformation (AVM) of the brain. AVM is an abnormal tangle of blood vessels connecting arteries directly with the veins, without normal capillaries in between. AVM disrupts blood flow and oxygen supply to normal brain tissues. Being abnormal, these blood vessels can lead on to rupture causing haemorrhage, stroke, seizures, and eventual damage to brain tissues.

The unique advantage of the material developed by the scientists of SCTIMST is its radiopacity without adding metallic materials. Radiopacity enables interventional radiologists to have real-time visibility of the material while injecting it into the diseased vessels under X-ray-guided fluoroscopy. The inventors have filed applications for securing United States, European and Indian patents for the invention. The institute is expecting to transfer the technology for commercial production at the earliest. This development was carried out with the grant received from the Department of Science and Technology, Govt. of India, under the technical research center scheme.

(The date and time for award function ceremony will announce later. Letter from Government of India attached.)

For more details:

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