

**Patent Search**

Invention Title	ECO-FRIENDLY PAINT AND ELECTRICAL INSULATION LIQUID FROM LIGNIN AND TANNIN EXTRACTED FROM BANANA SHE
Publication Number	24/2024
Publication Date	14/06/2024
Publication Type	INA
Application Number	202441044698
Application Filing Date	10/06/2024
Priority Number	
Priority Country	
Priority Date	
Field Of Invention	POLYMER TECHNOLOGY
Classification (IPC)	C08K0005000000, C09J0197000000, G03G0009125000, H04W0076110000, A61K0039120000

**Inventor**

Name	Address	Country
KONGUNADU COLLEGE OF ENGINEERING AND TECHNOLOGY	KONGUNADU COLLEGE OF ENGINEERING AND TECHNOLOGY, NAMAKKAL-TRICHY MAIN ROAD, THOLURPATTI POST, THOTTIYAM TALUK, TRICHY DT, TAMILNADU-621215, INDIA	India
T RAJAMANIKANDAN	KONGUNADU COLLEGE OF ENGINEERING AND TECHNOLOGY, NAMAKKAL-TRICHY MAIN ROAD, THOLURPATTI POST, THOTTIYAM TALUK, TRICHY DT, TAMILNADU-621215, INDIA	India
P. ARUL	KONGUNADU COLLEGE OF ENGINEERING AND TECHNOLOGY, NAMAKKAL-TRICHY MAIN ROAD, THOLURPATTI POST, THOTTIYAM TALUK, TRICHY DT, TAMILNADU-621215, INDIA	India
R.SHANKAR	KONGUNADU COLLEGE OF ENGINEERING AND TECHNOLOGY, NAMAKKAL-TRICHY MAIN ROAD, THOLURPATTI POST, THOTTIYAM TALUK, TRICHY DT, TAMILNADU-621215, INDIA	India
S.KAVIPRIYA	KONGUNADU COLLEGE OF ENGINEERING AND TECHNOLOGY, NAMAKKAL-TRICHY MAIN ROAD, THOLURPATTI POST, THOTTIYAM TALUK, TRICHY DT, TAMILNADU-621215, INDIA	India
R.SARAVANAN	KONGUNADU COLLEGE OF ENGINEERING AND TECHNOLOGY, NAMAKKAL-TRICHY MAIN ROAD, THOLURPATTI POST, THOTTIYAM TALUK, TRICHY DT, TAMILNADU-621215, INDIA	India
P.PRABHU	KONGUNADU COLLEGE OF ENGINEERING AND TECHNOLOGY, NAMAKKAL-TRICHY MAIN ROAD, THOLURPATTI POST, THOTTIYAM TALUK, TRICHY DT, TAMILNADU-621215, INDIA	India
N.SRIDHAR	KONGUNADU COLLEGE OF ENGINEERING AND TECHNOLOGY, NAMAKKAL-TRICHY MAIN ROAD, THOLURPATTI POST, THOTTIYAM TALUK, TRICHY DT, TAMILNADU-621215, INDIA	India
S.SATHEESHKUMAR	KONGUNADU COLLEGE OF ENGINEERING AND TECHNOLOGY, NAMAKKAL-TRICHY MAIN ROAD, THOLURPATTI POST, THOTTIYAM TALUK, TRICHY DT, TAMILNADU-621215, INDIA	India
K. YAZHINI	KONGUNADU COLLEGE OF ENGINEERING AND TECHNOLOGY, NAMAKKAL-TRICHY MAIN ROAD, THOLURPATTI POST, THOTTIYAM TALUK, TRICHY DT, TAMILNADU-621215, INDIA	India
R.GOPALAKR SHNAN	KONGUNADU COLLEGE OF ENGINEERING AND TECHNOLOGY, NAMAKKAL-TRICHY MAIN ROAD, THOLURPATTI POST, THOTTIYAM TALUK, TRICHY DT, TAMILNADU-621215, INDIA	India
S REVATHY	KONGUNADU COLLEGE OF ENGINEERING AND TECHNOLOGY, NAMAKKAL-TRICHY MAIN ROAD, THOLURPATTI POST, THOTTIYAM TALUK, TRICHY DT, TAMILNADU-621215, INDIA	India
C. P. NIRANJANA	KONGUNADU COLLEGE OF ENGINEERING AND TECHNOLOGY, NAMAKKAL-TRICHY MAIN ROAD, THOLURPATTI POST, THOTTIYAM TALUK, TRICHY DT, TAMILNADU-621215, INDIA	India
K.M.SWARNA DEVI	KONGUNADU COLLEGE OF ENGINEERING AND TECHNOLOGY, NAMAKKAL-TRICHY MAIN ROAD, THOLURPATTI POST, THOTTIYAM TALUK, TRICHY DT, TAMILNADU-621215, INDIA	India

**Applicant**

Name	Address	Country
KONGUNADU COLLEGE OF ENGINEERING AND TECHNOLOGY	KONGUNADU COLLEGE OF ENGINEERING AND TECHNOLOGY, NAMAKKAL-TRICHY MAIN ROAD, THOLURPATTI POST, THOTTIYAM TALUK, TRICHY DT, TAMILNADU-621215, INDIA	India
T.RAJAMANIKANDAN	KONGUNADU COLLEGE OF ENGINEERING AND TECHNOLOGY, NAMAKKAL-TRICHY MAIN ROAD, THOLURPATTI POST, THOTTIYAM TALUK, TRICHY DT, TAMILNADU-621215, INDIA	India
P.ARUL	KONGUNADU COLLEGE OF ENGINEERING AND TECHNOLOGY, NAMAKKAL-TRICHY MAIN ROAD, THOLURPATTI POST, THOTTIYAM TALUK, TRICHY DT, TAMILNADU-621215, INDIA	India
R.SHANKAR	KONGUNADU COLLEGE OF ENGINEERING AND TECHNOLOGY, NAMAKKAL-TRICHY MAIN ROAD, THOLURPATTI POST, THOTTIYAM TALUK, TRICHY DT, TAMILNADU-621215, INDIA	India
S.KAVIPRIYA	KONGUNADU COLLEGE OF ENGINEERING AND TECHNOLOGY, NAMAKKAL-TRICHY MAIN ROAD, THOLURPATTI POST, THOTTIYAM TALUK, TRICHY DT, TAMILNADU-621215, INDIA	India
R.SARAVANAN	KONGUNADU COLLEGE OF ENGINEERING AND TECHNOLOGY, NAMAKKAL-TRICHY MAIN ROAD, THOLURPATTI POST, THOTTIYAM TALUK, TRICHY DT, TAMILNADU-621215, INDIA	India
P.PRABHU	KONGUNADU COLLEGE OF ENGINEERING AND TECHNOLOGY, NAMAKKAL-TRICHY MAIN ROAD, THOLURPATTI POST, THOTTIYAM TALUK, TRICHY DT, TAMILNADU-621215, INDIA	India
N.SRIDHAR	KONGUNADU COLLEGE OF ENGINEERING AND TECHNOLOGY, NAMAKKAL-TRICHY MAIN ROAD, THOLURPATTI POST, THOTTIYAM TALUK, TRICHY DT, TAMILNADU-621215, INDIA	India
S.SATHEESHKUMAR	KONGUNADU COLLEGE OF ENGINEERING AND TECHNOLOGY, NAMAKKAL-TRICHY MAIN ROAD, THOLURPATTI POST, THOTTIYAM TALUK, TRICHY DT, TAMILNADU-621215, INDIA	India
K.YAZHINI	KONGUNADU COLLEGE OF ENGINEERING AND TECHNOLOGY, NAMAKKAL-TRICHY MAIN ROAD, THOLURPATTI POST, THOTTIYAM TALUK, TRICHY DT, TAMILNADU-621215, INDIA	India
R.GOPALAKRISHNAN	KONGUNADU COLLEGE OF ENGINEERING AND TECHNOLOGY, NAMAKKAL-TRICHY MAIN ROAD, THOLURPATTI POST, THOTTIYAM TALUK, TRICHY DT, TAMILNADU-621215, INDIA	India
S.REVATHY	KONGUNADU COLLEGE OF ENGINEERING AND TECHNOLOGY, NAMAKKAL-TRICHY MAIN ROAD, THOLURPATTI POST, THOTTIYAM TALUK, TRICHY DT, TAMILNADU-621215, INDIA	India
C.P.NIRANJANA	KONGUNADU COLLEGE OF ENGINEERING AND TECHNOLOGY, NAMAKKAL-TRICHY MAIN ROAD, THOLURPATTI POST, THOTTIYAM TALUK, TRICHY DT, TAMILNADU-621215, INDIA	India
K.M.SWARNA DEVI	KONGUNADU COLLEGE OF ENGINEERING AND TECHNOLOGY, NAMAKKAL-TRICHY MAIN ROAD, THOLURPATTI POST, THOTTIYAM TALUK, TRICHY DT, TAMILNADU-621215, INDIA	India

**Abstract:**

**ABSTRACT** This invention discloses coo-friendly paint and electrical insulation liquid formulations utilizing lignin and tannin extracted from banana sheaths and cocor. The extraction process involves soda pulping for lignin and solvent extraction for tannin. These bio-polymers are combined with cog-friendly solvents, pigments, thick additives, and plasticizers to produce high-perfonnance, sustainable products. The formulations are prepared using specific mixing times and methods to ensure the dispersion and homogeneity. This innovative approach offers a non-toxic, cost-effective alternative to conventional products, promoting environmental sustainability and industrial applicability.

**Complete Specification****FIELD OF INVENTION**

This invention pertains to the field of environmentally sustainable materials, focusing on the development of eco-friendly paint and electrical insulation liquid utilizing lignin and tanhin extracted from agricultural waste products, specifically banana sheaths and coconut husks.

**BACKGROUND OF INVENTION**

Traditional paints and electrical insulation liquids often contain harmful chemicals that pose significant environmental and health risks. With the growing emphasis on sustainability and stricter environmental regulations, there is a pressing need for green alternatives. Lignin and tannin, naturally occurring bio-polymers found 'in abundance in banana sheaths and coconut husks, possess excellent binding, antioxidant, and insulating properties. This invention harnesses these properties to create coo-friendly products that meet performance standards while being environmentally benign.

**DESCRIPTION OF THE INVENTION**

g

The invention describes the processes and fonnulations for producing green paint and electrical

[View Application Status](#)



Terms & conditions (<https://ipindia.gov.in/Home/Termsconditions>) Privacy Policy (<https://ipindia.gov.in/Home/Privacypolicy>)

Copyright (<https://ipindia.gov.in/Home/copyright>) Hyperlinking Policy (<https://ipindia.gov.in/Home/hyperlinkingpolicy>)

Accessibility (<https://ipindia.gov.in/Home/accessibility>) Contact Us (<https://ipindia.gov.in/Home/contactus>) Help (<https://ipindia.gov.in/Home/help>)

Content Owned, updated and maintained by Intellectual Property India, All Rights Reserved.

