

**PRO-Media Coordinator's Office  
Jamia Millia Islamia**

September 23, 2020

Press Release

**JMI faculty's invention on nano cement gets patent from GoI**

The Patent Office of the Government of India has granted the patent to an invention titled "*High Strength Cementitious Nanocomposite Compositions and the methods of making the same*" by Mr. Ibadur Rahman, Assistant Professor, Department of Civil Engineering, Jamia Millia Islamia(JMI).

The main objective of the invention is to bring together nanotechnology and construction technology in order to produce nano modified cement based materials so as to achieve enhanced mechanical performance, reduced weight and most efficient utilization of the material resources.

A number of compositions having nano additives were used to make high strength cementitious composites. The influence of additive components such as nano cement, silica fume, nano silica fume, fly ash and nano fly ash in cement matrix was studied with reference to normal size cement matrix. With the addition of the nano particles, a significant improvement in the properties of cementitious matrix was observed.

The modified nano composites will be useful in strategically important structures requiring high strength like Nuclear Power Plant, Airport Runways, and Bridges etc. These materials will also be beneficial in constructing high rise buildings particularly in the Government of India Projects on "Smart Cities".

Apart from Dr. Ibadur Rahman of JMI, Prof. Mohammed Arif, Department of Civil Engineering and Prof. Ameer Azam, Department of Applied Physics, Z. H. College of Engineering and Technology, Aligarh Muslim University (AMU), Aligarh are other two patentee.

**Ahmad Azeem**  
PRO-Media Coordinator



**Mr. Ibadur Rahman**

Assistant Professor

Civil Engineering Department

Jamia Millia Islamia





**INTELLECTUAL  
PROPERTY INDIA**

PATENTS | DESIGNS | TRADE MARKS  
GEOGRAPHICAL INDICATIONS



सत्यमेव जयते

क्रमांक : 011126598  
SL No :



भारत सरकार  
GOVERNMENT OF INDIA

पेटेंट कार्यालय  
THE PATENT OFFICE

पेटेंट प्रमाणपत्र  
PATENT CERTIFICATE  
(Rule 74 Of The Patents Rules)

पेटेंट सं. / Patent No. : 346730  
आवेदन सं. / Application No. : 2771/DEL/2014  
फाइल करने की तारीख / Date of Filing : 29/09/2014  
पेटेंटी / Patentee : 1.ER. IBADUR RAHMAN 2.MOHAMMED ARIF 3.DR.  
AMEER AZAM

प्रमाणित किया जाता है कि पेटेंटी को उपरोक्त आवेदन में यथाप्रकटित HIGH STRENGTH CEMENTITIOUS NANOCOMPOSITE COMPOSITIONS AND THE METHODS OF MAKING THE SAME नामक आविष्कार के लिए, पेटेंट अधिनियम, १९७० के उपबंधों के अनुसार आज तारीख 29th day of September 2014 से बीस वर्ष की अवधि के लिए पेटेंट अनुदत्त किया गया है।

It is hereby certified that a patent has been granted to the patentee for an invention entitled HIGH STRENGTH CEMENTITIOUS NANOCOMPOSITE COMPOSITIONS AND THE METHODS OF MAKING THE SAME as disclosed in the above mentioned application for the term of 20 years from the 29th day of September 2014 in accordance with the provisions of the Patents Act, 1970.

**INTELLECTUAL  
PROPERTY INDIA**  
PATENTS | DESIGNS | TRADE MARKS  
GEOGRAPHICAL INDICATIONS



*OKayla*

अनुदान की तारीख : 14/09/2020  
Date of Grant :

पेटेंट नियंत्रक  
Controller of Patent

टिप्पणी - इस पेटेंट के नवीकरण के लिए फीस, यदि इसे बनाए रखा जाना है, 29th day of September 2016 को और उसके पश्चात प्रत्येक वर्ष में उसी दिन देय होगी।  
Note. - The fees for renewal of this patent, if it is to be maintained will fall / has fallen due on 29th day of September 2016 and on the same day in every year thereafter.





گلستانِ غالب  
GULISTAN-e-GHALIB

گلستانِ غالب  
Gulistan · Ghalib