



**INTELLECTUAL  
PROPERTY INDIA**

PATENTS | DESIGNS | TRADE MARKS  
GEOGRAPHICAL INDICATIONS



सत्यमेव जयते

क्रमांक : 011141199  
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. : 383711  
आवेदन सं. / Application No. : 472/DEL/2013  
फाइल करने की तारीख / Date of Filing : 19/02/2013  
पेटेंटी / Patentee : UNIVERSITY OF DELHI

प्रमाणित किया जाता है कि पेटेंटी को उपरोक्त आवेदन में यथाप्रकटित SOLAR WATER DISTILLER नामक आविष्कार के लिए, पेटेंट अधिनियम, १९७० के उपबंधों के अनुसार आज तारीख 19th day of February 2013 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 SOLAR WATER DISTILLER as disclosed in the above mentioned application for the term of 20 years from the 19th day of February 2013 in accordance with the provisions of the Patents Act, 1970.



अनुदान की तारीख : 04/12/2021  
Date of Grant :

पेटेंट नियंत्रक  
Controller of Patent

टिप्पणी - इस पेटेंट के नवीकरण के लिए फीस, यदि इसे बनाए रखा जाना है, 19th day of February 2015 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 19th day of February 2015 and on the same day in every year thereafter.

## Indian Patent for a Solar Water Distiller: A Big Achievement for ZHDC, A Significant Development for the Community

It is matter of great honour and pride for the entire family of Zakir Husain Delhi College that an **Indian Patent (no. 383711) for a Solar water distiller**, filed wide application no. **472/DEL/2013 by its four faculty members and ten students** has been granted and recorded in the Register of Patents on **December 04, 2021**. This is the first ever Patent awarded to the college in its long history of existence.

The interdisciplinary Innovation Project (ZH-101), titled “Feasibility Studies to improve quality of living and development of low cost efficient techniques to purify potable water: Case study with reference to villages of Ajmer (Rajasthan)” proposed jointly by the Physics, Chemistry and English departments was awarded to the college by the University of Delhi in the year 2012. The team comprised: Prof. Swati Arora (Physics), Prof Anuradha Marwah (English), Prof Samta Goyal (Chemistry) and Dr Mohammed Fahim Ansari (Physics) as Faculty Coordinators. The following were the student-researchers: Arshi Choudhry (Chemistry), Mohit Singh (Electronics), Jyoti Sharma (Chemistry), Priyanka (Chemistry), Priya Kaushik (Chemistry), Rajersh Mathur (Physical Sciences), Sudeep Kumar Dwivedi (Chemistry), Harsh Sharma (Physical Sciences), Saral Baweja (Chemistry) and Chandan Singh Bisht (Physical Sciences). Prof. R.P Tandon, the then Head of Department of Physics and Astrophysics, University of Delhi acted as the Mentor of the Project.

The team visited as many as six villages in and around Ajmer, Rajasthan during the summer of 2012 and collected samples from various sources of water like hand-pumps, wells, water bodies and ground water and analysed their quality. Students interacted with the rural populace there and also had a detailed discussion with the local youth who had been working on water problems. This was coordinated by the NGO, Ajmer Adult Education Association (AAEA), that is working in this area. A detailed report was compiled on this very fruitful exchange. Based on the assessment and availability of local resources, the idea of water purification using solar energy was developed and executed. From preliminary set-up, and subsequent modifications, the idea was finally translated into a prototype. A lot of brain-storming and technical guidance by the Mentor, Faculty Coordinators and Laboratory Staff helped students realise this prototype.

We sincerely hope that this technology will now be transferred to interested Industries for actual applications. Solar water distiller can make a qualitative difference to the quality of life of people living in areas where access to potable water is difficult and limited.

The entire research team expresses its gratitude to the University of Delhi for award of project which gave exposure to the students beyond classroom teaching. The Team would also like to acknowledge the Administration of Zakir Husain Delhi College for providing logistics support and space to carry out this project.

