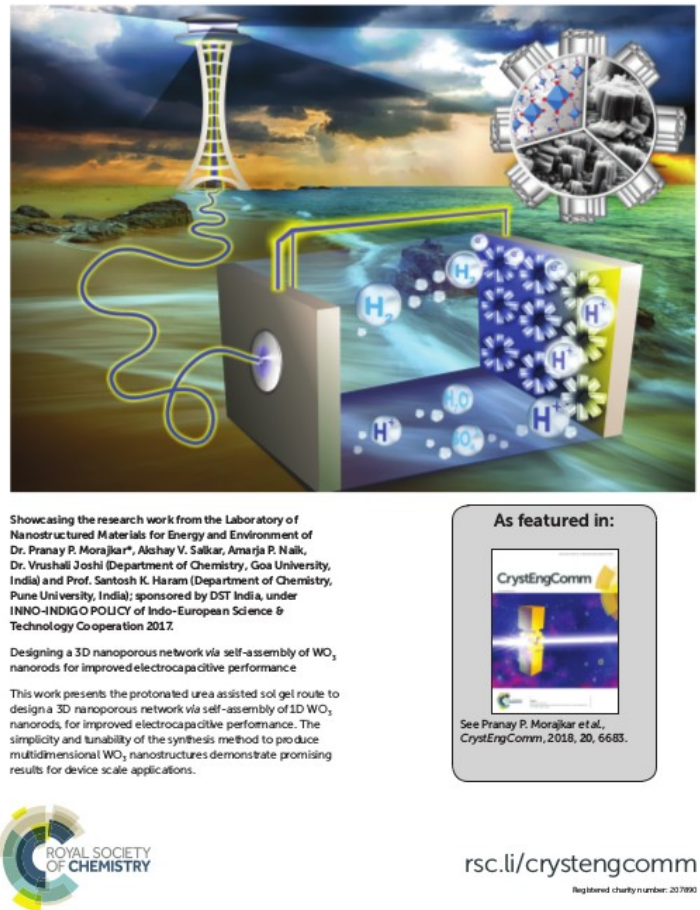
RSC showcases research @ Goa University

Royal Society of Chemistry (RSC), with a dual role of learned society and professional association of over 40000 members, spread over the world, specializing in all branches of Chemistry publishes 46 very high and high impact factor journals as a part of their objective. One of their journal titled CrystEngComm with an impact factor of 3.304 and receiving over 27000 citations in the last year to its articles has showcased the work of researchers at Goa University by providing space on the back cover page of the issue of the journal. While researchers dream of publishing in these journals, showcasing the work on the cover is an added prestige to the work.



A team of researchers at the Goa University working on synthesizing 3D nanoporous Tungsten trioxide realized the drawback of available techniques in bulk synthesis of Tungesten trioxide, along with the cost inefficiency and the hazards/safety issues. To address this issue, they used a soft chemistry approach to synthesize 3D nanoporous Tungsten trioxide (WO_3) nanostructures via self-assembly of initially designed nanorods using protonated urea as a novel, economical and efficient nanostructure forming agent that have provided encouraging results. This novel approach has been reported in the research paper titled "Designing a 3D nanoporous network via self-assembly of WO sub(3) nanorods for improved electrocapacitive performance". The editors of the journal, have understood the importance of the work and showcased the same on the coverpage of the issue.

Tungsten trioxide, a chemical compound is used in a variety of industrial applications such as electrochemical water splitting, supercapacitors, photocatalysis, photoluminescence, gas sensing, and photochromic and electrochromic devices. The 3D nanoporous Tungsten trioxide is a smart material that have applications in energy storage systems such as batteries, fuel cells and capacitors and other energy devices. Use of 3D nanoporous Tungsten trioxide at various levels is being considered since recent past because it has a potential to address the issues of poor air quality and global warming, the demand for generation, utilization and storage of energy, etc. The work is sponsored by DST India, under INNO-INDIGO POLICY of Indo-European Science & Technology Cooperation 2017.

The research paper is also available on the Goa University repository and interested readers wishing to know more can send reprint requests.

Congratulations to all those involved in addressing this issue.

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