

Statement of research achievements

- **Portugal provisional patent** for 'Diaper gel formulated nanocellulose as plant growth enhancer' has been approved by Portugal government in 2024. Application number: PT-024-16538
- Project application placed under **reserve list** in **MERIT fellowship 2024** by Czechia (formerly Czech republic) government with a score of 86.9%.
The project application for the MERIT Fellowship 2024, submitted to the Czechia (formerly Czech Republic) government, has been placed on the reserve list. The application received a commendable score of 86.9%. This indicates strong merit and competitiveness, though it currently awaits further evaluation or the availability of additional funding. The placement on the reserve list signifies that the project met high standards but did not secure immediate funding. Applicants will be notified if opportunities arise for funding or if there are changes in the fellowship's allocation of resources.
- Received **Travel grant award** to attend 3rd Journal of Thermal Analysis and Calorimetry Conference and 9th V4 (Joint Czech-Hungarian-Polish-Slovakian) Thermo-analytical Conference, Hungary (2023) and present the results of research.
This travel grant was provided for the applicant to acknowledge his achievement in the evaluation of nanocellulose via thermogravimetry analysis and present his work in the conference.
- Included in the list of **top 2% scientist in the world** with more citations in the year 2020 and 2021 by Stanford University, USA.
The applicant has been included in the list of 2% scientist in the world for his excellence in the field of material science.
- **Postdoctoral fellowship** from Transnational cooperation programme Madeira-Azores-Canarias (MAC 2014-2020) towards Regional developmental fund (ERDF), Portugal (2021-2022) to carryout research in Madeira Chemistry Center (CQM), University of Madeira, **Portugal**.
The applicant has been awarded with a postdoctoral fellowship from the government of Portugal, jointly funded by government of Spain for his excellence in the field of nanoparticle synthesis for pharmaceutical application.
- **Literati highly commended research paper award** from **Emerald publication** for the article 'Evaluation and development of antibacterial fabrics using Pongamia pinnata extracts' for the year 2020.
This award has been provided for the applicant as a co-author for the research article. The article provided insights about the utilization of *P. pinnata* leaf extract and coat them in the cotton fabric as a potential antibacterial agent. The applicant worked in collaboration with the researchers from Anna University India for the characterization of the leaf extract.
- **Postdoctoral fellowship** from ARDITI – Agencia Regional para o Desenvolvimento da Investigacao, Tecnologia e Inovacao (Regional Agency for the Development of Research, Technology and Innovation), Portugal (2020-2021) to carryout research in University of Madeira, **Portugal**.
The applicant has been awarded with a postdoctoral fellowship from the government of Portugal for his excellence in the field of nanoparticle synthesis for pharmaceutical application.

- Recipient of **‘Best Teacher award-2019’** in **Academy of competitive exam and research training (ACERT, Chennai)** for the academic year 2018-2019, for the extraordinary service as a guest faculty.

The applicant has been awarded with a Best teacher award for his extraordinary service as a guest faculty in India.

- Recipient of **Gold medal in 3rd World Invention Innovation Contest (WiC) 2017** organized by **Korea Invention News (KINEWS)** for the project proposal entitled **‘Multi-compartment antimicrobial nanoformulation for food packaging’**.

The applicant has been awarded with a gold medal for his excellent project proposal on the novel food packages to provide safety to products from microbial infection for a long time. The project has been currently under patent filing stage from a Korean company, under the guidance of the applicant.

- Recipient of **Special Honour of Invention award in 3rd World Invention Innovation Contest (WiC) 2017** from Toronto International Society of Innovation & Advanced skills (TISIAS) and International Invention and Innovation Competition in Canada (iCAN-Toronto) for the project proposal entitled **‘Multi-compartment antimicrobial nanoformulation for food packaging’**.

The applicant has been awarded with a special honor of invention for his excellent project proposal on the novel food packages to provide safety to products from microbial infection for a long time.

- Recipient of **‘People’s choice award’** in 3-minutes thesis competition conducted by Curtin University, Malaysia, 2015.

The applicant has received people’s choice award for his excellent portrayal for explaining his thesis in 3 minutes.

- Recipient of **‘Curtin Sarawak Postgraduate Research Scholarship’**, Curtin University, 2014-2017.

The applicant has been provided with a scholarship award to carry out his proposed research by Curtin University Malaysia, jointly funded by the Australian and Malaysian government.