

25th Anniversary W-To-W

Innovative Ideas Application Form

Please submit your idea by the **5th of December 2021** using the **Following the instructions below** and using this template below.

Please be specific as to which area (child, elderly care, medicine... etc) you are applying to speak about. We are aiming to invite **all** applicants to pitch their ideas in a dedicated “full day global session” online. The competition’s winners will also be invited to present at the Special Session “WIE25th From Women to Women”, International Leadership Conference 2022 in San Diego, Ca, USA in June 2022. For any questions contact dvc@ieee.org.



Title of the idea (acronym)

"Using Ground water salinity Technology to overcome food shortage by helping irrigation in Salinity affected areas "

/Application Field:

"Agricultural Engineering; SDG for global food shortage; Environmental sustainability "

Applicant(s) Names,

Sadia Nawaz; Qudsia Nawaz; Amna Niazi

Institutions, *email*:

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Presenter(s) Name and Institution:

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Abstract:

Global food shortage is a nightmare coming to reality. While urbanization and human activities are known risk factors causing it; soil salinity is also among the top-10 factors contributing to it. This leads to physiological drought, rendering plant growth and germination from difficult to nearly impossible. This is also one of the reasons why vegetation at beaches and sand dunes is low. 1.

SOLUTION: Tube-well integrated with our salt extraction system.

Design options:

- 1. Using large magnifying glass tunnel system to evaporate water and extract salt at base-plates. Evaporated water will be locked in tunnel by precipitation and used for irrigation.**
- 2. Using solar panel coupled electrode plates that will attract salt deposits.**

- 1. S.M. Schmöckel, D.E. Jarvis, in Encyclopedia of Applied Plant Sciences (Second Edition), 2017**
- 2. Vvvb**

Summary (max 2 pages, Times New Roman font 11
excluding references and CVs)