

ACTIVITIES

REPORT

SUSTAINING MEMBER

PRINCE MOHAMMAD BIN FAHD **UNIVERSITY**

As part of the university's mission along with ongoing commitment to solve real-world problems through research, the PMU strategy sets out a framework for how to support and encourage patenting arising from PMU research as well as commercializing the inventions. The growth in issued patents each year is a tangible indicator that our strategy is delivering licensable intellectual property. Furthermore, patent commercialization process has been established and 12 patents were nominated for further consideration.

On May 15, 2022, Prince Mohammad Bin Fahd University (PMU) further cemented its commitment in innovation through the official opening of the first National Academy of Inventors (NAI) Chapter office in the Middle East. The opening in another chapter in PMU's dedication to be a leader in innovation, support development and celebrate the outstanding contributions that PMU faculty, staff, and students have made to academic innovation and inventions. The chapter plans to take an active role across the campus, engaging with faculty, students, and staff to support innovation and entrepreneurship, and networking.

The ceremony took place at Prince Truki Center for Creativity & Entrepreneurship which serves as an incubator for the excellence endeavors for the PMU community (https://ptcce.pmu.edu.sa/). The highlight of the inauguration were the chapter member's patent presentations (listed below) and the NAI Chapter membership certificate handout by the PMU Vice President of Academic Affair Dr. Faisal Al Anezi.

No.	Title
1	Process for forming metal wires
2	Multi-stage brain tumor image processing method and system
3	Earthen dam structure
4	Thermal imaging system for disease outbreak detection
5	Method for making polyethylene/graphene composite
6	Hydraulic confinement and measuring system for determining hydraulic conductivity of porous carbonates and sandstones
7	System and method of dehumidifying atmospheric air using a vapor condensation process
8	Method of forming thermally and electrically conductive polyolefin-carbon nanomaterial composites
	having increased dielectric permittivity and breakdown-induced electrical and thermal conduction pathways
9	Equal channel angular pressing of multi size copper wire
10	A method of forming electrically and thermally conductive polyolefin-perovskite nanomaterial composites having increased dielectric permittivity and breakdown-induced electrical and thermal conduction pathways
11	Solar distillation system with integrated cooling and controller
12	Device and method for soil hydraulic permeability measurement
13	System, computer-readable storage medium and method of deep learning of texture in short time series
14	Hybrid potable water generator
15	Method of applying voltage to a polymergraphene composite to form a conductive polyolefin-carbon material



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- 16 Fever-causing disease outbreak detection system
- 17 Method for making polyolefin-perovskite nanomaterial composite
- 18 Supersonic conduit system and method for dehumidifying air
- 19 Proximity triggered water fountain system with deflector
- 20 Method for making and using a dye sorbent
- 21 Process for equal channel angular pressing fine grain titanium round tube
- 22 Method of modifying surface biocompatibility of a titanium medical impant
- 23 HVAC dehumidification system
- 24 Versatile lunch box
- 25 Method for producing fresh water from saline water using solar energy
- 26 Flexible bearing for compliant mechanisms
- 27 Polymer composite material having oriented electrically and thermally conductive pathways
- 28 Method for producing high strength titanium pipe
- 29 Multi-tiered security analysis method and system
- 30 Method of producing medically applicable titanium

The PMU- NAI Chapter is open to all members of the university community, including faculty, staff, alumni, who have received an issued patent from the U.S. Patent and Trademark Office. An annual recognition ceremony will be held during the academic year and a list of members will be published. Membership in the NAI is available through local university chapters only. Chapter members are automatically enrolled as members of the NAI, with all rights and privileges thereof. The Chapter also recognizes honorary members of the university community, who materially support and advance technological development and innovation.

The objective of the PMU-NAI Chapter is:

- To acknowledge PMU researchers who are also inventors
- To promote technology development and entrepreneurship among the PMU community .
- To increase awareness of intellectual property at PMU by mentoring, fostering, and encouraging faculty, staff, . and students to develop their inventions
- To develop relevant invention-based activities in collaboration with PMU Patents Office .