

NANO Nuclear Energy Appoints Noted Physicist Carlos O. Maidana, Ph.D. as its Head of Thermal Hydraulics and Space Program

October 1, 2024

Dr. Maidana will spearhead design of space nuclear systems that encompass nuclear propulsion and power generation technologies optimized for space applications

New York, N.Y., Oct. 01, 2024 (GLOBE NEWSWIRE) -- NANO Nuclear Energy Inc. (NASDAQ: NNE) ("NANO Nuclear" or "the Company"), a leading advanced nuclear energy and technology company focused on developing portable, clean energy solutions, today announced that Carlos O. Maidana, Ph.D. has been appointed as the Company's Head of Thermal Hydraulics and Space Program. He will play a key role in NANO Nuclear's recently formed subsidiary, NANO Nuclear Space, which has been formed to explore potential commercial applications of the Company's developing advanced nuclear technology in space.

Dr. Maidana's appointment follows NANO Nuclear's June 2024 acquisition from Dr. Maidana of the novel annular linear induction pump (ALIP) intellectual property, which has applications in small nuclear reactor cooling and heat transfer systems.

Dr. Maidana is a distinguished physicist and research engineer with over 22 years of international experience in the fields of engineering, applied sciences, and nuclear systems. He has led a diverse range of cross-disciplinary projects, covering the entire design and development cycle from concept studies to optimization using advanced theoretical, computational, and experimental techniques.



Figure 1 - NANO Nuclear Energy Inc. Appoints Carlos O. Maidana, Ph.D., as its Head of Thermal Hydraulics and Space Program.

Dr. Maidana previously held the positions of Senior Research Fellow and Scientific Secretary at CERN, the European Organization for Nuclear Research, where he made noteworthy contributions to high-energy particle accelerator advancements. He also served as a Research Associate at the Idaho National Laboratory, focusing on space nuclear systems and technologies in collaboration with the Department of Energy (DOE) and NASA.

Dr. Maidana has been awarded several DOE Small Business Innovation Research (SBIR) grants for his work in advanced nuclear technologies. He is highly regarded for his expertise in engineering magneto-hydrodynamics, particularly in annular linear induction pumps (ALIPs) and the thermo-hydraulics of liquid metals and molten salts. His knowledge in these areas has significantly advanced magneto-hydrodynamics technology and its applications.

"I am honored to join NANO Nuclear Energy and take a leading role in developing cutting-edge energy solutions for operations in space," said Carlos O. Maidana, Ph.D., Head of Thermal Hydraulics and Space Program of NANO Nuclear Energy. "NANO Nuclear is evolving into a leader in the advanced nuclear technology sector, with pioneering microreactor designs and plans for vertical integration that create vast opportunities for innovation across multiple sectors. I was confident that NANO Nuclear was the right partner to help complete development of the ALIP technology. Having now worked with the company closely, I am even more excited to take a leading role in NANO Nuclear Space, where I believe the ALIP technology will help position us at the forefront of nuclear energy solutions for space exploration."

Dr. Maidana will continue to serve as the DOE SBIR Phase 3 Project Director for the ALIP technology and will simultaneously assist in the expansion of NANO Nuclear's nuclear energy consulting services. As Project Director, he will be pivotal to the development of compact, scalable, and versatile nuclear systems that can power the next frontier of human and robotic missions in space. Dr. Maidana will also assist in the optimization and simplification of NANO Nuclear's 'ODIN' microreactor design, a cutting-edge, clean energy, advanced portable micronuclear reactor currently under development.



Figure 2 - Rendition of Proprietary NANO Nuclear Energy Inc. 'ODIN' Microreactor Optimized for Cis-Lunar Operations

"It is with pleasure that we welcome Dr. Maidana to the NANO Nuclear team," said Jay Yu, Founder and Chairman of NANO Nuclear Energy. "Dr. Maidana is a well-known and respected physicist, research engineer and project manager with numerous beneficial synergies with NANO Nuclear and our long-term goals. He will spearhead our newly founded space subsidiary, helping to refine and develop our proprietary technologies with the objective of establishing a leading position in space propulsion, habitation, and exploration sectors."

NANO Nuclear Space will focus on developing compact, scalable, and versatile nuclear systems that can power the next frontier of human and robotic missions in space. By leveraging nuclear energy and its own proprietary technologies, NANO Nuclear aims to enable long-duration missions and habitation on extraterrestrial bodies, reduce travel times and increase mission efficiency with advanced propulsion and provide reliable power solutions for critical operations and infrastructure in space.



Figure 3 - Rendition of Proprietary NANO Nuclear Energy Inc. 'ODIN' Microreactor Optimized for Celestial Bodies with Centripetally Generated Gravity

NANO Nuclear's innovative systems are planned to support cis-lunar operations, referring to uses in the space region extending from Earth to the area surrounding the Moon's surface, and facilitate the precise maneuvering of satellites and spacecraft to their designated orbits. Furthermore, the ALIP technology is poised to significantly contribute to the development of viable space systems following the completion of its DOE SBIR Phase III program. The ALIP technology enhances thermal management systems by enabling forced circulation of coolant during normal operations.

"Im thrilled to welcome Dr. Maidana to his new role with NANO Nuclear," said James Walker, Chief Executive Officer and Head of Reactor **Development of NANO Nuclear Energy.** "Dr. Maidana has a distinguished background of developing advanced nuclear technologies and working with the government to optimize and implement commercialization strategies. His innovative vision for space exploration, combined with decades of experience, will be invaluable as we venture into this sector. I am confident that his contributions will be transformative for the long-term growth of NANO Nuclear, and I look forward to collaborating with Dr. Maidana on this exciting new frontier."

About NANO Nuclear Energy, Inc.

NANO Nuclear Energy Inc. (NASDAQ: NNE) is an advanced technology-driven nuclear energy company seeking to become a commercially focused, diversified, and vertically integrated company across four business lines: (i) cutting edge portable microreactor technology, (ii) nuclear fuel fabrication, (iii) nuclear fuel transportation and (iv) nuclear industry consulting services. NANO Nuclear believes it is the first portable nuclear microreactor company to be listed publicly in the U.S.

Led by a world-class nuclear engineering team, NANO Nuclear's products in technical development are "ZEUS", a solid core battery reactor, and "ODIN", a low-pressure coolant reactor, each representing advanced developments in clean energy solutions that are portable, on-demand capable, advanced nuclear microreactors.

Advanced Fuel Transportation Inc. (AFT), a NANO Nuclear subsidiary, is led by former executives from the largest transportation company in the world aiming to build a North American transportation company that will provide commercial quantities of HALEU fuel to small modular reactors, microreactor companies, national laboratories, military, and DOE programs. Through NANO Nuclear, AFT is the exclusive licensee of a patented high-capacity HALEU fuel transportation basket developed by three major U.S. national nuclear laboratories and funded by the Department of Energy. Assuming development and commercialization, AFT is expected to form part of the only vertically integrated nuclear fuel business of its kind in North

America.

HALEU Energy Fuel Inc. (HEF), a NANO Nuclear subsidiary, is focusing on the future development of a domestic source for a High-Assay, Low-Enriched Uranium (HALEU) fuel fabrication pipeline for NANO Nuclear's own microreactors as well as the broader advanced nuclear reactor industry.

For more corporate information please visit: https://NanoNuclearEnergy.com/

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Cautionary Note Regarding Forward Looking Statements

This news release and statements of NANO Nuclear's management in connection with this news release or related events contain or may contain "forward-looking statements" within the meaning of Section 21E of the Securities Exchange Act of 1934, as amended, and the Private Securities Litigation Reform Act of 1995. In this context, forward-looking statements (including statements regarding the anticipated benefits of Dr. Maidana's appointment and the outcomes associated with NANO Nuclear's work on both the ALIP technology and with space applications of its technology in general) mean statements related to future events, which may impact our expected future business and financial performance, and often contain words such as "expects", "anticipates", "intends", "plans", "believes", "potential", "will", "should", "could", "would" or "may" and other words of similar meaning. These forward-looking statements are based on information available to us as of the date of this news release and represent management's current views and assumptions. Forward-looking statements are not guarantees of future performance, events or results and involve significant known and unknown risks, uncertainties and other factors, which may be beyond our control. For NANO Nuclear, particular risks and uncertainties that could cause our actual future results to differ materially from those expressed in our forward-looking statements include but are not limited to the following: (i) risks related to our U.S. Department of Energy ("DOE") nuclear fuel manufacturing submission and the development of new or advanced technology, including difficulties with design and testing, cost overruns, development of competitive technology, (ii) our ability to obtain contracts and funding to be able to continue operations, (iii) risks related to uncertainty regarding our ability to technologically develop and commercially deploy a competitive advanced nuclear reactor technology, (iv) risks related to the impact of government regulation and policies including by the DOE and the U.S. Nuclear Regulatory Commission, including those associated with the recently enacted ADVANCE Act, and (v) similar risks and uncertainties associated with the business of a start-up business operating a highly regulated industry. Readers are cautioned not to place undue reliance on these forward-looking statements, which apply only as of the date of this news release. These factors may not constitute all factors that could cause actual results to differ from those discussed in any forward-looking statement, and the NANO Nuclear therefore encourages investors to review other factors that may affect future results in its filings with the SEC, which are available for review at www.sec.gov and at https://ir.nanonuclearenergy.com/financial-information (sec-filings. Accordingly, forward-looking statements should not be relied upon as a predictor of actual results. We do not undertake to update our forward-looking statements to reflect events or circumstances that may arise after the date of this news release, except as required by law.

Attachment

• NANO Nuclear Energy Inc.



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Source: NANO Nuclear Energy Inc.