NEWS RELEASE

RI Research Instruments Announces Major Orders for Enabling Technology for the Gamma-Ray Source of the Extreme Light Infrastructure (ELI)

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BERGISCH GLADBACH, Germany--(BUSINESS WIRE)-- **RI Research Instruments**, a company that is majority-owned by **Bruker Corporation** (Nasdaq: BRKR), today announced orders for key components and enabling subsystems for the research gamma ray source of the **Extreme Light Infrastructure – Nuclear Physics (ELI-NP)** at the **Horia Hulubei National Institute of Physics and Nuclear Engineering (IFIN-HH)** in Romania. The total value of these ELI contracts is approximately €35 million (more than USD $40 million), with major deliveries expected in late 2026.

Inverse Compton scattering system, showing electrons entering from the right (linac electron accelerator) and interacting with laser light at the Interaction Point (center), where a high-energy gamma-ray beam is generated.

This unique gamma-ray source will generate a beam of gamma rays like those that existed in the first minutes of our universe after the Big Bang. The high-flux, monochromatic and energy-tunable gamma rays will be produced by scattering ultra-intense laser beams off relativistic electrons via inverse Compton scattering. The gamma ray beam will enable unprecedented insights into nuclear and fundamental processes such as the formation of atomic nuclei in the early universe. In the first phase, RI will expand an existing particle accelerator and supply the components to guide and focus both the electron and laser beams into the collision point, where they can produce gamma rays. For the second phase, RI will upgrade the existing Linac (Linear accelerator), increasing the pulses rate by a factor of 200x. The contracts include an optical resonator amplifying the laser beam by more than a factor of 900x. For this key enabling component, RI teamed up with LICOS (**https://licos-munich.de/**), a spin-out of the Technical University Munich (TUM).

“This inverse Compton scattering system completes the advanced instrumentation portfolio at ELI-NP,” said Dr. Călin A. Ur, Project Director. “Delivering intense, monochromatic gamma beams from 1 to 20 MeV puts us in a

uniquely strong global position. It closes a key capability gap and strengthens our ability to attract top talent. Researchers are already lining up to conduct their most demanding experiments here in Romania."

"We are excited to complete our gamma beam system by adding the inverse Compton scattering instruments to the existing Linac," said Dr. Catalin Matei, Head of the Gamma System Department at ELI-NP. "Monochromatic gamma-ray beams are a unique tool for probing nuclear processes. They let us investigate conditions like they existed minutes after the Big Bang, how nuclei formed, and why today's isotopes exist. These questions are central to understanding our universe, and ELI-NP will soon have the capabilities to study them."

"This gamma-ray source exemplifies RI's unique capabilities to solve complex physics and advanced engineering projects and deliver complex, high-performance solutions that meet our customers' needs," said Dr. Christian Piel, Managing Director at RI Research Instruments. "We are pleased to have been awarded these contracts and are working with our team of experts, and key technology partners to deliver all gamma-ray source components on time and to specifications."

About RI Research Instruments – High-performance solutions for science and industry (Nasdaq: BRKR)

RI enables groundbreaking research and cutting-edge industrial applications by providing custom-designed instruments and solutions for advanced physics and medical research and integrated production systems. With our team of 400 employees, we combine physics-based design capabilities with project management and high-tech manufacturing to deliver unique components and instruments. As a trusted development and technology partner, we collaborate closely with customers worldwide. With a worldwide network of technology partners, we can accept uniquely complex and multi-disciplinary projects. Drawing on our experience supplying world-leading research institutions such as CERN, ITER, DESY or SLAC, we understand what it takes to meet the highest expectations of top-tier scientists.

With our new production site, the Manufaktur, RI now has the high-quality team, space and unique infrastructure for over 200 colleagues in precision fabrication to produce, assemble, test and clean key physics components.

For more information, please visit **www.research-instruments.de**.

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